



## EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FETAL DEVELOPMENT AMONG PRIMI MOTHERS IN SELECTED HOSPITALS: A QUASI EXPERIMENTAL STUDY

<b>Ravina Gawande*</b>	Department of Nursing, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur. *Corresponding Author
<b>Hemlata Salve</b>	Department of Nursing, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur.
<b>Dr. Asha Shingekar</b>	Department of Nursing, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur.
<b>Ms. Sarika Bais</b>	Department of Nursing, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur.
<b>Ms. Varsha hambarde</b>	Department of Nursing, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur.
<b>Ms. Priyal Waghchoure</b>	Department of Nursing, VSPM Madhuribai Deshmukh Institute of Nursing Education, Nagpur.

### ABSTRACT

**Introduction:** Embryonic development in the human, covers the first eight weeks of development at the beginning of the ninth week the embryo is termed a fetus. Need of the study: Congenital anomalies (birth defects) can be defined as structural or functional anomalies (e.g. metabolic disorders) that occur during intrauterine life and can be identified prenatally, at birth or later in life. **Objectives:** To assess the effectiveness of structure teaching programme on knowledge regarding fetal development among primi mothers in selected hospitals. **Material and Method:** the quasi-experimental research design was used to conduct research study. The 80 primi mothers were selected by using non-probability purposive sampling technique in selected hospitals. **Result:** The study reveals mean pre-test knowledge was 11.06 and mean post-test knowledge score was 22.26 The calculated 't' value is i.e. 53.71 are much higher than the 1.98 at 5% level of significance for overall knowledge score of Primi Mothers which is statistically acceptable level of significance.

**KEYWORDS :** fetal development, primi mothers, knowledge, structured teaching programme.

### INTRODUCTION

Motherhood is the state of being a mother. A person enters motherhood when they become a mother. This most commonly happens when their child is born but it can also happen through adoption or by marrying or becoming a partner to someone with children. Motherhood is a gender specific version of the term parenthood.

Conception is process of the union of the sperm and the ovum with fertilization. the onset of pregnancy marked by implantation of the blastocyst into the endometrium.<sup>2</sup>

Embryonic development in the human, covers the first eight weeks of development at the beginning of the ninth week the embryo is termed a fetus. Human embryology is the study of this development during the First eight weeks after fertilization. The normal period of gestation (pregnancy) is about nine months or 40 weeks. The germinal stage refers to the time from fertilization through the development of the early embryo until implantation is completed in the uterus.

### Background of the study

Birth defects are also known as congenital abnormalities, congenital disorders or congenital malformations. It can be defined as structural and functional anomalies. An estimated 240,000 newborns die worldwide within 28 days of birth every year due to birth defects. Birth defects cause further 170,000 deaths of children between the ages of 1 month and 5 years. Birth defects can contribute to long term disability, which takes a significant toll on individuals, families, health care systems and societies.

### Need of the study

The prevalence of birth defects in India is 6 -7% which translates to around 1.7 million birth defects annually. The common birth defects include congenital heart disease (8- 10 per 1000 live births), congenital deafness (5.6-10 per 1000 live

births), and neural tube defects (4-11.4 per 1000 live births) India Newborn Action Plan (INAP) integrated the approaches for the prevention and care of newborn with birth defects into primary health care, with an emphasis on maternal and child health. INAP is India's committed response to the Global Every Newborn Action Plan (ENAP) by WHO with a vision to eliminate preventable newborn deaths and stillbirths.

### Statements of the problem

"Effectiveness Of Structured Teaching Programme On Knowledge Regarding Fetal Development Among Primi Mothers In Selected Hospitals: A Quasi-Experimental Study"

### Objectives of the study

#### Primary Objective:

To assess the effectiveness of structure teaching programme on knowledge regarding fetal development among primi mothers in selected hospitals.

#### Secondary objectives:

1. To assess the pre-test knowledge regarding fetal development among primi mothers.
2. To assess the post-test knowledge regarding fetal development among primi mothers.
3. To evaluate the effectiveness of structure teaching programme on knowledge regarding fetal development among primi mothers.
4. To associate the post-test knowledge regarding fetal development among primi mothers in selected hospitals with their selected demographic variables.

### Conceptual framework

Conceptual framework is the study is based upon 'Imogene King Goal attainment theory'.

### Methodology

**Research approach:** Quantitative approach is used.

**Research design:** Quasi- experimental one group pre- test post- test research design

**Sample:** Primi mothers

**Sample size:** 80 Primi Mothers

**Sampling technique:** Non-probability purposive sampling.

**Description of tool**

**Section -A:**

Semi structured questionnaire on demographic variable.

**Section -B:**

Self-structured questionnaires on knowledge regarding fetal development.

