

## **A PROPHYLACTIC STUDY ON UNANI DRUGS IN COVID - 19 AT CRIUM, LUCKNOW**

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### **ABSTRACT**

The Unani system of medicine is an ancient herbal system. It has served the human kind all over the over the world. The system reached its crescendo during Arab Islamic rule in Europe, it provide the herbal treatment for almost all ailments in the world. The Covid - 19 is no exception. This diseases has been described as Nazlawabai in classical literature of Unani medicine and fully match with the sign and symptoms of Covid - 19as shaikhbuali IBN sina and other Arab physicians of repute have suggested the same line of treatment as it is being followed today i.e., keeping distance, Lockdown of affected cities and using immunity boosting dietand medicine. The Deputy

Directorin-charge of central research institute of Unani medicine lucknow decided to provide a decoction of some plants leaves which are grown on the promises of the institute to provide relief to the patients as prophylactic medicine andthe experiment brought laurels to the institute in way of praise from patients. The study is being document for future research and encourages the Unani experts to come forwardand provide relief to the common people of the country.

**KEYWORDS:**– Unani Medicine, COVID – 19.

### **INTRODUCTION**

COVID-19 i.e., Coronavirus Disease 2019 is an ongoing pandemic caused by a new Coronavirus named as SARS COV-2, which mainly affects respiratory system of human body. Symptoms of COVID-19 include fever, sore throat, dry cough and malaise which usually resolve in a few days in most of the cases. Some cases may progress to respiratory distress and multiple organ failure. Mode of transmission is through droplet infection or

fomites. Air born transmission and oro-fecal transmission are also speculated. Researchers are underway to developed effective vaccines and medicines for the prevention, control and treatment of COVID-19.

Unani System Of Medicine is a traditional system of medicine which is based on the ‘Humoral Theory’ which presupposes the presence of four Humours – Dam (Blood), Balgham (Phlegm), Safra (Yellow Bile) and Sauda (Black Bile) in the body. There is a unique humoral constitution in every person representing his/her state of health and his/her unique Temperament (Mizaj). Unani System of Medicine employs use of drugs of herbal, mineral and animal origin for the treatment of various diseases.

Various epidemic diseases are mentioned in older Unani texts<sup>[1]</sup> out of which ‘Nazla Wabaiya’<sup>[2]</sup> is very similar to COVID-19 in symptoms. ‘Nazla Wabaiya’ spreads as epidemic in a population and causes deaths of individuals in a large number. According to Unani approach ‘Nazla Wabaiya’ is caused by inhalation of air containing some infectious entity which on entering in the body cause disease.<sup>[3]</sup> Symptoms of ‘Nazla Wabaiya’ includes fever, body ache, sore throat, dry cough with breathlessness, heaviness in chest, loss of appetite and severe weakness.<sup>[4]</sup> The disease is mild in most cases with symptoms like fever, sore throat, dry cough and malaise which usually resolves in a few days but in some cases (usually the elderly and those with comorbid conditions) may progress to Pneumonia, ARDS (Acute Respiratory Distress Syndrome) and Multi-organ dysfunction. Mode of transmission is through droplet infection or fomites. Air born transmission and orofacial transmission are also speculated. Researches are underway to developed effective vaccines and medicines for the prevention, control and treatment of COVID-19.

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## **MATERIAL AND METHOD**

### **Study drug**

The present observational study was carried out from May 2020 to September 2020 on 109 human subjects of both genders coming in General Out Patient Department of Central Research Institute of Unani Medicine, Lucknow. The drug was provided by Deputy Director Central Research institute of Unani Medicine, Lucknow at General out Patient Department of Central Research institute of Unani Medicine, Lucknow. The drug was given in the form of decoction 100 ml daily for seven days.

### **Patients selection**

The patients were selected for the study presenting the sign and symptoms of low immunity without fever and dry cough. These symptoms are chest pain, pain in whole body, headache, swelling, wet cough, anxiety, difficulty in breathing, and general weakness. The patients presenting two or more than two symptoms were selected for the study.

### **Inclusion criteria**

Age not less than 18 years

Age not more than 68 years

Patient having the symptoms at least 2 days

### **Exclusion criteria**

Pregnant and lactating women

Patient age is below 18 years and above 68 years

History of fever more than 38 degree C

History of concomitant disease.

Other condition in the investigator's opinion that participation of the patient makes difficult in the study.

### Diagnostic criteria

Diagnosis of each case was made with the help of history in respect of selected patients, previous history, physical and systemic examinations.

### Treatment of patients

All selected patient's who met the inclusion and exclusion criteria were given 100 ml decoction (Joshanda) daily for 7 days.

### Safety assessment

The safety was assessed by monitoring adverse events volunteered by the patients or observed during the course of study. No adverse effect of the Unani formulation was reported either by the patient or observed during the course of study.

### Clinical evaluation

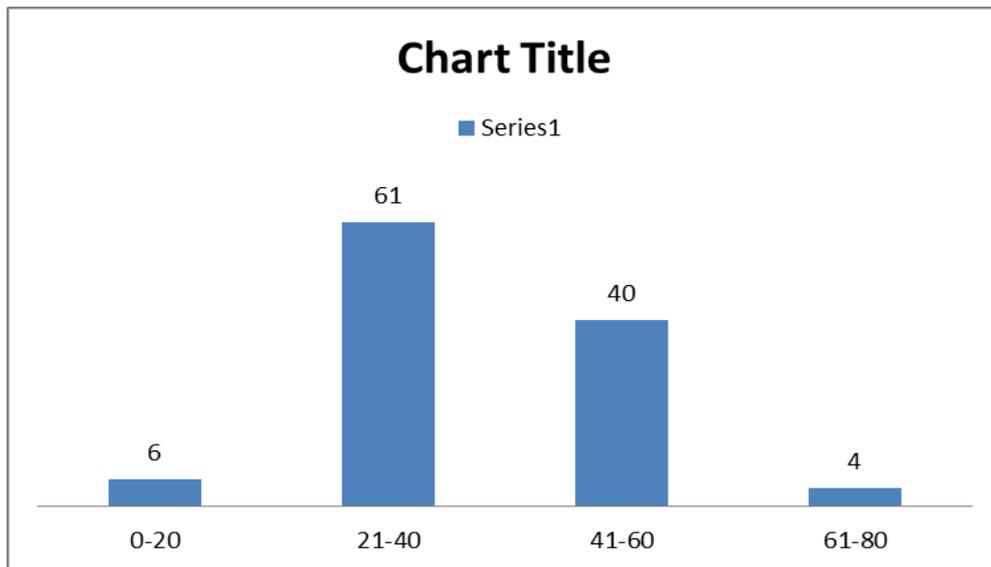
The efficacy of the drug was assessed on clinical parameters of low immunity and common seasonal changing symptom i.e chest pain, pain in whole body, headache, swelling,/ edema, wet cough, anxiety, difficulty in breathing and general weakness. Severity of the symptoms was measured by present or not absent that positive + or negative -, for assessment of and statistically evaluation of the clinical symptoms.

