Research Designs in Indian Psychiatric Nursing

Some Observations

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SINCE Nursing is a practice profession, nurses have, in the past, placed more emphasis on its practical aspects than on research. Thus, nurses tended to accept ideas and knowledge from authorities without much question.

These introductory words written by Lucille E. Notter in the year 1974 prove to be appropriate to the status and conditions of Indian Nursing in general and Psychiatric Nursing in particular.

Any profession needs to strengthen its knowledge base by continuous efforts. Usually the observations and experiences of the practitioners lead to newer insights contributing towards improving the practice base. The Nurses' involvement in patient care in hospital and community setting bring forth a fund of knowledge and wide variety of meaningful observations. But such gains in experience are rarely transformed into systematic body of knowledge mainly due to the lack of orientation towards research methodology which bridges the gap between the practice-base and knowledge-base.

Simply stated, scientific research, basic and applied, involves the following steps: (Notter, 1974)

1. Identifying the problem, delineating it clearly, and delimiting it to a manageable research question or hypothesis.

2. Collecting essential facts pertaining to the problem. This includes reviewing the literature, validating the significance of the problem and selecting or developing theories pertinent to explaining the problem and its possible solutions.

3. Developing a tentative solution called a hypothesis.

4. Setting up a suitable design or method for the study.

5. Collecting the essential data required for testing out the hypothesis.

6. Analysing the data in terms of hypothesis.

7. Reporting the research and its findings.

These steps of research are essential in developing the following qualities in nurses :

R— Rational way of thinking.
E— Expert and exhaustive treatment.
S— Search for solutions.
E— Exactness.
A— Analytical analysis of data.
R— Relationships among facts.
C— Careful recording.
Critical observation.
Constructive attitude.
Condensed and completely stated generalisation.
H— Honesty and hardwork.

Viewing the research work in Nursing in the Indian setting from this frame of reference, we observe that very few attempts have been made in nursing clinical practice, nursing education and in nursing administration. Most of these researches were undertaken as part of requirement of post-graduate programme in nursing. Even these few attempts when we critically look at we come across many limitations specially the sources of bias. Some of the areas of bias are :

1. Ignoring the influence of external factors on the phenomenon being studied.

2. Adopting unscientific sampling designs leading to unrealiable inferences.

3. Failing to make appropriate matching between control and experimental group.

4. Results being influenced by the subjective feelings of the researcher himself/herself.

5. Inappropriate handling the possible effects of the research subjects, awareness about the researcher's intention.

6. Applying inappropriate statistical analysis.

Overcoming Limitation

Even while planning for research many such limitations could be overcome provided the research oriented nurse/nursing educator attempts to answer the following questions:

1. What are the appropriate sources of information ? Patients or family members or both ? Nursing professionals only or other professionals also ?

2. What is the sampling strategy ? Are we going to study all the patients in the ward ? Or are we going to adopt scientific sampling procedures like simple random sampling, stratified random sampling or purposive sampling or convenient sampling or any other methods of sampling

3. By what methods will the information be obtained from the sources selected ? Are we going to observe, interview ?

4. What is the general strategy for measuring, counting, or classifying the data ? Any standardised scales or check-list or guidelines for observations ?

5. How will the process of obtaining data be patterned ? Is it going to be an in-depth study or not ?

6. How will the data be analysed ? Is it going to be merely through descriptive statistics or inferential statistics ? Univariate or multivariate analysis ?

By answering these questions, the researcher could gain the confidence of conducting the

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studies scientifically. This also tells to correct the drawbacks at the initial stages.

Accidental Discoveries

When the nurse is given research orientation her commitment and preoccupation might lead to significant observations. In the history of science, many of the discoveries had resulted from accidental events, for instance, Madam Curie's discovery of radium is preceded by her accidental observation of a piece of radio-active rock left on a photographic plate over night. Likewise, apple falling from a tree leads to Newton's laws. In the bath-tub, Archimedes found the famous scientific principles. Kekule found the formula for Benzene in his dreams. Many such examples can be quoted. These kinds of accidental events leading to great discovery is termed as "Un-planned observations" or "Serendipity".

