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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ONKNOWLEDGE REGARDING NEUROLOGICAL AND PHYSICAL GROWTH ANDDEVELOPMENT OF PRETERMBABIES AMONGMOTHERS OF PRETERMADMITTED INNICUOFSELECTEDHOSPITALS AT AKLERA''

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Abstract

The goal of this study is to find out how much mothers of preterm babies know about their children's neurological and physical growth and development. through an organised teaching programme atAklera'sNirogdham Hospital and Research Center. An experimentation-free approach was adopted in the study. In this study, participants filled out a self-structured knowledge questionnaire in two parts. A sociodemographic questionnaire was employed in the first part of the study, while a self-structured knowledge questionnaire was used in the second part of the study. The data was analysed using descriptive and inferential statistical methods. It was shown that 60% of preterm mothers had excellent knowledge about preterm children's neurological and physical development, compared to 40% of those who had adequate knowledge. As a consequence, nurses were instructed to provide information to expectant women about their children's neurological and physical development.

Keyword-Observe, evaluate, and plan for growth and improvement

1.INTRODUCTION

According to the WHO, "A live born infant delivered before the 37th week of pregnancy" is what constitutes a preterm delivery. The term "immature" is used to describe babies born too early or prematurely.

• at the very early stages of development (less than 28 weeks gestation) • infancy (less than 28 weeks gestation)

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• really early (28 to 32 weeks gestation)

Pregnant with "moderately" to "lately"

According to the World Health Organization (WHO) 2012 global action report, preterm births are on the rise in most countries and are the second most common cause of death for children under the age of five, behind pneumonia. Preterm infants are a leading source of neonatal disease and mortality due to their physical and functional immaturity, making them a substantial challenge for those involved in maternal and perinatal care across the globe.

20% to 30% of Extremely Low Weight Preterms exhibit motor function and neurosensory impairments in the first year of life The most typical problem at this age is a delay in cognitive development.

In the first year of life, it is critical to monitor the language development of preterm babies because they are more likely to show delays in pre-linguistic markers like the recognition of objects and pictures, obedience to verbal commands, and performing simple actions by 12 months of corrected age; they will also have a smaller vocabulary and a lower ability to express their thoughts in sentences. According to a recent research, language difficulties and developmental delays may persist until the age of six or seven. Premature development of a newborn is influenced to some degree by the time of birth. Most babies born between the 24th and 35th week of pregnancy have greater developmental difficulties than those born later. The development of certain preterm neonates may be years behind their full-term counterparts by the time they are two years old.

NEEDFORSTUDY

A growing number of babies are being born prematurely (before 37 weeks of pregnancy), with an estimated 15 million being born each year. Premature births kill an estimated 1.1 million infants each year. Prematurity is the leading cause of newborn death (babies in the first four weeks of life)

There are 184 countries where anything from 5% to 18% of babies are delivered preterm. There are 14 preterm births per day, according to the statistics.

Premature birth is the second leading cause of death among children under the age of five, according to the first estimates of preterm birth survivors ever made at the national, regional, and global levels.

Every year, more than a million children lose their lives as a result of complications during pregnancy or childbirth. It is normal for survivors to have disabilities such as learning issues and visual and hearing impairments..

2.**OBJECTIVEOFTHE STUDY**

Mothers of preterm babies will be assessed on their knowledge of their preemies' physical and neurological development.

Whether preterm mothers' knowledge of their children's neurological and physical growth and development has increased as a result of being exposed to a structured training programme

Identifying whether or whether the pre-test knowledge score of pre-term baby women is linked to the neurological and physical growth and development of the children.

1.**HYPOTHESES:**

2.Neurological and physical growth and development of preterm infants will not vary significantly between their mothers and their non-pregnant counterparts.

3.Before and after tests on preterm newborn babies' neurological and physical development, there will be a significant difference.

4.Neurodevelopment and demographic variables will be strongly linked among mothers of preterm babies, according to RH2 findings.

5.**ASSUMPTION**

If a formal training programme is not implemented, preterm mothers may be left in the dark about their preterm children's neurological and physical growth and development..