### Study drug

1.	Giloy	Tinosporacordifolia	Eqal part
2.	Ginger	Zingibuofficinale	Eqal part
3.	Akaashbel	Cassythafiliformis	Eqal part
4.	Adoosa	Jasticiaadhatoda	Eqal part
5.	Harsingar	Nyctanthesarbortristic	Eqal part
6.	Makoh	Solanumnigrum	Eqal part

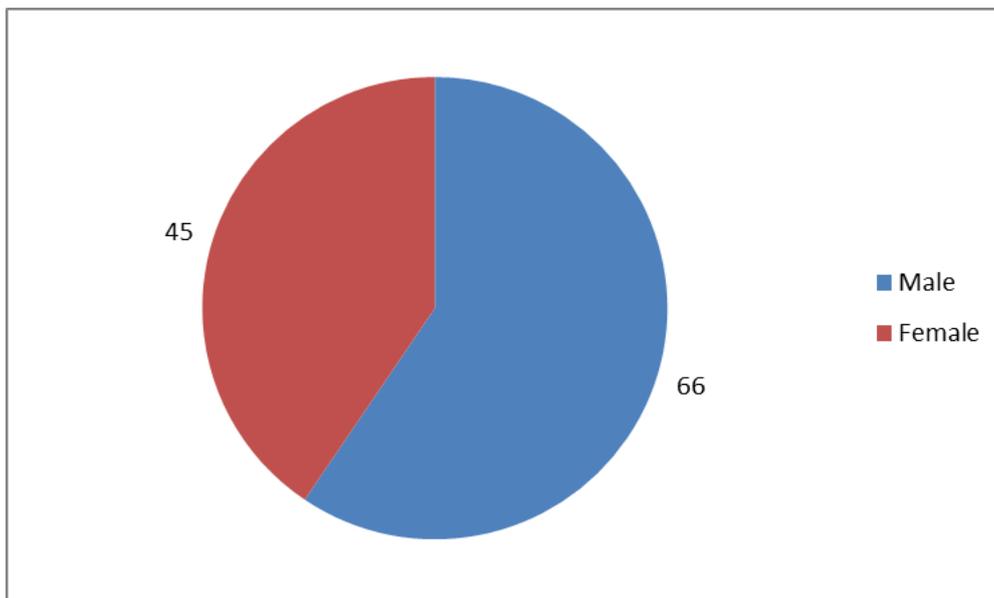
**Table 1: Age wise distribution of patients.**

Age group ( In years)	No. of cases	Percentage (%)
0-20	06	05.41
21-40	61	54.95
41-60	40	36.04
61-80	4	03.60
Total	111	100
Mean±SD	39.24±12.26	



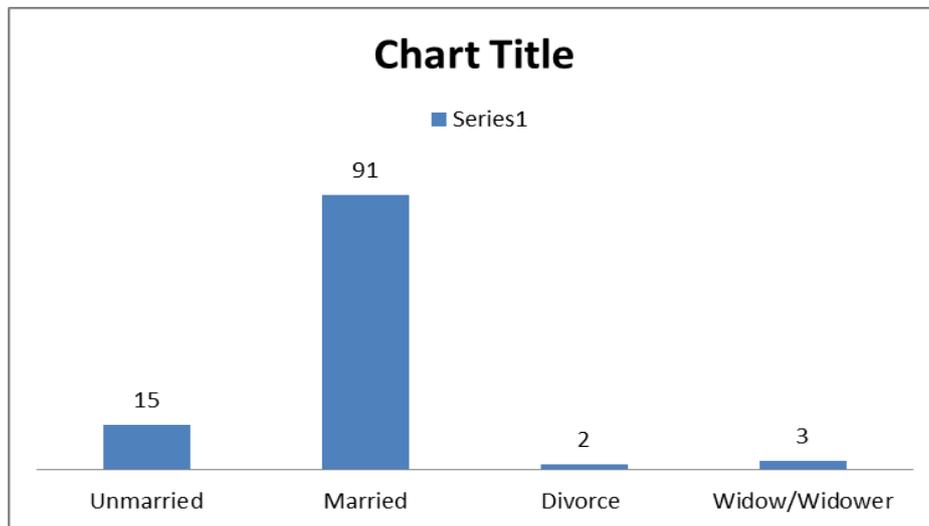
**Table 2: Sex wise distribution of patients.**

Sex	No. of cases	Percentage (%)
Male	66	59.46
Female	45	40.54
Total (%)	111	100



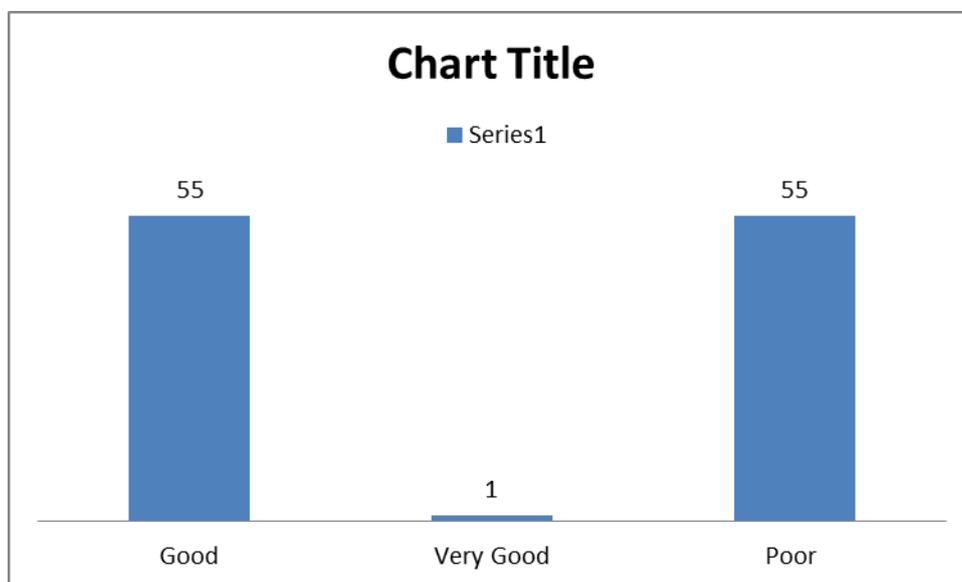
**Table 3: Marital status wise distribution of patients.**

