A Study to Assess the Effectiveness of Educational Package on Knowledge Regarding Most Common Congenital Heart Diseases and Their Management among Staff Nurses in Selected Pediatric Hospital at Lucknow

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ABSTRACT

A new baby is like beginning of all things- wonder, hope, and dreams. The growth and development of human being is a continuous process that begins before birth. Baby's heart begins to develop shortly after conception. There are several phases of the fetal heart's development. At first, the heart is just a tube which grows so fast that it needs more space, so it bends and twists back, forming the familiar shape. The next phase begins when the two atria are completely separate and the ventricles are just beginning to separate. Finally, the ventricles separate completely and the heart is developed. The Embryonic heart starts to beat at around 21 days after conception and then undergoes various stages of development and modification. During development, structural defects can cause congenital heart disease or heart problems which may present at birth. Congenital heart disease will happen when the heart does not develop normally before birth. (1)

KEYWORDS: Impact of smoking, Mass awareness programme

INTRODUCTION

Congenital heart disease (CHD) is the most common congenital abnormality found in pediatrics, approximately 25% of all the congenital anomalies[2] .

Congenital heart diseases are a rapidly increasing population, presenting some of the most complex and challenging problems in cardiology units today. Congenital heart disease occurs in approximately 5-8 per 1000 live births. This incidence remains relatively constant throughout the world and has remained unchanged for many years. In 1950's fewer than one in five infants with recognized CHD survived into adulthood. Improvements in cardiac surgery, peri-operative care, a better understanding of CHD and more recently interventional catheterization in childhood meant that by the 1980's ,85%of infants born with CHD could be expected to reach adulthood[3]

Congenital heart defects (CHDs) are conditions that are present at birth and can affect the structure of a baby's heart and the way it works. They are the most common type of birth defect. As medical care and treatment have advanced, infants with congenital heart defects are living longer and healthier lives. Many now are living into adulthood.[4]

Congenital heart disease (CHD) is the most common birth defect, affecting 8 out of 1,000 live births. Accounting for 30% of total congenital malformation. The heart is developed during the period of embryogenesis from the primitive muscle wrapped to a four chambered muscular organ with septa, valves, conduction system and major vessels originating & terminating in the heart. Any defect in the orderly and sequential development leads to structural or functional malformation.[5],[6]

Exact cause of CHD is not known but many factors are associated with CHD such as parental viral infection, poor maternal nutritional status, the mother's age above 40 years and mother has insulin dependant diabetes & use of drugs such as lithium, anticonvulsants, etc. Congenital heart diseases are mainly grouped as Acyanotic and Cyanotic. Acyanotic heart disease includes coarctation of aorta (COA), ventricular septal defect (VSD), pulmonary stenosis (PS), patent ductus arteriosus (PDA), arterial septal defect (ASD) and aortic stenosis (AS). Cyanotic heart disease includes Tetralogy of Fallot (TOF), transposition of the great vessels (TGV).[7]

Many heart abnormalities can be corrected with a single operation in early infancy. More complex abnormalities including hypoplastic left heart syndrome and tricuspid atresia may require a series of two or three operations beginning in the newborn period and completed at about 3 years of age. Less invasive procedures done in the cardiac catheterization laboratory, rather than the operating room, may be used to treat some conditions which include balloon angioplasty or valvuloplasty to relieve an obstruction of a blood vessel such as in coarctation of the aorta or a valve obstruction such as in pulmonary or aortic stenosis. Some abnormalities, such as small- or moderate-sized ventricular septal defects, may close or decrease in relative size as a child grows. While waiting for the hole to close, the child might have to take certain medications, which some kids also need to take after surgery.[8]

Treatment of the defect can include medicine, surgery and heart transplant. Today many children born with complex heart defects grow to adulthood and lead a productive life. When parent learns that their child has a cardiac defect, the nurse can assist parent's knowledge, responsibility and help them to learn care of their child both at home and in hospital.[9]

