

## To assess effectiveness of information booklet on knowledge regarding awareness and management of COVID – 19 among individuals.

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**Abstract:** Novel corona virus belongs to the family of Zoonotic pathogens it's from the same class of SARS and MARS which is been spread in previous time, its originated from Wuhan China and within a very short period of time it has spread all across the world, without giving time to understand and confront it with proper treatment. As per WHO and Other organizations the severity of this disease is leading towards global public health emergency. Aim of this study is to assess individual's knowledge on awareness and management of COVID 19 such as assessment, sign and symptoms, precaution, incubation period and management of the person suspected to COVID 19. The research design adopted for this study was pre-experimental one group pre-test–post-test design. Sample size comprised of 500 individuals. Data was collected with the help of demographic variables and self structured knowledge questionnaire. Data were analysis using descriptive & inferential statistics. The most significant finding was 4.4% of individuals were having average knowledge regarding awareness and management of COVID-19 whereas 50.2% and 45.4% had good and excellent knowledge respectively.

**Key Words:** ZOONOTIC, SARS, MARS, WHO, KNOWLEDGE, COVID 19.

### 1. INTRODUCTION:

Understanding the facts are the best method to resolve complication, avoiding panic situation and spreading obtained knowledge further, A new virus is been noticed in Wuhan CHINA in December 2019. initially severity of this virus was not known but as time moves on it turns a small virus to big disaster not only to Wuhan but all across the World, it'll not be wrong to say if proper measures and treatment would not be taken on time it'll soon ruin many country by its impact. As COVID 19 Is from the group of SARS and MARS it effects the respiratory system of an individual and causes severe diseases of respiration system such as Pneumonia and others, so far studies shows that transmission of this virus is person to person via droplets i.e. by coughing and sneezing, shaking hands, touching contaminated articles and maintain close contacts to suspected person.



**Figure 1.** Showing transmission of COVID 19 from various methods.

Whereas incubation period is been referred it is from 2 days to 14 days but it varies from person to person depending upon the immunity system of any individuals along with person those who are suffering from old illness mainly as diabetes, cardiac problems and other diseases. The best method of confronting this virus is to aware individuals by increasing their understanding level, so that they may not get indulge in acts which enhances spread mechanism along with symptomatic treatment till effective remedy come to assistance. CDC (centres for Disease Control and Prevention) and WHO (World Health Organization) has listed symptoms of COVID 19 such as:

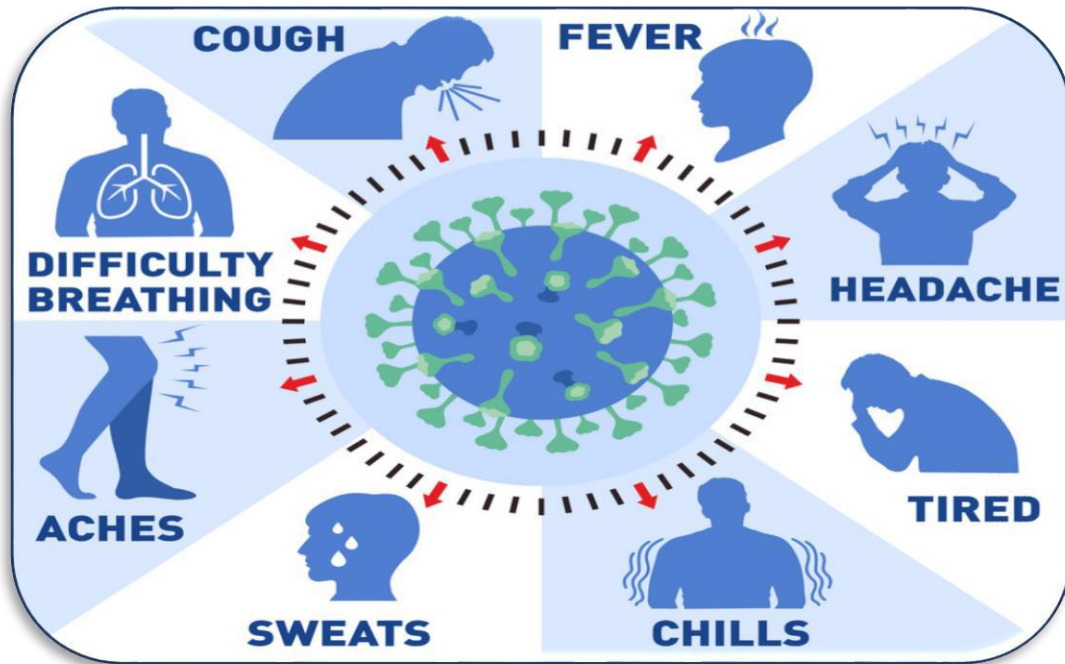


Figure 2. Showing Symptoms of COVID 19 in suspected person.

