Full Length Research Article

DETERMINATION OF THE EFFECTIVENESS OF FAMILY HEALTH NURSING BASED EDUCATION PROGRAM ON NURSES' PERFORMANCE AT THE PRIMARY HEALTH CARE CENTERS IN AL-MUTHANA HEALTH DIRECTORATE

[1,*]Noor M. Abdullah and [2]Hala S. Abdulwahid

[1]Community Health Nurse Specialist, Ministry of Health
[2]Assistant Professor, Community Health Nursing Department, College of
Nursing, University of Baghdad

ABSTRACT

Objective(s): To determine the effectiveness of family health nursing based education program on nurses' performance at primary health centers in AL-Muthanna Health Directorate.
Methodology: A quasi-experimental design was carried throughout the present study with the application of test-retest approach of pre-test, post-test1and post-test2 for the study and control groups, from the period of March 25th 2015 through June 30th 2016. A purposive sample, of (52) Diploma nurses, is selected throughout the use of non-probability sampling approach. The sample of study includes nursing staffs who are working at primary health care centers in Al Muthanna Health Directorate in Al Muthanna Governorate. The sample is divided into (2) groups; study and control of (26) nurse each. Through an extensive review of relevant literature, family health nursing based education program and observational tool are constructed as a tool of data collection. Content validity of the program and the study observational tool is determined through the use of panel of (11) expert. Inter-observer reliability is computed for the determination of the equivalence of the study observational tool. Data are collected through the application of the study instrument and the structured observation technique as means of data collection. Data are analyzed through the application of descriptive statistical data analysis approach (i.e., frequency, percent and mean) and inferential statistical data analysis approach (i.e., Pearson correlation coefficient, t-test and analysis of variance).
Results: Results of the study reveal that there is a high significant difference between the study group responses in pre-test and post-test I at p-value less than 0.01, while there is a non-significant difference between the post-test I and post-test II at p-value more than 0.05.
Recommendations: The study recommends that the Ministry of Health should consider the Family Health Nursing Program as mean for the improvement of nurses' performance in the area of family health services.

INTRODUCTION

The family is often called the basic social institution because of its important functions of procreation and socialization and because it is found, in some forms, in all societies. Family is a term used in everyday language whose meaning is cognate with the culturally and historically specific social practices to which it refer. The family is a universal social life of particular culture and epochs. Its activity and their effects are accounted on the maintenance of the social structure of society, of which it is a part, concentrating on biological and demographic features (1).

Family health is one of the global critical and crucial issues. Scholars and practitioners from family and medical sciences, as well as many in the general public, recognize the crucial effect of family health and wellness on overall family well-being and quality of life. Many of these scholars and practitioners agree that family health goes beyond absence of disease and dysfunction, and therefore accept a more multidimensional portrait of being healthy and well (2). Nurses need to be knowledgeable in the theory of families, as well as the structure, function, and processes of families to assist them in achieving or maintaining a state of health. When families are considered the unit of care, nurses have much broader perspectives for approaching health care needs of

*Corresponding author: Noor M. Abdullah,
Community Health Nurse Specialist, Ministry of Health.

both individual family members and the family unit as a whole (3). Based on the early stated evidence, the present study ought to design and implement Family Health Nursing based Education Program, as well as attempts to determine its effectiveness on nurses' performance of such nursing? So, the findings of the study will definitely present significant contribution to the improvement of these nurses' performance.

METHODOLOGY

A quasi-experimental design was carried throughout the present study with the application of test-retest approach of pre-test, post-test1and post-test2 for the study and control groups, from the period of March 25th 2015 through June 30th 2016. Such design is considered as an effective one for the implementation of the Family Health Nursing Education Program and the determination of the effectiveness of the health education program (4). A purposive sample, of (52) Diploma nurses, is selected throughout the use of non-probability sampling approach. The sample of study includes nursing staffs who are working at primary health care centers in Al Muthanna Health Directorate in Al Muthanna Governorate. The sample is divided into (2) groups; study and control of (26) nurse each. Family Health Nursing Based education Program is constructed throughout intensive review of literature for the purpose of the study and presented through (5) educational sessions.

