

Effectiveness Of Structured Teaching Program (STP) On Knowledge And Practices Regarding Essential Newborn Care (ENBC) Among Post-Natal Mothers In Assam.

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Abstract

Introduction: Essential Newborn care is a comprehensive strategy to reduce the death of newborn through effective interventions before conception during pregnancy, immediately after birth and postnatal period¹. These will contribute to sustained reduction in neonatal mortality. **Objectives:** To evaluate the effect of Structured Teaching Program (STP) on Knowledge and Practices of Essential Newborn Care (ENBC) among Post-Natal Mothers admitted in the selected government hospital of Kamrup (M), Assam.

Material and Methods: The study was conducted using Pre-experimental One group pre-test post- test design research design with a total of 35 Post-Natal Mothers by purposive sampling. Data was collected by interview with self-structured questionnaire for knowledge and checklist to assess the Practice of Essential Newborn Care.

Results: The findings revealed 6% of Post Natal Mother had inadequate knowledge, 63% had moderately adequate knowledge and 31 % had adequate knowledge in the pre test where as in the post test 100% of Post Natal Mothers had adequate knowledge regarding Essential Newborn Care. 3% Post Natal Mother had poor practice, another 86% average practice and another 11% Post Natal Mother had good practice on Essential Newborn Care in pretest whereas in post test 14% of Post Natal Mother had average practice and majority 86% of them had good practice on Essential Newborn Care. Post test Practices score were higher than pre test Practices score on Essential Newborn care. The data also shows that the 't' value for knowledge is (t=11.75), p <0.05 and 't' value for practices are (t=9.743), p value <0.05 is highly significant at 0.05 level of significance.

Conclusion: In conclusion, the study revealed that the structured teaching program proved highly effective in significantly improving knowledge and practice of Post Natal Mothers on Essential New Born Care.

Key words: Essential newborn care (ENBC), Structure teaching program (STP), Post –Natal Mothers

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Introduction

Newborn period encompasses the 1st to 4th weeks of extra uterine life. Newborns are completely dependent on others for feeding, warmth and comfort².

According to the WHO and UNICEF every year, globally 2.4 million babies die in the first four weeks of life. Up to two-thirds of these deaths can be prevented if mothers provide Essential Newborn care. These will contribute to sustained reduction in neonatal mortality³.

In 2019, neonatal mortality rate for India was 21.7 deaths per thousand live births. Neonatal mortality rate of India fell gradually from 84.4 to 21.7 deaths per thousand live births from the year 1970 to 2019. According to the latest data of the Registrar General and Census Commissioner of India 2020, Madhya Pradesh has recorded the highest infant mortality rate of 48 for every 1,000 live births while Kerala has registered the lowest 7 for every 1,000 live births⁴.

Latest data of Registrar General and Census Commissioner of India has revealed that the Assam remained among the top three states in the country with the highest infant mortality rate (IMR), the state,

which is struggling to bring down its IMR, has recorded marginal decline by three numbers from 44 to 41 per 1,000 live births in 2017 to 2018. At national level between 2020-2021, infant mortality rate (IMR) declined by 40.3%, while in Assam it declined by 34.3%⁵.

Objectives of the study:

- To assess the Knowledge on Essential New Born Care among Postnatal Mothers.
- To evaluate the Practices on Essential New Born Care among Postnatal Mothers.
- To evaluate the effect of Structured Teaching Program by comparing the pre test and post test Knowledge and Practice score.

Materials and Methods:

Research approach: In this research quantitative research approach is used.

Research design: In this study, Pre-experimental One group pre-test post- test research design is used.

Research Setting: The Research work was carried out in the Post natal ward, post operative ward and post natal Outpatient department of Obstetrical and

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Gynecological department of Gauhati Medical College & Hospital of Assam.

Population: The population will consist of Post-Natal Mothers who are admitted in the hospital at the time of data collection

Sample Technique: Non probability purposive sampling technique was adopted for the study.

Sample Size: The sample size was of 35 Post Natal mother.