**RESULT AND DISCUSSION**

**Table No. 1: Table showing Assessment with level of pretest knowledge score** n=80

Level of pre-test knowledge	Score Range	Level of Pre Test Knowledge Score	
		Frequency (f)	Percentage (%)
Poor	0-20%(0-6)	5	6.25
Average	21-40%(7-12)	48	60
Good	41-60%(13-18)	27	33.75
Very Good	61-80%(19-24)	0	0
Excellent	81-100%(25-30)	0	0
Minimum score		6	
Maximum score		15	
Mean knowledge score		11.06±2.40	
Mean % Knowledge Score		36.87±8.03	

**Table No. - 2: Table showing Assessment with level of post-test knowledge score** n=80

Level of post test knowledge	Score Range	Level of Post Test Knowledge Score	
		Frequency (f)	Percentage %
Poor	0-20%(0-6)	0	0
Average	21-40%(7-12)	0	0
Good	41-60%(13-18)	9	11.25
Very Good	61-80%(19-24)	48	60
Excellent	81-100%(25-30)	23	28.75
Minimum score		16	
Maximum score		27	
Mean knowledge score		22.26±2.91	
Mean % Knowledge Score		74.20±9.71	

**Table No. 3: Table showing effectiveness of structured teaching programme on knowledge score of pre-test and post-test regarding fetal development among primi mothers.** n=80

Overall	Mean	SD	Mean Difference	df	Table value	Calculated t-value	p-value	Significance
Pre Test	11.06	2.40	11.20 ± 1.86	79	1.98	53.71	0.0001	S
Post Test	22.26	2.91						

**Table No. 4: Table showing association of level of knowledge score with selected demographic variable**

Demographic variables	Calculated value			df	Table value	Level of significance p<0.05	Significance
	t -value	F -value	p -value				
Age (in yrs.)		276.23	0.0001	4,	2.49	p<0.05	S

Religious	1.47	0.22	3,76	2.72	p>0.05	NS
Educational status	320.20	0.0001	4,75	2.49	P<0.05	S
Occupation	9.28	0.0001	3,76	2.72	P<0.05	S
Type of family	0.27	0.76	2,77	3.11	p>0.05	NS
Area of residence	1.35	0.26	2,77	3.11	p>0.05	NS
Monthly family income (in Rupees.)	5.23	0.002	3,76	2.72	P<0.05	S
Type of diet	3.10	0.051	2,77	3.11	p>0.05	NS

Majority of primi mothers 37.5% were from the age group of 26-29 years, 38.80% of primi mothers were Hindus, 36.30% of them up to higher secondary education, 33.80% of primi mothers were doing services, 41.30% of them had from joint families, 45% of them had from urban areas, 40% of them had monthly family income of Rs. 15,001-20,000, 63.80% of primi mothers had non-vegetarian.

**Table No. 1.** shows majority 60% of primi mothers had average level of knowledge score and 33.75% of primi mothers had good level of knowledge score. 6.25% of primi mothers had poor level of knowledge score. Minimum knowledge score in pretest was 6 and maximum knowledge score in pretest was 15. Mean knowledge score in pretest was 11.06±2.40 and mean percentage of knowledge score in pre-test was 36.87±8.03.

**Table No. 2.** shows majority 60% of primi mothers had very good level of knowledge score and 28.75% of them had excellent level of knowledge score. 11.25% of primi mothers had good level of knowledge score, Minimum knowledge score in posttest was 16 and maximum knowledge score in post-test was 27. Mean knowledge score in posttest was 22.26±2.91 and mean percentage of knowledge score in post-test was 74.20±9.71.

**Table No. 3.** shows the result show that pre-test and post test knowledge scores of primi mothers regarding fetal development. Mean, standard deviation and mean difference values are compared and student's paired 't' test is applied at 5% level of significance. The tabulated value for n=80-1 i.e. 79 degrees of freedom was 1.98. The calculated 't' value i.e. 53.71 are much higher than the tabulated value at 5% level of significance for overall knowledge score of Primi Mothers which is statistically acceptable level of significance. Hence it is statistically interpreted that the Structured Teaching Programme on knowledge regarding Fetal Development was effective. Thus the H<sub>1</sub> is accepted.

**Table No. 4.** shows analysis reveals that there is association of post test knowledge score with Age in year, Educational status, Occupation and Monthly family income in Rupees, while none of the other demographic variables were associated with knowledge score.

**CONCLUSION**

After the detailed analysis, this study lead to the following conclusion:

The study reveals mean pre-test knowledge was 11.06 and mean post-test knowledge score was 22.26 The calculated 't' value is i.e. 53.71 are much higher than the 1.98 at 5% level of significance for overall knowledge score of Primi Mothers which is statistically acceptable level of significance.

Hence it is statistically interpreted that the Structured Teaching Programme on knowledge regarding fetal development was effective. Thus the H<sub>1</sub> is accepted and H<sub>0</sub> is

rejected. Analysis reveals that there is association of post test knowledge score with Age (in year), Educational status, Occupation and Monthly family income (in Rupees), while none of the other demographic variables were associated with knowledge score.

#### **Recommendation**

1. A similar study can be replicated on a larger population for a generalization
2. An experimental study to assess the effectiveness of self-instructional module on knowledge regarding fetal development among ASHA workers in selected area of the city.

#### **Authors contributions**

The author carries out tasks from data collection, data analysis, making discussion to making manuscripts

#### **Source of funding**

The research was not funded, all the expenses were carried out by the researcher.

#### **Conflict of interest**

There was no conflict of interest

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