Advances in medical management and surgical treatment have improved the longevity and quality of life for patients with CHD. However, meeting the health care needs of this growing population has not kept pace with the advances in technology. Assessment and recognition of the developmental changes occurring for both children and their families and the impact of chronic illness on these changes are critical. Nurses have a key role in guiding patients and families toward adult, independent self-care by helping them identify and use their talents and resources as they move toward achieving their goals and dreams for the future.[10]

Problem Statement:
"A study to assess the effectiveness of educational package on knowledge regarding most common congenital heart diseases and their management among staff nurses in selected Pediatric hospital at Lucknow, U.P."

Objectives of The Study:
➢ To assess the pre-test knowledge of the staff nurses regarding most common Congenital heart diseases and their management.

➢ To develop and validate educational Package on most common Congenital heart diseases and their management.

➢ To assess the post-test knowledge of the staff nurses regarding most common Congenital heart diseases and their management.

➢ To assess the effectiveness of educational package by comparing the pre- test and post-test knowledge score.

➢ To find out the association between pre-test knowledge score of staff nurses with Selected demographic variables.

HYPOTHESIS:
H_1 - There will be significant difference between pre-test and post-test scores regarding most common congenital heart diseases and their management among staff nurses.

H_2 - There will be a significant association between the pre- test and post-test knowledge score with selected demographic variables

OPERATIONAL DEFINITIONS:
Assess:- It is the statistical assessment of the scores achieved by the staff nurses.

Educatonal Package- Here educational package includes information lecture cum discussion, PPT regarding most common congenital heart diseases and their management containing nurses role information

Effectiveness: Refers to the extent to which the educational package on most common congenital heart diseases and their management achieves desired effect in improving the knowledge of staff nurses as evident from the gain in knowledge scores.

Knowledge:- It refers to the appropriate response from the staff nurses about most common congenital heart diseases and their management through the items of structured questionnaire.

staff nurses:- It is defined as a health professional (male or female) who has completed a diploma or degree in nursing registered with the UPSMF, and who has been deployed in one of the Pediatric hospitals at LUCKNOW.

Congenital Heart Disease:- CHD is the structural malformations of the heart and great vessels, present at birth

Ventricular septal defect:- A ventricular septal defect is an abnormal opening in the septum between right and left ventricle.

Atrial septal defect:- ASD is an abnormal opening between the right and left atria resulting left to right shunting of blood.

Tetralogy of fallot:- It is the most common cyanotic CHD. The classic from include four defect.
A. Ventricular septal defect
B. Pulmonary stenosis
C. Overriding aorta
D. Right ventricular hypertrophy

Management- It includes planned interventions for the holistic care of the child

ETHICAL CONSIDERATION: Prior permission was obtained from the research committee of INTEGRAL Hospital, Luckow, U.P. The participants were as sure do anonymity and total confidentiality of information, and that any information obtained from them was solely for the purpose of the study.

METHODOLOGY:
RESEARCH APPROACH: The research approach adopted or this study was an evaluative approach.

RESEARCH DESIGN: A pre-experimental research design with pre and post-test approach was used to this study.

VARIABLES:
Independent variable: Independent variable is the variable that stands alone and is not dependent on any other. In this study independent variable refers to Educational package.

Dependent variable: Dependent variable is the outcome variable of interest. The variable that is hypothesized to depend on the independent variable. In this study, knowledge of staff nurses regarding most common CHD & their management is the dependent variable.

POPULATION: Population for the study were the staff nurses working in Integral Hospital at Lucknow, U.P.

SAMPLE: Sample comprises of 60 staff nurses working from Integral hospital at Lucknow.

SAMPLING TECHNIQUE: 60 samples were selected by using convenient sampling technique.

SAMPLING CRITERIA:
Inclusion criteria:-
➢ Nurses who were working in CHD unit.

➢ Nurses who were willing to participate.