**2. NEED OF STUDY:**

Time never stay stationary it unfolds many layers, to understand it we have to study certain changed which occurs gradually and give rise to curiosity of acquiring knowledge and focusing on current situation, many times certain new things evolves which requires constant researching to reveal the facts and drawing conclusion to evolved problems. Same is with this virus, as we all know that there are only limited facts which were searcher by various researcher across world and yet many new findings are still under consideration of researchers and soon they'll be reviled for the betterment of the society. Specific regime to this virus is not yet came to existence therefore it is effective to treat suspected as an symptomatic scenario. Till yet preventive measures are the best methods to control the effect of COVID 19 in society certain guidelines are been framed such as frequent hand washing practice, always were face mask when going out, maintain social distance, to avoid to touch your face, eyes, nose and if found suspected it's better to do self quarantine for at least 14 days by opting there interventions we can restricts the spread of COVID 19.



Figure 3: Showing preventive measures to restrict COVID 19 spread.

Soon with the efforts of all hardworking scientist and researchers we'll be able to get specific treatment regime of COVID 19.

### 3. REVIEW OF LITERATURE:

**Sasmita Poudel et.al (2020)** The 2019-nCoV has been recognized as the reason for an episode of respiratory disease in Wuhan, Hubei Province, China starting in December 2019. This plague had spread to 19 nations with 11,791 affirmed cases, including 213 passing, as of January 31, 2020. The World Health Organization proclaimed it as a Public Health Emergency of International Concern. This examination dissected and talked about 70 research articles distributed until January 31, 2020 for a superior comprehension of the study of disease transmission, causes, clinical conclusion, anticipation and control of this infection. Studies up to this point have indicated beginning in association with a fish advertise in Wuhan, however explicit creature affiliation has not been affirmed. The revealed indications incorporate fever, hack, weariness, pneumonia, migraine, loose bowels, haemoptysis, and dyspnoea. Preventive estimates, for example, covers, hand cleanliness rehearses, shirking of open contact, case discovery, contact following, and isolates are successful for diminishing the transmission. Until this point, no particular antiviral treatment is demonstrated compelling, thus, contaminated individuals principally depend on symptomatic treatment and steady consideration. Despite the fact that these examinations had pertinence to control an open crisis, more research should be led to give substantial and solid approaches to deal with this sort of general wellbeing crisis in both short-and long haul.

**Tanu Singhal (2019)** There is another general wellbeing emergencies undermining the world with the development and spread of 2019 novel crown infection (2019-nCoV) or the serious intense respiratory disorder crown infection 2 (SARS-CoV-2). The infection began in bats and was transmitted to people through yet obscure middle person creatures in Wuhan, Hubei area, China in December 2019. There have been around 96,000 detailed instances of crown infection sickness 2019 (COVID-2019) and 3300 announced passing to date (05/03/2020). The sickness is transmitted by inward breath or contact with tainted beads and the hatching time frame ranges from 2 to 14 d. The side effects are generally fever, hack, sore throat, shortness of breath, exhaustion, and discomfort among others. The ailment is gentle in the vast majority; in a few (for the most part the older and those with co morbidities), it might advance to pneumonia, intense respiratory trouble disorder (ARDS) and multi organ brokenness. Numerous individuals are asymptomatic. The case casualty rate is assessed to run from 2 to 3%. Analysis is by showing of the infection in respiratory emissions by exceptional atomic tests. Basic research facility discoveries incorporate ordinary/low white cell tallies with raised C-responsive protein (CRP). The modernized tomographic chest examine is typically anomalous even in those without any manifestations or mellow ailment. Treatment is basically steady; job of antiviral specialists is yet to be built up. Avoidance involves home disconnection of suspected cases and those with mellow ailments and severe disease control measures at medical clinics that incorporate contact and bead insurances. The infection spreads quicker than its two predecessors the SARS-CoV and Middle East respiratory disorder crown infection (MERS-CoV), however has lower casualty. The worldwide effect of this new plague is yet questionable.

### 4. PROBLEM STATEMENT:

“A study to assess the effectiveness of information booklet on knowledge regarding awareness and management of COVID - 19 among individuals at urban areas of Indore.”

