

# COVID -19 – An Empirical Study on Knowledge, Awareness, and Practices of Adoni Residents

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## ***Abstract***

*COCIS-19 is the only one problem faced by around 215 countries around the globe. It is a contagious disease that spreads very fast if we don't take suggestive precautionary measures. The Government of India and State Governments in India have put their efforts successfully to create awareness in people's minds. Social media, broadcast media and print media are also doing their best in communicating necessary information about COVID-19. In this regard, a study is performed to comprehend the knowledge, awareness, and practices of Adoni residents towards COVID-19. The data is gathered from 337 respondents in the study. The data is evaluated with the chi-square test and explored that respondents regardless of their gender and occupation are having and improving awareness and practicing proper practices to destroy COVID-19. The study was restricted to the residents of Adoni.*

## **Introduction:**

Covid-19 (Corona Virus Disease, 19) is an infectious disease that causes mild to a moderate respiratory disorder. Coronaviruses are a big umbrella of viruses that causes disease in animals or human beings. In human beings, numerous coronaviruses are recognized to cause respiratory contagions like common cold to further serious illnesses such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Chen N, 2020)<sup>1</sup>. Recently it is revealed that coronavirus causes COVID-19. It was first seen in Hubei province, China. Now it is pandemic and soon spreaded to 215 countries in the world. The main symptoms of COVID-19 are fever, dry cough, and tiredness. Some of the infected people have mild symptoms. People of all ages may catch the COVID-19 virus. But, 80% of

the infected people are recovering without having treatment in hospitals. Elderly people with health complications like diabetes, high blood pressure, heart and lung diseases, and cancer are at high risk (**Awareness Material, 2020**)<sup>2</sup>.

The first COVID-19 case was reported on 30th January 2020 in Kerala state in India (Home)<sup>3</sup>. Since then it is spread to 27 states and 6 union territories. The most affected states in India are Maharashtra, Gujarat, Delhi, Tamilnadu, Rajasthan, and Madhya Pradesh. The Government of India (GoI) has taken exceptional measures to control the spread of COVID-19. It has announced a complete nationwide lockdown on 24th March 2020 and is extended to May 3, 2020, gradually (Withnall, Adam, 2020)<sup>4</sup>. Educational institutions, commercial establishments, and transportation were vital affected areas. The due economic devastation caused by lockdown, many people lost their livelihood in the absence of transportation and access to markets (**Jayati Ghosh, 2020**)<sup>5</sup>.

India is as yet persevering through the fight against COVID-19. Obeying control measures set up by the government of India is just the factor that impacting achievement. Thusly control measures are enormously influenced by the awareness and practices of the residents in India (**Ajilore K, 2017**)<sup>6</sup>. It is learned from the previous outbreak of SARS that awareness and practices of people towards infectious diseases can stop the spread further. To flatter the COVID-19 curve in India, there is a pressing need to comprehend the people's opinions at this crucial point in time.

#### **About Adoni:**

Adoni is a small town in the Kurnool district in Andhra Pradesh. It is also one of the first largest municipalities in the Kurnool district. The town is considered famous for its cotton business, sunflower, and other small and medium enterprises. The town is well connected with nearby villages. Due to this most of the agriculture producers, bring their harvest to Adoni, and by selling they use to make some money to lead their family. Suddenly the town heard the news about the lockdown followed by Janata Curfew on 22 March 2020. Before the first lockdown, the majority of the Adoni population was going through what is happening in China through various channels of media. Even the population thought that it is also like some other viruses. The citizens of Adoni were not aware of the effect of this virus, very little knowledge about the symptoms, and measures to control the spread of the virus. So, in this study, we researched the awareness and practices of Adoni residents during the quick ascent time of the COVID-19 flare-up.

**The Profile of the Adoni:**

Area	38.16 SqKms
Population	166537
No. of Households	33071
No. of Revenue Wards	26
No. of Election Wards	41
No. of Slums	51
Slum population	61510
No. of Governmental Hospitals	3
No. of Government Schools	15
No. of Burial Grounds	4
Vegetable Markets	3
No of Public Parks	2
Community Halls	5
Year of Constitution as Municipality	MAY 1865
No. of municipal wards	41

*Source: Adoni Municipality*

**How the COVID knowledge created among the citizens of Adoni?**

Before the first lockdown whole India was known about, what is happening in China?. But the majority of the population in Adoni, they were not having complete knowledge about the corona virus. The following are some of the strategies adopted in Adoni to bring awareness about the corona virus.