6.**METHODOLOGY:**

A pre-experimental one-group pre-test post-test research design was utilised in the study. Convenient sampling was utilised to choose 30 mothers with preterm infants, without any probability. Nirogdham Hospital and Research Center in Aklera, Akron, was the site of the inquiry. The investigator acquired data before to and throughout the structure teaching programme by analysing demographic factors and conducting a self-structured knowledge evaluation. Immediately after completing the pre-test, the post-test was administered. Descriptive and inferential statistics were employed by statisticians in their investigations.

7.**ANALYSISANDINTERPRETATION**

SECTION-I Table -1 Frequency and percentage distribution of samples according to their demographic variables.n =30

S.No	DemographicVariables	Frequency	Percentage
1	**Age inYears**		
a.	20-25	18	60.0
b.	26-31	10	33.3
c.	32-37	8	6.66
d.	≥38	00	00.0
2	**Livingarea**		
a.	Ruralarea	14	46.66
b.	Urban area	16	53.33
3	**EDUCATIONALQUALIFICATION**		
a.	Primary	07	23.3
b	Middle	16	53.3
c	Secondary	04	13.3
d.	Illiterate	03	10
4	**Type of Family**		
a.	Jointfamily	16	53.33
b.	Nuclear family	14	46.66

SECTION-II-Table-2.1.1-FrequencyandpercentagedistributionofPre-testscoresofstudiedsubjects:

Categoryand test Score	Frequency (N=30)	Frequency Percentage(%)
AVERAGE(01-07)	19	63.33%
GOOD(8-14)	11	36.66%
EXILLENT(15-20)	00	00%
TOTAL	30	100%

Moms of preterm 19 (63.33 percent) had average (01-07) knowledge of preterm children's neurological and physical growth and development, whereas some preterm 11 (36.66 percent) mothers appear in the current table 2.1..

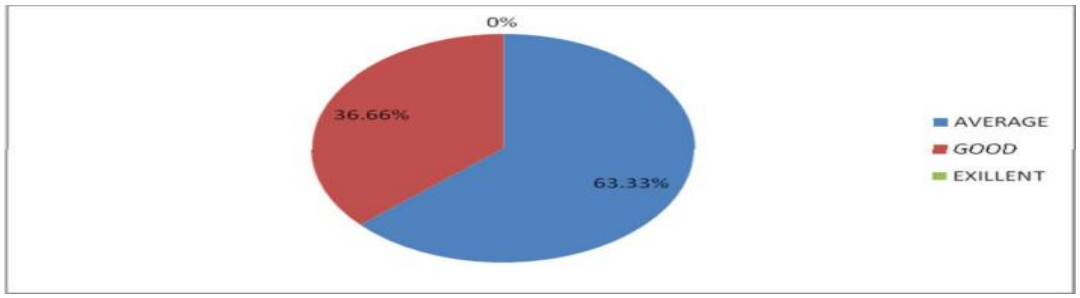
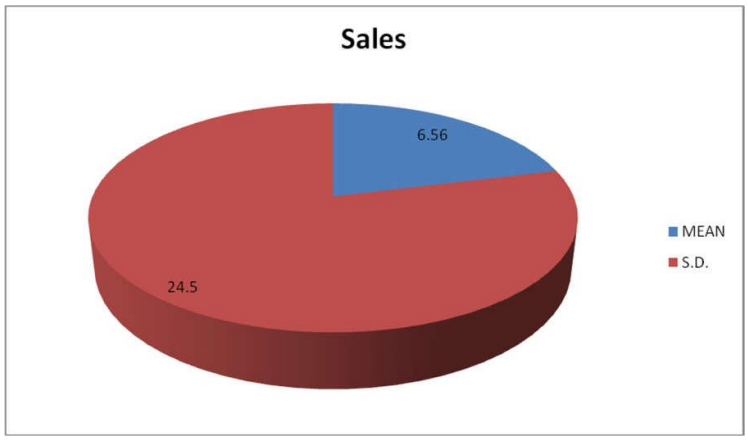


FIG.-2.1.1- Frequency and percentage distribution of Pre-test scores of studied subjectsTable-2.1.2.-Mean(X)andstandard Deviation (s) ofknowledgescores:

Knowledge Pre –test	Mean (X)	StdDev(S)
Pre-testscore	6.56	24.5

At the Nirogdham hospital and research centre, Aklera, the mean pre-test score was 6.56+ 24.5 and the knowledge of preterm babies' neurologic and physical growth and development among mothers of preterms was 6.56+ 24.5 percent (Raj).

