



ASSOCIATION BETWEEN UTILIZATION OF NEONATAL RESUSCITATION PROGRAM (NRP) & PERSONAL PROFILE OF NURSES

Nursing

Mr. Dipti Y. Sorte* Associate Professor, Swami Rama Himalayan University, Dehradun. *Corresponding Author

Dr. Anurag Bhai Patidar Professor, C. O. N. B.M.H.R.C, Bhopal.

ABSTRACT

INTRODUCTION: The child age and newborn death rate lower down substantially in the last 10 years. Still if we see the death rate of new born is at top. We are losing roughly three out of two newborns every year in first four week of their life therefore, initial time in newborns transition very crucial in survival of newborns specially those who are birth asphyxiated. **Purposes:** Overall resolution of this research is to recognize an "Utilization, means, effective use of workshop in the professional career" among the nurses working in various healthcare establishment and factors affecting poor utilization therefore, it will help to develop any new measures or modify current workshop protocols study was conceptualized based on The health promotion model presented by Nola J Pender (1982, revised 1996). **Materials & methods:** This is cross-sectional study used Quantitative research approach, to identify the utilization and association between Personal profile of nurses & Utilization of the NRP Training Programme. Non-experimental cross – sectional research and Exploratory survey design was used where entire tool was made in Google form and send to participants mail id. study was conducted in different national healthcare establishments. The population under this study are registered nurses working in selected healthcare establishments. samples are Staff Nurses working in different Health establishments. Sample size was 278 nurses was taken from a Actual population, 300 nurses was Selected and administrated the tool and 1000 nurses was a Target population. Purposive Sampling technique was used. Tool contains Part 1 for Questionnaire for Socio-demographic assessment. Part 2 for Structured Questionnaire Utilization of NRP training Programme. The reliability of a tool was conducted for the degree of steadiness with which it measures the qualities it is supposed to quantify, Cronbach alpha ($r = 0.91$), split half correlation (0.90), Spearman-brown prophecy (0.94), Mean for test (81.7) & SD for test is 18.83. Pretesting was done 30 samples to establish the clearness of items, considerate of the linguistic and period required to ample the item. Pilot testing was conducted on nurses of different health establishments on for 30 participants. Administrative permission was obtained from NRP President Main study collected on 278 samples Proceeds for Data Analysis (Descriptive & Inferential) as per objectives. **Conclusion:** The study concluded with finding Association between utilization with selected Socio-demographic (Personal profile) where Age and primary education of the participants came significant results and Participants exposure to related work area after or before NRP training are associated with the utilization NRP skills.

KEYWORDS

Utilization, Personal Profile, Nurses, Health Care Establishment.

1. INTRODUCTION:

The child age and newborn death rate lower down substantially in the last 10 years. Still if we see the death rate of new born is at top. We are losing roughly three out of two newborns every year in first four week of their life therefore, initial time in newborns transition very crucial in survival of newborns specially those who are birth asphyxiated¹

Almost all newborns frequently obtain the best care consideration. It is now to be considered that they required special care isolated from their mother to guarantee healthy and new start of life. The instant causes of newborns deaths are primarily birth asphyxia, infection, and complications related to congenital anomaly and prematurity. Maximum neonatal deaths are prevented with simple solutions and do not required to be highly sophisticated instruments and specialized professionals²

Operative newborn care is a central challenge which is a challenged to all health worker who are working in pediatric and labour room dealing in. The concern education and simulation practice to health care team member is an essential. The important constituent is to prepare attendants with essential psychomotor skills to enhance execution of excellence provision. The govt. office of fly welfare was speaking it through launching Navjaat shishu suraksha Karykram (NSSK). modest accessible educative element on NRP is established³

2. Literature Review:

Dr. Suresh Ray 2014 studied utilization and awareness of National rural health mission services of rural people as he was though of the countryside people were using this facility but investigation stated that there is the average utilization of services. He also identified some of the factors are responsible for non-utilization of the services. As the search was on huge sample size in four different districts. This study supports current study¹.

Ndima SD et.al 2015 investigated that motivation and implementation has it own importance, which means unless there is motivation no task will accomplish. Community health workers has great role in implementation of government policy schemes programmes in

community. This study supervised output of communal health worker in relation to inducing factors of program enactment linked with motivation. It was qualitative research. 29 supervisors taken as sample and conducted detailed interview. Factors verbalized by respondents are heavy workload, poor resources in supervision activity, Supervisors have to play multiple administrative and non-administrative role. Sometimes supervisor even do not get training on non-learned capabilities. Ultimately, supervisor needs specialized and continuous training as a motivation to improve their skills to handle different role received in the set up thus, the future implementation may be fruitful and effective with quality outcomes²

3. Problem Statement and Objectives:

3.1 Statement: "A study to assess the Utilization and Factors affecting Utilization of NRP Programme among the nurses working at different Healthcare establishment in the state of Uttarakhand"

3.2 Objectives:

1. To assess the utilization of the NRP training Programme among the nurses working at different healthcare establishments.
2. To associate the finding of utilization with selected Socio-demographic (Personal Profile) variables.

