



## "EFFECTIVENESS OF SELF- INSTRUCTIONAL MODULE ON KNOWLEDGE REGARDING MULTISYSTEM INFLAMMATORY SYNDROME IN CHILDREN (MIS-C) AMONG NURSES WORKING IN PAEDIATRIC DEPARTMENTS"

Mr. Chetan Kumar Sharma

M.Sc. Tutor, Renaissance University, School of Nursing, Indore M.P.

### ABSTRACT

The rapid spread of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) led to the global COVID-19 pandemic, impacting the elderly and those with underlying health conditions the most. Initially seen as mild in children, COVID-19's effects on them have become clearer over time. Some children experienced Multisystem Inflammatory Syndrome (MIS-C), marked by fever, abdominal pain, and various organ system involvement, similar to Kawasaki disease or toxic shock syndrome. MIS-C, also known as Pediatric Inflammatory Multisystem Syndrome (PIMS-TS), emerged in close association with SARS-CoV-2. Though rare, it prompted urgent pediatric attention. Reports described clinical heterogeneity, resembling known inflammatory conditions but distinct from them. Diagnosis criteria evolved, and health officials adapted to the evolving understanding of MIS-C. In adults, a similar syndrome, Multisystem Inflammatory Syndrome in Adults (MIS-A), emerged, often following SARS-CoV-2 infection. The CDC defined MIS-C with criteria involving severe illness, SARS-CoV-2 presence, organ dysfunction, inflammation, and absence of severe respiratory illness. These syndromes underline the complexities of COVID-19's effects across age groups, warranting ongoing research.

**KEYWORDS :** Effectiveness, Self-Instructional Module, Knowledge,

### Background Of Study

Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), causing coronavirus disease 2019 (COVID-19), led to a pandemic health crisis within a few months' time. Severe COVID-19 and associated mortality has been highest in elderly and patients with comorbidities, such as cardiovascular disease, diabetes mellitus, and chronic lung disease. Since the outbreak, COVID-19 was generally described as asymptomatic or mild in children, causing few pediatric hospitalizations and minimal mortality.

### Need Of The Study –

This report presents a case of a young adult woman who exhibited complete Kawasaki disease symptoms along with severe myocarditis, acute respiratory distress syndrome, and hemodynamic instability several weeks after experiencing transient anosmia. The presence of specific antibodies to SARS-CoV-2, despite the absence of detectable virus, indicated a delayed immune response following a recent COVID-19 infection. Treatment involving colchicine, tocilizumab, high-dose immunoglobulins, and methylprednisolone effectively managed the inflammatory process and mitigated the risk of coronary aneurysm. The patient eventually recovered without lasting effects. This case highlights the significance of SARS-CoV-2 serology in diagnosing delayed immune-related complications of COVID-19, emphasizing that not only children but also young adults can experience multisystem inflammatory syndromes akin to Kawasaki disease linked to COVID-19. Despite the ongoing global spread of the virus, comprehensive understanding of its effects on children and young adults remains essential.

### Problem Statement-

"A Study To Assess The Effectiveness Of Self Instructional Module On Knowledge Regarding Multisystem Inflammatory Syndrome In Children (Mis-C) Among Nurses Working In Pediatric Departments Of Selected Hospitals At Indore (M.P)".

### Objectives Of The Study Were –

1. To assess the pre test knowledge regarding Multisystem Inflammatory syndrome in Children (MIS-C) among nurses
2. To assess the post test knowledge regarding Multisystem Inflammatory syndrome in Children (MIS-C) among nurses
3. To assess the effectiveness of self instructional module on knowledge regarding Multisystem Inflammatory

syndrome in Children (MIS-C) among nurses

4. To find an association between pre-test knowledge regarding Multisystem Inflammatory syndrome in Children (MIS-C) with selected socio-demographic variables.

### Hypothesis –

#### Rh<sub>0</sub> -

There will be no significant difference between pre-test and post-test knowledge score regarding Multisystem Inflammatory syndrome in Children (MIS-C) among nurses at the level of  $p \leq 0.05$ .

#### Rh<sub>1</sub> –

There will be significant difference between pre-test and post-test knowledge score regarding Multisystem Inflammatory syndrome in Children (MIS-C) among nurses at the level of  $p \leq 0.05$ .

#### Rh<sub>02</sub> –

There will be no significant association of pre-test knowledge score regarding Multisystem Inflammatory syndrome in Children (MIS-C) with selected socio-demographical variables at the level of  $p \leq 0.05$ .

#### Rh<sub>2</sub> –

There will be significant association of pre-test knowledge score regarding Multisystem Inflammatory syndrome in Children (MIS-C) with selected socio-demographical variables at the level of  $p \leq 0.05$ .

### METHODOLOGY –

An quantitative approach with one group pre-test design was used for the study. The samples consisted of 60 staff nurses selected by Non probability purposive sampling technique. Research design was pre-experimental one group pre-test and post-test design. Data was collected by administering a structured knowledge questionnaire by the investigator before and after self instructional module. Post-test was conducted after 7 days of pre test and intervention. Data was analyzed using descriptive & inferential statistics (Paired 't' test, Chi-square test, Karl-Person's correlation coefficient).

### RESULTS–

The pretest knowledge score was  $9.05 \pm 2.45$ , while the posttest knowledge score was  $19.98 \pm 2.57$ . The difference was found to be statistically significant ('t' value = -24.62,  $df=59$ ,  $p$  value=0.05, Significant), showing a higher posttest

knowledge score. Hence it is confirmed that there is a significant difference in mean of test scores which fulfil the first second objectives of the present study. Hypothesis  $H_1$  that, There will be a significant difference in the pre-test and post-test knowledge score regarding MIS-C among staff nurses is being accepted. In which the Association of age, gender, professional qualification, clinical experience, previous knowledge regarding pediatric patient safety and sources of previous knowledge regarding pediatric patient safety are insignificant in the study. The hypothesis  $H_2$  "it was found out that the age, gender, professional qualification, clinical experience, previous knowledge and sources of previous knowledge found to be insignificant at the level of  $P = 0.05$  is being rejected.

## CONCLUSION

After the analysis and interpretation of the data, we can conclude that the hypothesis  $H_1$  that, "There will be a significant difference in the pre-test and post-test knowledge score regarding Multisystem Inflammatory syndrome in Children (MIS-C) among nurses working in paediatric departments is being accepted.

And the hypothesis  $H_2$  "it was found out that the age, gender, professional qualification, clinical experience, previous knowledge and sources of previous knowledge found to be insignificant at the level of  $P < 0.05$  is being rejected.

This research proved that the structured teaching programme is effective in improving knowledge of staff nurses. Hence "SELF INSTRUCTIONAL MODULE" was effective and improving the knowledge score of staff nurses regarding Multisystem Inflammatory syndrome in Children (MIS-C) among nurses

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