Because of this, the results in Section II demonstrate a significant difference in mean test scores, validating the



study's first and second goals.

FIG.-2.1.1.-Mean(X) andstandard Deviation(s) ofknowledgescores

Table-2.2.1-FrequencyandpercentagedistributionofPosttestscoresofstudiedsubjects:

Categoryand test Score	**Frequency (N=30)**	**Frequency Percentage(%)**
AVERAGE(01-07)	00	00%
GOOD(08-14)	12	40%
EXELLENT(15-20)	18	60%
TOTAL	30	100%

Using post-test scores, this study found that 18% of mothers of preterm babies had excellent knowledge, whereas only 12% of mothers of preterm babies had good knowledge.

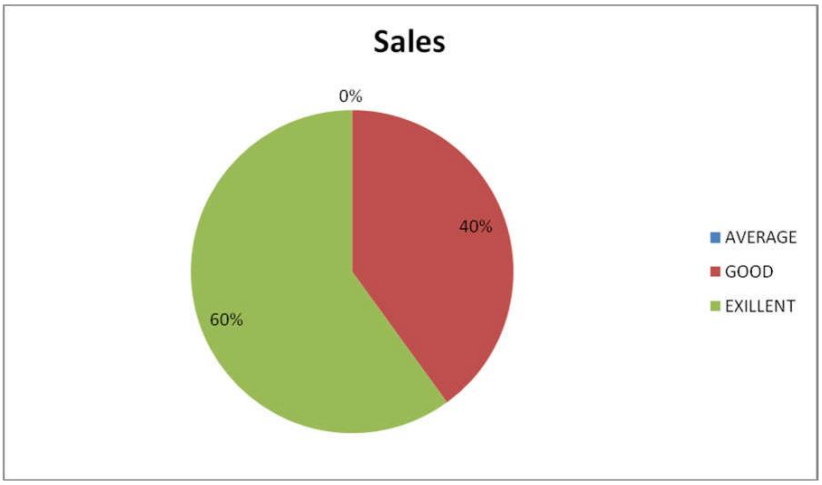
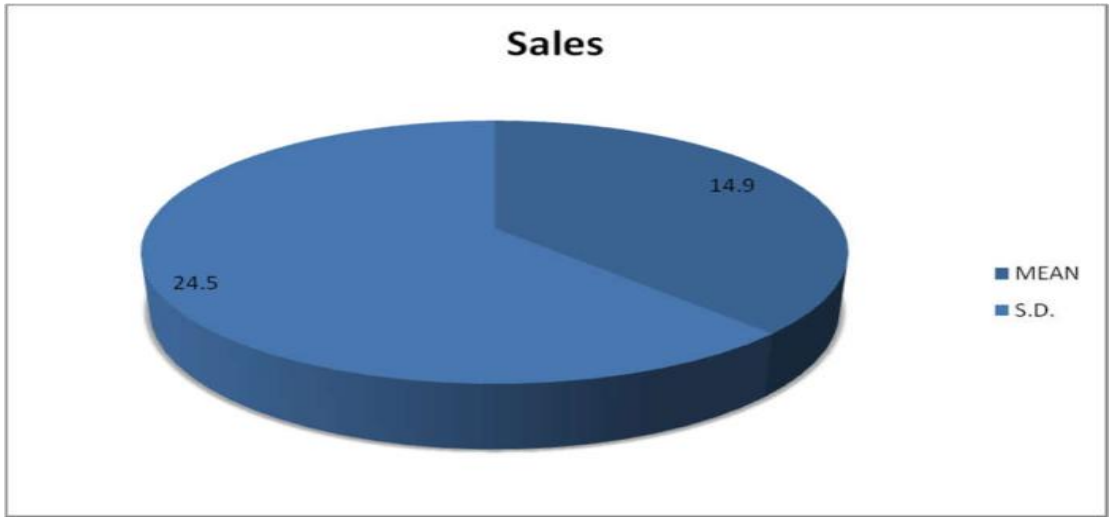


