

A Study to Evaluate Effectiveness of Awareness Program on Knowledge regarding Covid -19 among Mother of Under Five Children Admitted in Pediatric Ward in Selected Hospital Ujjain (MP)

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Abstract

Introduction : Corona virus disease 2019 (COVID-19) is a severe acute respiratory infection caused by the novel corona virus severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (WHO 2020a), which started initially as a bunch of proceeding from Wuhan, China (Zhu et al. 2020), has now dispersed to 135 countries with 142,539 number of addicted cases and 5393 deaths (WHO 2020b). The WHO declared COVID-19 as a global pandemic on March 11, 2020 (WHO 2020c). The illness mainly dispersed via close interaction of respiratory droplets create by infected individualist (Center for Disease Control and Prevention 2020a). At the world level, sufficient testing capacity for COVID-19 is not available as it should be and therefore preventing individuals from accessing care.

Methodology : The present study an interventional study to assess the effectiveness of awareness program on knowledge regarding covid-19 among mother of under five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain M.P. A quantitative with evaluative approach was adopted for this study. The study was conducted in the selected Hospital of Ujjain. This area is located at 90 km far from College. The setting was chosen on the basis of feasibility, availability of adequate sample and the familiarity of the investigator with the setting. The present study was conducted among 50 mother of under five children admitted in pediatric ward at selected Hospital of Ujjain. data analysis done by descriptive and inferential statistics.

Results : Chi-square test used to find out the association between pre-test knowledge score with selected socio-demographic variables of Mother of under-five children.

Conclusions : The information was given with the aid of Awareness program which included various aspects such as introduction, causes, types, complication and management, which will help the mother of under five children to improve their knowledge.

Keywords : Covid 19; Evaluate; Effectiveness; Awareness

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How to cite this article : Bagri S. A Study to Evaluate Effectiveness of Awareness Program On Knowledge Regarding Covid -19 Among Mother of Under Five Children Admitted in Pediatric Ward in Selected Hospital Ujjain (MP). Glob. Nurs. J. India 2024; 7: II: 704-710.

Submitted : 03/08/2024, Accepted : 02/09/2024, Published :07/09/2024

Introduction

Covid-19 virus disease 2019 (COVID-19) is a severe acute respiratory infection caused by the novel covid-19virus severe acute respiratory syndrome covid-19virus 2 (SARS-CoV-2) (WHO 2020a), which started initially as a cluster of cases from Wuhan, China (Zhu et Al.2020), has now dispersed to 135 nation with 142,539 number of confirmed proceeding and 5393 deaths (WHO 2020b).

The WHO declared COVID-19 as a global pandemic on March 11, 2020 (WHO 2020c). The unwellness mainly outspread via close interaction of respiratory droplets generated by infected single (Center for Disease Control and Hindrance 2020a). At the world level, adequate testing capability for COVID-19 is not available as it should be and hence preventing individuals from admittance care. During the letter outbreak period, various countries have followed and enforced various testing scheme, depending on the handiness of diagnostics and expendable. Nevertheless, strict steps taken by the WORLD HEALTH ORGANIZATION has made the diagnostic available with the mission to "detect, protect and treat" to break the chain of transmittal of SARS-CoV-2 (WHO 2020d). Hence, early diagnosis and on time treatment can substantially reduce the number of expected cases. Hence, laboratory diagnosis of SARS-CoV-2 holds the key in comprise and confining the COVID-19 pandemic.

People who are in close contact with mistrustful influence have been advised under a 14-day health measuring time period that should be started from the last day of contact with infected single. One time these individuals show any symptoms including breathing out, sneezing, shortness of breath or diarrhea, they should require immediate medical attraction. Immediate separation of the suspected individual should be performed with proper guidance, and they should be closely monitored for clinical symptoms and diagnosis should be performed inhospital-based lab as soon as possible. In add-on, surveillance should be performed for those who were in contact with the suspected or conformed single by observing their clinical symptoms. Before taking conclusion about separation, authorities should make sure that whether the suspected individual requires home isolation and careful clinical evaluation with safety assessment by healthcare professionals or not. If the suspected individuals present any symptoms during separation, they should contact the doctors for their treatment. During home isolation, suggested medication and symptoms should be closely certified. The suspected, probable and confirmed case

definition of COVID-19 by the WORLD HEALTH ORGANIZATION has been presented in Fig. 9.1. The decision for diagnosis of an individual should be based on epidemiologic and clinical factors which linked to an assessment of the quantity of infection.