1. On the day of Janatha Curfew Adoni municipality started announcing the symptoms of corona virus in the regional language (Telugu) and continued for more than three days in all the areas and public places.
2. Leaflet prepared in regional language distributed to door which comprises of the symptoms, lockdown rules, and regulations, emergency contact numbers.

3. Display of the flex banners in all the strategic locations, where symptoms and other information communicated in regional language.
4. Every hour once airing the symptoms in the regional local channel(RAM Netcom) and scrolling the important information in the channel which has helped to reach the citizens of Adoni easily in a short period.
5. Ward volunteers visited the allotted household and educated personally about the corona virus, symptoms, and measures to be taken in the home and when outside.

#### **What are the measures taken in Adoni in controlling the spread of the virus?**

1. Geographically each ward is closed linking with other areas using barricades. Only one entrance and exit made available to the residents, which was guarded by the Two officers from the Police Department and Two volunteers.
2. The police department has given advertisement for voluntary service at the time of lockdown. This helped the police department to source more volunteers and deployed in various strategic locations helped in controlling the spread of the virus.
3. Monitoring and controlling the movement of the people throughout the day by police beat vehicle, police personnel in their two-wheeler, volunteer in their two-wheeler, circle inspector through his four-wheeler and Divisional Inspector of Police in his vehicle.
4. Relocated the vegetable market, fruits market in four strategic locations to control the crowd movement and implementation of social distancing made possible.
5. Outer road of the Adoni completely closed for commuters.
6. Spraying the chemical in all the residential and commercial locations throughout Adoni.
7. One pass for each household is allowed in the scheduled time limit to bring the essentials.
8. The government has distributed three masks for each individual which helped to control the spread.
9. Introduced mobile market assisted by a volunteer to reduce the crowd movement visiting the market.
10. Maintaining the public places, roads, gutters, drainages clean

**Review of Literature:**

The study was led to evaluate the knowledge levels of COVID-19 ailment and related disease control rehearses among medicinal services experts and students in the Mumbai Metropolitan Region. It is discovered that the most elevated rates of right reactions were from undergrad clinical understudies and the least was from non-clinical/regulatory staff. It is finished up from the examination that is a requirement for educational measures and preparing programs on the disease. **(Modi P D, April 02, 2020 )<sup>7</sup>**

This examination meant to evaluate the awareness, attitudes, and behavioral patterns of the nursers concerning COVID-19. It is discovered that respondents had practically great information about COVID-19. Be that as it may, more data despite everything should be given by the WHO and the Ministry of Health for medical staff to facilitate further govern of the contagious infection. **(Marzieh Nemati, 24 March 2020)<sup>8</sup>**

A cross-sectional analysis with a systematic random sampling technique was done and the information was gathered through a self-regulated questionnaire of the awareness and practices of healthcare workers regarding in regards to COVID-19. It is discovered that most of the healthcare workers had great information and an inspirational attitude toward COVID-19. In any case, the degree of knowledge and attitude of some healthcare workers are not exactly anticipated. **(Huynh Giao, 29 March 2020)<sup>9</sup>**

The examination intended to research the knowledge and attitude of Health Care Workers toward MERS-Cov in south-western Saudi Arabia. From the examination, it is discovered that healthcare workers of the Najran locale demonstrated an elevated flat of awareness and knowledge to MERS-Cov. It is found perceptible contrast in information levels among various professions. Occasional awareness and professional promotions are as yet required. **(Asaad AM, 20/09/2018)<sup>10</sup>**

This investigation endeavored to evaluate the awareness, attitudes, nervousness, and psychological aspects among the middle age Indian populace for the period of the COVID-19 contagion. The respondents had a reasonable level of awareness of the COVID-19 and sufficient information about its precautionary perspectives. The attitudes of COVID-19 demonstrated people groups' eagerness to obey government rules on isolate and social distancing. The nervousness levels recognized in the examination were high. **(Deblina Roy, 3 April 2020)<sup>11</sup>**