Criteria for Sample selection:

A. Inclusion Criteria:

- Mothers delivered in the selected government hospitals and turned up for 1st postnatal check up.
- Mothers who are willing to participate in the study

B. Exclusion Criteria:

- Mothers who are separated from their newborn.
- Mothers who has postnatal complications.

Data collection tool:

- It contains demographic data such as Age, religion, educational status, occupation, type of family, type of delivery, parity, sex of the child.
- Questionnaire related to knowledge and checklist to assess Practice

Development of the tool:

The tools were developed by an extensive review of literature, discussion with guide and experts from the field of obstetrics and gynecology and pediatric from college of nursing, GMCH.

Validity of tools Validity of the tool was established in consultation with the guide and experts from the field of Doctors from obstetrics and gynecology Department, pediatric department, obstetric and

gynecological Nursing and Pediatric Nursing. Based on the suggestions given by the experts, the final draft of the tool was prepared by modifying, deleting and rearranging the first draft.

Reliability of the tool

The tool was administered on 35 participants during study and Reliability of the tool was calculated by Split half method using Karl Pearson correlation coefficient.

Method of data collection

After obtaining permission from the concerned authority of Gauhati Medical College & Hospital and a self introduction and objectives of the study was explained to the participants. Sample who will fulfill the inclusion criteria was selected purposively for the study and written informed consent was taken from the participants.

Results:

Analysis: Analysis of the study was categorized organized and presented under the following headings:

- **Section A:** Description of demographic characteristics of samples in frequency and percentage
- **Section B:** Description of the postnatal mothers according to their Pre & Post test level of knowledge in frequency and percentage.
- **Section C:** Description of the Pre & Post Test practice scores are computed in terms of frequency and percentage
- **Section D:** Evaluate the effect of Structured Teaching Program by comparing between mean and standard deviation of the pre test and post test Knowledge and Practice score.

Section A: Socio-demographic characteristics of the samples

Table 1: Description of demographic characteristics of samples n = 35

| Sl No. | Demographic variables | Frequency | Percentage(%) |
|-----------|-----------------------|-----------|---------------|
| 1. | Age | | |
| | 18-27 | 0 | 0 |
| | 28-37 | 9 | 26 |
| | 38-45 | 26 | 74 |
| | Total | 35 | 100 |
| 2. | Religion | | |
| | Hinduism | 19 | 54 |
| | Islam | 11 | 32 |
| | Christian | 5 | 14 |
| | Total | 35 | 100 |
| 3. | Education | | |
| | Illiterate | 0 | 0 |
| | Primary- Class 4 | 1 | 3 |
| | Class 5- Class 10 | 10 | 28 |
| | Class 11- Class 12 | 21 | 60 |
| | Degree Pass- PG | 3 | 9 |
| | Total | 35 | 100 |
| 4. | Occupation | | |

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| | | | |
|-----------|-------------------------|-----------|------------|
| | Housewife | 26 | 74 |
| | Working Women | 7 | 20 |
| | Business women | 2 | 6 |
| | Total | 35 | 100 |
| 5. | Type of family | | |
| | Nuclear | 15 | 43 |
| | Joint | 20 | 57 |
| | Extended | 0 | 0 |
| | Total | 35 | 100 |
| 6. | Type of delivery | | |
| | Normal Vaginal Delivery | 16 | 46 |
| | Assisted Delivery | 8 | 23 |
| | LSCS Delivery | 11 | 31 |
| | Total | 35 | 100 |
| 7. | Parity | | |
| | Primi Para | 8 | 23 |
| | Multi Para | 27 | 77 |
| | Total | 35 | 100 |
| 8. | Sex of the Child | | |
| | Male | 15 | 43 |
| | Female | 20 | 57 |
| | Total | 35 | 100 |

Table 1 shows that majority of 26(74%) of the Post Natal Mother belongs to the age group 38-45year. Majority of 19(54%) Post Natal Mother belongs to Hindu religion. Majority of 21(60%) Post Natal Mothers had qualification up to secondary education. Majority of 26(74%) Post Natal Mothers were

homemaker. Majority of 20(57%) of the Post Natal Mothers belongs to joint family. Majority of 16(46%) of the Post Natal Mothers had Normal Vaginal Delivery. Majority 27(77%) of the Post Natal Mothers were multipara. Majority of 20 (57%) Post Natal Mothers had delivered female baby

Section B: Frequency and percentage of Pre and Post test Knowledge score on Essential New Born Care among Postnatal Mothers.