IN 2021JOSE D SANTOTORIBIO, DAVID NUNEZ-JURADO, et, al. Evaluation of Routine Blood Tests for Diagnosis of Suspected Covid-19virus Disease 2019. Clinical graph, nursing records, laboratory findings, and chest x-rays from adult patients with clinical intuition of COVID-19 (fever, cough and/or dyspnoea) at hospital entry were reviewed. Patients were categorized into two groups according to RT-PCR COVID-19: positive (COVID-19) or negative (NON-COVID-19). Diagnostic accuracy was determined by analyzing receiver operating characteristic (ROC) curve, calculating the area under the ROC curve (AUC) and the cutoff value. In order to reduce the number of false positives, the cutoff value with a specificity of 80% was considered. 203 patients (101 females, 102 males) with ages between 18 and 96 years (mean = 61.3) were deliberate. Ninety-four were COVID-19 and 109 were NON-COVID-19. Plasma ferritin level was the most accurate biomarker (AUC = 0.847 and 0.804 in women and men, respectively). The leading diagnostic criteria for suspected COVID-19 were constituted with biomarker limitation values to distinguish between COVID-19 and NON-COVID-19 patients: lymphocytes $\leq 1.0 \times 10^9/L$; eosinophils $\leq 0.02 \times 10^9/L$; protein $> 125\%$ of high remark extent (URL); LDH $> 125\%$ of UPPER REFERENCE LIMIT; hsC-REACTIVE PROTEIN $> 80 \text{ mg/L}$; and D-dimer $> 1.2 \text{ mg/LITER}$. Sensitiveness was 66%, 64% 62%, 46%, 43%, and 33% for protein, eosinophils, LDH, CRP, lymph cell, and D-dimer, severally. Of those determined to be COVID-19 patients, 91% met one or more of the diagnostic criteria with these blood biomarkers, and of the NON-COVID-19 patients, 47% did not met any diagnostic criteria.

IN 2021 YUEHONG WANG , SHUANG YAOet,al. Risk Factors of Covid-19virus Disease 2019-Related Mortality and Optimal Treatment Regimens: A Retrospective StudyCovid-19virus disease 2019 (COVID-19) is spreading rapidly worldwide, and scientists are trying to find a way to overcome the disease. We explored the risk factors that influence patient outcomes, including treatment regimens, which can provide a reference for further treatment. A prospective cohort study analysis was performed using data from 97 patients with COVID-19

who visited Wuhan Union Hospital from February 2020 to March 2020. We collected data on statistic, comorbidities, clinical manifestations, laboratory tests, treatment methods, outcomes, and complications. Patients were separate into a recovered group and a deceased group. We compared the differences between the 2 groups and analysed risk factors influencing the treatment effect. 76 patients recovered and 21 died. The average age and body mass index (BMI) of the deceased group were significantly higher than those of the recovered group (69.81±6.80 years vs 60.79±11.28 years, $P<0.001$ and 24.95±3.14 kg/m² vs 23.09±2.97 kg/m², $P=0.014$, respectively). The collection of antiviral drugs and supportive therapy appears to be associated with the lowest mortality ($P<0.05$). Variable Cox regression analysis revealed that age, BMI, H-CRP, shock, and acute respiratory distress syndrome (ARDS) were independent risk factors for patients with COVID-19 ($P<0.05$). CONCLUSIONS Elderly patients and those with a high BMI, as well as patients who experience shock and ARDS, may have a higher risk of death from COVID-19. The combination of antiviral drugs and supportive therapy appears to be associated with lower mortality, although further research is needed.

IN 2021 ZHIGANG WANG , ZHIQIANG WANG et al. Identification of risk factors for in-hospital death of COVID - 19 pneumonia lesion from the early outbreak. To examine the clinical characteristics and identify independent risk factors for in-hospital mortality of 2019 novel covid-19 virus (COVID-19) pneumonia. A total of 156 patients diagnosed with COVID-19 pneumonia at the Central Hospital of Wuhan from January 29, 2020, to March 20, 2020, and 20 healthy individuals were enrolled in this single centered retrospective study. The epidemiological parameters, clinical presentations, underlying diseases, laboratory test results, and disease outcomes were collected and analysed. The median age of all enrolled patients was 66 years. At least one underlying disease was identified in 101 COVID-19 patients, with hypertension being the most common one, followed by cardiovascular disease and diabetes. The most common symptoms known upon admission were fever, cough, dyspnoea, and fatigue. Compared to alive cases, patients who died during hospitalization had higher plasma levels of D-dimer, creatinine, creatine kinase, lactate dehydrogenase, lactate, and lower percent of lymphocytes (LYM [%]), thrombocyte count and albumin levels. Most enrolled patients received antibiotics and anti-viral treatment. In add-on, 60 patients received corticoid, and 51 received

