

Effectiveness of Planned Teaching Programme on Knowledge Regarding Febricidal Measures in Children among Mother's at Jabalpur District (M.P)

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Abstract: *The study was aimed to assess the effect of planned teaching programme on knowledge regarding febricidal measures in children among mothers. Methodology-quasi experimental study with 60 samples, one group pre test post test design was used to assess the significance of planned teaching programme. Data was analysed based on the objectives and hypotheses by descriptive and inferential statistics is that percentage, Mean, Standard deviation. The 't' test and Chi-square to test. Finding of the study shows that the pre test mean knowledge score was 6.25. The post test mean knowledge score is 16.65. The post test score of group is significant at P<0.05%. There is a significant difference in the post test score, which clearly indicates that there has been an increase in the knowledge level of mothers of children between the age of 0 – 8 years regarding the febricidal measures administration of planned teaching program. The association findings was done to find out the relationship of knowledge with selected demographic variables by using Chi square test and calculating 'P' value it was found that the socio demographic variable like the age of the mother was found most significant*

Keywords: Assess, Effectiveness, Planned Teaching Programme, Febricidal Measures.

1. Introduction

Among the general population, half of the population lives under poverty line, that is 55.5% of children belong to the families of Low Income Group. Most of the children consistently suffer from infectious diseases. The main primary symptom in any infection is fever.

Majority of the mothers are not aware about the fever control measures. If the fever is not controlled, it leads to convulsions and irreversible brain damage. Some of the pathological fevers are Cerebral Malaria, Meningitis, Encephalitis and Hemorrhages, Dengue Fever, which often lead to the occurrence of mortality among children.

A febrile convulsion also known as a fever fit or febrile seizure, is a convulsion associated with a significant rise in body temperature. They most commonly occur in children between the ages of 6 months to 6 years (with only 10% of reported seizures occurring after the age of 3) and are twice as common in boys as in girls. Febrile convulsions occur in young children when there is a rapid increase in their body temperature. It affects up to 1 in 20 children between the ages of one and four but can affect children between six months and about five years old⁶. There are two types of febrile seizures [1]. Fever is a common symptom of childhood illness. Fever is a natural response of the body that helps in fighting of foreign substances. Thermoregulatory center in the hypothalamus regulates body temperature. Once the temperature raises the person often feels warm, the cellular metabolism increases, oxygen consumption rises, heart rate and respiratory rate increases to meet the metabolic needs of the body. Increased metabolism uses energy that produces additional heat [2].

A child is precious not only to the parents, family, community, and Nation but also to the world at large. In fact child is a citizen of world and thus it becomes the responsibility of the wide population of the whole universe to look after the interest of children all over. Children are the assets of our country [3]

World Health Organization (WHO) has estimated that more than 10 million children under five of age die each year in developing countries and seven in ten of these deaths are due to acute respiratory infection, mostly Pneumonia, diarrhoea, measles, malaria, or malnutrition, or combination of all these. It is further speculated that the deaths from these diseases will be more if there is no intervention². Almost all of these diseases are signalled by rise in temperature of the children which is called fever and, if the fever is not managed on time, it triggers a condition known as 'febrile seizures' or 'febrile convulsion'. [4].

2. Literature Survey

The planned teaching is often an area in which nurses prepare and practice with competent role models because it involves transmitting information to the patient, caregivers and other members depending on the level of understanding and desire for information. As an educator, the nurse, focuses on giving appropriate health teaching with generous feedback and evaluation to promote teaching [5].

2.1 Review of Literature Related to Effectiveness of Planned Teaching Programme

Babu, R. L., Mali, N., & Shinde, M. (2014) concluded in their study care takers had inadequate knowledge regarding

non-curative care of terminally ill cancer patients. The planned teaching programme on non-curative care of terminally ill cancer patients was highly effective in improving the knowledge of care takers regarding non-curative care of terminally ill cancer patients.[6]

Deshmukh, M., & Shinde, M. (2014) stated that structured education was effective on knowledge and practice of staff nurses regarding venous access device care.[7] Bhudhagaonkar, J (2014) concluded their study findings reveals that structured education is effective regarding menstrual hygiene practices among adolescent girls.[8]. **Shinde m concluded tintheir study that** The caregiver's role is assumed when the persons assist in meeting the needs of individuals who are unable to care for themselves. In present society, women usually assume the caregiver role. The demonstration regarding feeding of hemiplegic patient among caregivers was effective in increasing the skill of the caregivers regarding feeding of hemiplegic patient. [9].