Table 2: Assess the Pre and Post test Knowledge on Essential New Born Care among Postnatal Mothers. n = 35

| Knowledge | Pretest | | Posttest | |
|-----------------------------|---------|----|----------|-----|
| | Freq | % | Freq | % |
| Inadequate (<12) | 2 | 6 | - | - |
| Moderately Adequate (12-18) | 22 | 63 | - | - |
| Adequate (>18) | 11 | 31 | 35 | 100 |

Table 2 shows that 6% of Post Natal Mother had inadequate knowledge, 63% had moderately adequate knowledge and 31 % had adequate knowledge in the pre test where as in the post test 100% of Post Natal Mothers had adequate knowledge regarding Essential Newborn Care.

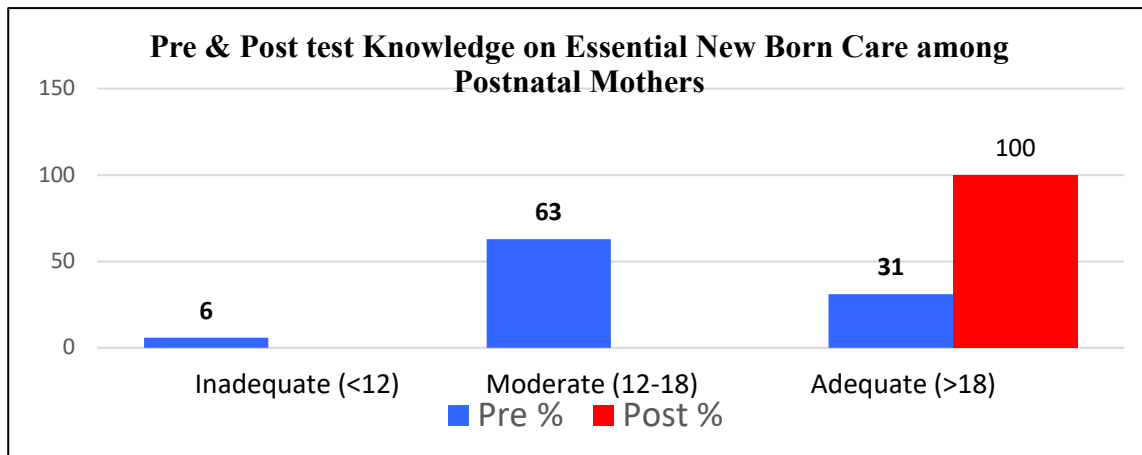


Fig 1: Percentage distribution of Pre and Post test Knowledge on Essential New Born Care among Postnatal Mothers.

Section C: Frequency and percentage of Pre and Post test Practice score on Essential New Born Care among Postnatal Mothers.

Table 3: Assess the Pre and Post test Practice on Essential New Born Care among Postnatal Mothers.
n = 35

| Practice | Pretest | | Posttest | |
|------------------------|---------|----|----------|----|
| | Freq | % | Freq | % |
| Poor Practice(<8) | 1 | 3 | - | - |
| Average Practice(8-13) | 30 | 86 | 5 | 14 |
| Good Practice (>13) | 4 | 11 | 30 | 86 |

Table 3 shows that 3% Post Natal Mother had poor practice, another 86% average practice and another 11% Post Natal Mother had good practice on Essential Newborn Care in pretest whereas in post test 14% of Post Natal Mother had average practice and majority 86% of them had good practice on Essential Newborn Care.

