

# A Study to Assess the Effectiveness of Information Booklet on Knowledge Regarding Care of COVID-19 Patient in Home Isolation Among Adult Population with Age Group 20-50 Years at Selected Area of Utai Durg District (C.G.)

Kalpana Singh<sup>1\*</sup>, Abhilekha Biswal<sup>2</sup>, G. Hemavati<sup>3</sup>, Sreemini Pillai<sup>4</sup>

<sup>1</sup>M.Sc. Nursing, Department of Medical Surgical Nursing (Cardiothoracic Nursing), P.G. College of Nursing, Bhilai, Durg, India

<sup>2</sup>Professor, Department of Child Health Nursing, P.G. College of Nursing, Bhilai, Durg, India

<sup>3,4</sup>Professor, Department of Medical Surgical Nursing, P.G. College of Nursing, Bhilai, Durg, India

**Abstract:** Corona virus is related to a large family group of viruses which may cause illness in animals or humans. In humans, novel corona virus directly attacks the upper respiratory tract and it may cause respiratory infections, from common cold to more severe diseases like Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). The most recently spread virus/disease was unknown until its outbreak began in Wuhan, China, in December 2019. The disease is transmitted by inhalation or contact with infected droplets and the incubation period ranges from 2 to 14 days. The symptoms are usually fever, cough, sore throat, breathlessness, fatigue, malaise among others. The WHO (World Health Organization) declared COVID-19 a pandemic on 11 March, 2020. Worldwide COVID-19 exploded to 33,688,356 cases and caused 1,008,600 deaths by August 2020. Globally according to WHO, 281,808,270 confirmed COVID cases till 29th Dec 2021. India reported over 34,808,886 confirmed cases of the corona virus as of Dec 13, 2021. As on 9 January, 2021, total number of cases in Chhattisgarh was 1020811, including 13066 active cases, 994132 recoveries and 13613 deaths. In Chhattisgarh's COVID-19 count reached 10, 07,847 on Dec 30, 2021 detected. **The Objectives:** To assess the pre-test and post-test knowledge regarding care of covid -19 patient in home isolation among adult population with age group 20-50 years of age at selected area of Utai Durg district Chhattisgarh. To assess the effectiveness of information booklet regarding care of covid -19 patient in home isolation on post test knowledge among adult population with age group 20-50 years. To find association between pre test knowledge regarding care of covid -19 patient in home isolation and selected Socio demographic variable among adult population with age group 20-50 years. **Material and Methods:** The research approach used was an experimental approach, and the research design of the study was pre-experimental one group pre-test post-test research design. The non-probability purposive sampling techniques was used to select 60 adult population from Utai Durg District (C.G). The variables under the study are independent and dependent variables. Independent variables is Information Booklet regarding care of covid-19 patient in home isolation and dependent variables is knowledge of adult population regarding care of covid-19 patient in home isolation. A self-structured questionnaire was prepared

to assess knowledge regarding care of covid-19 patient in home isolation. Reliability of the tool was 1. The data obtained were analyzed and interpreted in terms of objective and hypothesis. Descriptive and inferential statistics were used for data analysis, the level of significance was at 0.05. **Results:** Major findings of these studies are out of 60 sample, in relation overall analysis related to pre-test and post-test knowledge score regarding care of covid-19 patient in home isolation among adult population. In post-test, majority of subject maximum 45(75%) subjects were having excellent knowledge, 15(25%) subjects were having good knowledge score regarding care of covid-19 patient in home isolation.

**Keywords:** assess effectiveness, knowledge, information booklet, home isolation, adult population.

## 1. Introduction

COVID-19 is a novel pandemic that has spread rapidly, overwhelming the health care system and exerting devastating effects on public health and economies. A coronavirus is a kind of common virus that causes an infection in nose, sinuses, or upper throat. Most coronaviruses aren't dangerous. In early 2020, after a December 2019 outbreak in China, the World Health Organization identified SARS-CoV-2 as a new type of coronavirus. The outbreak quickly spread around the world. COVID-19 is a disease caused by SARS-CoV-2 that can trigger what doctors call a respiratory tract infection. It can affect upper respiratory tract (sinuses, nose, and throat) or lower respiratory tract (windpipe and lungs). It spreads the same way other coronaviruses do, mainly through person-to-person contact. Infections range from mild to deadly. SARS-CoV-2 is one of seven types of corona viruses, including the ones that cause severe diseases like Middle East respiratory syndrome (MERS) and sudden acute respiratory syndrome (SARS). The other coronaviruses cause most of the colds that affect us during the year but aren't a serious threat for otherwise healthy people.