intravenous Ig infusion. FORTY-FOUR patients received non-invasive ventilation and NINETEEN received invasive ventilation. Respiratory failure was the most frequently observed complication (106 [67.9%]), followed by sepsis (103 [66.0%]), acute respiratory distress syndrome (ARDS) (67 [42.9%]), and septic shock (50 [32.1%]). Multivariable regression suggested that advanced age (OR [odds ratio] = 1.098, 95% CI [confidence interval]: 1.006-1.199, $P = 0.037$), shorter duration from onset to admission (OR = 0.853, 95% CI: 0.750-0.969, $P = 0.015$) and elevated lactate level upon admission (OR = 2.689, 95% CI: 1.044-6.926, $P = 0.040$) were independent risk factors for in-hospital mortality for COVID-19 infection. Meanwhile, increased LYM (%) at admission (OR = 0.787, 95% CI: 0.686-0.903, $P = 0.001$) signal a better prediction.

Objectives of the Study

1. To assess the existing knowledge on covid-19 among mother of under five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain M.P.
2. To assess the posttest knowledge on covid-19 among mother of under five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain M.P.
3. To find out the effectiveness of awareness program on covid-19 among mother of under five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain M.P.
4. To find out the association between pre- test knowledge scores of mother of under-five children with their selected demographic variables.

Hypotheses :

H₁ - There will be significant difference between mean pre-test and post-test knowledge scores regarding covid-19 among mother of under five children at $p<0.05$ level of significance.

H₂ - There will be significant association between pre-test knowledge scores of mother of under-five children with their selected demographic variable.

Methodology

Research approach & design : Quantitative with One group Pre-test & Post test interventional research design.

Setting of the study : The study was conducted in the selected Hospital of Ujjain. This area is located at 90 km far from College.

Population : Population consists of mother of under five children admitted in pediatric ward in term of gaining knowledge selected Area of Ujjain district.

Sampling technique : Convenient sampling

Sample Size : 50

Criteria for sample selection :

Inclusive Criteria

1. Mother of under five children admitted in pediatric ward.
2. Mothers who is willing to participate in this study.
3. Mothers who is present during the data collection of this study.
4. Mothers who know Hindi language

Exclusive Criteria

- Mother of more than age of five children admitted in pediatric ward.
- Who were not willing to participate.
- Who were not available at the time of study.

Development and description of tool

Section-A

Background Data of Mother Questionnaire to collect demographic data of the samples which consists of 9 items. They were Age in year, Religion, Number of children, Type of family, Education of mother, Area of living, Occupation, Family income per month, Previous knowledge regarding prevention of covid-19

Section-B

The knowledge gain is assessed by multiple choice questions. Multiple choice questions especially adapted for use regarding covid-19 among mother of under five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain (M.P.). This Multiple choice questions is prepared by teaching notes/program.

Scoring Key : The average knowledge gain for mother of under five children admitted in pediatric ward. By giving awareness program regarding covid-19 among mother of under five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain (M.P.).

Good	21-30
Average	11-20
Poor	0-10

Intervention

The procedure was, on the first day the investigator checked the knowledge gain for mother of under five children admitted in pediatric ward. A conducive environment was established before initiation of awareness program of covid-19 among mother of under five children. Awareness program of covid-19 among mother of under five children given for 1 hours after that researcher assess the knowledge of mother of under five age of children through post test by same questionnaires used in pre-test assessment of knowledge of mother of under five age of children.

Content validity

Validity refers to the grade to which an tool measures what it is supposed to measure. The content of the tool was established on the basis of opinion of one medical expert and five nursing experts in the field of pediatrics.

Reliability of the tool

Hence the tool was standardized electronic infant weighing scale and universally acceptable one. The weighing scale used by the investigator was calibrated. The reliability of the tool was calculated by using Kerl Pearson coefficient correlation, the reliability was found to be 0.8

Data collection procedure :

The investigator obtained written permission from the S S Hospital & Research Centre Ujjain (M.P.). The data collection period extended from 05/10/2021 to 12/11/2021 as per the purposive of the sample. The purpose of the study was explained to them and privateness was confident to all the answering. The mother of under five children were selected by purposive sampling technique. The pre-assessment done by questionnaires, after the assessment researcher give the Awareness program of covid-19 among mother of under five children given for 1 hours after that researcher assess the knowledge of mother of under five age of children through post test by same questionnaires used in pre-test assessment of knowledge of mother of under five age of children. 31 Post-test was conducted from 26/010/2021 to 12/11/2021 Respondents cooperated well with the investigator. Data collection process was terminated on assessing knowledge of mother of under five children and thanking the respondents for their cooperation and patience.

Results :

Distribution of socio- demographic variable of mother of under-five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain(M.P.).

