



A pre-experimental study to assess the effect of nurse led educational package on knowledge regarding telemedicine among ANM's at a selected community health Centre, M.P

Baby Swanngaihlun

Lecturer, Bombay Hospital College of Nursing, Indore, Madhya Pradesh, India

Abstract

Introduction: A study was done to assess the effect of Nurse Led Educational Package on Knowledge regarding Telemedicine among ANM's at a selected Community Health Centre, M.P.

Background: With 80% of India's population living in rural areas and 80% of the medical community living in cities, there is an imbalance in health care reaching people. Hence, it becomes very essential that telemedicine be introduced and implemented in the country.

Objectives: 1. Assess the pre-interventional level of knowledge regarding Telemedicine among ANM's. 2. Assess the post-interventional level of knowledge regarding Telemedicine among ANM's. 3. Find out the significant difference between pre interventional and post interventional level of knowledge among ANM's. 4. Associate the pre interventional level of knowledge regarding Telemedicine among ANM's with their selected demographic variables.

Methods: An evaluative approach with Pre-experimental one group pre-test post-test design was used for the study. The sample consists of 50 ANMs were selected by using Non-Probability convenient sampling technique. Structured questionnaires were administered to evaluate the knowledge on Telemedicine before and after introduction of Nurse led Educational Package. The collected data was analyzed by using descriptive and inferential statistics.

Results: The result showed that there was a significant difference between pre-test and post-test knowledge scores as assessed by the paired t-test value at 16.6. Hence it is statistically interpreted that Nurse Led Educational Package could be an effective strategy to improve the knowledge of ANMs on Telemedicine.

Conclusion: Based on the findings of the study there was a significant increase in the knowledge of subjects after the introduction of Nurse led Educational Package.

Keywords: telemedicine, knowledge, nurse led educational package, ANMs

Introduction

People living in remote areas struggle to get timely and good quality specialty medical care. Because of this, the health status of rural Indians is still a cause for grave concern. There are remote areas, which lack basic health care facilities, and patients have to travel for mile before they can be treated at any hospital/ health care centre. Recent advances in information and communication technologies have created un-experienced opportunities for overcoming this by increasing the number of ways that health care can be delivered. Telemedicine has the potential to bridge this gap to provide specialty care to the rural areas. Telemedicine is the use of electronic information to communicate technologies to provide and support health care when distance separates the participants. Several studies have shown Telemedicine to be practical, safe and cost effective. Telemedicine is a new branch of treatment and the nurse needs to know it for the better patient care and prognosis. Once Nurses were trained in the emerging fields of care, this would lead to a swing of illness towards wellness.

Problem Statement

"A Pre Experimental study to assess the effect of Nurse Led Educational Package on knowledge regarding Telemedicine among ANM's at selected Community Health Centre, M.P".

Objectives of the study

1. Assess the pre-interventional level of knowledge regarding Telemedicine among ANM's.
2. Assess the post-interventional level of knowledge regarding Telemedicine among ANM's.
3. Find out the significant difference between pre interventional and post interventional level of knowledge among ANM's.
4. Associate the pre interventional level of knowledge regarding Telemedicine among ANM's with their selected demographic variables.

Research Hypotheses

- H₁:** There is a significant difference between pre-interventional and post-interventional level of knowledge scores regarding Tele Medicine among ANM's at ≤ 0.05 level.
- H₂:** There is a significant association of pre-interventional level of knowledge score regarding Telemedicine among ANM's with their selected socio demographic variables at ≤ 0.05 level.

The theoretical framework of the study is based on modified Imogene M. King's Goal Attainment Model (1981).

Methodology

In this study evaluative approach was used. The study is conducted in selected Health Centres, M.P. The sample consisted of 50 ANMs through non-probability convenient sampling method.

The Dependent variables was knowledge level of ANMs assessed by structured knowledge questionnaire and Independent variables- selected teaching module (Nurse Led Educational Package).

The researcher designed a tool consisting of sample demographic variables and structured questionnaire data was collected by administering structured knowledge questionnaire and Nurse Led Educational Package was provided regarding Telemedicine among ANMs. The reliability of the structured knowledge questionnaire was calculated by Split half method and found to be $r = 0.86$ which is indicated that tool is highly reliable. After conducting pilot study, the final study was carried out on 50 ANMs from selected health centres, Bhopal. The pre- interventional knowledge level was assessed by structured knowledge questionnaire. After pre- test Nurse Led Educational Package was provided. Then after 7 days post-intervention was conducted by same structured knowledge questionnaire. The data collected was analyzed by using descriptive and inferential statistics.

Major Findings

Section-I: Description of demographic variables

- With regards to the age group of ANMs, 19(38%) was belonged to the age group of 40 and above years, 17(34%)

was belonged to the age group of 30-<40 years and

- 14(28%) was belonged to the age group of 20-<30 years. This might have been due to the recruitment criteria of the ANMs.
- Regarding educational qualification 30(60%) had done higher secondary, 17(34%) had done graduation and only 3(6%) had done high school education.
- While considering professional qualification 27(54%) completed 2years ANM course and 23(46%) have completed 18 months revised ANM course. This shows that the majority of the ANMs prefer 2 yrs. course of ANM trainee.
- Majority of the selected ANMs i.e 19(38%) was working in Sub-centre, 18(36%) was working in CHC and 13(26%) was working in PHC.
- The data further reveals that most of them 19(38%) have 21 and above years of experience, 16(32%) had 1-10 years of experience and 15(30%) had 11-20 years of experience. This shows that majority of the ANMs have good working experience.
- In relation to experience of Telemedicine most of the ANMs 39(78%) did not have any previous knowledge whereas only 11(22%) ANMs had previous knowledge. This may be due to lack of exposure to Telemedicine by ANM.

Section-II: Findings related to the effect of Nurse Led Educational Package on Telemedicine among ANMs. N=50

Table 1

Knowledge	Mean	Mean difference	Mean Percentage (%)	Standard Deviation (S.D)	't' value
Pre-intervention	9.96	10	33.28%	2.76	16.6*
Post-intervention	19.96		66.71%	3.31	

The data in the table depicts that the mean post-test knowledge score (19.96) is apparently higher than the mean pre-test knowledge score (9.96) as evidence by the statistical significance between pre and post-test knowledge score 't' 16.6*, $P < 0.05$ showed that selected Nurse Led Educational Package is effective to increase the knowledge level of ANMs.

Conclusion

On the basis of findings it was concluded that Nurse Led Educational Package was effective to improve the knowledge of ANMs regarding Telemedicine. The interest of ANMs to learn about Telemedicine result in enhancement of knowledge with high percentage.

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