4. Hypothesis:

H₁: Significant connotation among skill Utilization of NRP Programme by nurses and selected Socio-demographic (Personal variables) of nurses.

H₀: There will be no significant association between skill Utilization of NRP Programme by nurses and selected Socio-demographic (Personal Profile) variables of nurses.

5. Conceptual framework:

Major components of General System Theory are as given below

The health promotion model presented by Nola J Pender (1982, revised 1996). In this model, these are the main dimensions that define Pender's health promotion model.

1. Individual characteristics and experiences

2. Behavior specific cognition and affect
3. Behavioral outcome

6. Materials and Methods:

This is cross-sectional study used Quantitative research approach, to identify the utilization and association between Personal profile of nurses & Utilization of the NRP Training Programme. Non-experimental cross – sectional research and Exploratory survey design was used where entire tool was made in Google form and send to participants mail id. study was conducted in different national healthcare establishments. The population under this study are registered nurses working in selected healthcare establishments. samples are Staff Nurses working in different Health establishments. Sample size was 278 nurses was taken from a Actual population, 300 nurses was Selected and administrated the tool and 1000 nurses was a Target population. Purposive Sampling technique was used. Tool contains Part 1 for Questionnaire for Socio-demographic assessment. Part 2 for Structured Questionnaire Utilization of NRP training Programme. The reliability of a tool was conducted for the degree of steadiness with which it measures the qualities it is supposed to quantify, Cronbach alpha ($r = 0.91$), split half correlation (0.90), Spearman-brown prophecy (0.94), Mean for test (81.7) & SD for test is 18.83. Pretesting was done 30 samples to establish the clearness of items, considerate of the linguistic and period required to ample the item. Pilot testing was conducted on nurses of different health establishments on for 30 participants. Administrative permission was obtained from NRP President Main study collected on 278 samples Proceeds for Data Analysis (Descriptive & Inferential) as per objectives.

7. Analysis and Interpretations:

The entire data subdivided to see the systematic output of the given objective, as the objective is to assess the utilization of the NRP training Programme among the nurses where subdivisions are made as:

- **Total Utilization of NRP Training Programme.**
- If skills were utilized then, **the intensity in terms of Good, Moderate & Poor of Utilized skills of NRP Training Programme.**
- If skills are utilized or not utilized then, whether the participants received **an opportunity to utilize their skills?**
- If the NRP skills are not utilized then, what is the participant's **reasons for non-utilization of skills of NRP Training Programme?**
- Through the NRP skills were not utilized are the Participants **still interested in renewal & Utilization of the Course?**
- Lastly, those who are utilized their NRP skills are the Participants **who Stepped forward towards NRP course renewal.**

Table 1: Total Utilization of NRP training Programme [overall data]

(n=278)

Particular	Utilized		Not utilized	
	Frequency	Percentage	Frequency	Percentage
NRP training skills Utilized by Nurses	163	58.62%	115	41.36%

The above table shows that somehow, the majority 163 (58.63%) nurses utilized the NRP training skills and 115 (41.36%) nurses could not able to utilize the NRP training skills adequately. It also indicated the NRP training Programme was utilized among nurses working in different health establishment. The utilized skills nurses had exposure to your NRP skills, renewed the Course post certificate expiration, Willingness to renew NRP course in future, No difficulties/setbacks for the renewing the NRP course, Having difficulties and set back they are ready to renew the NRP course, Participants had an opportunity to demonstrate NRP training skills, Participants were willing to utilize your NRP skills aggressively after they renew their NRP Course. These are some of the points where participants agreed positively that depicts the utilization of NRP skills. Those who not utilized are given some negative responses thus the percentage comes out of non-utilization but, the good output is the majority of participants had the utilization of NRP skills.

Table 2: Intensity of Utilized skills of NRP training Programme

(n=163)

Intensity of Utilized skills of NRP training Programme Total 163 (58.62%)		
Good	Moderate	Poor
16		

Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
53	19.06%	26	9.35%	84	30.21%

The above table shows that the Intensity (Good, moderate, poor) of Utilized skills of the NRP training Programme so, total of 163 (58.62%) participants found to utilized their skills this was responded when the researcher asked question on exposure to their NRP skills and the majority participants 84 (30.21%) has utilized poorly the skills of NRP training Programme whereas, 53 (19.06%) responded that they were utilized the skills in Good category and 26 (9.35%) are utilized skills moderately. It attracts the attention for motivation on Good utilization of skills also need to see the opportunities of utilization.