Sex	No. of cases	Percentage (%)
Unmarried	15	13.52
Married	91	81.98
Divorce	02	01.80
Widow/Widower	03	02.70
Total (%)	111	100



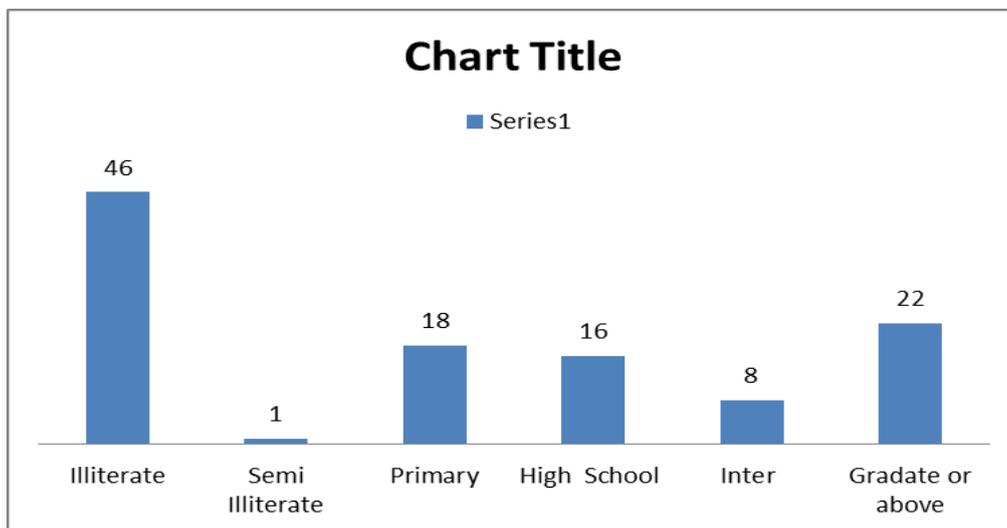
**Table 4: Social status wise distribution of patients.**

Social Status	No. of cases	Percentage (%)
Good	55	49.55
Very Good	01	00.9
Poor	55	49.55
Total (%)	111	100

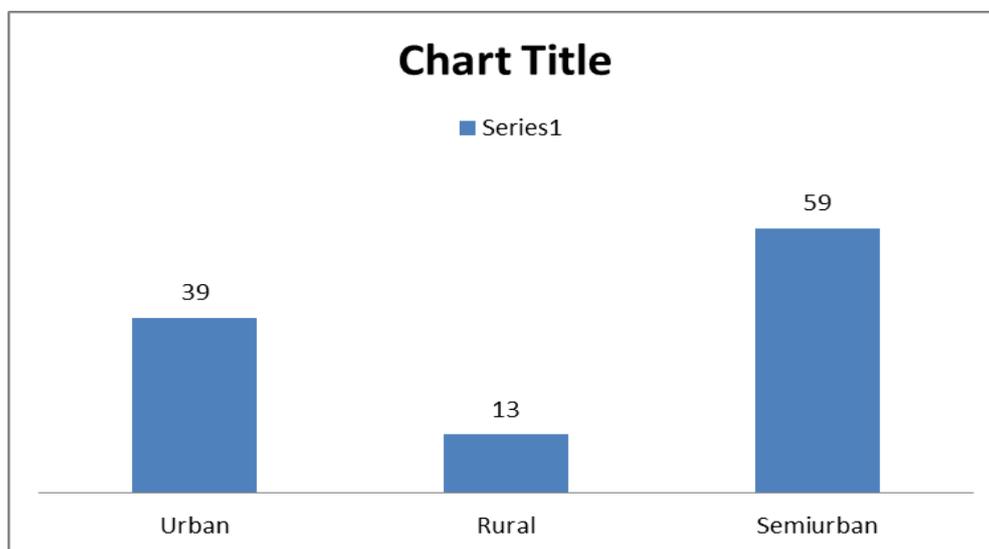


**Table 5: Education wise distribution of patients.**

Education	No. of cases	Percentage (%)
Illiterate	46	41.44
Semi Illiterate	01	00.90
Primary	18	16.22
High School	16	14.41
Intermediate	08	07.21
Gradate or above	22	19.82
Total	111	(100.00)

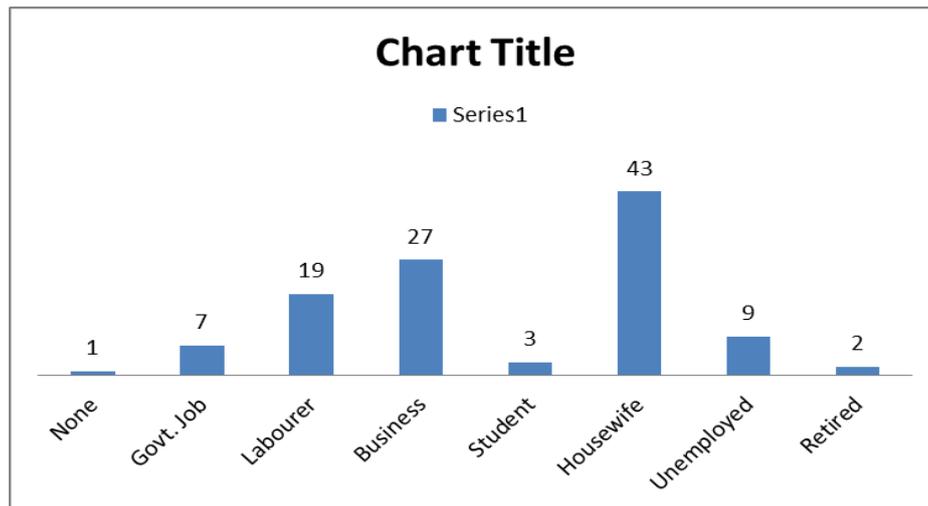
**Table 6: Area wise distribution of patients.**

