

A Quasi Experimental Study to Assess the Effectiveness of Training Programme on Knowledge and Skills of Newborn Care among Fathers Attending Maternity Ward at SGRD Hospital, Vallah, Amritsar

Nisha¹, Ujala Joshi², Karuna Sharma³

¹Student, ²Assistant Professor, ³Professor,
SGRD College of Nursing, Vallah, Amritsar.

Corresponding Author: Nisha

ABSTRACT

Caring for newborns includes providing them with proper nutrition, a safe place to sleep as well as quality time and attention. The role of father is extremely important in the newborn care. Once, they become mentally adapted to the role of newborn care, they feel very satisfied that they are contributing their share towards the caring of the newborn and also feel proud in the fact that they are good father. A quasi experimental study was adopted to assess the effectiveness of training programme on knowledge and skills of newborn care among fathers attending maternity ward at SGRD Hospital, Vallah, Amritsar. The sample size was 60 fathers (30 in control group and 30 in experimental group) were selected for the study using convenience sampling technique. Structured knowledge questionnaire and skill of newborn was assessed using checklist was used to collect the data. The data was analyzed using descriptive and inferential statistics. The results showed that mean and SD for experimental group was 25.40 ± 3.440 and in control group 13.20 ± 4.238 with ($t=12.24$, $p=0.001$). The findings on skills showed that the eye care skills in experimental group mean and SD was 7.77 ± 0.971 and in control group 3.47 ± 1.358 with ($t=14.10$, $p=0.001$) indicates highly significant. On cord care skills in experimental group mean and SD was 7.83 ± 0.791 and in control group 3.80 ± 1.243 with ($t=14.99$, $p=0.001$). On burping skills of newborn care in experimental group mean and SD was 8.50 ± 0.861 and in control group 3.97 ± 1.066 with ($t=18.11$, $p=0.001$) indicates highly significant. On diaper change skills of newborn care in experimental group mean and SD was 7.73 ± 1.143 and in control group 3.93 ± 1.258 with ($t=12.24$, $p=0.001$) indicates highly significant. The study concluded that there is a need to create awareness among the fathers and mothers regarding newborn care to help them reduce newborn complications. Health education on essential newborn care should be integrated into routine antenatal services and re-emphasised in the antenatal period to help improve maternal knowledge towards essential newborn care practices.

Keywords: Knowledge, Skill, Newborn, father

INTRODUCTION

Birth of a healthy newborn is one of the finest gifts of nature. Childbirth has been described as one of the most important life experiences that a woman and her partner will encounter.¹ Newborn babies are completely dependent on their parents.

Caring for newborns includes providing them with proper nutrition, a safe place to sleep as well as quality time and attention. The role of father is extremely important in the newborn care. Once, they become mentally adapted to the role of newborn care, they feel very satisfied that they are

contributing their share towards the caring of the newborn and also feel proud in the fact that they are good father.²

Parenting is not only the responsibility of the mothers, grandparents and close relatives, but also the responsibility of the fathers. Fathers should be prepared for the challenges of parenting. Fathers who are highly involved with the newborn often feel more comfortable and successful in parenting role. Fathers also show specific attachment towards the newborn. Fathers generally request assistance coping with their parental role. They prefer information about prenatal care, newborn care and infant development. A wonderful and healthy parenting is one which involves both mothers and fathers taking active participation in a child's life.³

A father's role in a child life is indispensable important in helping to determining the healthy development of the child. Every child born into this world possesses a set to genes that have from her mother and half from her father. It only makes a sense that the presence of both a father and a mother are crucially important in helping to determine the wellbeing of their child. Once, they become mentally adapted to the role of child care, they feel very satisfied that they are contributing their share towards the rearing of the baby and also feel proud in the fact that they are good father. The little that we do know indicates that fathers of infant in the face unique challenges. Fathers strive to balance between work and family life. Despite these completing demands, ensuring that each infant's father is engaged actively with the infant in vital for developmental reasons. In addition, the involvement of fathers is crucial when major decisions have to be made regarding the clinical care of the infant.⁴