➢ Nurses who had not attended any similar intervention under 6 month.

Exclusion criteria:-
➢ Staff nurse who were not available during data collection
➢ Staff who had attended the same programme in last 6 month.

DESCRIPTION OF THE TOOL: The instruments used in this study consisted of two sections.

SECTION A: A Performa for selected personal information was used to collect the sample characteristics. The characteristics included age, gender, education qualification, total clinical experience, total experience in neonatal unit, Attended any workshop/ seminar regarding most common CHD & their management.

SECTION B: It includes structured knowledge questionnaire. It consisted of 30 items divided into 4 sections. all the items were multiple choice questions, A score value of 1 was allotted to each correct response. Thus there were 30 maximum obtainable scores. The level of knowledge was categorized based on the scores obtained.

REVIEW OF LITERATURE
Review of literature is regarded as a preparatory stage of gathering data and serves to acquaint the researcher with previous research findings on the topic under study. A literature review is a compilation of resources that provide the groundwork for further study. It is frequently found as a subsection of a published research study.[28] Literature review refers to the activities involved in searching for information on a topic and developing a comprehensive picture of the state of the knowledge on that topic.[29]

A clinical study conducted by F. Rahim, A. Ebadi, G. Saki et al. on Prevalence of Congenital Heart Disease in Iran 2008 The present investigation in Ahwaz, from 1998 to 2007, revealed a mean prevalence of 12.30 per 1000 live births of the total 3061 inpatients and live births with a yearly prevalence varying from 7.93 to 17.51 per 1000 live births. The most frequent type of CHD was found to be Atrial Septal Defect (ASD)(19.54%) followed by Tetralogy of Fallot (TOF) (16.99%), Shunt (11.47%) and Ventricular Septal Defect (VSD) (11.07%).[32]

A study conducted by Zhang Y, Riehle-Colarusso T, Correa A, et. al on Observed prevalence of congenital heart defects from a surveillance study in China.2011. Among 4006 scanned fetuses and neonates, there were 75 congenital heart defects, including 12 major

defects. The observed prevalence for all congenital heart defects was 18.7 (95% confidence interval, 14.8-23.5) per 1000 births, and the prevalence for major defects was 3.0 (95% confidence interval, 1.6-5.2) per 1000 births. The most common defects were ventricular septal defects (n = 47 [62.7%]), atrial septal defects (n = 14 [18.7%]), tetralogy of Fallot (n = 4 [5.3%]), and hypoplastic left heart syndrome (n = 3 [4.0%]).[34]

A study conducted by Zierler S on Maternal drugs and congenital heart disease 1985 Congenital heart disease comprises one-third of all major birth defects. The studies with the longest follow-up estimate that 0.9% of infants are afflicted. The effect of embryonic exposure to maternal drugs during cardiogenesis has been widely studied, and the evidence suggests that maternal use of ethanol, anticonvulsants, lithium, and exogeneous female hormones may increase the risk of congenital heart disease. An antiemetic agent containing doxylamine has been implicated in the courts. This review offers an analysis of the epidemiologic evidence of the occurrence of congenital heart disease in relation to maternal drug use during pregnancy. The evidence indicates that the vast majority of heart malformations cannot be attributed to these pharmacologic agents.[52]

A case control study was conducted by Shiwei Liu, Junxiu Liu, JiTang,et al on Environmental Risk Factors for Congenital Heart Disease in the Shandong Peninsula, China 2009. They conducted a hospital-based 1:2 matched case–control study of 164 patients with congenital heart diseases and 328 controls, all of whom were retrospectively interviewed. The environmental risk factors associated with CHD were mother's education level (odds ratio [OR], 0.31; 95% confidence interval [CI], 0.15–0.67), neonatal asphyxia or hypoxia (OR, 3.74; 95% CI, 1.25–11.18), number of previous pregnancies (OR, 2.68; 95% CI, 1.44–4.97), maternal upper respiratory tract infection (OR, 4.12; 95% CI, 1.56–10.85), maternal infection (OR, 7.98; 95% CI, 2.14–29.72), maternal B-mode ultrasound examination (OR, 4.05; 95% CI, 1.48–11.08), and maternal mental stress (OR, 3.93; 95% CI, 1.94–7.94) during early pregnancy. No significant interactions were observed among these factors.[53]