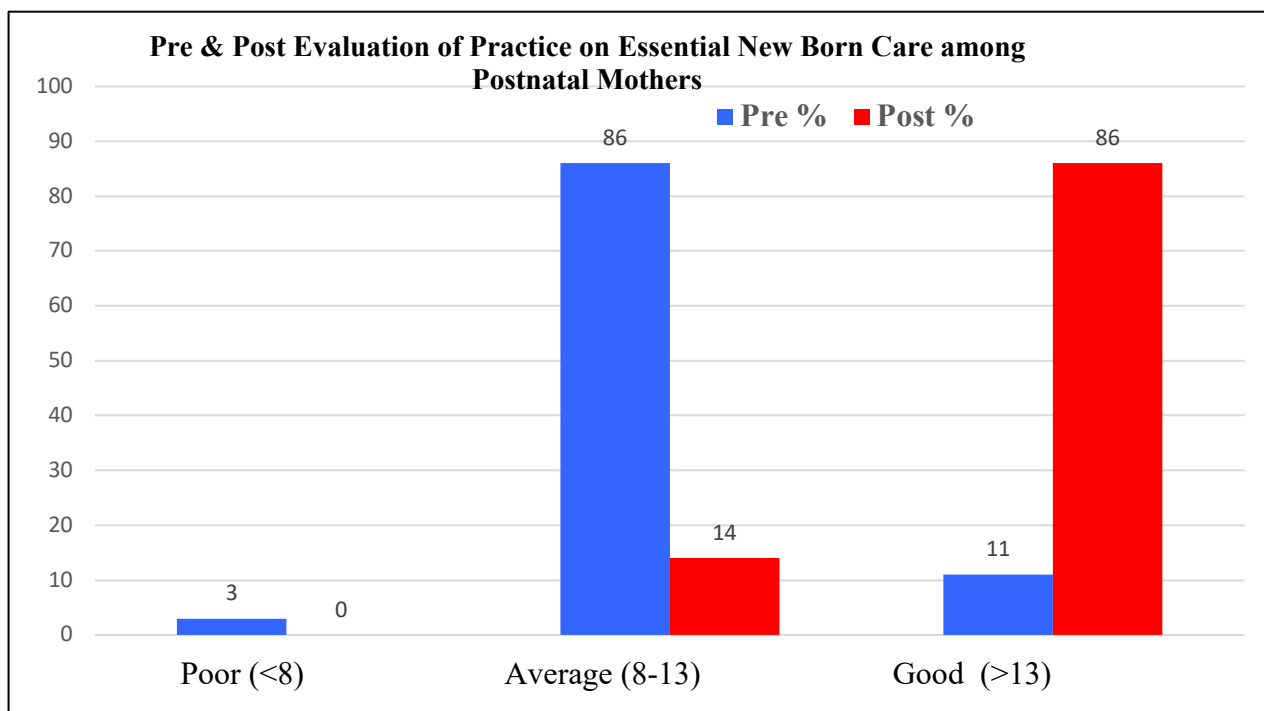


Fig 2: Percentage distribution of Pre & Post Evaluation of Practice on Essential New Born Care among Postnatal Mothers

SECTION D: Evaluate the effect of Structured Teaching Program by comparing between mean and standard deviation of the pre test and post test Knowledge and Practice score

Table 4: Comparison between mean and standard deviation of the pre test and post test Knowledge and Practice score. n = 35

| | Pre | | Post | | T -test | P | Remark |
|-----------|-------|------|-------|------|---------|-------|-------------|
| | Mean | Std | Mean | Std | | | |
| Knowledge | 14.94 | 2.84 | 20.97 | 1.67 | 11.755 | 0.000 | Significant |
| Practice | 10.34 | 2.45 | 15.00 | 1.89 | 9.743 | 0.000 | Significant |

The data presented in the table 4 indicates the mean post test score (20.97) of knowledge on Essential newborn care is higher than the mean pretest score (14.94). The post test score (SD=1.67) seemed to be less dispersed than pretest score (SD= 2.84). So it is evident that post test Knowledge score were higher than pre test Knowledge score on Essential Newborn care. Again the mean post test score (15.00) of Practice on Essential newborn care is higher than the mean pretest score (10.34). The post test score (SD=1.89) seemed to be less dispersed than pretest score (SD= 2.45). So it is evident that post test Practices score were higher than pre test Practices score on Essential Newborn care. The data in the table also shows that the ‘t’ value for knowledge is (t=11.75), $p < 0.05$ and ‘t’ value for practices are (t=9.743), p value < 0.05 is highly significant at 0.05 level of significance.