Table 3: Participant's Received & utilized an Opportunities of NRP skills.

(n=278)

Particulars	Yes		No	
	Frequency	%	Frequency	%
Participants received opportunity to demonstrate NRP skills.	114	41%	164	59%

The above table shows that the participants received & used Opportunities for utilization. The researcher when asked question whether they received the opportunity to demonstrate their NRP skills where the majority 164(59%) responded 'No' and 114 (41%) responded 'Yes'. It shows that there is a need to put attention to the provision of opportunities for utilizing their NRP skills. It is also important to see that the reasons why skills are not utilized.

Table 4: Participant's reasons of non-utilization of skills of NRP training Programme (n=115)

Reasons of non-utilization of skills of NRP training Programme							
Lack of opportunity in current set up		No Interest		I feel no benefit in doing this course		No Difficulties	
Frequency	%	Frequency	%	Frequency	%	Frequency	%
50	43.47%	9	7.83%	4	3.48%	52	45.22%

The above table shows that the participant's data exhibited Reasons for non-utilization of skills of the NRP Training Programme. The researcher when enquired on participant feel any 'difficulties/setback' on renewing the NRP course the majority 52 (45.22%) participants responded no difficulties but almost equivalent data 50(43.47%) also shows that there is a lack of opportunity in the current set up where they are practice, that might because they posted outside the pediatric unit where usually find fewer opportunities for demonstrating the skills of NRP. It also put the attention when hospitals are providing such valuable skills, it is important to post them (participant) regularly in pediatric set up so, that the skills were utilized. 9 participants are responded that they are having 'No interest' And lastly very few 4(3.48%) participants responded they 'I feel no benefit in doing this course' It is also necessary to see the out of 278 participants how many are interested to renew the course and utilize the skills.

Table 5: Participants interested in renewal & Utilization of Course [Q21,23,25]

(n=278)

	Particulars	Yes		No	
		Frequency	%	Frequency	%
1	Participants willing to renew the NRP course	239	85.97%	39	14.02%
2	In spite of difficulties /setbacks willing to renew the NRP course	235	84.53%	43	15.46%
3	Once renew willing to utilize skills aggressively	246	88.48%	32	11.51%

The above table shows researchers enquiry 'Course renewal & Utilization of NRP skills' then it reveals that out of 278 participants how many participants are interested in course renewal & Utilization of NRP skills' on three major aspects the response of participants received and depicted in above table which shows that majority 246(88.48%) participant replied 'Yes' they are interested and 'Once it renew they are willing to utilize skills aggressively' whereas minimum 32 (11.51%) participants replied 'No' they are not interested in the utilization of skills aggressively. Secondly, majority 239(85.97%) participants responded 'Yes' they are willing to renew the NRP course and a minimum of 39(14.02%) responded 'No' they are not willing to

renew the NRP course whereas a minimum of 235(84.53%) participants replied 'Yes' In spite of difficulties /setbacks they are willing to renew the NRP course. It shows that participants are interested in the utilization of NRP skills. It is also important to see that the interested participants are taken any step towards the renewal of the NRP course.

Table 6: Participants interested Stepping towards NRP course renewal [Q20]

(n=278)

Particulars	Yes		No	
	Frequency	%	Frequency	%

Post certificate expiration Participants attended NRP course	77	27.79 %	201	72.30 %
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The above table shows that the interested participants took steps towards NRP course renewal and the majority 201(72.30%) participants responded 'No' to 'Post certificate expiration participants attended NRP course' and a minimum of 77(27.79%) responded 'Yes' to 'Post certificate expiration Participants attended NRP course'. It means very few candidates took interest to renew the NRP course. As it also shows that that the pediatric area as compare to medicine and surgery is less so, there might be participants who become worrying about the opportunity to work in the pediatric area

Table 7: Association between finding of utilization and selected Socio-demographic (Personal) variables. (n=278)