A study conducted by GordonGladman, Brian W. McCrindle, William G. Williams on The modified Blalock Taussig shunt: Clinical impact and morbidity in fallot's tetralogy in the current era 1997.Between 1990 and 1994, 65 children with tetralogy of fallot received a Blalock Taussig shunt. Sixty patient who had follow up angiography were assessed for clinical outcomes and shunt related morbidity and mortality. From the same study period 68 of 247 pediatric patient . Who underwent angiography and tetralogy repair, but did not receive palliation, were randomly selected to comprise a comparison group. Palliation was more likely in the presence of a complicated tetralogy malformation or if there was an associated medical condition. Median age at palliation was 58 days (range; 1 to 535 days). Ninty- five percent of shunts were right- sided self – limited morbidity complicated 11% of shunt operations. Significantly smaller distal right pulmonary arteries were observed in the palliated group before total repair compared with findings in the group without palliation and 33% of patient who underwent palliation had angiographic evidence of pulmonary artery distortion. Shunt stenosis was common and correlated with younger age at palliation shunt occlusion resulted in the one death. Excluding noncardiac causes of death, overall survival was 90% in the palliated group versus 97% in the non-palliated group (p = 0.09). Pulmonary artery hypoplesis and angiographic evidence of pulmonary artery distortion are common after initial palliation by a modified Blalock-Taussig shunt.[59]

A retrospective study conducted by JS Rana, KA Ahmed, AS Shaminet. al on Blalock-Taussig shunt: experience from the developing world Karachi, Pakistan.2002. We report a retrospective study of 70 Blalock-Taussig shunt procedures in 63 patients over an 8-year period. Most of the procedures (54.0%) were done on children less than 4 months of age. Thirty-nine (58%) patients had Tetralogy of Fallot; the remaining patients had a wide spectrum of lesions. In the first year of the review period, the classical Blalock-Taussig shunt was done in six patients (9.5%) and the modified Blalock-Taussig shunt was used thereafter. In 49 patients who were followed up long term, clinical congestive cardiac failure developed in three (6%) and shunt failure was reported in 10 (14%). Of the 16 (33%) total deaths, six had serious comorbid conditions preoperatively. The Blalock-Taussig shunt is a relatively safe palliative procedure, requiring fewer resources and less expertise than corrective surgery, making it a suitable option in developing countries.[60]

RESULTS
A total of 60 patients with Management of CHD in nursery among nursing personnel

Section-1: Description of socio-demographic characteristics of samples

Table-1: Frequency and percentage distribution of selected demographic variables

S. No	VARIABLES	FREQUENCY	FREQUENCY PERCENTAGE
1	**AGE**		
	21-25	23	38.3%
	26-30	14	23.3%
	31-35	11	18.3%
	35 and above	12	20%
2	**GENDER**		
	Male	31	51.7%
	Female	29	48.3%
3	**EDUCATION QUALIFICATION**		
	G.N.M.	26	43.3%
	B.Sc. nursing	12	20%
	Post B.Sc. nursing	19	31.7%
	M.Sc. nursing	3	5%
4.	**TOTAL CLINICAL EXPERIENCE (IN YEARS)**		
	1-2	27	45%
	3-4	20	33.33%
	5-7	10	16.7%
	7 and above	3	5%
5.	**TOTAL EXPERIENCE IN CHD UNIT (IN YEARS)**		
	0-1	19	31.7%
	2-3	23	38.3%
	4-5	13	21.7%
	5 and above	5	8.3%
6	**ANY OTHER INFORMATION RELATED TO NICU CARE (conferences seminars, workshop)**		
	Yes	22	36.7%
	No	38	63.3%

Table 1 shows the number and percentage of the distribution of the subjects

1. Based on this 38.3% (23) were distributed in 21-25Years of age,23.3%(14) were distributed in 26-30 years, 18.3 %(11) were distributed in 31- 35Years, and 20 % (12) were distributed in 35 and above yrs. of age.