An observational tool is designed through the use of (3) levels type Likert Scale for the evaluation of nurses' performance relative to family health nursing at the primary health care centers. The rating and scoring system of the scale is consisted of (3) for adequate performance, (2) for acceptable performance, and (1) for inadequate performance. Adequate performance is considered when (3) correct episodes of performance are observed; acceptable performance is considered when only (2) episode of performance is done; and inadequate performance is considered when there is (1) episode of performance is observed. The observational tool is comprised of (16) statements that deal the major domains of the family health nursing education program. The first statement is measured through (20) items which is dealing with Family Nursing Roles , the second statement is measured through (4) items which is dealing with Family Structure, the third statement is measured through (6) items which is dealing with Family Function , the fourth statement is measured through (3) items which is dealing with Family Development, the fifth statement is measured through(3) items which is dealing with Family Coping, the sixth statement is measured through (3) items which is dealing with Family Assessment, the seventh statement is measured through (41) items which is dealing with Assessing Family Dimensions of Health, the eighth statement is measured through (5) items which is dealing with Family planning , the ninth statement is measured through (8) items which is dealing with Family Interventions, the tenth statement is measured through (4) items which is dealing with Family Evaluation, the eleventh statement is measured through (10) items which is dealing with Family as A Caregiver, the twelfth statement is measured through (4) items Family at risk or with health problem which is dealing with Family as A Caregiver, the thirteenth statement is measured through (6) items which is

dealing with family health promotion, the fourteenth statement is measured through (3) items which is dealing with Impact of culture and society upon family health, the fifteenth statement is measured through (7) items which is dealing with Social influences on health and well- being, and the sixteenth statement is measured through (7) items which is dealing with Ethical issues related to care of family. It comprised of (131) items which are concerned with the domains of the performance of family health nursing at the primary health care centers. Content validity of the program and the study observational tool is determined through the use of panel of (11) expert. Inter-observer reliability is computed for the determination of the equivalence of the study observational tool. Pearson correlation coefficient is computed for such reliability and (r=0.78) which is considered satisfactory.

Data are collected through the application of the study instrument and the structured observation technique as means of data collection. Data are analyzed through the application of descriptive statistical data analysis approach (i.e., frequency, percent and mean) and inferential statistical data analysis approach (i.e., Pearson correlation coefficient, t-test and analysis of variance).

Table 1. Paired T- test for the Difference of the Study Group Responses Relative to Pre- test, Post- test I, and Post test II

Pairs (paired t-test)	T-value	D.F	P – value
Pre-test / post-test I	14.24	25	0.001 HS
Post-test I / post test II	1.00	25	0.327 NS

T-value= Observed T-test, DF=Degree of Freedom, P-value= Probability value, Hs=Highly significant, NS=Not significant

The study results reveal that there is a high significant difference between the study group responses in pre-test and post-test one at p-value less than 0.01, while there is a non-significant difference between the post-test I and post-test II at p-value more than 0.05.

Table (2) Paired T- test for the Difference of the Control Group Responses Relative to Pre- test, Post- test I, and Post- test II

Pairs (paired t-test)	T-value	D.F	P – value
Pre-test / post-test I	1.00	25	0.327 NS
Post-test I / post test II	1.00	25	0.327 NS

T-value= Observed T-test, DF=Degree of Freedom, P-value= Probability value, NS=Not significant

The study results depict that there is a non-significant difference between the control group' responses in three levels of responses (pre- test, post-test I , and post-test II) at p-value more than 0.05.

Table (3) Independent Sample T-test for the Comparison of the Overall Responses of the Study and Control Groups

Tests	t-value	df	p-value
Pre-test	1.58	50	0.119 NS
Post – test I	10.28	50	0.001 HS
Post – test II	6.45	50	0.001 HS

T-value= observed T-test, DF=Degree of Freedom, P-value= Probability value, Hs=highly significant, NS=Not significant

This table depicts that there is a non-significant difference between the study and control groups` responses in pre-test at p-value more than 0.05, while there is a highly significant difference between post-test I and post-test II at p-value less than 0.01.

Table (4) Analysis of Variance for Comparison of Different Levels of Responses of the Study Group

Main comparison related groups	Comparative patterns	df	F	Sig.
Pre-test / post-test I / posttest II	Between Groups	2	28.872	0.001 HS
	Within Groups	75		

Df=degree of freedom, HS=Highly significant, F= F- statistics, Sig=level of Significant

The study results indicate that there is a highly significant difference between the study group responses in three levels of responses (pre-test, post-test I, and post-test II) at p-value less than 0.01.