\*Corresponding author: [kalpanasingh1994ks9009459504@gmail.com](mailto:kalpanasingh1994ks9009459504@gmail.com)

COVID-19 is characterized by rapid transmission, and can occur by close contact with an infected person. The details on the disease are evolving. As such, this may not be the only way the transmission is occurring. COVID-19 has spread widely and rapidly, from Wuhan city, to other parts of the world, threatening the lives of many people by the end of January 2020, the World Health Organization (WHO) announced a public health emergency of international concern and called for the collaborative effort of all countries, to prevent its rapid spread. Later, the WHO declared COVID-19 a “global pandemic”. The large number of populations has been quarantined and isolated to prevent the further transmission. The control of disease by proper precautions, management, and care can decrease the cases. Therefore, the quarantine zone was essential to practice and follow up the safety measurement regarding protection from virus. The government passed a rule of social distancing and closed certain places like cinemas, school and institutional area to minimize the transmission of disease. As a result, screening, isolation, symptomatic and supportive care are the major treatment procedures. The methods adopted according to the condition of the patient among the different aspects of area, the results shows that the cases have rapidly increased with thousands number of morbidity rate especially the age above 60 years and the patient with different disease like COVID-19 is now a pandemic affecting many countries globally. Governments around the world are taking many efforts to control the spread of COVID-19.

## 2. Material and Method

Pre experimental one group pre-test post-test research design was utilized to assess the effectiveness of Information booklet on knowledge regarding care of covid-19 patient in home isolation among adult population with age group 20-50 years at selected area of Utai Durg district (C.G.)” Where subjects were selected non probability purposive sampling technique. An extensive review of literature was undertaken in various related concepts. The study adopted “Imogene Kings goal attainment model” modified system model. Target population was adult population. Purposive sampling techniques was used to obtain 60 samples. The tool was self-structured questionnaires for assess the knowledge. The tool was validated by experts. The pilot study was conducted from 31/10/2021 to 7/11/2021 at Snakar Nagar ward no.11 Durg. The reliability co- efficient was calculated using Karl – Pearson correlation coefficient, the Reliability of knowledge questionnaire was found in pre- test knowledge on care of covid-19 patient in home isolation was found to be ( $r = 0.72$ ), and post -test knowledge on care of covid-19 patient in home isolation was found to be ( $r = 1$ ) so the tool was found to be highly reliable for data collection. The main study was conducted in the month of December 2021. Data for main study was collected from the Indra Nagar ward no.1 Utai Durg (C.G.). The data obtained were analyzed and interpreted in terms of objective and hypothesis. Descriptive and inferential statistics were used for data analysis the level of significance was  $<0.001$ .

## 3. Results

### A. Overall and area wise analysis of pre –test and post –test knowledge regarding care of covid-19 patient in home isolation among adult population.

Overall analysis of pre and post test knowledge score regarding care of covid-19 patient in home isolation out of 60 adult population, majority of subjects 45 (75%) had excellent knowledge, 15(25%) had good knowledge. In the assessment of area wise analysis of knowledge score majority of adult population improve their knowledge about area of in the area of general knowledge regarding covid-19 in pre test the mean is score 1.6 and mean (53.33 %). Post-test, mean is score 2.72 (90.67%).