2. The data presented shows that 51.7% (31) of subjects were males and 48.3%(29) were females

3. Based on educational qualification 43.3% (26) were GNM, 20% (12) were BSc staffs, 31.7 % (19) were post BSc, and 5 % (3) post graduate staff nurses during the study.

4. Based on the total clinical experience most of subjects 45%(27) were distributed between1-2yrs,33.33% (20) were distributed between 3-4yrs, 16.7%(10) were distributed between 5-7yrs.and 5%(3) had more than 7 yrs. Of experience.

5. Based on the experience in CHD Unit majority of subjects 31.7% (19) were distributed between <1 yr., 38.3% (23) were distributed between 2-3yrs, 21.7%(13) were distributed between 4-5yrs.and 8.3% (5) had >5 yrs. of experience in neonatal unit.

6. Based on the data majority of subjects 63.3 %(38) not received and attended any CHD and CHD Management, conference, workshop, seminar, programme and very few of them 36.7% (22) had attended CHD and CHD Management conference, workshop, seminar.

SECTION II

Percentage distribution of overall knowledge level and knowledge in Specific areas related to CHD and CHD Management among staff nurses in pre- test

Table:2 Percentage distribution of overall knowledge level N=60

S.NO	Level of Knowledge	% of score	Pretest		Post test	
			Frequency	Frequency %	Frequency	Frequency %
1.	Poor	0-40	3	5	0	0
2.	Average	41-60	57	95	0	0
3.	Good	61-74	0	0	19	31.6
4.	Very good	75 and above	0	0	41	68.33

The level of knowledge was classified in four aspects includes poor (0-40%), average (41-60), good (61-74) and very good (75 and above). The data of table no. 2.1 shows that in pre -test majority of the subjects 95% (57) had average knowledge and 5% (3) subjects had poor knowledge about the topic, and none was found in category of good and very good. Data present above: revels that in the assessment of post-test knowledge of staff nurse, majority 68.33 % (41) of subject had very good knowledge while 31.6% (19) of them had good knowledge about the topic and none were found to be average and poor in knowledge.

Table: 3 Aspect wise knowledge effectiveness of Structured Teaching Programme   N=60

S. NO	AREA	MAXIMUM SCORE	MEAN SCORE	MEAN %	S.D
1	Questions Related to Introduction Defination and Epidemiology of CHD	6	3.050	50.83%	.9816
2	Questions Related to Causes and Classification of CHD	6	2.8833	48.05%	.95831
3	Question Related to Estimation of Body Surface Area for CHD and Calculation of CHD	4	2.1167	52.91%	.84556
4	Question Related to Care and Management	14	7.0667	50.47%	1.10264
	Overall	**30**	**15.1167**	**50.38%**	**3.88811**

Table no. 3 depicted area wise mean, mean %, standard deviation and overall score in pre- test knowledge scores of staff nurses comprising of Four sections on CHD and its Management, the first section involves introduction definition and epidemiology of CHD data shows that maximum score allotted for this section was 6and mean score, mean% and SD were consequently 3.050, 50.83%, and .9816.In section 2 i.e. Causes and classification of CHD the maximum score allotted was 6 and mean score, mean%, and SD were 2.8833, 48.05%, and .95831respectively. Section 3 estimation of body surface area for CHD and calculation of CHD with maximum score of 4, the mean score, mean% and SD were consequently 2.1167, 52.91% and.84556.Section 4 care and management of CHD with maximum score of 14, mean, mean% and SD were 7.0667,50.47%, and 1.10264respectively.