Area	No. of cases	Percentage (%)
Urban	39	35.13
Rural	13	11.71
Semiurban	59	53.16
Total	111	100.00

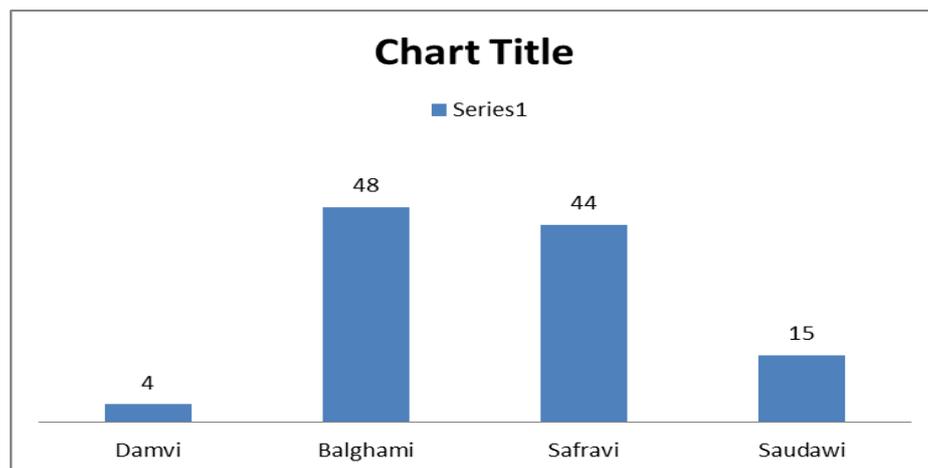


**Table 7: Occupation wise distribution of patients.**

Occupation	No. of cases	Percentage (%)
None	01	00.90
Govt. Job	07	06.31
Labourer	19	17.11
Business	27	24.32
Student	03	02.70
Housewife	43	38.73
Unemployed	09	08.10
Retired	02	01.80
Total	111	(100.00)

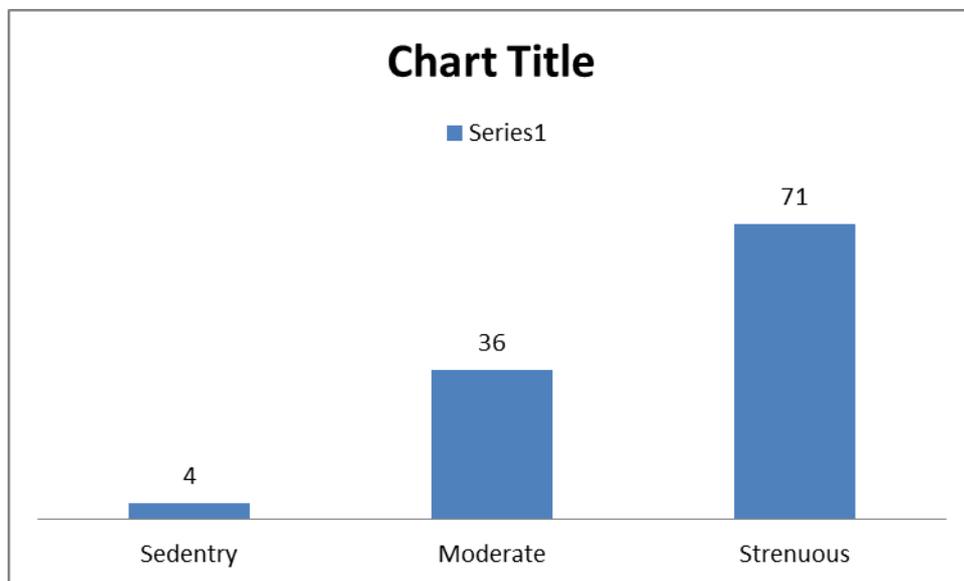
**Table 8: Temperament wise distribution of patients.**

Temperament	No. of cases	Percentage (%)
Damvi	04	03.60
Balghami	48	43.24
Safravi	44	39.64
Saudawi	15	13.52
Total	111	(100.00)



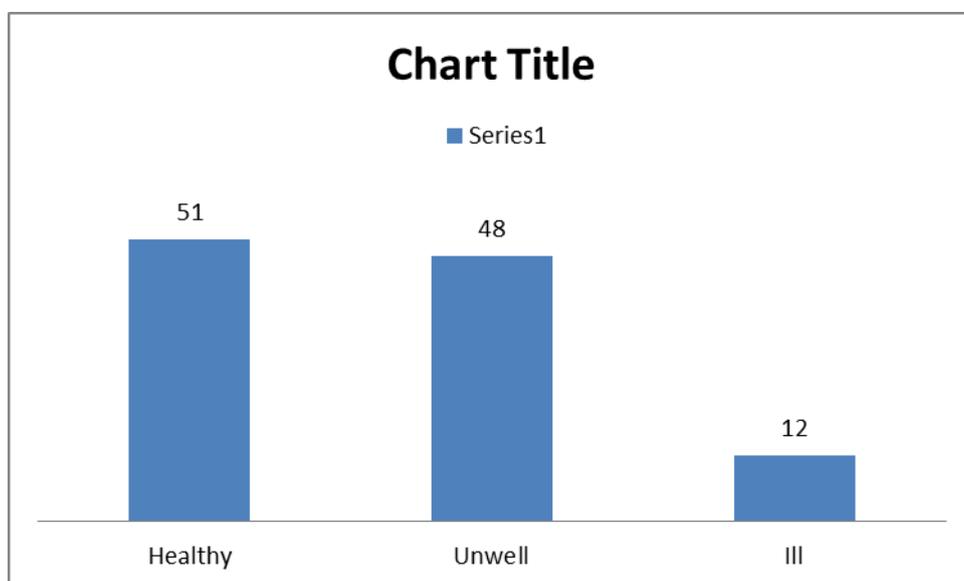
**Lifestyle wise distribution of patients.**

