



## EFFECTIVENESS OF PROTOCOL REGARDING PERIPHERAL INTRAVENOUS INFUSION OF CHILDREN IN TERMS OF KNOWLEDGE & PRACTICE AMONG STAFF NURSES.

\*Surbhi Royna Dulare, M.Sc.(N) \*\*Achamma Varghese, M.Sc.(N)

\* Associate Professor, Jabalpur Institute Of Nursing Sciences & Research , Bless\_sur55@yahoo.co.in

### Abstract

The intravenous route is one of the fastest ways to deliver fluids and medications throughout the body. The study adopted an evaluative research approach to assess the effectiveness of protocol regarding peripheral intravenous infusion of children in terms of knowledge & practice among staff nurses working in pediatric ward. Pre-experimental one group pre test post test design was adopted in this study. The population comprised of 30 Staff Nurses working in pediatric ward of selected hospital of Indore. A purposive sampling technique was used. Structured knowledge questionnaire & checklist was used as instruments. A protocol for Intravenous infusion in children was developed & validated. Reliability of the tool was calculated by using Karl Pearson Co-relation coefficient & tool was found to be reliable. Reliability for questionnaire was  $r=0.83$  and for the checklist was  $r=0.85$ . After conducting the pilot study, the main study was carried out. In the main study a pre test for knowledge and practice was taken among 30 Staff Nurses. After the pre test on the same day the protocol was introduced and after seven days a post test was taken. The finding of the pretest indicated that 17(56.66%) of the respondents scored good grade & 13 (43.44%) scored average grade. Regarding their practice score 7 (23.33%) of the respondents scored good grade & 23 (76.66%) scored average grade. There was no significant association between pretest knowledge & practice scores & selected demographic variables. The mean posttest knowledge score (19.7) was higher than the Mean pretest knowledge score (17.03) and the Mean posttest practice score (30) was higher than the Mean pre test practice score (26.5). The computed "t" value for the knowledge score ( $t_{29}=8.24$   $p\leq 0.001$ ) showed a significant difference with the use of protocol for Intravenous infusion in children by the Staff Nurses. Thus, this study concluded that the protocol for Intravenous infusion in children was helpful in increasing the knowledge & practices of Staff Nurses.

**Key words:** Protocol, Peripheral intravenous infusion, Intra Venous (IV) therapy, Knowledge and practice.

### Introduction

Intravenous therapy or IV therapy is the giving of liquid substances directly into a vein. It can be intermittent or continuous; continuous administration is called an intravenous drip. The word intravenous simply means "within a vein", but is most commonly used to refer to IV therapy.

Compared with other routes of administration, the intravenous route is one of the fastest ways to deliver fluids and medications. Fluid therapy maintains the normal volume and composition of body fluids and, if needed, corrects any existing abnormalities. In children,

the most common clinical abnormality requiring fluid therapy is hypovolemia, primarily due to vomiting and diarrhea from gastroenteritis. Thus, it is useful clinically to divide fluid therapy into two potential components: provision of volume for homeostatic needs (maintenance therapy) and provision of fluid for deficit requirements (repletion therapy) (Malcolm A Holliday 2007)<sup>9</sup>

Starvation, surgery and anesthesia cause stress and alter physiology. Intravenous fluids are administered perioperatively to maintain homeostasis during this period. Water and electrolytes are required to correct