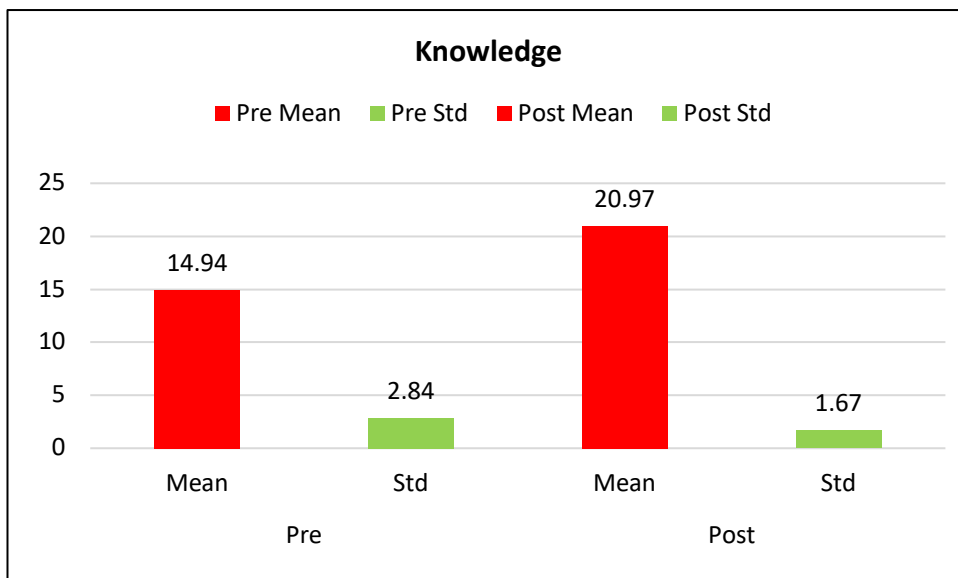


Fig 3: Mean and Standard deviation of Pre and Post test Knowledge score

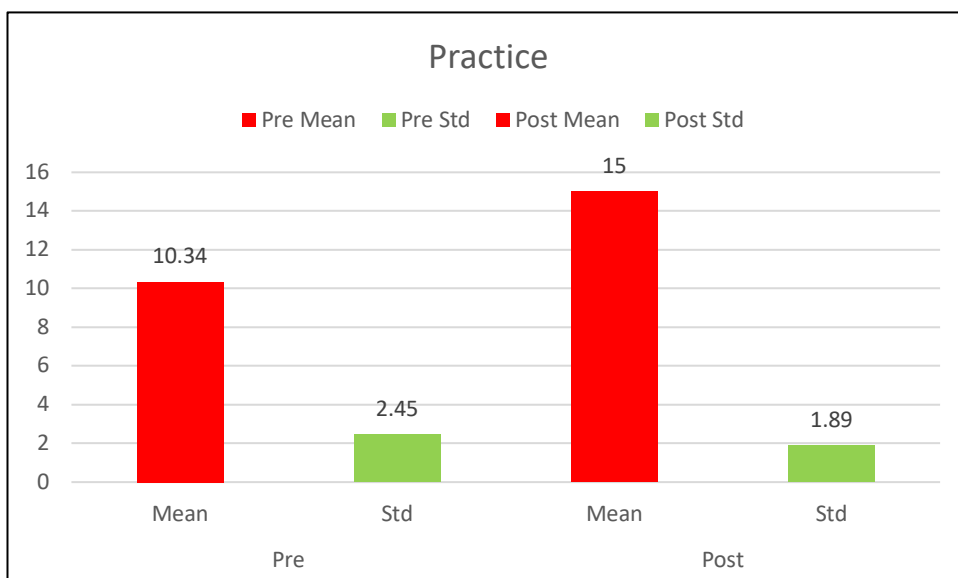


Fig 4: Mean and Standard deviation of Pre and Post test Practice score

Discussion:

The findings of the study have been discussed in terms of objectives framed for the study. The discussion of the study findings are presented below Socio-demographic Characteristics of the participants shows in the study are: The findings of study revealed that majority of 26(74%) of the Post Natal Mother belongs to the age group 38-45year. Majority of 19(54%) Post Natal Mother belongs to Hindu religion. Majority of 21(60%) Post Natal Mothers had qualification up to secondary education. Majority of 26(74%) Post Natal Mothers were homemaker. Majority of 20(57%) of the Post Natal Mothers belongs to joint family. Majority of 16(46%) of the Post Natal Mothers had Normal Vaginal Delivery. Majority 27(77%) of the Post Natal Mothers were multipara. Majority of 20 (57%) Post Natal Mothers had delivered female baby

Objective I: To assess the Pre and Post test Knowledge on Essential New Born Care among Postnatal Mothers.