Lifestyle	No. of cases	Percentage (%)
Sedentry	04	03.60
Moderate	36	32.43
Strenuous	71	63.97
Total	111	(100.00)



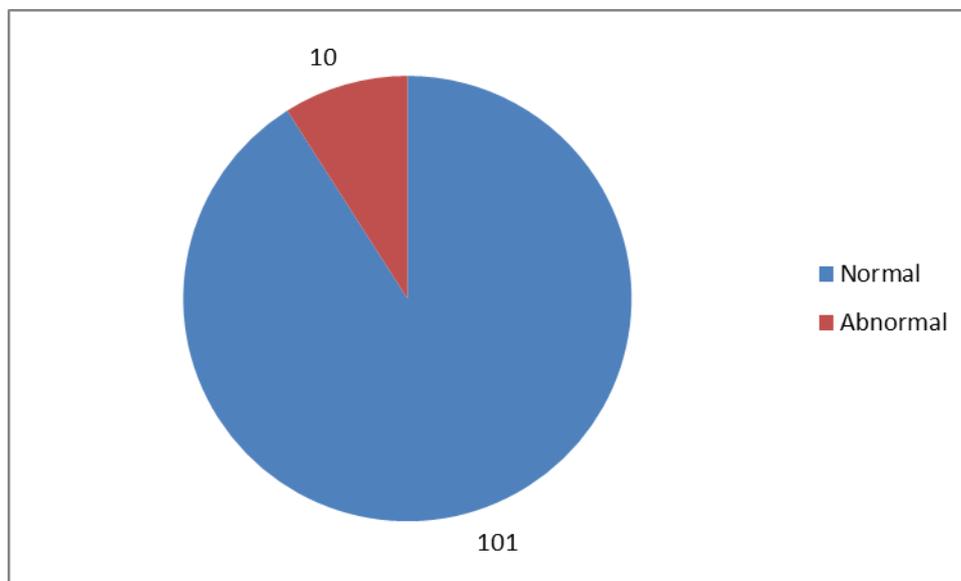
**General appearance wise distribution of patients**

General appearance	No. of cases	Percentage (%)
Healthy	51	45.95
Unwell	48	43.24
Ill	12	10.81
Total	111	(100.00)

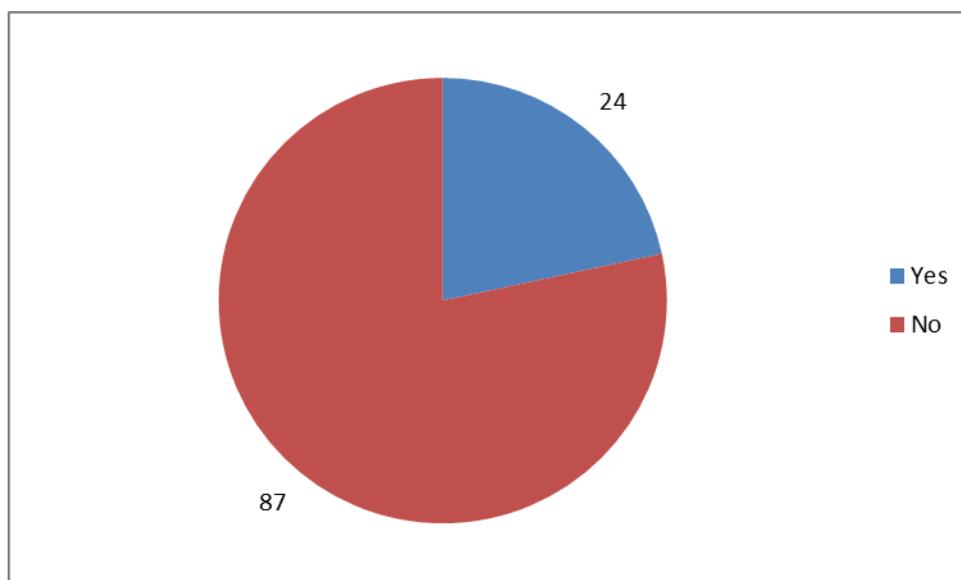


**Giant wise distribution of patients**

Giant	No. of cases	Percentage (%)
Normal	101	90.99
Abnormal	10	09.01
Total	111	(100.00)

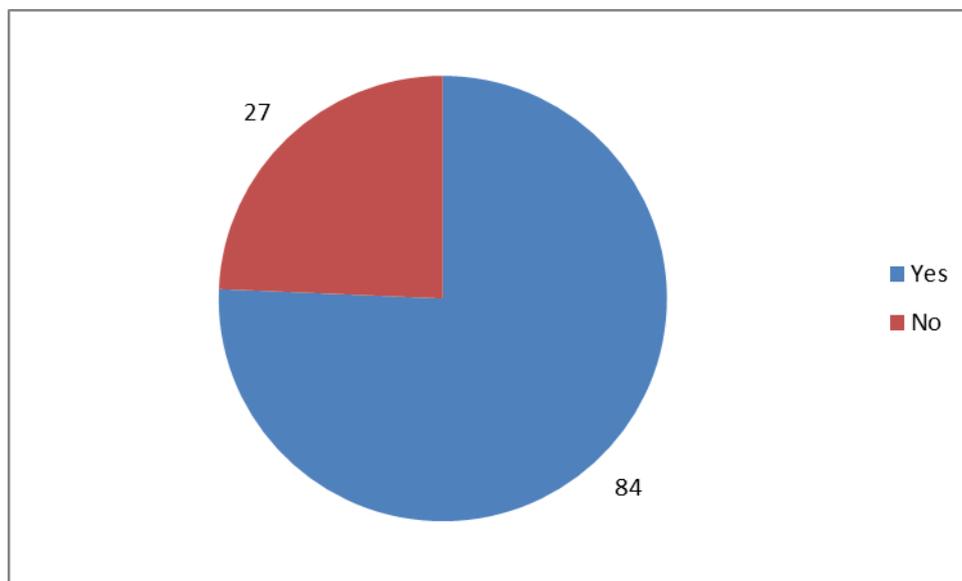
**Chest pain distribution of patients.**