FIG.-2.2.1-FrequencyandpercentagedistributionofPosttestscoresofstudiedsubjects

Table-2.2.2.- Mean(X)andstandard Deviation(s) ofknowledgescores:

Knowledg eTest	**Mean $(\overline{X})$**	**StdDev(S)**
Post-testscore	14.9	24.5

Post-test scores, knowledge of pre-term children's neurological and physical growth and development among mothers of preterm babies at Nirogdham hospital and research centre, Aklera, are all shown in Table 2.2.2. (Raj). According to average test results, there is a statistically significant difference in this. study's first second



d aim has been partly met.

FIG.-2.2.2.-Mean(X)andstandardDeviation (s) ofknowledgescores:

SECTION-IIIAssociationofknowledgescoresbetweentestandselecteddemographicvariables:

Table-3.1Associationofagewithpre-testscores:

Age	**Testscores**			**Total**
(inyears)	AVERAGE (1-5)	GOOD (6-10)	EXELLENT (11-16)	
20-25	14	04	00	**18**
26-31	05	05	00	**10**
32-37	00	02	00	**02**
≥38	00	00	00	**00**
Total	**19**	**11**	**00**	**30**
X=5.85	p>0.05(Insignificant)			

Correlation between age and test scores is seen in Table 3.1. Found to have a Chi-Square test probability of 5.85, a minor valve with p=0.05, two-tailed significance. As a consequence, it has been shown that there is little link between age and test outcomes. It has been shown that age has no influence on the present situation.

Table-3.2 Associationof livingareawithpre-testscores

Living Area	**Testscores**			**Total**
	AVERAGE (1-5)	GOOD (6-10)	EXELLENT (11-16)	
Rural	10	04	00	**14**
Urban.	09	07	00	**16**
Total	**19**	**11**	**00**	**30**
p>0.05(Insignificant)				

Test results and living space are shown in Table 3.2. For four degrees of freedom, no statistical significance was found in the chi-squared test, which had a p-value (two-tailed) of 0.72. Living space and test outcomes seem to have a high correlation..

Table-3.3.AssociationofEducationalstatuswithpre-testscores:

Education	**Testscores**			**Total**
CLASS	AVERAGE (1-5)	GOOD (6-10)	EXELLENT (11-16)	
Primary	05	02	00	**07**
Middle	11	05	00	**16**
Secondary	01	03	00	**04**
Illiterate	02	01	00	**03**
Total	**19**	**11**	**00**	**30**
	X = 4.61	p>0.05(Insignificant)		

Table 3.3 demonstrates the link between age and test scores. We utilised the Chi-Square test with six degrees of freedom and a probability value of 4.61 to exclude the possibility of a statistically insignificant valve. Students' educational backgrounds seem to have little impact on their test scores. A person's educational background does not suffer as a result of this disease.

Table-3.4Association offamilytypewith pre-testscores:

Familytype	**Testscores**			**Total**
	AVERAGE (1-5)	GOOD (6-10)	EXELLENT (11-16)	
Joint	13	03	00	**16**
Nuclear	06	08	00	**14**
Total	**19**	**11**	**00**	**30**
	X= 4.72	p>0.05(Insignificant)		

Table 3.4 indicates a correlation between age and test results. The Chi-Square test yields a probability value of 4.72, which indicates the kind of family and the test findings for two degrees of freedom. Furthermore, it is shown that the present problem has no effect on the age of families.

8.**RESULTS**

9.Percentage Knowledge score was 6.5624.5 in the pre-test compared to 14.924.5 when a comprehensive training programme was implemented.

10.**CONCLUSION**

As a result, we may conclude that hypothesis RH1 has been accepted, which indicates that there would be a substantial difference between the pre- and post-test knowledge scores (P0.05).

There may be a benefit to prenatal education programmes for pregnant mothers when there is a need for missing, bridging and changing information about preterm children's neurological and physical development...

11.**LIMITATIONS-**

12.Research was limited to a single university since only 30 samples were available.

13.**REFERENCE-**

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