S.No	Variables	Characteristics	Utilized	Not Utilized	Chi Square χ^2	Degree of freedom (df)	P-Value $\leq .5$
A	Personal Profile						
1	Age of the participants	21 to 30 Yrs.	95(34.17%)	82(29.49)	4.24	1	.039 Significant
		31 yrs & above	67(24.10)	34(12.23)			
2	Gender of the participants	Male	40(14.38%)	26(9.35%)	0.19	1	.65 Not significant
		Female	122(43.88%)	90(32.37%)			
3	Income Range	2391 to 23,673 Rs	33(11.87%)	21(7.55%)	0.22	1	.63 Not significant
		23,673Rs & above	129(46.40%)	95(34.17%)			
4	Types of family	Nuclear Family	80(28.77%)	67(24.10%)	1.90	1	0.16
		Other variety of fly	82(29.49%)	49(17.62%)			
5	Primary education of the	Graduate	42(15.10%)	53(19.06%)	11.73	1	.0006 Significant
		Non-Graduate	120(43.16%)	63(22.66%)			
6	Marital status of the participants	Married	53(19.06%)	46(16.54%)	1.41	1	.23 Not significant
		Single	109(39.20%)	70(25.17%)			
7	No. of children participants have	No Children	90(32.37%)	69(24.82%)	0.26	1	.60 Not significant
		Having Children	71(25.53%)	48(17.26%)			
8	Distance of home to Job	Within 10 kms.	100(35.97%)	72(25.89%)	0.003	1	.95 Not significant
		More than 10kms.	62(22.30%)	44(15.82%)			

The above Table shows that the association between a finding of utilization and selected Socio-demographic (Personal) variables. Where the **age** of participants both the group are maximum utilized the NRP skills. The p-value is .03 which is $< .05$ it means there is a significant association between age and utilization of NRP skills. The second variable is **gender** where maximum females have utilized the NRP skills comparing to male but it also shows that male also utilized the NRP skills within its group. The p-value is .65 which is $> .05$ it means though there are gender differences, there is no significant association between male and female, both are utilizing the NRP skills. The third category is **the Income** range of the participants where max participants are earning 23,673Rs & above but utilization of NRP skills are finding more than non-utilization. The p-value is .63 which is $> .05$ it means there is no association between the income of participants and utilization of skills. Whatever income will be the nurses using their skills whenever it's needed. The fourth category is **Types of the family** where it found whatever type of fly is but the utilization within a group is more as compare to non-utilization. The p-value is 0.16 which is $> .05$ it means there is no association between family type and utilization of NRP skills. The fifth category is **Primary education of the participants** where participant education in both Graduate and non-Graduate has maximum utilization within the group as compare to non-utilization. The p-value is .0006 which $< .5$ that depicts there is a significant association between primary education of the participants and utilization of the NRP skills. The sixth category is **the Marital status of the participants** where both married and single participants are utilized the NRP skills within the group as compare to non-utilization. The p-value is .23 which is higher than .05 it means there is no association between marital status and utilization of NRP skills. The seventh category is **No. of children participants have** where, both the group no children and having children have utilized the NRP skills within the group as compare to non-utilization. The p-value is .60 which is higher than .05 it means there is no association between No. of children and the Utilization of NRP skills. The last and eighth category is **Distance of home to Job** where, both the group distance within 10kms and more than 10kms are utilized the NRP skills within the group as compare to non-utilization. The p-value is .95 which is higher than .05 it means there is no association between Distance of home to Job and Utilization of NRP skills.

In short, out of 8 categories of Socio-demographic (Personal) variables, only two categories are significant rest 6 category are non-significant and finding no association which also indicate the

alternative hypothesis is rejected and the null hypothesis is accepted within non-significant groups which also means that despite of participant's personal characteristics the utilization of NRP skills are constant and continues with no effect of personal characteristic like Gender, income range, marital status, no. of children and distance of home to job.

8. DISCUSSION:

Personal profile:

The personal profile starts that the age of the participants where the majority participants 138(49.60%) aged between 26 to 30yrs of age and less 39 (14%) participants between 21 to 25yrs of age which young and strong group working in different health care establishments.

The gender population is majority 212(76%) were female whereas less 65(23%) population were male and surprisingly 1(0.40%) found in unspecified sex category all the participants working in different health care establishments.

The income range categorizes as (Kuppuswamy classification) and the majority income range is 162(58.30%) of the population is between 23,674 to 47,347 Rs. whereas less found in 2(0.7%) 7,102 to 11,886 Rs. Presently the minimum wages for the employee are 15,000/-Rs so, the researcher had verbal communication and participants responded as either they working in a small hospital, the reason for working in the hospital is near to home or they do not join for working so, they put minimum wages in the given column of response.

There were six different categories of the family included in the study and the majority found 148(53.20%) belongs to the Nuclear family and less 1(0.40%) found in the childless and extended family whereas, nobody found in a stepfamily.