Table No. 1 - Frequency and percentage wise distribution of Mother of under-five children based on their Age in year

1	Age in year	Frequency	Percentages
	a) 21-23 years	15	30.00%
	b) 24-26 years	16	32.00%
	c) 27-29 year	11	22.00%
	d) Above 30 years	8	16.00%

Table No. 2 - Frequency and percentage wise distribution of Mother of under-five children based on their Religion.

2	Religion	Frequency	Percentages
	a) Hindu	12	24.00%
	b) Muslim	17	34.00%
	c) Christian	13	26.00%
	d) Other	8	16.00%

Table No. 3 - Frequency and percentage wise distribution of Mother of under-five children based on their Number of children

3	Number of children	Frequency	Percentages
	a) 1	18	36.00%
	b) 2	20	40.00%
	c) More than 2	12	24.00%

Table No. 4 - Frequency and percentage wise distribution of Mother of under-five children based on their Type of family.

4	Type of family	Frequency	Percentages
	a) Joint family	12	24.00%
	b) Nuclear family	12	24.00%
	c) Extended family	26	52.00%

Table No. 5 - Frequency and percentage wise distribution of Mother of under-five children based on their Education of mother.

5	Education of mother	Frequency	Percentages
	a) Illiterate	16	32.00%
	b) Primary	7	14.00%
	c) High school	17	34.00%
	d) Graduate	10	20.00%

Table No. 6 - Frequency and percentage wise distribution of Mother of under-five children based on their Area of living.

6	Area of living	Frequency	Percentages
	a) Urban	16	32.00%
	b) Rural	34	68.00%

Table No. 7 - Frequency and percentage wise distribution of Mother of under-five children based on their Occupation.

7	Occupation	Frequency	Percentages
	a) Private job	10	20.00%
	b) Govt job	14	28.00%
	c) Housewife	12	24.00%
	d) Daily wages	14	28.00%

Table No. 8 - Frequency and percentage wise distribution of Mother of under-five children based on their Family income per month.

8	Family income per month	Frequency	Percentages
	a) 5001-10000 Rs.	8	16.00%
	b) 10001-19000 Rs.	16	32.00%
	c) 20000-30000 Rs.	14	28.00%
	d) More than 30000 Rs.	12	24.00%

Table No. 9 - Frequency and percentage wise distribution of Mother of under-five children based on their Previous knowledge regarding prevention of Covid-19.

8	Previous knowledge regarding prevention of covid-19	Frequency	Percentages
	a) Yes	32	64.00%
	b) No	18	36.00%

Analysis of level of knowledge on Covid-19 on pre-test and post-test among mother of under-five children admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain (M.P.).

Table No. 10 - Frequency and percentage wise distribution of Mother of under-five children based on pre-test level of knowledge score on covid-19.

N=50

S.No.	Category	Range	Frequency	Percentage	Mean	Mean %	SD
1	Good	21-30	4	8%	11.8	39.33%	2.348
2	Average	11-20	14	28%			
3	Poor	0-10	32	64%			

Table No. 11 - Frequency and percentage wise distribution of post- test knowledge score of mother of under-five children regarding covid-19 admitted in pediatric ward in S.S. Hospital & Research Centre Ujjain (M.P.).

N=50

S.No.	Category	Range	Frequency	Percentage	Mean	Mean %	SD
1	Good	21-30	37	74%	24.28	80.93%	3.81
2	Average	11-20	11	22%			
3	Poor	0-10	2	4%			

Comparison of mean pre-Test & Post-Test knowledge score**Table No. 12 - Comparison of mean pre-test and post-test knowledge score of Mother of under-five children regarding covid-19.**

S.No.	Description	Mean	Mean %	SD
1	Pre-test knowledge	11.8	39.33%	2.348
2	Post-test knowledge	24.28	80.93%	3.81

Conclusions

The following conclusions were drawn based on the present study,

- q Prevention of covid 19 is the current problem among the community people.
- q The knowledge of the mother of under five children was not up to the mark before the introduction of awareness programme.
- q After the introduction of the awareness programme, the post-test findings showed the significant increase in the knowledge of mother of under five children on covid 19.
- q Awareness program is proved to be one of the effective teaching strategies.
- q Awareness program can be kept for future reference when comparing with PTP.

Recommendation :

Following are the recommendation

- q The study can be replicated on a large sample with a control group.

- q A comparative study may be conducted to find out the effectiveness between PTP and STP, Information booklet regarding the same topic.
- q Awareness program similar study can be undertaken using other teaching strategies.
- q Similar study can be conducted using larger number of sample.
- q A study can be conducted to find the knowledge and attitude of mother of under five children regarding Prevention of covid 19.

Financial support and sponsorship : Nil

Conflicts of interests : The authors declare that they have no conflict of interest with regard to the content of the report.

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