Most fathers are naturally protective, supportive and responsible and are able to provide a number of significant benefits for their children. Involved fathers offer developmentally specific provisions to their sons and daughters throughout the life cycle

and are impacted themselves by their doing so. Active father figures have a key role to play in reducing behavior problems in boys and psychological problems in young women.⁵

Fathers of children with special health care needs have been found to be highly involved in the care of their children. Fathers have been shown to increase involvement with children with chronic illnesses, often advocating for their children's medical needs even if it means positioning themselves in the health care system as "unpopular" family members. Although mothers are generally more involved with their children's direct care, a father's participation in care has been linked to higher adherence to treatment, better child psychological adjustment, and improved health status compared with families with nonparticipating fathers.⁶

Many interviews with men tell that just as new babies reach out to their new world, fathers open up to their new child. Despite the stereotype of the dad who fumbles frantically with the fragile newborn, new fathers are neither inept nor uninterested in neonatal interaction. They are as engaged with their children as mothers are, attending to babies' cues and responding appropriately. Studies of Israeli fathers find that with an average of less than seven hours with their infant, blindfolded fathers can identify their children by the feel of their hands. By responding to their babies' signals, fathers reinforce the newborns' behavior and initiate the new relationship.⁷

Now a days mothers are also having a hectic schedule where they are also earning hand of the family along with father so father need to be learned enough to care for his baby. While it is essential for mothers and babies to develop a deep connection, it's also important for fathers to spend quality time bonding with their babies. An increasing amount of research suggests a strong correlation between early father infant bonds and the happiness of their entire family.⁸

The way fathers play with their neonates also has an important impact on a child's emotional and social development. Fathers spend a much higher percentage of their one-on-one interaction with infants and preschoolers in stimulating, playful activity than do mothers. From these interactions neonates learn how to regulate their feelings and behaviors. The child needs fathers as much as it needs the mother. The father needs you to take care of the baby so that father can help in doing most of the things related to baby care. So fathers take the initiative so that fathers are equal to mothers. Care of newborn include daily routine care, handling a newborn, immunization.⁹

Now days the fathers involvement in newborn care is important according to our culture. Fathers are engaged in their job so fathers also have equal responsibility in the care of the child. For a healthy baby both fathers care is needed. In recent days the trend has drastically changed in all strata where both fathers work and nuclear families is on the rise. Neonates are left uncared making the vulnerable to many problems. Indian society is known well for women to play a major role in the care of the child and fathers take a back seat.¹⁰

After reviewing various sources and literature studies the investigator had decided to provide training programme to fathers and to assess the effectiveness of training programme on knowledge and skills of newborn care.

PROBLEM STATEMENT

A quasi experimental study to assess the effectiveness of training programme on knowledge and skills of newborn care among fathers attending maternity ward at SGRD Hospital, Vallah, Amritsar.

AIM OF THE STUDY

The aim of the present study was to assess the effectiveness of training programme on knowledge and skills of newborn care among fathers.

OBJECTIVES OF STUDY

- To assess knowledge and skills of newborn care among fathers attending maternity wards in experimental and control group.
- To evaluate the effectiveness of training programme on knowledge and skills of newborn care among fathers attending maternity wards in experimental group.
- To find the association of knowledge and skills of newborn care among fathers attending maternity wards in experimental and control group with selected socio demographic variables.

Operational definition

Knowledge: It refers to correct response of fathers regarding new born care elicited by knowledge score from self structured knowledge questionnaire

Skills: It refers to the ability of fathers to carry out newborn care well elicited by skills scores from self structured checklist.

Effectiveness: It refers to impact of training programme in terms of knowledge and skills gain of fathers regarding new born care as determined by significant increase in post test scores.

