# Awareness of Postnatal Mothers on Danger Signs of New Born Illness at CAIMS Hospital, Karimnagar, Andhra Pradesh

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#### **ABSTRACT**

**Aim:** Neonatal Mortality in developing countries is one of the most important problems that need immediate attention in order to achieve millennium development goals. Most of the deaths are preventable by simple interventions. Hence, the study aimed to assess the effectiveness of planned teaching programme on awareness of postnatal mothers on danger signs of new born illness at CAIMS Hospital, Karimnagar.

**Materials and Methods:** The study was conducted in postnatal ward at CAIMS Hospital using convenient sampling technique. The data was collected from 30 Postnatal mothers by structured questionnaire during the month of September, 2013. Pre-test and post-test awareness scores were obtained & analyzed by experimental statistical methods. Several implications were drawn for the nursing personnel which helps in preventing neonatal morbidity and mortality.

**Results:** 56.6% of postnatal mothers with below average knowledge on danger signs of new born illness had improved to above average knowledge of 70% after giving planned teaching programme. The calculated 't' value (14.16) was found significant at p<0.01.

**Conclusion:** The study concludes that identification of simple clinical signs by the mothers in hospital and at home and timely intervention would be a key factor in reduction of neonatal morbidity and mortality. Building the capacity of mothers through basic education is a key long - term plan to improve neonatal care.

**Keywords:** New born, danger sign, postnatal mothers.

## INTRODUCTION

The health of neonates has historically been of vital importance to all societies because of the fact that they are basic resources for the future of mankind. Birth of healthy newborn baby is one of the gifts of nature. Globally 6 million children die annually before their fifth birthday, most of them in the neonatal period. More than 98% of these deaths occur in developing countries [1] almost half of the deaths in under – five – year olds occur

in infancy and the infant deaths about two - thirds occur in the neonatal period. It has also been noted that one – third of all neonatal deaths occur on the first day of life, almost half within 3 days and nearby three quarters within the first week of life  $^{[2]}$ .

India is a regulatory to millennium development goals & has national level goals with respect to reduction in mortalities and the country has to fulfill its commitment in terms of reducing NMR as per the established goals.

In India every year 28 million pregnancies take place with 67,000 maternal deaths, million women left with chronic ill health and million neonatal deaths. Neonatal mortality rate in India is about 36/1000 live birth and neonatal mortality accounts for 50% of deaths of all children under five. Three quarters of all neonatal deaths occur during the first week of life and about 20% take place in the first 24 hrs<sup>[3]</sup>.

According to National Family Health Survey – III (NFHS – III) the highest neonatal mortality rates are from Chhattisgarh, Jharkhand and Uttar Pradesh.

In Andhra Pradesh the neonatal mortality rate is reported to be 40.3, infant mortality rate 53.5 and under five mortality 63.2 per thousand live births.

The WHO guidelines for essential newborn care include clean delivery, keeping the newborn warm, early initiation of breast feeding, exclusive breast feeding, care of eyes, care during illness, immunization and care of low birth weight newborns.

The mother is the primary person to give care for their new born. Considering the necessity of post natal mothers to understand and react to potential dangers of newborn like hypothermia, hyperthermia, convulsions, cyanosis, refusal to feed, vomiting, diarrhea etc. This study was carried out at CAIMS Hospital as part of preventive care and routine assessment for danger signs.

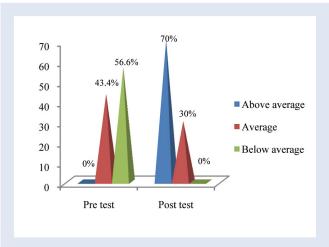
## MATERIALS AND METHODS

The objectives of the study were to assess the knowledge of postnatal mothers on danger signs of newborn illness, to assess the effectiveness of planned teaching programme and to determine the association between pretest and post test score and selected variables. A sample of 30 postnatal mothers admitted at CAIMS hospital (0-7 days of post test period) was selected by convenient sampling technique. The inclusive criteria was mothers who were admitted in the postnatal ward at CAIMS hospital, delivered either by vaginal / caesarean section, who were willing to participate in the study. Data collection procedure was carried out by self - introduction of investigators and purpose of the study was explained. Verbal consent was obtained from mothers and comfort and privacy was provided. The study was carried out from 1-9-2013 to 21-9-2013 which included development of study tools, collection of data, analysis, and tabulation of findings and interpretation of results. After pre test planned teaching programme was conducted on danger signs of newborn illness like (changes in behavior, thermal instability convulsions, poor appetite, vomiting, diarrhea, no urination in the first 24 hours, no bowel movement in 48 hours, central cyanosis, drowsy, lethargy, white patches on the tongue, shortness of breath, yellowish

discoloration, dehydration, eye infection, umbilical cord infection etc) with audio-visual aids (PPT and Flip Charts). The post test was done after one week period of teaching programme. Later data analysis and interpretation of data was done.

# **RESULTS AND DISCUSSION**

Data was analyzed with the help of descriptive and inferential statistics.



**Figure 1:** shows frequency distribution of knowledge of postnatal mothers in pre test and post test.

In the pre test 43.4% mothers had average knowledge, 56.6% below average and no one has obtained above average knowledge score. In the post test 30% mothers obtained average knowledge and 70% of mothers obtained above average knowledge score.