Chest pain	No. of cases	Percentage (%)
Yes	24	21.62
No	87	78.38
Total	111	(100.00)

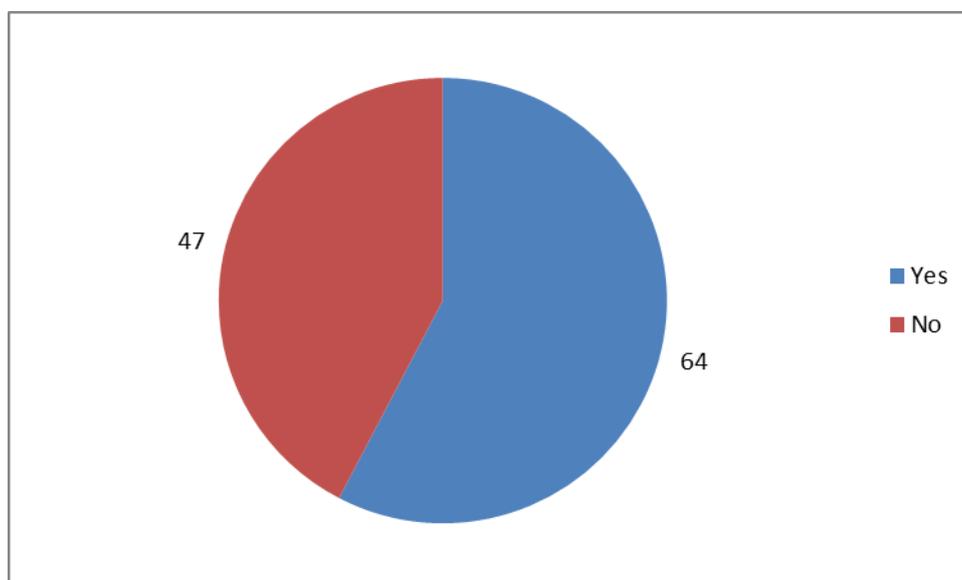


**Pain in whole body distribution of patients.**

Pain in whole body	No. of cases	Percentage (%)
Yes	84	75.68
No	27	24.32
Total	111	(100.00)

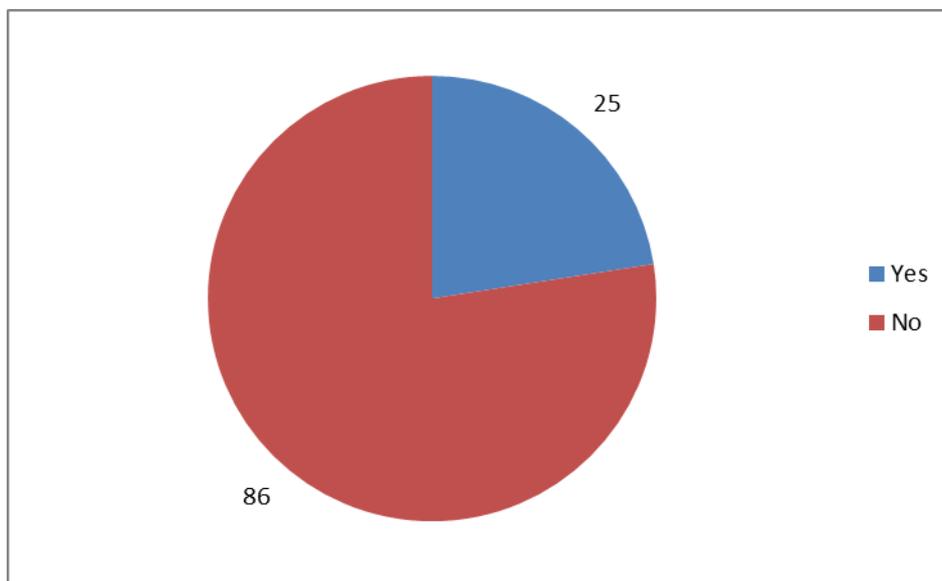
**Headache wise distribution of patients.**

Headache	No. of cases	Percentage (%)
Yes	64	57.66
No	47	42.34
Total	111	(100.00)

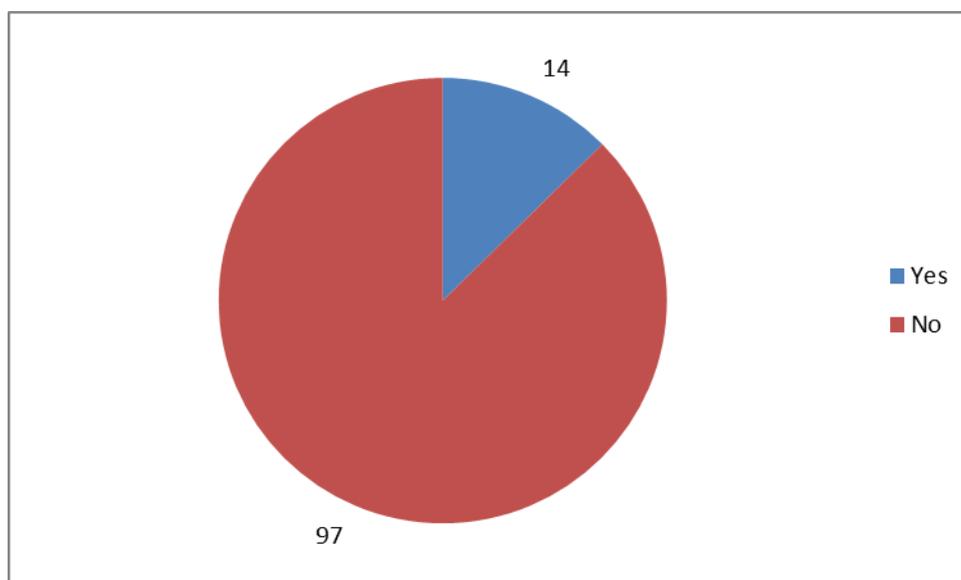


**Swelling/Oedema wise distribution of patients.**

Swelling/Oedema	No. of cases	Percentage (%)
Yes	25	22.52
No	86	77.48
Total	111	(100.00)