Newborn care: It refers to the daily routine care that includes – warmth (Maintain body temperature), Eye care, Cord care, Burping, Diaper changing, Handling Newborn (hand washing), Bonding and Immunization of the newborn

Training programme: It refers to a systematically developed instructional method & training to impart knowledge and skills regarding new born care

RESEARCH HYPOTHESIS

- H₀: There will be no significant difference in posttest knowledge and skills of newborn care among fathers between experimental and control group.
- H₁: There will be significant difference in posttest knowledge and skills of newborn care among fathers between experimental and control group.

METHODOLOGY

RESEARCH APPROACH:

Quantitative research approach was adopted to assess the effectiveness of training programme on knowledge and skills of newborn care among fathers attending maternity ward at SGRD hospital, Vallah, Amritsar.

RESEARCH DESIGN:

In present study, pre- experimental study design was utilized to achieve the objectives of the study.

VARIABLES UNDER STUDY

Dependent variable: Knowledge and skills of newborn care among fathers.

Independent variable: Structured teaching programme on knowledge and skills of Newborn care.

RESEARCH SETTING:

The present study was conducted at maternity ward, Sri Guru Ram Das Hospital, Vallah, Amritsar.

TARGET POPULATION

For the present study, population was Fathers attending maternity ward at SGRD Hospital, Vallah, Amritsar

SAMPLING TECHNIQUE

In the present study Non Probability Convenience sampling technique was used to select the samples for the study.

SAMPLE AND SAMPLE SIZE

The sample and sample size of present study was 60 fathers (30 in control group and 30 in experimental group)

SAMPLING CRITERIA

INCLUSION CRITERIA

- Fathers of newborn who were during the time of data collection
- Fathers of newborn who were willing to participate in the study

EXCLUSION CRITERIA

- Fathers of newborn who were suffering from any communicable diseases and chronic illness.

DESCRIPTION OF TOOL:

The tool consists of 3 parts :-

Part-A:

Selected socio-demographic variables such as : Age of father, Education of Father, Occupation of father, Occupation of mother, Family monthly income, Father habitat, Type of family, Duration of marriage, Number of children of father, Paternity leave

Part-B :

Self structured knowledge questionnaire tool on knowledge regarding new born care among fathers. It consists of 30 knowledge related questions

Part-C:

Self structured checklist on skills regarding newborn care among fathers. It consists of 4 skills checklist that is eye care, cord care, burping, diaper changing. All checklists consist of 9 items.

Reliability of tool:

The reliability for the knowledge questionnaire was measured by split half method ($r=.715$)

The reliability for the skill checklist was measured by cronbach's alpha ($r=.695$)

RESULTS AND DISCUSSION

The present study findings showed that knowledge regarding newborn care showed that in experimental group, pre-test 12(40%) had poor knowledge, 16(53.3%) had average knowledge and 2(6.7%) had good knowledge. In control group, pre-test 12(40%) had poor knowledge and 18(60%) had average knowledge. Esmaeel H et al. (2013)¹¹ conducted a study on knowledge assessment of neonatal care among fathers revealed that 78.5% of fathers had poor knowledge, 8.2% moderate and 13.3% had good knowledge.

The effectiveness of training programme on knowledge and skills of newborn care among fathers attending maternity wards in experimental group. The results revealed that findings of knowledge were as follows mean and SD for experimental group was 25.40 ± 3.440 and in control group 13.20 ± 4.238 with ($t=12.24$, $p=0.001$). The findings on skills showed that the eye care skills in experimental group mean and SD was 7.77 ± 0.971 and in control

group 3.47 ± 1.358 with ($t=14.10$, $p=0.001$) indicates highly significant. On cord care skills in experimental group mean and SD was 7.83 ± 0.791 and in control group 3.80 ± 1.243 with ($t=14.99$, $p=0.001$). On burping skills of newborn care in experimental group mean and SD was 8.50 ± 0.861 and in control group 3.97 ± 1.066 with ($t=18.11$, $p=0.001$) indicates highly significant. On diaper change skills of newborn care in experimental group mean and SD was 7.73 ± 1.143 and in control group 3.93 ± 1.258 with ($t=12.24$, $p=0.001$) indicates highly significant. The findings of the study revealed training programme on newborn care among fathers was effective in improving the knowledge and skill of