Table (5) Analysis of Variance for Comparison of Different Levels of Responses of the Control Group

Main comparative related groups	Comparative patterns	df	F	Sig.
Pre-test / post-test I / post-test II	Between Groups	2	0.301	0.741 NS
	Within Groups	75		

Df=Degree of Freedom, NS=Not Significant, F= F- statistics, sig=level of Significant

The study results presents that there is a non-significant difference between the control group responses in three levels of responses (pre-test, post-test I, and post-test II) at p-value more than 0.05.

DISCUSSION

Prior to the implementation of the program, the study and control group are pretested to ascertain that there is no difference between both of them in terms of their performance which has been approved as inadequate throughout the course of data analysis (Table 3). Post the implementation of the program, both of the study and control groups are post-tested for the first time to determine the effectiveness of the program on staff nurses' performance in the study group. Findings of such test have indicated that the program has made significant effect on staff nurses' performance in the study group alone (Table 1, 2 and 4). These findings provide evidence that the program has improved the staff nurses' capabilities to employ fair to adequate performance on items of aspects of the scale. In order to make a definite judgment about the effectiveness of the program on staff nurses' performance of family health nursing practices, both of the study and control groups are post-tested for the second time one month later. Findings of such test reveal that staff nurses have maintained their level of performance of such practices on all items of aspects of the scale as they are in the previous posttest which is fair and adequate (Table 3, 4 and 5). Program implementation evaluates how the program is being implemented.

This evaluation determines whether the components identified as critical to the success of the program are being implemented. The evaluation determines whether target populations are being reached. The effectiveness evaluation determines the causal effects of the program. This involves trying to measure if the program has achieved its intended outcomes, i.e. program outcomes. An outcome is the state of the target population or the social conditions that a program is expected to have changed. Program outcomes are the observed characteristics of the target population or social conditions, not of the program. Thus the concept of an outcome does not necessarily mean that the program targets have actually changed or that the program has caused them to change in any way (5).

Supportive evidence for this finding is presented in a quasi-experimental study that aims at determining the impact of an educational program on nurses' performance regarding the care of children in Thomas splint traction. The results of the study show that nurses' performance score is poor before the program is implemented and significantly improved after the program implementation (6). Support for the present finding is provided by a quasi-experimental study with a pre and post design. The study is conducted to verify the effects of an education program of restraints use on nurses' performance related to restraints use. The subjects are nurses who meet the selection criteria and worked in intensive care units of two university hospitals located at K-City, Gyeongbuk, Korea. Twenty nurses in a hospital are designated as the study group and 20 nurses in B hospital as the control group. Results of the study depict that that the study group have higher scores of nursing performance than the control group (F=3.28, p=0.032). This result has approved that nurses' performance has dramatically changed as result to their exposure to the education program (7).

Recommendations

The study recommends that the Ministry of Health should consider the Family Health Nursing Program as mean for the improvement of nurses' performance in the area of family health services. Further and a nationwide research can be conducted on a large size of family health nurses with focus on variety of related variables that may influence their knowledge and skills of family health nursing

REFERENCES

El-Dakhakhny, A. 2011. Impact of an educational program on nurses' performance toward children in Thomas traction. *International Journal of Orthopaedic and Trauma Nursing,* (15) 2, 2011, pp.206–219.

Hanson, S., Gedaly-Duff, V. and Kaakinen, J. 2005. Family Health Care Nursing: Theory, Practice and Research, 3rd edition, Philadelphia: F.A. Davis, 2005, P. 3.

Paul, M. and Walton, T. 2008. Dimensions of health and wellness include: a physical, emotional, intellectual, spiritual, social, and interpersonal, plus environmental planetary components, Boston, MA: Mcgraw-Hill, 2008.

Polit, D. and Hungler, B.1999. Nursing Research: Principles and Methods. sixth edition. Philadelphia: Lippincott, 1999, pp. 186-193.

Shackman, G.. What is Program Evaluation? A Beginner's Guide.The Global Social Change Research Project. 2012.

Vasundhra, M. 2008. Community Health Nursing, 2nd edition, New Delhi: BT basavanthappa, P. 108.

Yeo, J. and Park, M. 2006. Effects of on education program for nurses on the use of restraints. Taehan Kanho Hakhoe Chi, 36(3), 2006, pp. 532-41.

****