A nurse with the knowledge of research and inquisitiveness is likely to have the experience of serendipity.

In many areas of Nursing, specially related to psychiatric, not much work is done. What we require is systematic approach with small sample of population not rigorously representative for in depth study. Such studies can focus on nursing activities with acute patients, as well as chronic patients, patients' perceptions about their stay in the hospitals, relatives' fears and anxieties etc For such studies formulation of hypothesis is not necessary but a thorough survey of literature and consultation with professional experts are essential steps. These researches could be grouped under "Exploratory or formulative studies.

When the characteristics of certain events or phenomena are known it is necessary to describe the characteristics further. Various studies have brought forth findings related to levels of satisfaction among the nurses. Also researches have focussed on differing levels of treatment complaince or adherence among patients. In such cases the nurse-researcher could probe into the factors associated with each group and trace out the root-cause. These studies can be done either cross-sectionally or longitudinally. They could be classified as descriptive study. Design requires carefully defined population and representative samples. Data may be gathered from questionnaire interviews, observation schedule or available statistical reports.

Psychiatric Nursing Education

As far as Psychiatric Nursing Education is concerned, it is important to focus on the effect of teaching methodology or pattern. Similarly it is interesting to know the comparative effects of different nursing approaches on the psychiatric patients' improvements or family members' satisfaction. A nurse-educator could adopt simple experimental designs. The patterns of design vary, but generally include 'experimental' and 'control' groups with random assignments of subjects to each or approximations to 'control groups'.

For example, two matched groups of chronic schizophrenic patients could be taken up, one group gets routine clinical care. Another group is exposed to intensive nursing interventions like self-help skills improvement, and social skill development. These two groups could be compared at different points of time to see the effectiveness of intensive nursing interventions.

The problems and challanges presently being encountered by the psychiatric nurses could be solved by applying suitable designs of research. Considering the role functioning of the nurse, it may not be difficult to collect the valid and reliable data. The nursing curriculum need to include both theoritical and practical aspects of research. This re-orientation would go a long way in making the nurse not only an effective service-provider but also, efficient educator and useful researcher.

Reference :

1. Notter Lucille E. (1974) Essentials of Nursing Research. New York : Springer Publishing Company.
2. Polit Denise F. & Bernadette P. Hungler (1987) Nursing Research (3rd Edn). Philadelphia : J.B. Lippincott Co.

Kajal Das

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Advised : Orthosis

Rt-plastic insert (the ankle is fixed and forefoot drops)—compensation for shortening—something light.

AFO—although hip doesn't have any functional muscle power. (Ankle-foot orthosis)

Following the physio assessment, she was measured for orthosis as advised plus Lt. KAFO with inner T-strap, 1/8" inner raise and valgus arch support.

Crutches Rt. elbow crutch

Lt. modified axillary crutch

Kajal was discharged on 26.9.82 to her home and came for trial of orthosis on 1.10.82.

She learnt to get around very confidently, has been for long train journeys, can walk (with a little support) without her calipers for short distances. In November 1986 she got a Bank loan and started a small grocery shop. Her family have supported her very well and her brother helps her to run the shop, which is attached to their house.

Schooling

When Kajal first was admitted, she was very shy and more so as she was much older than the small children in KG and infant classes (we had no provision for non-formal education). She refused to go to school. Then it was discovered that she loved music and readily came forward to try the tabla or harmonium—so these were used to gain her interest and confidence and gradually she was won over. She tried sincerely to study and passed class II exam. while with us. She started studying in class III but was not able to continue at school when she went home due to the long distance and cost of rickshaw fare. For some time she had a tutor, but the family couldn't continue. Meanwhile Kajal tried to learn more and more by herself and now she can write very nicely and manage to do the simple arithmetic required in her shop. However she feels that she needs to improve her arithmetic and her brother is helping her in this.