In area of transmission of covid-19 mean score is 1.02 and mean (51%) and post-test mean score is 1.83 and mean (91.5%). In the area of sign and symptoms of covid-19, the mean score is 1.42 and the mean (7.28%) and post –test mean is score is 1.8 and the mean (90%). In the area of guideline of covid-19 patient in home isolation mean score 7.28 and mean (48.53%) and post-test mean score is 11.73 and mean (78.2%). In the area of assessment of covid-19 the mean score is 4.07 and mean % 58.14 and post-test mean score 5.73 and mean (81.86%). In the area of medication to be given covid patient the mean score is 7.85 and mean (49.06%) and post-test mean score is 12.88 and mean (80.5%). In the area of diet for covid-19 patient in home isolation the mean score is 3.53 and mean (58.83%) and post-test mean score is 5.3 and mean (88.33%). In the area of personal hygiene and rest and sleep for covid-9 patient in home isolation the mean score is 3.93 and mean (56.14%) and post test mean score is 5.6 and mean (80%). In the area of exercise for covid-19 patient in home isolation the mean score is 0.87 and mean (43.5%) and post-test mean score 1.55 and mean (77%).

### B. Effectiveness of Information booklet regarding care of covid-19 patient in home isolation

In relation to analysis of effectiveness of information booklet on knowledge regarding care of covid-19 patient in home isolation among adult population that increase the knowledge score as calculated “t” value 23.85 is greater than the table value 3 at  $p < 0.0001$  level of significance, the data signifies that the information booklet was very effective in term of gain in knowledge regarding care of covid-19 patient in home isolation.

### C. Association between sociodemographic variables of knowledge

In relation to analysis of association between pretest knowledge score regarding blood donation of nursing students, that there is significant association between previous history of covid-19 infection. As the calculated chi square value is 7.81 which is higher than the table value i.e., 3 at the degree of freedom (1) so, the H3 hypothesis that there is significant association between pretest knowledge score with selected sociodemographic variables i.e., Related to previous history of covid-19 infection only is accepted with regards to knowledge of adult population.

Table 1  
Analysis of overall pre-test and post-test knowledge regarding care of covid-19 patient in home isolation among adult population

Level of knowledge score	Pre Test		Post Test	
	Frequency (n)	Percentage (%)	Frequency (n)	Percentage (%)
Poor knowledge	0	0	0	0
Average knowledge	20	33.33	0	0
Good knowledge	40	66.67	15	25
Excellent	0	0	45	75

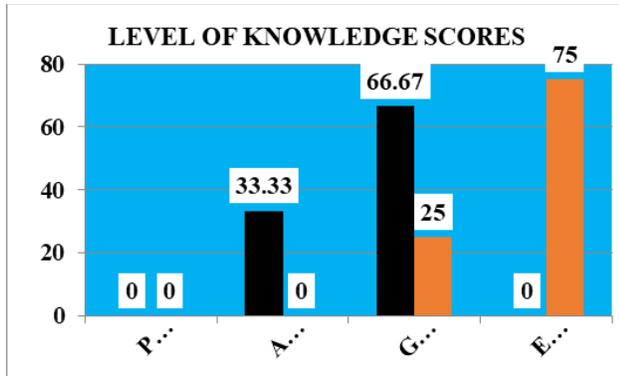


Fig. 1. Overall knowledge on care of covid-19 patient in home isolation

#### 4. Discussion

In present study overall analysis of pre-test and post-test knowledge score of care of covid-19 patient in home isolation out of 60 adult population in pre-test majority score majority 40 (66.67%) subjects had good knowledge, 20(33.33%) had average knowledge and none had poor and excellent knowledge regarding care of covid-19 patient in home isolation.

In post-test, majority 45(75%) subjects had excellent knowledge, 15(25%) had good knowledge and none had poor and average knowledge regarding care of covid-19 patient in home isolation. It is concluded that after administration of information booklet, maximum knowledge score was improved regarding care of covid-19 patient in home isolation.

#### 5. Conclusion

On the basis of finding of the study, following conclusion was drawn:

- After intervention in posttest all adult population in post-test, majority 45 (75%) subjects had excellent knowledge, 15 (25%) had good knowledge and none had poor and average knowledge regarding blood donation.
- This study was done to evaluate the effectiveness of information booklet on knowledge reading care of covid-19 patient in home isolation. The result of this study showed that information booklet was effective in improving knowledge among adult population.
- Calculated “t” value 23.85 is greater than the table value 3 at  $p < 0.0001$  level of significance, the data signifies that the information booklet was very

effective in term of gain in knowledge regarding care of covid-19 patient in home isolation.

- There is significant association between pretest knowledge score regarding care of covid-19 patient in home isolation with selected sociodemographic variables related to previous history of covid-19 infection.

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