2.2 Literature Related to Febricidal Measures

There are various pharmacological and non pharmacological measures available to manage fever. One of the pharmacological management for the fever is the administration of the paracetamol. The most frequent reason for the administration of antipyretics by the doctors is to provide immediate comfort to the patients. But paracetamol toxicity is a concern [10].

In a study wherein paracetamol 10-15mg/kg was administered in children with fever, there were no remarkable advantage in comfort, mood, appetite or fluid intake from the antipyretics, though there was some improvement in alertness and activity. These studies have limited relevance to children with viral infections since pain is an uncommon accompaniment. When an infection causes pain, such as head ache of influenza, then analgesics is clearly appropriate. Greater antipyretics efficacy has been shown to occur in children given the combination compare with either drug alone. However there are potentially complicating problem, that make such a practice inadvisable is due to its side effects that is hepatotoxicity[11].

A study on effectiveness of paracetamol and tepid sponging on reducing fever, variety of non pharmacological measures which is used to reduce fever include sponging with various solution, tepid water, alcohol, application of ice packs, or cooling blankets, exposure to circulating fans, hot water foot bath therapy. A more recent study showed that ice packs placed on the neck, axilla, and groin are ineffective in the treatment of hyperthermia. Article also emphasized that warm or cool water can be useful in controlling body temperature of a feverish person[12].

A prospective comparative study was done in Netherlands, to compare the efficacy of different cooling methods to reduce fever. Fifty ICU patients with fever were enrolled in the study and were assigned to five groups. Group-1 conventional cooling, group-2 cooling with air circulating blankets, group-3 water circulating gel coated pads, group-4 intravascular heat exchange system, and group-5 water circulating

blankets. Temperature decline was significantly higher in cooling with water circulating blankets, gel pads and intravascular cooling, when compared to conventional cooling and air circulating blankets. No adverse events are noted. However the absence of this can be due to small sample sizes[13].

A comparative randomized control trial was conducted in CMC Vellore, to assess the effectiveness of tepid sponging and antipyretic drug versus only antipyretic drug in the management of fever among children. Hundred and fifty samples with temperature $>101^{\circ}\text{F}$ were selected and assigned into two groups. After the intervention, temperature was checked at every 30, 45, 60, 90 and 120 minutes. The results showed, apart from the initial rapid temperature reduction, addition of tepid sponging to antipyretic administration does not offer any advantage in ultimate reduction of temperature and may result in additional discomfort such as shivering[14].

A study conducted by on prophylactic drug management for febrile seizure in children. Thirty-six articles describing 26 randomized trials with 2740 randomized participants were included. They concluded that no clinically important benefits for children with febrile seizures were found for intermittent oral diazepam, phenytoin, phenobarbitone, intermittent rectal diazepam, valproate, pyridoxine, intermittent phenobarbitone or intermittent ibuprofen, nor for diclofenac versus placebo followed by ibuprofen, acetaminophen or placebo. Adverse effects were reported in up to 30% of children. Given the benign nature of recurrent febrile seizures, and the high prevalence of adverse effects of these drugs, parents and families should be supported with adequate contact details of medical services and information on recurrence, first aid management and, most importantly, the benign nature of the phenomenon [15].

A study conducted by on care of the patients with febrile illness focused on reducing the elevated body temperature thereby preventing the occurrence of the febrile convulsions. A temperature of more than 100.4°F is considered fever. Fever of more than 101°F should be actively controlled. Acetaminophen is the most commonly used drug for this purpose. The recommended dose of acetaminophen is 10 to 15mg per kg of body weight every 4 hrs. It is also stated that one of the common mistake parents make in management of febrile children is to bundle them up in the layers of clothes and blankets. This conserves body heat. So the heat should be allowed to dissipate from the skin surface. Thereafter a child with fever should be dressed lightly. For temperature more than 103°F , sponging with tepid water is recommended [16].

The general incidence of febrile seizures among children at Bangalore Medical College hospital was 37.2 per 1000. Among that 32% of the children were female. Majority of febrile convulsions occurred between the age group of 6 months to 2 yrs which constitutes 75% of case, 40% of cases were found within year of age and 36% cases found between 1-2 yrs of age, seizures occur within 24 hrs in 88% of the cases. At the onset of febrile convulsions, 77% of the cases had moderate degree of temperature and 33% had high

temperature. According to Dr. Dhanalakshmi febrile convulsions could be prevented by providing parental education regarding the therapy during a febrile episode or convulsions[17].