### 5. OBJECTIVES OF THE STUDY:

- To assess the pre interventional knowledge of individuals regarding awareness and management of COVID - 19 at urban areas of Indore.
- To administer information booklet to individuals regarding awareness and management of COVID - 19 at urban areas of Indore.
- To assess the post interventional knowledge of individuals regarding awareness and management of COVID - 19 at urban areas of Indore.
- To find out association between pre intervention knowledge score regarding awareness and management of COVID - 19 at urban areas of Indore with selected demographic variables.

### HYPOTHESIS

- **RH<sub>0</sub>** - There will be no significant relationship between pre intervention and post intervention knowledge score of individuals regarding awareness and management of COVID – 19.
- **RH<sub>1</sub>** There will be significant relationship between pre intervention and post intervention knowledge score of individuals regarding awareness and management of COVID – 19.
- **RH<sub>2</sub>** There will be significant association between pre intervention knowledge score of individuals regarding awareness and management of COVID - 19 with selected demographic variables.

### 6. ASSUMPTION:

- Individuals may have some basic knowledge regarding awareness and management of COVID- 19.
- Knowledge may vary from person to person.

- Demographic variables may influence the knowledge of individuals on awareness and management of COVID-19.

**7. METHODOLOGY:**

The research method adopted for the study was an evaluatory pre-experimental research approach. The research design used in this study was pre-experimental one group pre-test–post-test design. This study was conducted in urban areas as Vijay Nagar, Patnipura & Pardesipura of Indore city. In this study the sample size comprised of 500 individuals. Non probability purposive sampling technique is used in this study. Data was collected with the help of demographic variables and self structured knowledge questionnaire. Data were analysis using descriptive & inferential statistics.

**8. PROCEDURE FOR DATA COLLECTION:**

- The investigator explained purpose of study to subjects and informed consent was obtained from them. Confidentiality was assured to entire subjects to get their cooperation.
- Sample was selected based on the inclusive and exclusive criteria.
- The pre intervention assessment was done by using a self structured knowledge questionnaire on awareness and management of COVID- 19.
- Intervention is information booklet had been given and after 3-5 days interval post intervention was taken.
- The investigators thanked and appreciated all the participants for their cooperation.
- The data collected and compiled for data analysis.

**9. ANALYSIS AND INTERPRETATION:**

The present data is comprised of tabulated and statistically analyzed observations.