In the article, it is investigated that there are two reasons that Covid-19 is such a danger. To begin with, it can kill healthy adults notwithstanding older individuals with existing medical issues. Second, Covid-19 is transmitted effectively. The average contagious individual spreads the illness to a few others. In such a manner, it is talked about that the pioneers have two similarly significant obligations: tackle the prompt issue and shield it from happening once more. (Gates, April 30, 2020)<sup>12</sup>

The investigation uncovers that maximum Chinese inhabitants of a moderately high financial status, especially ladies, are proficient about COVID-19, hold positive attitudes, and possess proper practices towards COVID-19. Wellbeing training programs planned for improving COVID-19 information are useful for Chinese inhabitants to embrace idealistic mentalities and keep up fitting practices. (Chen N, 2020)<sup>13</sup>

### **Research Design and Research Methodology**

It is found from the literature review that studies on awareness and practices of residents towards COVID-19 are very less and such study will help the decision-makers to understand current behaviors and implement innovative ideas to create awareness and encourage residents to practice best ways to stop spreading of COVID-19.

#### **Objectives:**

The present study mainly emphasizes on the awareness levels and practices of Adoni residents towards COVID-19. Hence, the objectives are framed as below,

- To understand the awareness levels of Adoni residents towards COVID-19.
- To study various practices of knowledge inhibition in the residents of Adoni.
- To know the behavioral patterns of the Adoni residents towards COVID-19.
- To explore the significant relationship between demographical factors of the residents and their awareness and practices towards COVID-19.

#### **Methodology**

The convenience sampling technique is used to collect responses from the residents of Adoni. This survey was done in the first week of May after announcing lockdown relaxations. The questionnaire is consists of three sections. It covered demographic factors, awareness level questions, and questions on practices. The researchers referred to conference proceedings,

books, reports, articles, and websites for gathering secondary data. The collected data was inferred with the SPSS. A Chi-Square test is used performed to test the hypotheses.

### Discussion and Analysis:

The study is mainly focused on exploring the significant relationship among demographical factors of the respondents and their awareness level and practices towards COVID-19. To understand awareness level, nine important points are considered and surveyed 337 respondents. In the same way, 11 important practices are identified and tested whether they are practiced by the respondents to restrict the spread of COVID-19.

$H_01$ : *There is no significant relationship between the gender of the respondents and their awareness of COVID-19.*

**Table 01: Showing the relationship between the gender of the respondents and their awareness of COVID-19.**

S.No	Awareness factor	Gender	Frequency	Pearson Chi-Square value	df	Asymp.sig.(two-sided)
1	The main clinical symptoms of COVID-19 are fever, dry cough, and difficulty in breathing.	Male	179	15.83	1	0.000
		Female	158			
2	Most of the affected persons (about 80%) improve their health from the sickness without requiring exceptional treatment.	Male	179	0.011	1	0.918
		Female	158			
3	The corona virus that causes COVID-19 is mostly spread through contact with respiratory droplets than over the air.	Male	179	7.121	1	0.008
		Female	158			
4	It is likely to catch COVID-19 from somebody who has, for instance, just a slight cough and does not sense ill.	Male	179	1.938	1	0.164
		Female	158			
5	COVID -19 has been detected in everywhere, comprising areas with hot and moist weather	Male	179	2.536	1	0.111
		Female	158			

6	Currently, there is no operative cure for COVID-2019, but initial symptomatic and supportive management can help most patients improve from the illness.	Male	179	1.032	1	0.310
		Female	158			
7	Not all persons with COVID-2019 will grow severe cases. Only those who are old, have long-lasting illnesses, and are overweight are more probable to be severe cases.	Male	179	3.244	1	0.072
		Female	158			
8	Isolation and treatment of persons who are diseased with the COVID-19 virus are actual ways to lessen the spread of the virus.	Male	179	7.814	1	0.005
		Female	158			
9	The isolation observation period is 14 days.	Male	179	8.356	1	0.004
		Female	158			