**Table 1:** Comparison of pre and post test knowledge of postnatal mothers regarding danger signs of new born illness

Aspect	Mean	MD	SD	SE	t	df
Pretest	8.2	65.56	2.553	0.466	14.16	29
Post test	73.76		2.328	0.435		

Mean post test knowledge score 73.76 is higher than mean pre test knowledge score 8.2, the mean difference is 65.56; the obtained 't' value 14.16 was significant at 0.01 level. The differences between mean post test knowledge score of the subjects indicates the planned teaching program has played a significant role improving the knowledge score of the subject.

**TABLE 2:** Association between Demographic variables and post test knowledge scores (n=30)

Variables	Above average	Average	X <sup>2</sup>	df
Age				
15-20 yrs	7	1		
21-25 yrs	9	6	#0.31	3
26-30yrs	4	1		
Above30 yrs	1	1		
Religion				
Hindu	19	6		
Muslim	1	2	# 0.24	2
Christian	1	1		
Education				
Illiterate	5	2	# 0.09	3
Primary	6	4		
Secondary	4	1		
Graduate & above	6	2		
Occupation				
House wife	17	7	# 0.13	1
Employee	4	2		
Income				
< 5000	11	7		
5000-10000	5	1	# 0.25	2
>10000	5	1	# 0.23	
Parity				
Primi	12	6	# 0.07	1
Multi	9	3		

# Not significant at 0.01 level

Table 2 shows that the variable was not significant at 0.01 levels. Since there was no association between the demographic variables and post test knowledge scores. Hence the researcher accept the null hypothesis

Shally Aswathy, Tuhina verma and Monika Agarwal<sup>[5]</sup> conducted a study on Danger signs of neonatal illness and perception of 200 care givers of Uttar Pradesh. In this 70.5% reported and more than half of the care givers recognized fever, irritability, weakness, abdominal distention, vomiting, slow breathing and diarrhea as a danger signs in neonates. 79 (39.5%) of the care givers had seen a sick neonate in the family in the past 2 years, with 30.38% illness manifested neonates was

continuously crying. Health care was sought for 23% neonates.

Dongre AR. et.al<sup>[6]</sup> A triangulated quantitative & qualitative study was conducted to find out awareness of the mothers about newborn danger signs and their healthcare seeking behaviour for sick newborn in periurban Wardha. The result of the study showed that out of 72 mothers, 29 (40.3%), 16 (22.2%) and 10 (13.9%) identified difficulty in breathing, poor sucking, and lethargy/unconsciousness as newborn danger signs respectively. About 11 (15.3%) and 8 (11.1%) were reported to have poor sucking and difficulty in breathing respectively. All sick newborns with danger signs were taken to the doctor and only two mothers consulted faith healer for treatment. Final conclusion of this study was that awareness of mothers regarding newborn signs was poor.

Ahmed et.al [7] conducted a study to assess the pattern of reported neonatal morbidity and the care seeking behavior for neonates in rural Bangladesh using a structured knowledge questionnaire. Out of 151 women 49% of their neonates were reported to have suffered from the some kind of morbidity. Fever was the most common morbidity reported in the study population (21%), followed by breathing difficulty (11%). Birth order, complication during pregnancy and delivery and death of sibling were found to be significantly associated with reported neonatal morbidity. 87% of the mothers sought care for their new borns. Some were taken to several different providers, the commonest being homeopathies (38%) and village doctors. 17% were taken to trained providers and only 5% to government health facilities. Ghosh R<sup>[8]</sup> has given an overview on child mortality in India.

Egube BA et.al<sup>[9]</sup> the study was descriptive cross sectional, carried out among 389 expectant mothers and two hundred and five (52.4%) did not know any danger signs of complications (Neonatal Jaundice). Thamer Kadum<sup>[10]</sup> et al. was conducted a cross sectional cohort study on randomly selected sample. The data collected from 760 and knowledge and practice of mothers was not satisfactory towards diarrheal disease, while the knowledge about ARI risk signs were around 65%.

#### NURSING IMPLICATIONS

Several implications can be drawn from the present study for nursing practice. Educational programs conducted by the nursing personnel both in the hospital and community helps in preventing neonatal morbidity and mortality. Nurses as competent professionals have the responsibility to promote health information and practices among mothers of newborn in the hospital.

The nursing curriculum should consist of knowledge related to health information using different methods of teaching. Nursing students should be made aware of their role in health promotion in danger signs of new born illness in present and future which may help in achieving goal of health for all.

The nurse as an administrator should plan and organize educational programs for nursing personnel and motivate them in conducting awareness programme in danger signs of new born illness. Planning and organizing of such programs require efficient team work. She should also encourage and depute nurses to participate in such programs conducted by any other voluntary organization both in the hospital and in community.

The nurse researcher should conduct research on various aspects of awareness in danger signs of new born illness which provide more scientific data and adds more scientific body of knowledge to nursing profession.

### **CONCLUSION**

India is a signatory to millennium development goals and has national level goals with respect to reduction in mortality and the country has to fulfill its commitment in terms of reducing IMR as per established goals [11, 12, 13]. The millennium development goal can only be achieved by improving all available services. The long term solutions can only be achieved by improving the literacy rate, empowerment of mothers, which has been clearly shown to be effective by reduction of neonatal mortality in Indian states of Goa, Kerala and Mizoram, where female literacy and empowerment is at high level[14]. The present study concludes that the health promotion activities like health education or planned teaching programme will increase the health awareness of mothers in danger signs of new born illness and will reduce the further deterioration of new born life.

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