**Section-I : Identification of the features and characteristic of Individuals**

**Table 1. IDENTIFICATION OF MAIN FEATURES AND CHARACTERISTICS OF STUDIE INDIVIDUAL’S N=500**

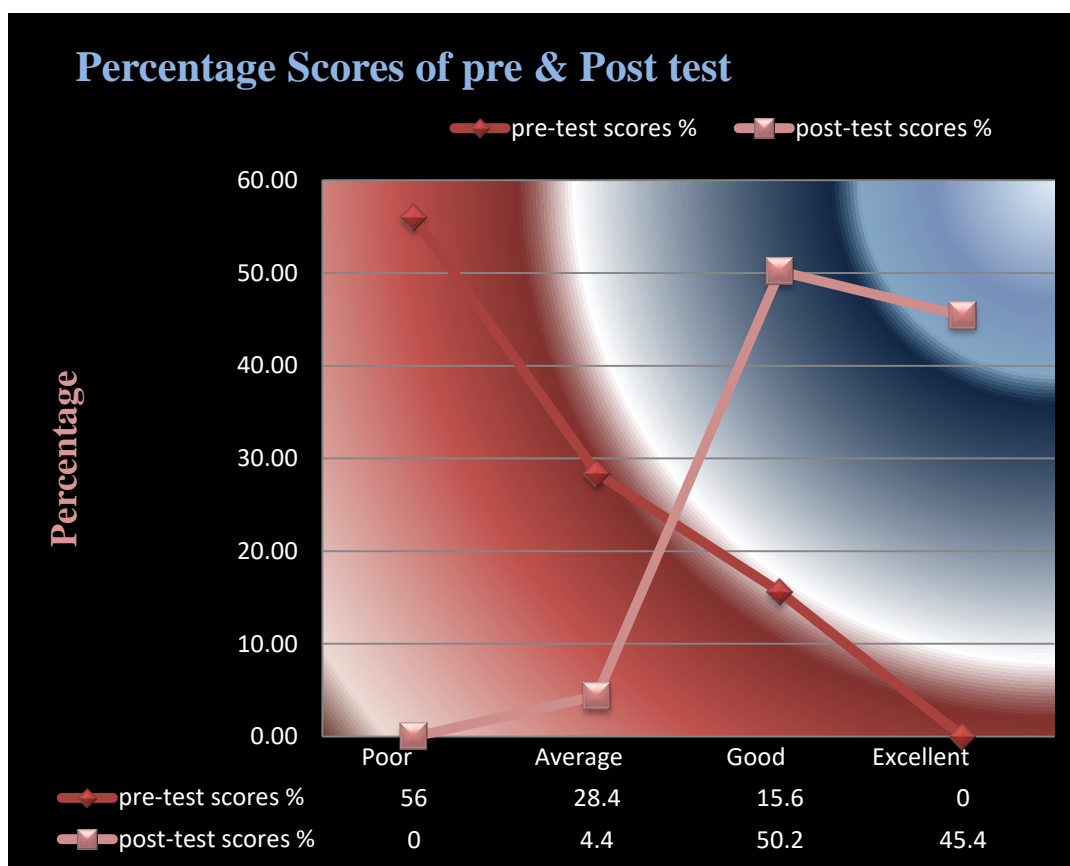
S.NO.	DEMOGRAPHIC VARIABLE	Pre test	
		Frequency (n)	Percentage (%)
1.	<b>Age</b>		
	18 years to 21 years	102	20.4 %
	21 years to 23 years	118	23.6 %
	23 years to 25 years	105	21.0 %
	25 years and above	175	35.0 %
2.	<b>Gender</b>		
	Male	230	46 %
	Female	270	54 %
3.	<b>Educational status</b>		
	Illiterate	22	4.4 %
	Primary/Middle	122	24.4 %
	High School/ Higher Secondary	108	21.6 %
	Graduate and Above	248	49.6 %
4.	<b>Family income per month</b>		
	less than ₹ 10000/-	98	19.6 %
	₹ 10000/- to ₹ 15000/-	95	19.0 %
	₹ 15000/- to ₹ 20000/-	127	25.4 %
	more than ₹ 20000/-	180	36.0 %
5.	<b>Sources of previous knowledge</b>		
	None	274	54.8 %
	Social media	106	21.2 %
	Printed media	112	22.4 %
	Others sources	8	1.6 %

**Section-II: The assessment of the pre intervention knowledge and the post intervention knowledge by administering information booklet**

**Table-2.** Frequency and percentage distribution of pre intervention and post intervention scores of studied subjects

Scores and category	Pre intervention		Post intervention	
	N	%	N	%
1-5 (Poor)	280	56.0	00	0.0
6-10 (Average)	142	28.4	22	4.4
11-15 (Good)	78	15.6	251	50.2
16-20 (Excellent)	00	0.0	227	45.4
<b>TOTAL</b>	<b>500</b>	<b>100.0</b>	<b>500</b>	<b>100.0</b>