Source: Primary data

Chi-Square test is employed to explore the significant relationship between the age of the respondents and their awareness level towards COVID-19. It is found that P values for factor 2 (.918), factor 4 (.164), factor 5 (.111), factor 6 (.310) and factor 7 (.072) are greater than .05. Hence the test is insignificant, i.e., there is no significant relationship between age and above-mentioned factors. The P values for factor 1(.000), factor 3 (.008), factor 8 (.005) and factor 9 (0.004) are less than .05, hence the test is significant, and there is a relationship between age and these four factors

*H<sub>02</sub>: There is no significant relationship between the Occupation of the respondents and their awareness of COVID-19.*

**Table 02: Showing the relationship between the occupation of the respondents and their awareness of COVID-19.**

S.No	Awareness factor	Occupation	Frequency	Pearson Chi-Square value	df	Asymp.sig.(two-sided)
1	The main clinical symptoms of COVID-19 are fever, dry cough,	Farmer	13	8.094	5	0.151
		Student	210			
		Housewife	5			



	and difficulty in breathing	Private employee	81			
		Self-employee	14			
		Business	14			
2	Most of the affected persons (about 80%) improve their health from the sickness without requiring exceptional treatment.	Farmer	13	8.425	5	0.134
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
3	The corona virus that causes COVID-19 is mostly spread through contact with respiratory droplets than over the air.	Farmer	13	24.432	5	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
4	It is likely to catch COVID-19 from somebody who has, for instance, just a slight cough and does not sense ill.	Farmer	13	22.120	5	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
5	COVID -19 has been detected in everywhere, comprising areas with hot and moist weather	Farmer	13	27.897	5	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
6	Currently, there is no operative cure for COVID-2019, but initial symptomatic and supportive management can help most patients improve from the illness	Farmer	13	16.907	5	0.005
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
7	Not all persons with	Farmer	13	53.214	5	0.000

	COVID-2019 will grow severe cases. Only those who are old, have long-lasting illnesses, and are overweight are more probable to be severe cases..	Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
8	Isolation and treatment of persons who are diseased with the COVID-19 virus are actual ways to lessen the spread of the virus.	Farmer	13	30.171	5	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
	Business	14				
9	The isolation observation period is 14 days.	Farmer	13	34.482	5	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
	Business	14				

Source: Primary data

Chi-Square test is used to find the significant relationship between the occupation of the respondents and their awareness level towards COVID-19. It is found that significance values for factor 3 (.000), factor 4 (.000), factor 5 (.000), factor 6 (.005), factor 7 (.000), factor 8 (.000) and factor 9 (.000) are less than .05. Hence the test is significant, i.e., there is a significant relationship between occupation and the above-mentioned factors. The P values for factor 1(.151), and factor 2 (.134) are greater than .05, hence the test is insignificant, and there is no relationship between occupation and these two factors

*H<sub>03</sub> There is no significant relationship between gender of the respondents and their practices to stop COVID-19 spread.*

**Table 03: Showing the relationship between the gender of the respondents and their practices to stop COVID-19 spread.**

S.No	Practices	Gender	Frequency	Pearson Chi-Square value	df	Asymp.sig.(two-sided)
1	Avoided going to crowded places.	Male	179	3.778	2	0.151
		Female	158			
2	Wore mask whenever leaving home	Male	179	3.693	2	0.158
		Female	158			
3	Maintaining hand hygiene.	Male	179	9.747	2	0.008
		Female	158			
4	Maintaining respiratory hygiene.	Male	179	7.311	2	0.026
		Female	158			
5	Maintaining social distance	Male	179	3.080	2	0.214
		Female	158			
6	Protecting with home care and home isolation.	Male	179	5.773	2	0.056
		Female	158			
7	Avoid touching or direct physical contact	Male	179	5.109	2	0.078
		Female	158			
8	Avoided visitors to the house	Male	179	4.717	2	0.095
		Female	158			
9	Avoided spiting in the open	Male	179	4.813	2	0.090
		Female	158			
10	Improving the immune system.	Male	179	17.821	2	0.000
		Female	158			
11	Keep up to date on the latest COVID-19 hotspots	Male	179	7.479	2	0.024
		Female	158			