Finally overall maximum score was of 30 and overall mean score, mean%, and SD were 15.1167, 50.38% and 3.88811consequently.

Table no. 4 shows Mean, mean% and standard deviation of post-test knowledge scores

N=60

S. N	AREA	MAXIMUM SCORE	MEAN SCORE	MEAN %	S. D
1	Questions Related to Introduction Definition and Epidemiology of CHD	6	4.9333	82.22%	.88042
2	Questions Related to Causes and Classification of CHD	6	4.9833	83.05%	.85354
3	Question Related to Estimation of Body Surface Area for CHD and Calculation of CHD	4	3.3333	83.33%	.72875
4	Question Related to Care and Management	14	11.5667	82.61%	1.59837
	OVERALL	**30**	**24.8166**	**82.72%**	**4.06108**

Table: 4 depicted area wise mean, mean %, standard deviation and overall score in post- test knowledge scores of staff nurses in first section which involves introduction definition and epidemiology of CHD with the maximum score of 6 in this mean score, mean% and SD were consequently 4.9333, 82.22% , and .88042. In section 2 i.e. Causes and classification of CHD with the maximum of 6, the mean score, mean%, and SD were 4.9833, 83.05%, and .85354respectively. Section 3 estimation of body surface area for CHD and calculation of CHD with maximum score of 4, the mean score, mean% and SD were consequently 3.3333, 83.33% and .72875and in section 4 care and management of CHD with maximum score of 14, mean, mean% and SD were 11.5667, 82.61%, and1.59837respectively. Finally overall maximum score was of 30 and overall mean score, mean%, and SD were 24.8166, 82.72% and 4.06108 consequently.

SECTION III
Effectiveness of structured teaching programme among staff nurses on CHD and CHD management knowledge by comparing the pre-test and post-test assessment

Table 5: Area wise effectiveness of STP

N=60

S. No.	Area	Score	Pre-test (x)			Post- test (y)			Effectiveness (y-x)		
			Mean	Mean%	S.D.	Mean	Mean%	S.D	Mean	Mean%	S.D
1.	Questions Related to Introduction Defination and Epidemiology of CHD	6	3.050	50.83%	.9816	4.9333	82.22%	.88042	1.8833	31.39%	0.1011
2.	Questions Related to Causes and Classification of CHD	6	2.883	48.05%	.95831	4.9833	83.05%	.85354	2.1	35%	0.1022
3.	Question Related to Estimation of Body Surface Area for CHD and Calculation of CHD	4	2.116	52.91%	.84556	3.3333	83.33%	.72875	1.2166	30.42%	0.1168
4.	Question Related to Care and Management	14	7.066	50.47%	1.1026	11.566	82.61%	1.5983	4.5	32.14%	0.4957
	Overall	30	15.11	50.38%	3.8881	24.816	82.72%	4.0610	9.6999	32.34%	0.17297

Table no. 5 describes that overall findings revels that the mean% of post -test knowledge score was more compare to the mean% of the pre- test knowledge score. The effectiveness of STP was observed in all the areas suggesting that it was effective in increasing the knowledge of staff nurses regarding CHD and its management.

Table 6 Significance difference between pre-test and post-test knowledge scores

N=60

S. n	Score	Mean	S.D	Std. error	Mean difference	D.F	't' table	
							Calculated value	Tabulated value
1	Pre-test	15.1167	3.88811	0.75	9.6999	59	4.6884	2.0010
2	Post - test	24.8166	4.06108					

Table: 6 describe the comparison of knowledge score CHD and CHD management before and after intervention. The post-test mean score was significantly higher than the pre- test mean score. The tabulated value of 't' score at 0.05% level of significance and 59 degrees of freedom is 2.0010 and the table value was less than the calculated' value (4.6884) which represents the significant gain in knowledge through the structured Teaching Program. Thus it suggests that the STP has been effective in increasing the knowledge of staff nurses CHD and CHD management. ($p < 0.05$ HS)

