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# A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE OF NEONATAL CONVULSIONS AMONG NURSING STUDENTS AT NARAYAN NURSING COLLEGE, JAMUHAR SASARAM.

Nursing Science

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## ABSTRACT

Neonatal convulsions are a commonly encountered neurological condition accounting for 1/3rd death of the neonates. A descriptive research study was conducted among the 60 purposefully selected Nursing students after getting informed consent on the knowledge of neonatal convulsion using a self-instructional questionnaire. The data was collected and analysed using statistical software and the results showed that out of 60 participants, 35 (58.3%) had average knowledge and 25(41.7%) had adequate knowledge. In finding the association between the knowledge and selected demographic variables there was a significant association between gender and residence. The study reveals that though the students have adequate knowledge of neonatal convulsion, the care rendered to the child during the neonatal period by the students must be focused on helping the country as laid by the current Indian government focusing on sustainable tomorrow.

## KEYWORDS

*Knowledge, Neonatal convulsion, GNM Nursing students*

## INTRODUCTION

A child is precious not only to the parents, family, community, and nation but also to the world at large. The child is a citizen of the world and thus it becomes the responsibility of the wide population of the whole universe to look after the interest of children all over. Children are the assets of our country(Azhagesan C, N.D.).

The body's muscles rapidly contract and then relax continuously during a convulsion. Depending on the person, convulsive seizures have varying lengths(Parul Datta, n.d.). Generalized convulsions follow tonic-clonic seizures, which begin with body-wide rigidity1. In India, seizure disorders are prevalent with a prevalence of 360 per 100,000 people(Ghai. O. P. (2007)., n.d.).

The Important components of child-rearing are maternal Activities that promote the children's physical, intellectual, and psychosocial development so that they may grow up to express their full potential (Dr. S.P. Gupta, n.d.). Because immature neurons cannot sustain repetitive activity for extended periods or be focal or multifocal, newborn convulsions are typically brief. It needs to be evaluated right away due to the variety of conditions that could harm the neonate's developing and delicate neurons, some of which could endanger the neonate's life. Convulsions may occasionally be the first and most severe symptom of a newborn infant's significant CNS dysfunction (Harjit Singh, n.d.)

Neonatal seizures are a commonly encountered neurologic condition in neonates. They are defined as the occurrence of sudden, paroxysmal, abnormal alteration of electrographic activity at any point from birth to the end of the neonatal period. During this period, the neonatal brain is developmentally immature(Glass, 2014). Thus, neonatal seizures have unique pathophysiology and electrographic findings resulting in clinical manifestations that can be different (and more difficult to identify) when compared to older age groups(Abend & Wusthoff, 2012). This activity reviews the evaluation and treatment of neonatal seizures and highlights the role of the interprofessional team in evaluating and treating patients with this condition(Jensen, 2009).

Approximately one in every 25 children will have at least 1 febrile seizure and more than one of these children will have an additional febrile seizure before they outgrow the tendency to have children rarely develop their first febrile seizure before the age of 6 months or after 3 years of age(Bhardwaj, 2020).

The incidence of neonatal seizures is estimated to be 1–3 per 1000 live births in HIC and widely varies from 36–90 per 1000 live births in LMIC panelSerena Pellegrin n.d.). The incidence of neonatal convulsions ranges from 0.5% to 20% in various studies. The discrepancies in incidence figures among various studies are due to varying conception ages of newborns and criteria for selection. Various studies revealed that the incidence was as low as 0.5% to as high as 14%(S. & P., 2018).

## METHOD

### Study Period And Design

This descriptive cross-sectional study was performed in the month of 2022. The cross-sectional study design was used as the present study was aimed to assess the knowledge among Nursing Students about neonatal convulsion.

### Study Area

The current study was carried out at the Narayan Nursing College at the Sasaram (Rohtas Distt).

### Participants Of The Study

The Nursing students willing to participate in this study, the Nursing students who are studying at Narayan Nursing College, and present during the data collection.

### Sample Size And Sampling Technique

The nonprobability purposive sampling technique was used to recruit 60 study participants who were eligible according to their inclusive and exclusive criteria under study, and the sample size was calculated by the coherent formula.

### Data Collection Tool And Procedure

The data were collected using a semi-structured questionnaire open open-ended questions. Participants took approximately 15 min to complete the questionnaire. The data collection tool was divided into two sections; the first section consists of 7 items related to the socio-demographic profile of participants and the second section consists of 20 items related to assessing the knowledge score of participants. Participants were asked to respond – 1 denotes the correct answer 0 is to wrong answer of the questions and the knowledge interpretation is poor (below 50%), 51-75% interpreted as average knowledge, and, above 76% interpreted as adequate knowledge score. There was a 100% response rate among study participants as the questionnaire was administered face to face for each participant.