Source: Primary data

It is found from the Chi-Square test that significance values for practices, maintaining hand hygiene (.008), maintaining respiratory hygiene (.026) improving the immune system (.000), and updates on the latest COVID-19 hotspots (.024) are less than .05. So the test is significant for these factors and there is no significant relationship exists between occupation and above-mentioned factors. It is also found that for practices avoiding going to crowded places (.151), wore mask whenever leaving home (.158), maintaining social distance (.214), protecting with home care and home isolation (.056), avoid touching or direct physical contact (.078), avoided visitors to house (.095), avoided spitting in the open (.090)  $P > .05$ . Hence there is no significant relationship between occupation and mentioned seven factors as the test is insignificant for these practices.

*H<sub>04</sub>. There is no significant relationship between the occupation of the respondents and their practices to stop COVID-19 spread.*

**Table.4: Relationship between the occupation of the respondents and their practices to stop COVID-19 spread.**

S.No	Awareness factor	Occupation	Frequency	Pearson Chi-Square value	df	Asymp.sig.(two-sided)
1	Avoided going to crowded places.	Farmer	13	42.357	10	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
2	Wore mask whenever leaving home.	Farmer	13	59.038	10	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
3	Maintaining hand hygiene.	Farmer	13	43.294	10	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
4	Maintaining respiratory hygiene.	Farmer	13	60.101	10	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
5	Maintaining social distance	Farmer	13	30.368	10	0.001
		Student	210			
		Housewife	5			
		Private	81			

		employee				
		Self-employee	14			
		Business	14			
6	Protecting with home care and home isolation.	Farmer	13	15.481	10	0.115
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
7	Avoid touching or direct physical contact	Farmer	13	22.15	10	0.014
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
8	Avoided visitors to my house	Farmer	13	99.181	10	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
9	Avoided spitting in the open	Farmer	13	64.182	10	0.000
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
10	Improving the immune system.	Farmer	13	28.349	10	0.002
		Student	210			
		Housewife	5			
		Private employee	81			
		Self-employee	14			
		Business	14			
11	Keep up to date on the latest COVID-19 hotspots	Farmer	13	12.814	10	0.234
		Student	210			
		Housewife	5			

		Private employee	81			
		Self-employee	14			
		Business	14			

Source: Primary data

It is clear from above table no.4 that there is no significant relationship between the occupation of the respondents and protecting with home care and home isolation (.115) and update on latest COVID-19 hotspots (.234) as the significance values are greater than .05. For remaining factors avoiding going to crowded places (.000), wore mask whenever leaving home (.000), maintaining hand hygiene (.000), maintaining respiratory hygiene (.000), maintaining social distance (.001), avoid touching or direct physical contact (.014), avoided visitors to my house (.000), avoided spitting in the open (.000), improving the immune system (.002) the  $P < .05$ , hence, the test is significant for 9 practices. It means there is a significant relationship between occupation and the above factors.

### Limitations

The study is restricted to Adoni residents. This represents the awareness and practices of the Adoni population thus the outcomes of the study cannot be generalized to the entire people of the territory. The awareness and practices of residents may vary from the place of the study and time of the study.

### Conclusion

COVID-19 is spreading quickly in India. Due to the large population in India, It was estimated by the World Health Organization that COVID-19 might spread very fast. But the spreading rate is effectively controlled with appropriate measures implemented by the government of India and other state governments. The GoI and other state governments have used social media, print media and broadcasting media to improve people's awareness and to cultivate good practices relating to COVID-19. In this regard, an effort is made to analyze people's awareness and their practices to eradicate COVID-19. In the study, researchers considered nine awareness factors and eleven practices. Data is analyzed with the Chi-Square test and interpreted that regardless of respondent's gender and occupation most of them have acquired knowledge about symptoms, maintaining hygiene, contamination, and isolation requirements. It is also explored that respondents with all occupations irrespective of gender

are cultivating a habit of practicing recommended practices to reduce the chances of COVID-19 contamination.

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