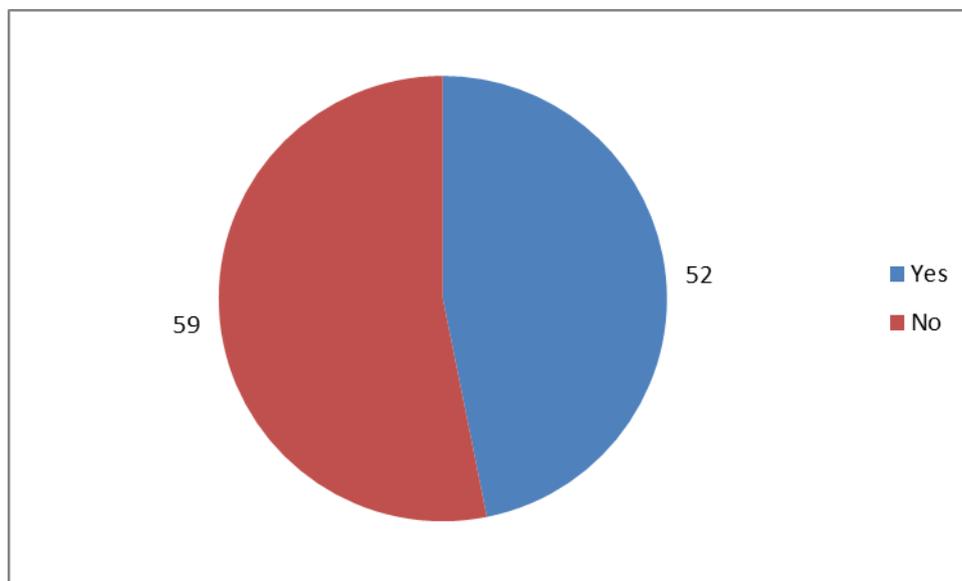
**Wet cough wise distribution of patients.**

Wet cough	No. of cases	Percentage (%)
Yes	14	12.61
No	97	87.39
Total	111	(100.00)

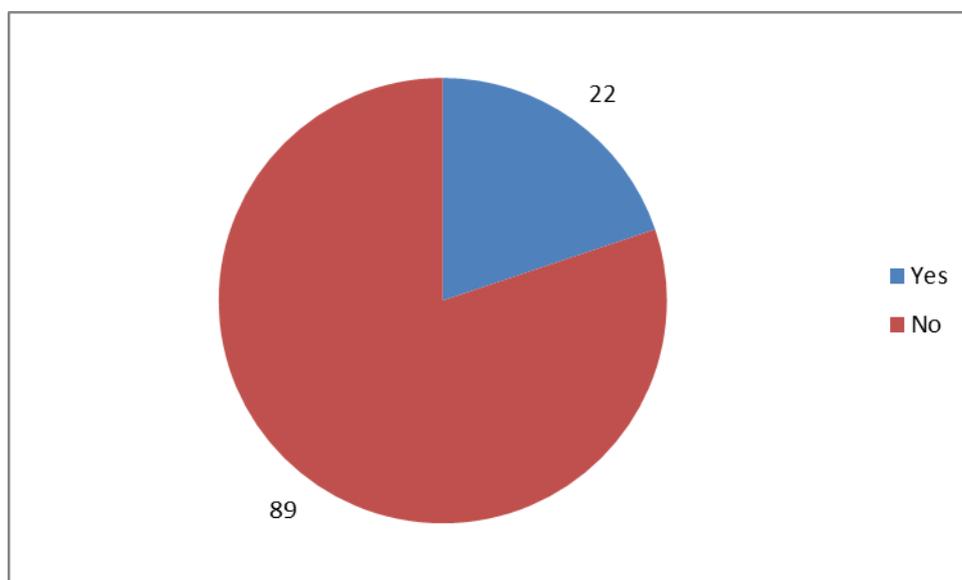


**Anxiety wise distribution of patients.**

Anxiety	No. of cases	Percentage (%)
Yes	52	46.85
No	59	53.15
Total	111	(100.00)

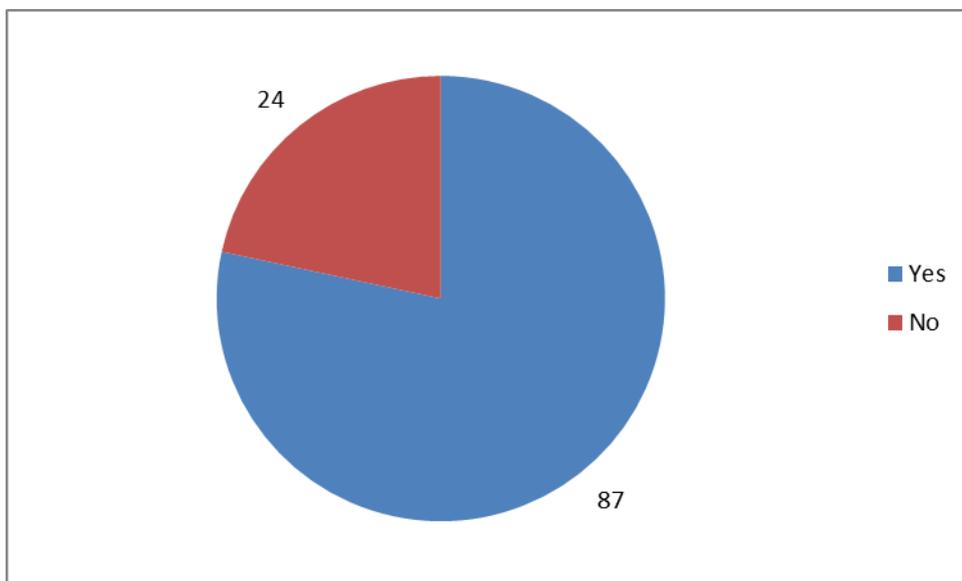
**Difficulty in breath wise distribution of patients.**

Difficulty in breath	No. of cases	Percentage (%)
Yes	22	19.82
No	89	80.18
Total	111	(100.00)