**DIAGRAMMATIC PRESENTATION OF PRE AND POST-TEST KNOWLEDGE SCORES OF STUDIED SUBJECTS**

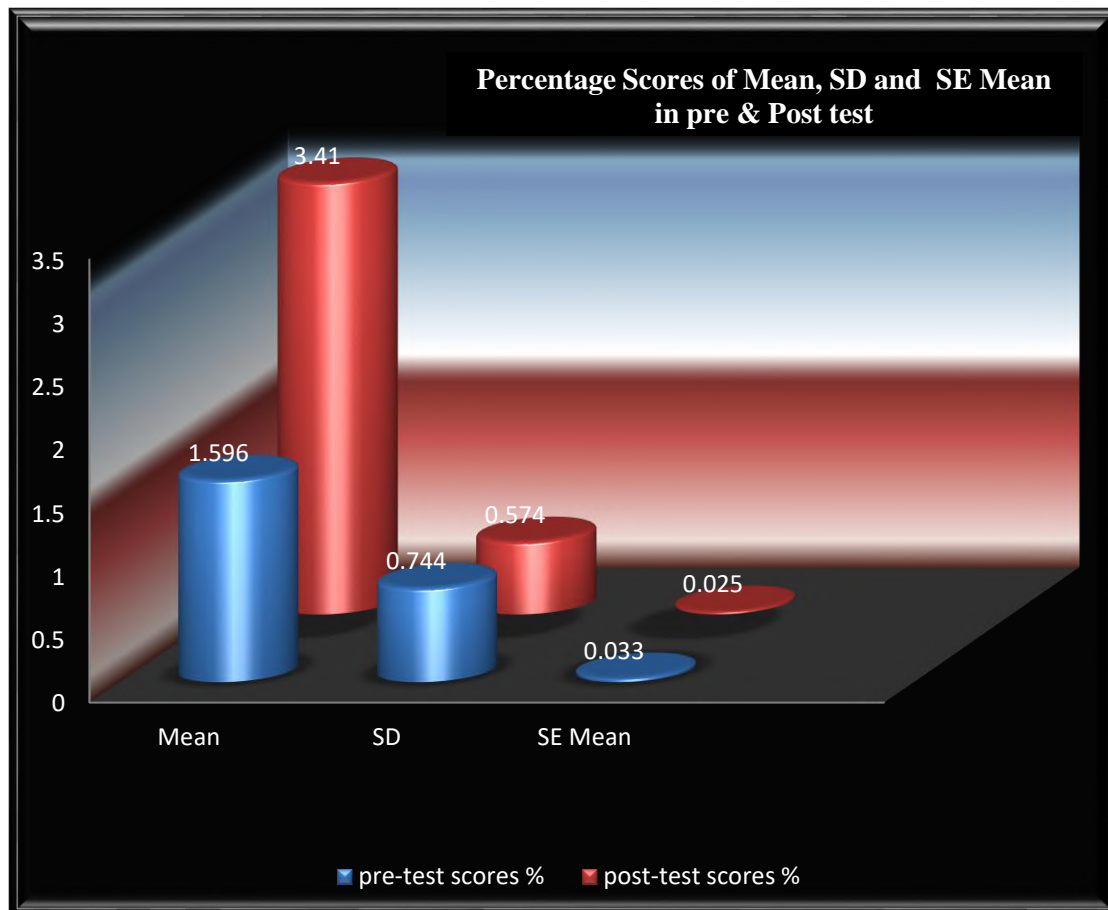


**Figure 4-** Scatter diagram showing proportion of pre intervention and post intervention knowledge scores of studied subjects

**Table 3.** Mean and SD of pre and post test scores of studied subjects:

Knowledge scores in	Mean ( $\bar{X}$ )	Std. Deviation (s)	Std. Error Mean
Pre-test	1.5960	.74424	.03328
Post-test	3.4100	.57494	.02571

**DIAGRAMMATIC PRESENTATION OF PRE AND POST-TEST MEAN, SD, STANDARD ERROR MEAN SCORES OF STUDIED SUBJECTS**



**Figure 5-** Bar diagram showing proportion of pre intervention and post intervention knowledge scores of studied subject

**Table 4.** Comparison between pre and post test knowledge scores:

	Paired Differences			t-value	Df	Significance level
	Mean	Std. Deviation	Std. Error Mean			
<b>Pre-test &amp; Post test</b>	<b>1.81400</b>	<b>.74600</b>	<b>.03336</b>	<b>54.373</b>	<b>499</b>	<b>0.001</b>

The mean difference is highly significant for 499 degrees of freedom at the 0.001 level of significance. LOS-level of significance

**Section-III : The association of pre test knowledge scores with selected demographic variables**

There was an insignificant ( $\chi^2_6 = 2.524^{\otimes}$   $p > 0.05$ ) association between age of individuals at pre-administration stage.

There was an insignificant ( $\chi^2_2 = 5.515^{\otimes}$   $p > 0.05$ ) association between gender of individuals at pre-administration stage.

There was an insignificant ( $\chi^2_6 = 3.100^{\otimes}$   $p > 0.05$ ) association between educational status of individuals at pre-administration stage.

There was an insignificant ( $\chi^2_6 = 7.566^{\otimes}$   $p > 0.05$ ) association between family income per month of individuals at pre-administration stage.

There was an insignificant ( $\chi^2_6 = 5.284^{\otimes}$   $p > 0.05$ ) association between sources of previous knowledge of individuals at pre-administration stage.

## 10. LIMITATIONS

- This study is limited to only urban area population.
- Those who are available at the time of data collection
- Those who are willing to participate as a sample.

## 11. CONCLUSION:

This study was done to expand informative knowledge on awareness and management of COVID – 19 among local resident of Indore city. Result shows that there was an tremendous changes in pre test (Mean 1.5960 value) and post test (Mean 3.4100 value) scores and comparison between pre and post test value shows mean difference is highly significance, therefore a conclusion is been drawn that if knowledge is given in effective manner with the help of certain informative booklet peoples use to sustain that knowledge for long duration and may revise it again. To fight a better fight it's necessary to gain correct and current knowledge on particular topic which may always give rise to awaked society.

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