SECTION IV

Table 7 Association between the knowledge of staff nurses on CHD and CHD Management with selected demographic variables   N=60

S. N	Variable	Chi square $x2$		d.f	Level of Significance
		Calculated value	Tabulated value		
1	**Age** 22-25 26-30 31-35 35 and above	1.1749	16.9	9	0.05 (S)
2	**Gender** Male Female	0.4249	7.81	3	0.05 (S)
3	**Education Qualification** GNM BSC POST BSC MSC	1.1889	16.9	9	0.05 (S)
4	**Total Clinical experience (In Years)** 1-2 3-4 5-7 7 and above	7.07	16.9	9	0.05 (S)
5	**Total Experience in CHD Unit (In Years)** <1 2-3 4-5 5 and above	6.6037	16.9	9	0.05 (S)
6	**Any additional information Received (conferences seminars, workshop)** Yes No	0.0149	7.81	3	0.05 (S)

Table no: 7 The above shows that the obtained chi- square values of variables of age, gender, education qualification, total clinical experience, total clinical experience in CHD unit, so there is significant association between the knowledge scores and these variables at the 0.05 level of significance. Hence the hypothesis is accepted. The obtained chi-square value of variable of additional information received was less than the tabulated value hence the hypothesis is accepted.

NURSING IMPLICATION

The scientific and medical inventions help to improve theon CHD and CHD management practice, requiring the staff nurses to be updated with knowledge. Staff development programmes through continuous education and training, teaching and learning materials like structured teaching programme (STP) are major factors in shaping the future of the profession of nursing services. The findings of the study have several implications for nursing practice, nursing education, nursing administration and nursing research.

NURSING PRACTICE

The study shows various degrees of deficiency in the CHD and CHD management knowledge among the staff nurses. The study reveals that the correction of deficiency needs to be an ongoing process. It highlights the need for special attention in providing additional and up-to-date information on CHD and CHD management which is the basic life support for the high-risk neonates.

NURSING EDUCATION

Staff nurses should be encouraged to participate in specialized courses regarding CHD and CHD management there should be individualized teaching and on-going feedback on their performance. Special classes and in service education programmes should be conducted. The structured teaching programme act as a good teaching and learning material. More emphasis should be given to periodic development

and updating of the STP. The curriculum of undergraduate and postgraduate nursing should detail out on the CHD and CHD management.

NURSING ADMINISTRATION

This highlights the need for nursing administrators to use performance appraisal, nursing audit, guidelines and updating of nursing standards. Clinical expertise and experience are helpful for the staff nurses to assess what is really the best evidence for neonatal care. The nurse administrators should try to update the knowledge of the staff nurses regarding CHD and CHD management and to develop appropriate teaching strategies which help in providing quality care.

NURSING RESEARCH

This is only an initial investigation into the area of nurse's knowledge on CHD and CHD management. There is a lot of scope for exploring this area. Extensive research into the factors affecting nurse's knowledge, CHD and CHD management practice of the staff nurses and care of children on Wound care and vital supports, can be conducted. Use of research findings should become part of the quality assurance evaluation to enhance the profession as a whole.

SUMMARY:

This chapter dealt with the findings of the study, implications of the study in the fields of nursing education, nursing practice, nursing administration and nursing research. It also deal with the limitations and recommendations for the study.

CONCLUSION

The main aim of the study was to assess the effectiveness of structured teaching programme on CHD and its management among the staff nurses of selected hospital at Lucknow, U.P. Teaching was given through the STP which included introduction and definition, epidemiology of CHD and its management causes and classification of CHD, estimation of TBA for CHD and calculation of CHD, care and management. Guidelines this helped the staff nurses to gain knowledge in CHD and CHD management.

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