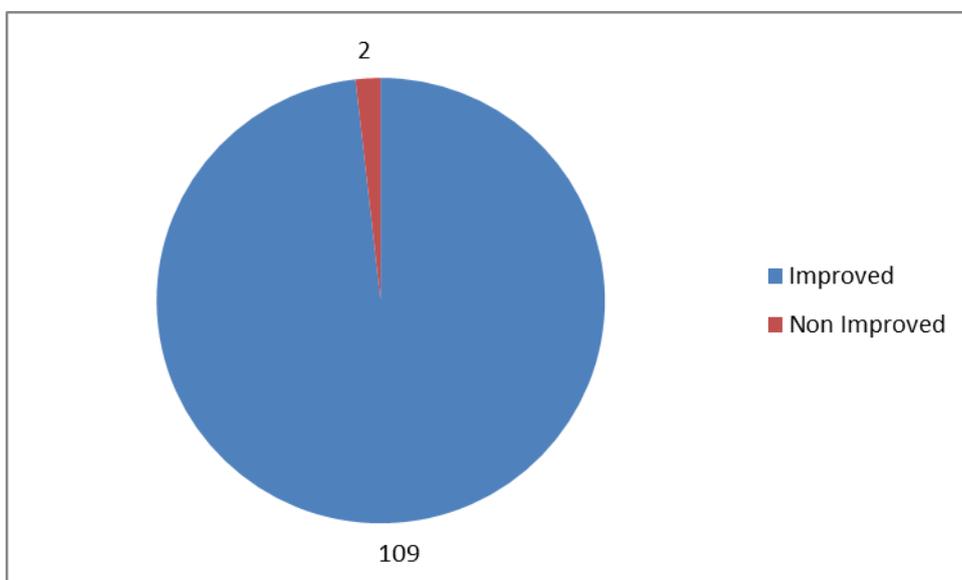
**General Weakness wise distribution of patients.**

General Weakness	No. of cases	Percentage (%)
Yes	87	78.38
No	24	21.62
Total	111	(100.00)



**Result wise distribution of patients.**

Result	No. of cases	Percentage (%)
Improved	109	98.19
Non Improved	2	1.81
Total	111	(100.00)



## RESULT AND DISCUSSION

In the present study the maximum number of cases belongs to age group of 21-40 years (54.95%). It was found that maximum number of cases were male 66(59.46%) patients while 45(40.54%) were female. In the present study all cases were divided into four group, married, unmarried, divorce and widow/widower. It was observed that maximum number of cases were married, 91 (81.98%), 15 cases (13.52%) were unmarried. All cases were divided into six group on the ground of their educational status and it was found that maximum number of cases were illiterate 46 (41.44%) and then 22 (19.82%) were graduate and above graduate. The distribution of cases done according to the living area that were urban, rural and semi urban. And found that 59(53.16%) cases were lived in semi urban area, 39 cases (35.13%) were lived in urban area and only 13 (11.71) cases were lived in rural area. The distribution of cases were divided into four group on basis of their temperament, maximum no of cases 48 (43.24%) were belongs to balghami (Phlegmatic), 44 (39.64%) were belongs to safravi (Bilious) temperament, 15 (13.52%) cases were belongs to saudavi (Melancholic) and only 4 (03.60%) cases belongs to damvi (Sanguine). The distribution of cases was done on the ground of life style followed by the cases enrolled in the study. The maximum no of cases were followed by strenuous life style 71 (63.97%), 36 (32.43%) were followed by moderate life style and 04 (03.60%) were followed by sedentary life style. The clinical sign and symptoms of the case enrolled in study were chest pain, pain in whole body, headache, swelling/edema, wet cough, anxiety, difficulty in breathing and general weakness. It were found that 87 cases out of 111 cases were reported for chest pain, 84 cases out of 111 reported for pain in whole body, 64 cases out of 111 were reported for headache, 86 out of 111 were reported for swelling / oedema, 14 cases out of 111 were reported for wet cough, 52 cases were reported for anxiety, 22 cases were reported for difficulty in breathing and 87 cases out 111 were reported for general weakness. The most common symptoms are general weakness and pain in whole body.

The ingredients used to make the formulation are well known, tolerated and frequently used by the people living in India. All ingredients have been subjected to scientific research and the details are given below. Giloy (*Tinosporacordifolia*) is the single drug very commonly used. The drug has anti pyretic, blood purifier, anti-inflammatory and diuretic effects. Arosa (*Vasaka*) is well known expectorant, anti spasmotic. Therefore it is used in diseases of lungs and respiratory tract. Makoh (*Solanumnigrum*) has the anti-inflammatory, *radae* (Divergent) *mujaffif* (Desiccant) and *musakkin-e-hararat* (Febrifuge) effect. *Akaashbel*

(*Cassythafiliformis*) has astringent, diuretic, piscicidal and insecticidal. The plants contain aporphine alkaloids. (Khare, 2007) Aporphine alkaloids from the leaves *Nelumbonucifera* Gaerth are substances of great interest because of their important pharmacological activities, particularly anti-diabetic, anti-obesity, anti-oxidant, and anti- HIV's activities. (Anonymous, 2014) Ginger (*Zingibuofficinale*) is well known herb/ spice and common used in Indian foods. It is a popular spice used globally especially in most of the Asian countries. Ginger is thought to act directly on the gastrointestinal system to reduce nausea, therefore it is used to prevent to nausea resulting from chemotherapy, motion sickness and surgery. Ginger is also used to treat various type of other GI problem. (Prasad, 2015) Besides, this ginger is used for treating upper respiratory tract infections, cough, and bronchitis. It is also used to warm the body for boosting the circulation and lowering high blood pressure. Because of warming effect, ginger acts as antiviral for treatment of cold and flu. (Qidwai, 2003).

## CONCLUSION

The present study reveal that Unani Herbs and Shrubs have proved their efficacy and safety as prophylactic medicine in Covid – 19 pandemic period but it require more research with latest laboratory investigations and on larger scale. The drugs used in decoction are very common and found in every region of India one of its ingredient, Giloy is being used in a number of formulation now days but this institute is using it for many years in its decoction given to the patients of Rheumatoid Arthritis is to boost their immune power and the world wide safety in many disease. The Authors request the CCRUM, New Delhi to take note and initiate research project with its abilities and provide some relief to the masses of the nation and the world.

## ACKNOWLEDGMENT

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