newborn care in experimental group as compared to control group at $P < 0.05$. **Hsieh H. W.** et al (2014)⁽³⁵⁾ conducted a study to identify the effects of newborn care education for first-time fathers on their knowledge and confidence in newborn care at postpartum one month. Findings revealed that fathers in the experimental group showed significantly higher knowledge ($t=4.51$, $p < 0.001$), confidence in newborn care ($t=-2.29$, $p=0.026$) compared to the control group at postpartum one month. Fathers in the experimental group had a satisfaction score of 27.37 ± 2.73 immediately after the education

Table 1: Frequency and percentage distribution of socio demographic variables. N=60

S.No	Socio-Demographic variables	Experimental		Control		Chi-value df p value
		f	%	f	%	
1	Age in years					
	a. 21-25 yrs	10	33.3	9	30	0.195
	b. 26-30 yrs	17	56.7	17	56.7	2
	c. 31-35 yrs	3	10	4	13.3	0.907 NS
2	Education of father					
	a. Informal education	2	6.7	6	20	2.858
	b. Primary	13	43.3	12	40	3
	c. Higher secondary	8	26.7	8	26.7	0.414 NS
	d. Graduation	7	23.3	4	13.3	
3	Occupation of father					
	a. Farmer	5	16.7	9	30.1	1.739
	b. Business	8	26.7	7	23.3	3
	c. Private employee	7	23.3	7	23.3	0.628 NS
	d. Government employee	10	33.3	7	23.3	
4	Occupation of mother					
	a. Working	14	46.7	11	36.7	0.617
	b. Homemaker	16	53.3	19	63.3	1
						0.432 NS
5	Monthly family income (Rs)					
	a. 10001-20000	4	13.3	6	20	0.518
	b. 20001-30000	8	26.7	8	26.7	2
	c. >30000	18	60	16	53.3	0.771 NS
6	Habitat					
	a. Urban	15	50	13	43.3	0.281
	b. Rural	10	33.3	11	36.7	2
	c. Semi urban	5	16.7	6	20	0.868 NS
7	Type of family					
	a. Nuclear	15	50	13	43.3	0.643
	b. Joint	12	40	12	40	2
	c. Extended	3	10	5	16.7	0.725 NS
8	Duration of marriage					
	a. 1 year	10	33.3	10	33.3	0.173
	b. 2 year	3	10	4	13.3	2
	c. 3 years and above	17	56.7	16	53.4	0.917 NS
9	No of children					
	a. 1	10	33.3	12	40	0.615
	b. 2	17	56.7	14	46.7	2
	c. 3	3	10	4	13.3	0.735 NS
10	Paternity leave					
	a. Yes	8	26.7	6	20	0.373
	b. No	22	73.3	24	80	1
						0.541 NS

* $p < 0.05$ level of significance NS-Non significant

Table 2: Effectiveness of training programme on level of knowledge and skills of new born care among father in experimental and control group N=60

Level of knowledge and skills		Mean	SD	t value	Df	p value
Knowledge	Experimental group	25.40	3.440	12.24	58	0.001*
	Control group	13.20	4.238			
Eye care	Experimental group	7.77	0.971	14.10	58	0.001*
	Control group	3.47	1.358			
Cord care	Experimental group	7.83	0.791	14.99	58	0.001*
	Control group	3.80	1.243			
Burping	Experimental group	8.50	0.861	18.11	58	0.001*
	Control group	3.97	1.066			
Diaper change	Experimental group	7.73	1.143	12.24	58	0.001*
	Control group	3.93	1.258			

*p<0.05 level of significance NS-Non significant

NURSING IMPLICATIONS:

The findings of this study will be used in different areas of nursing like area of service, education, administration and research. Present study result has following implications:

Nursing Practice

- In the present scenario, there is a need of evidence based practices so as to bring improvement in current nursing practices.
- The Nurse can educate fathers regarding newborn care.
- Motivate the peripheral nurses for importance of newborn care, so that they

Nursing Education

- Educational system incorporates advancement in nursing sciences through curriculum modifications.
- Nursing students can gain both knowledge and practical skills related to Newborn care and Participation of parents in providing newborn care.
- With the emerging health care demands and newer trends in the field of nursing, education must focus on the innovations to enhance the nursing care.

