

Introduction

Nursing research provides a wide scope of scientific inquiry in clinical trials, health systems research, epidemiological investigations and qualitative research. Globally Research in Nursing is committed to rigorous scientific inquiry that yield valid and reliable results which add significant knowledge to Nursing practice and contribute to the health of people.

Role of Research Nurse

The Nurse's role in a research team may be varied as Principal investigator, co investigator or as a consultant. With out dedicated nurse it is difficult to succeed in research. Conceptualizing and implementing a research project is a complex process. All research activities involving human are strictly regulated to ensure participants' safety and wellbeing. Patient advocacy and protection are the most important responsibility of research nurse. They may also act as teachers, mentors and advisers to other health professionals. Teamwork is crucial in all research activities and nurses are at the fulcrum especially in clinical trials.

Nurses are expected to adopt Evidence Based Practice to bring about clinical excellence. To pursue a research question there is a research process. During the **conceptual phase**, the idea for comparing two sponging methods were conceived by personal experience, traditional practice of giving warm drinks during fever and also an intuition on local proverb 'Ushnam ushna santhi' (Warmth is the remedy for hot). Fever can be miserable for the child and cause anxiety among parent. The efficacy of antipyretic medications has been well documented. Regarding external cooling measures, there are conflicting results. Globally no study has been conducted to compare the efficacy of warm sponging over tepid sponging. Cochrane Library on systematic review recommends comparing warm sponging with tepid sponging. These ideas were brought into a valid research question by reviewing literature and biological plausibility was ascertained. The facts were discussed with experts and objectives /hypothesis were formulated.

In Design and planning phase, the protocol was developed based on CONSORT. Randomized Controlled Trial was the design adopted. The participants were children between

6 months to 5 years reported to a primary care setting with fever. The sample size was 268. Here control group received tepid sponging & the intervention group received warm sponging, both groups received syrup paracetamol 15 mg/kg body weight. The randomization sequence was generated using Random number table with blocks of 'AB' & 'BA'. Reduction in temperature was the primary outcome and secondary outcome was comparison of thermal discomfort. Subjective measure of discomfort was taken as the Parental perception of child's discomfort, assessed by a Numerical Rating Scale. Tool for measuring thermal discomfort was developed (Cronbach's Alpha = 0.75). Trial got approval from the IRC & IEC, Medical College, Thiruvananthapuram and registered in Clinical Trials Registry-India (REFCTRI - 2009 000666, 19-08-2009). The study was piloted in 25 samples.

During Empirical phase, Informed consent from parents and assent from children were obtained by the Nurse. Initial assessment was done and those who were not meeting the inclusion criteria were excluded before randomization. The random numbers were kept by the Head Nurse to ensure allocation concealment.

During **Analytical phase**, descriptive statistics of baseline variables in two groups were compared and homogeneity ensured. There was statistically significant reduction in temperature in warm sponging group (49.25%) than tepid sponging group (22.39%), $P = 0.0001$. There was difference in scores of thermal discomfort between groups (P value 0.001) and there was no difference in parental perception of child's discomfort (P value 0.253).

In Dissemination phase, the study was published in International journal of Nursing care. Vol I, Jan-Jun 2013 (indexed). The development of thermal discomfort scale was presented in the State Nursing Conference conducted in 2012 at Govt. College of Nursing, Thiruvananthapuram, Kerala, India.

This study enabled me to fill the knowledge gap and to clear the controversies regarding the external cooling measures. Moreover I could involve nurses working in the primary care setting in this research. They got familiarized with taking informed consent, recruitment of

participants, randomization and allocation concealment. These are the major steps in a RCT. So that these nurses could be involved in future research.

Challenges

The challenges faced by Nurse Researches go along a continuum some are having primitive knowledge and others struggle due to lack of autonomy. We are in the physician dependent healthcare system and Nurse is viewed as an assistant to the physician with no critical thinking skills. In my setting the nurse educators are doing research but for them working in clinical area are not mandatory. Nurses working in the clinical area are seldom engaged in research. The evidences brought by the Nurse educators may not be appreciated by the medical community. Due to lack of autonomy the nurses are poorly funded by the agencies. In my knowledge there is no space for nurse run multi centric trials. The public's attitude towards nursing profession results in problems in getting consent for nurse run trials. The bulk of research done by nursing graduates and post graduates are not been implemented. The traditional system of keeping education, research and practice in compartments is a major challenge.

Suggestion to improve Nursing research would be, Nurse researchers should be given authority to practice preventive medicine so that they could familiarize with the problems of public and thus new problems can be identified, interventions formulated and implemented. Staff Nurses should be encouraged to participate in research projects. Without the support of actual care givers no clinical trials can be successful. Nurses should be given more opportunities other than bedside nurse as specialty nurse with license to practice independently. Nurses should renew their license at regular intervals on the basis of number of clinical hours or continuing education. Nurses who excel should be encouraged and supported.

Conclusion

Mathematics is applied in all science subjects but we never label it as Physics Mathematics or Chemistry Mathematics. Like wise we should never segregate research as Nursing research. Research should be the common tool for Nurses working in Clinical or

teaching area and for all medical fraternity. More Nurses should come forward with new findings and must be 'visible' to the public and policy makers.