There were seven different categories of primary education of the participants included in the study and the majority 108 (38.80%) found in the professional degree researcher put the slot for professional degree separately and he assumes professional degree rather than nursing professional degree but I found a majority in professional degree this might be related to nursing profession whereas, less 2(0.70%) found in High school education and found nobody in primary school and illiterate.

The marital status of the participants shows that the majority

179(64.40%) were married and less 99(35.60%) were unmarried whereas nobody was widow or widower.

There were five categories included in the No. of children category where the majority 78 (58.90%) participants found in not applicable. It means the participants are unmarried whereas, less than 1(0.40%) participants found more than two children.

There were four categories included in the distance of the home to the job where it founds the majority 123(44.20%) were staying within 1 to 3 kilometres of radius and less 22(7.90%) were staying within 7to10 kilometres of the radius.

• Utilization of NRP training Programme

The majority 163 (58.63%) nurses utilized the NRP training skills and 115 (41.36%) nurses could not able to utilize the NRP training skills adequately. It also indicated the NRP training Programme was utilized among nurses working in different health establishment. The utilized skills nurses had exposure to your NRP skills, renewed the Course post certificate expiration, Willingness to renew NRP course in future, No difficulties/setbacks for the renewing the NRP course, Having difficulties and set back they are ready to renew the NRP course, Participants had an opportunity to demonstrate NRP training skills, Participants were willing to utilize your NRP skills aggressively after they renew their NRP Course. These are some of the points where participants agreed positively that depicts the utilization of NRP skills. Those who not utilized are given some negative responses thus the percentage comes out of non-utilization but, the good output is the majority of participants had the utilization of NRP skills.

• Association between finding of utilization and selected Socio-demographic (Personal) variables.

The age of participants both the group are maximum utilized the NRP skills. The p value is .03 which is < 05 it means there is a significant association between age and utilization of NRP skills. **Primary education of the participants** where, participant education in both Graduate and non-Graduate has maximum utilization within the group as compare to non-utilization. The p value is .0006 which < .5 that depicts there is significant association between primary education of the participants and utilization of the NRP skills. Out of 8 category of Socio-demographic (Personal) variables only two categories are significant rest 6 category are non-significant and finding no association which also indicate the alternative hypothesis is rejected and null hypothesis is accepted within non-significant groups. The study supported by **Sreeramareddy CT. et.al 2012** his study reveals that the responsible factors in utilization of health care services. It is a cross-sectional survey conducted with large sample size of 48,679 ever married women's where the most of the respondents reported associated factors as child's age, sex, place of delivery with utilization of health care services. Choosing health care facility was also based on some of the predisposing factors like public or private, facility near or far and lastly the economic factor. India has maximum population with middle- and low-class families, where economy is becomes as essential factor⁴. Another study **Motlagh SN et.al 2015** population-based survey conducted, results show that some of the sociodemographic factors were found as affecting factor like insurance coverage, age, job status and income as well as household dimensions. The negative relationship was education with health care utilization. Chronic diseases significant variable in utilization. Study also communicated solution to overcome is Government need to focus on financial barriers. Insurance coverage helpful for people to utilize the health care facilities⁵. **Broberg G et.al 2018** population-based case-control study elements of demographic and socioeconomic which further affecting participation in cervical screening package. With 90 days invitation 3,14,307 samples included in the study. The study concluded with the factors for less attendance was poor fly income, less education, residence of country not cohabiting, being outside labour force are strongly associated with cervical screening. This designated best practice is being approved for improvement of cervical screening practice in women of Sweden⁶. **Jat TR et.al 2011** The millennium development goal has one aim among all is to improve maternal health. The DLHS was the source of data. Sample size was 51,419 evermarried women's age between 15-49 years. Results show that the level of utilization of health care services is maximum in rural with maximum percent as compare to district tribal population. The association show between postnatal care and antenatal care utilization. Also, in mother's profession and use of PNC. Socioeconomic household status and the utilization of maternal health services are

strongly associated factors. The second most dominant factor was mother's education to utilize the maternal health care service⁷.

9. LIMITATION:

1. Study was confined to Nurses who attended NRP workshop from 2012 to 2015
2. Study was limited to Nurses who responded to the online questionnaire.
3. Study was limited to a period of 3 months (90 days) due to the potential threat of pandemic for data collection.
4. Study was limited to nurses who attended the NRP workshop at the selected centre.
5. Study was limited to nurses who can read, understand English well.
6. There was no random selection of samples.

10. CONCLUSION:

Study found the Association between utilization with selected Socio-demographic (Personal profile) where Age and primary education of the participants came significant results and Participants exposure to related work area after or before NRP training are associated with the utilization NRP skills.

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Conflict of interest: None.

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