Nursing Administration

- Nurse administrator can conduct in-service education and training programme for nurses on the newborn care and make it compulsory to all staff unit to undergo skill training programmes.
- Nurse administrator should implement effective strategy for newborn care
- Nurse administrators can prepare written policies and protocols regarding care of newborn.

Nursing Research

- Findings of the study will act as a catalyst to carry out more extensive research on large sample and in other settings to generalize the research findings.
- Such research work enforces evidence based practice.
- In India, research studies related to training fathers regarding newborn care was very limited and many more studies can be carried out on such aspects.
- The findings of the research need to be disseminated through publications so that the utilization of such research findings will encouraged.

CONCLUSION

The study findings showed that fathers had average knowledge regarding newborn care and lack skills on eye care, cord care, burping and diaper change of newborn. After training programme the knowledge and skills of newborn care was improved and statistically significant in experimental group as compared to control group at p<0.05. The study concluded that there is a need to create awareness among the fathers and mothers regarding newborn care to help them reduce newborn complications. Health education on essential newborn care should be integrated into routine antenatal services and re-emphasised in the antenatal period to help improve maternal knowledge towards essential newborn care practices.

REFERENCES

1. Trends in Pediatric Nursing, New Born and Infant care. HS3T1 Pediatric Nursing. Indira Gandhi National Open University School of Health Sciences. March 2001. Unique Press Pvt. Ltd, NOIDA.
2. Nursing management of puerperium BNSL-103 maternal health nursing. Indira Gandhi National Open University School of Health Sciences. October 2004 A-one offset printers New Delhi.
3. Aribench SL. A study to assess the knowledge of father regarding care of the newborn care. Rajiv Gandhi University of Health Sciences, Karnataka, Bangalore. 1998.
4. Clare I. Health Begins at Home. The Nursing Journal of India 1973; 64: 119.
5. Sing M. Care Of The New Born. 5th edition. New Delhi: Sagar publication; 1999.
6. Module for staff nurse. (PHC/CHC) National Institute of health and family welfare. Munirka New Delhi; 1997.
7. Park's text book of preventive and social medicine 16th edition. Jabalpur, India M/s. Banarsidas Bhanot. 2001.
8. Merchant RM and Sharif M. The neonatal tetanus due to application of cow-dung to the umbilical stump causes septicemia. The Journal Of Obstetrics And Gynecology India. July 2005; 55 (4) : 313-317.
9. Bang AT, Bang RA, Baitule SB, Reddy MH, Deshmukh MD. Effect of home based neonatal care and management of sepsis on neonatal mortality: field trial in rural India. Lancet 1999 December; 354 (9194) : 1955-61.
10. Jali MV. Xth Annual conference of National Neonatology Forum Karnataka state chapter. NEOCON 2006 September; 23-24: PP-8.
11. Esmaeel H et al. Study on knowledge assessment of neonatal care among fathers. Journal of newborn care. 2013; 3(2): 12-17.
12. Hsieh H. W. et al. Study to identify the effects of newborn care education for first-time fathers on their knowledge and confidence in newborn care. International journal of pediatrics. 2014; 7(4): 345-350.

How to cite this article: Nisha, Joshi U, Sharma K. A quasi experimental study to assess the effectiveness of training programme on knowledge and skills of newborn care among fathers attending maternity ward at SGRD Hospital, Vallah, Amritsar. Int J Health Sci Res. 2020; 10(10):137-143.