The finding of the present study revealed that, majority of the Post-Natal Mothers i.e.6% of Post Natal Mother had inadequate knowledge, 63% had moderately adequate knowledge and 31 % had adequate knowledge in the pre test where as in the post test 100% of Post Natal Mothers had adequate knowledge regarding Essential Newborn Care.

Similar study finding by **Godai Manasa et al. (2016)**⁷ had conducted a study to assess the level of knowledge and practice of postnatal mothers regarding essential newborn care in Bheemunipatnam selected community areas, vishakapatnam. The research design for the study was one group pre-test post-test design. Total of 200 postnatal mothers were selected by using purposive sampling technique. It represents that of structured teaching program was effective to improve knowledge on essential new born care among postnatal mothers. There was statistically significant association between post assessment of essential level of knowledge on essential new born care and the demographic variables such as education and parity.

Objective II: To Evaluate the Pre and Post Practices on Essential New Born Care among Postnatal Mothers.

In the present study, the findings revealed that the majority of Post-Natal Mothers i.e. that 3% Post Natal Mother had poor practice, another 86% average practice and another 11% Post Natal Mother had good practice on Essential Newborn Care in pretest whereas in post test 14% of Post Natal Mother had average practice and majority 86% of them had good practice on Essential Newborn Care.

Another similar finding reported by **Shivaleela P. Upashe (Sep 2014)**⁸ had conducted a study to Assess the Essential Newborn Care Practices among Primipara Mothers at Government District Hospital, Tumkur Karnataka, India. The present study was aimed to assess the practices on essential newborn

care among primipara mothers. They have randomly selected 100 primipara mothers by interview method, using structured questionnaire. The results of the study indicated that above 28% of mothers had good practice, 62% mothers had moderate practice and below 10% of mothers had poor practice related to essential new born care. The study concluded that in-depth qualitative studies are needed to explore the reasons for different traditional practices.

Objective III: To evaluate the effect of Structured Teaching Program by comparing the pre test and post test Knowledge and Practice score

In the present study reveals that the pre test mean score of knowledge was 14.5and post test mean score was 20. The practices mean score in pre test was 10.7 and post test was 13. It shows significant difference in pre test and post test. It implies that there is inadequate knowledge and practice regarding essential new born care in pre test and in the post test it shows that the 't' value for knowledge is ($t=11.75$), $p < 0.05$ and 't' value for practices are ($t=9.743$), p value < 0.05 is highly significant at 0.05 level of significance.

A similar study finding by **Sheetal Kadam and Sunita Tata (2014)**⁹ had conducted a study on Impact of Structured Education Program on Antenatal Mothers Regarding Essential New Born Care, Karad, Maharashtra. The one group pre-test post-test study was conducted among 100 antenatal mothers selected by Purposive sampling technique. Study result revealed that there were significant gains in knowledge score of antenatal mothers after administering structured education. The study concluded that a structured education program on essential newborn care was effective in increasing the knowledge of antenatal mothers.

Conclusions:

The major conclusions drawn on the basis of the findings of the study are as follows:

- Majority of Post-Natal Mothers had moderate level of knowledge where after implementing the Structure Teaching program the level of knowledge have increased on Essential new born care.
- Majority of Post-Natal Mothers had average practice on pretesting after administering Structure Teaching program the majority of the postnatal mothers had good practice on Essential new born care
- The present study revealed improvement in the level of knowledge and practices on Essential New born care after administering the Structured Teaching Programme. It was proved that direct education can lead to increase in the level of knowledge and practices related to essential new born care.

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