3. Research Methodology

The choice of research approach constitutes one of the major decisions, which must be made in conducting a research study. Research approach is a systemic, objective method of discovery with empirical evidence and rigorous control. The control is achieved by holding conditions constant and varying only the phenomenon under study[18].

3.1 variables

3.1.1 Dependent Variable

The dependent variable of this study was knowledge of the mothers having children of age group 0- 8 years regarding febricidal measures.

3.1.2 Independent Variable

In the present study , independent variable was Planned teaching programme on knowledge regarding febricidal measures and Demographic variables .

3.1.3 Setting of the Study

The present study was conducted at rural areas (panagar) of Jabalpur district at mothers having children of age group 0-8 years.

3.1.4 Population

The population of the present study comprised of mothers having children of age group 0-8 years living in rural area (panagar) of Jabalpur district (M.P).

3.1.5 Target Population

In the present study the target population was mothers having children age group of 0 -8 years of Jabalpur City.

3.1.6 Accessible Population

The group that is available for actual study is the Mothers who are having children between 0-8 years in rural areas of Jabalpur city. They hail from Madhya pradesh State mainly.

3.1.7 Sample

Sample size for this study was 60 mothers of children having age group 0 -8 years living in rural area (panagar) of Jabalpur district (M.P).

3.1.8 Sampling Technique

Mothers of children having age group 0 – 8 years living in rural area (panagar) of Jabalpur district (M.P) were selected by purposive sampling technique by the investigator.

3.1.9 Description of the Tool

The tool used was structured questionnaire consists of two sections -

SEC- A - 1.contains Demographic Profile of the children and their Mothers. This contains about 10 questions which includes the details about, Age of child, Sex of child, Age of

the Mother, Educational Status of mother, Occupational Status of mother, Number of Children of following age group , Type of Family, type of religion, Frequency of febrile attack in child, and any information about fever control measures.

2 .contains knowledge related questions. There are 30 multiple choice questions regarding signs and symptoms of fever, causes of fever, febrile convulsions and their emergency management, myths about fever , do's and don't of fever.

SEC-B - It includes development of Planned teaching programme regarding febricidal measures measures to prevent the occurrence of febrile convulsion among the mothers of children between 0- 8 years.

3.2 Validity

The structured questionnaire along with blue print and planned teaching were submitted to Twelve experts. Experts were from the nursing and medical field of pediatrics , obstetrics and community health, medical surgical.Eight experts from nursing field , Two experts were from doctors in pediatric department , one expert was educationist and one expert was statistician.

3.3 Reliability

Items of the tool were coded and the reliability co-efficient of correlation was calculated using 'test – retest method' .This was found as 0. 75 $P(<0.05)$ which is significant.

3.4 Plan for Data Analysis

3.4.1 Descriptive Statistics

Socio – demographic data would be analysed using descriptive statistics i.e frequency and percentage. Mean and standard deviation of pre test and post test knowledge score were calculated.

3.4.2 Inferential Statistics

It includes paired 't' test to compare the mean pre-test and post-test knowledge scores of experimental group. chi-square test to associate the post-test knowledge score and the selected socio demographic variables (age, education, etc..).The findings will be represented in the form of Tables, Graphs and Diagrams.

4. Results

In the present study the mean of the scores obtained by the samples in the pre test phase was 6.25 and in the post test phase it has increased to 16.65 which means that knowledge scores of samples increased in the post test phase. This indicates that the planned teaching program (PTP) is effective in increasing the knowledge of the samples regarding febricidal measures. The calculated 't' value is 8.67 , $P<0.05$ which means that there is a significance difference in the post test , which clearly indicates , that there has been as an increase in the knowledge level of mothers of children between the age of 0 – 8 years regarding febricidal

measures after the intervention .So , in the present study , statistical analysis and results have also shown that there is a significant difference between pre test and post test scores

5. Conclusion

From all the above findings it can be concluded that mothers do not have adequate knowledge regarding febricidal measures. After implementation of planned teaching program knowledge of mothers increased to be higher score. The mean pretest score was 6.25, the post test mean score of sample was 16.65. This clearly indicates that the Planned teaching program was effective in increasing the knowledge of mothers of children between the age of 0 – 8 years regarding febricidal measures. The association findings was done to find out the relationship of knowledge with selected demographic variables by using Chi square test and calculating ' P ' value it was found that the socio demographic variable like The age of the mother was found most significant.

6. Future Scope

The study could be conducted in the hospital settings so that wider area will be helpful in propagating febricidal measures. Comparative study could be conducted between urban and rural and also between literate to non-literate, to know the knowledge and practice between both the groups.

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