Data were collected after getting approval from NRMC and permission from the competent authority (NNC). Data was collected after explaining the purpose of the study and getting informed consent signed by the participants. The average time to administer the tools for students was 15 min and the duration for data collection was one week.

### Data Processing And Analysis

After data collection was complete, all data were coded. All data were entered in an Excel sheet. SPSS 26.0 version was used for descriptive and inferential statistical analysis. To make the comprehensive easy, poor, average, and, adequate knowledge. Frequency and percentage were computed for the socio-demographic profile and each item of the semi-structured questionnaire. Based on the meanSD the total score of questionnaires was divided into three categories and was classified as poor knowledge score (0-50%), average knowledge score (51-75%), and adequate knowledge score (above 76%). The significant association was computed by chi-square test to find the association between the knowledge score and selected demographic variables regarding neonatal convulsion among Nursing Students.

### Ethical Consideration

NRMC approval for the study was taken from the institute NRMC committee. After being informed about the research and the confidentiality and anonymity of the information, participants were asked to sign a written consent.

## RESULTS

### Section- 1st Socio-demographic Profile Of Participants

| Demographical Data | Frequency | Percentage (%) |
|---|---|---|
| 1.Age of the student (In Years) | | |
| a) 17-21yrs. | 21 | 35 |
| b) 22-25yrs. | 25 | 41.66 |
| c) 25-30yrs. | 11 | 18.33 |
| d) Above 30yrs. | 3 | 5 |
| 2. Gender | | |
| a) Male | 25 | 41.66 |
| b)Female | 35 | 58.33 |
| c) Transgender | 00 | 00 |
| 3. Residence | | |
| a) Urban | 17 | 28.33 |
| b) Rural | 43 | 71.66 |
| c) Semi-urban | 0 | 0 |
| 4. Previous exposure to the neonatal convulsion | | |
| a) Yes | 50 | 83.33 |
| b) No | 10 | 16.66 |
| 5. Type of family | | |
| a) Nuclear | 13 | 21.66 |
| b) Joint | 36 | 60 |
| c) Extended | 11 | 18.33 |
| d) Three generation | 0 | 0 |
| 6. Monthly income of the family | | |
| a) Below 20,000 | 6 | 10 |
| b) 21,000-50,000 | 32 | 53.33 |
| c) 51,000-70,000 | 20 | 33.33 |
| d) More than 70,000 | 2 | 3.33 |
| 7. Source of information | | |
| a) Health profession | 30 | 50 |
| b) Mass media | 14 | 16.66 |
| c) Friends | 16 | 33.33 |

### Section-2nd Knowledge Score Of Participants

| Knowledge score | Frequency | Percentage |
|---|---|---|
| Inadequate knowledge | 00 | 0% |
| Average knowledge | 35 | 58.2% |
| Adequate knowledge | 25 | 41.8% |

Table-2, revealed that in the majority study's sample, 58% of students had average knowledge, and, 42% of nursing students had good knowledge regarding the knowledge of neonatal convulsion.

### Section-3rd Association Between Knowledge Score And Demographic Variables.

The present study researcher computed a chi-square value to find out the significant association between the knowledge score and selected demographic variables such as gender, and, the residence of participants. On another hand, there was no significant between the knowledge score and certain selected demographic variables with a *p*-value greater than 0.05 such as age, previous exposure to the neonatal convulsion, monthly income of the family, type of the family, and, source of information.

## DISCUSSION

The study presents study a cross-sectional in which the knowledge regarding neonatal convulsion among the Nursing Students students that the majority 42% of adolescents were between the age group of 17 and 21 years, the gender majority 55% of adolescents were male, the majority of place of living 72% of residence rural, majority of types of family 60% are from joint family, income of family 54% are obtained from 21-50 thousand, and, majority of the source of information 50% are obtain from health profession. The knowledge score of participants revealed that in the majority study sample, 58% of students had average knowledge and a significant association between the knowledge score and selected demographic variables such as gender, and, the residence of participants with the p-value less than (0.05).

## CONCLUSION

The present study was aimed at assessing the level of knowledge of neonatal convulsion among nursing students of GNM 2nd year and its consequences. The relevant data was collected statistically based on the objectives of the study. Among the sixty students majority study of the sample (58%) of students had average knowledge, (42%) of nursing students had good knowledge and 0% of nursing students had poor knowledge regarding neonatal convulsion. With the help of a self-structure questionnaire, knowledge has been assessed that the majority of the participants had average knowledge about neonatal convulsions. This shows that these variables had an influence level of knowledge in the study.

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