



A Study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge of Mothers Regarding Growth and Development of Toddler“S from Selected Anganwadi“S of Ratia Haryana

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Abstract

The primary objective of this study is to assess the efficacy of a structured instructional program in enhancing the knowledge of mothers pertaining to the growth and development of toddlers in specific Anganwadi centers located in Ratia, Haryana. The study employed a pre-experimental research design. The samples were chosen using the convenience sampling method. The study included a total of 60 moms who had toddlers as participants. The interview method was employed to obtain data pertaining to the growth and development of toddlers. The study devised a test to evaluate the level of information had by mothers pertaining to the growth and development of toddlers. The data that was gathered was subjected to analysis using Statistical Package for Social Sciences, Version 20. The findings of the study indicate that the average pre-test value was 1.32, whereas the average post-test value was 2.73. The calculated result for the mean difference was 1.41. The pre-test had a standard deviation value of 0.469, whereas the post-test had a standard deviation value of 0.446. The value of 't' was 17.737, and the value of 'p' was 0.000. This demonstrates the efficacy. There were no statistically significant associations observed between demographic characteristics and pre-test knowledge level.

Keywords: Evaluate; Effectiveness; Structured Teaching Programme; Knowledge; Mothers; Growth and Development; Toddler; Anganwadi

Introduction

Every new member of a family is a blessing from God. Adults lack the vitality, gentleness, joy, trust, curiosity, courage, and inventiveness of children. Children, on the other hand, have all of these qualities in abundance. The addition of children to a family both increases its level of

satisfaction and completes it. The health of the family as a whole is greatly affected by the health of the children. It is dependent on the family's lifestyle, customs, culture, traditional practices, and mainly their understanding of child parenting [1], which includes knowledge regarding growth and development. Both the family's physical and social environments are important factors to consider. The health

of the nation's children is a reflection of the nation's overall health and wealth. The youngsters of today will become the citizens of tomorrow. The contribution that a healthy, fully grown child makes to the general welfare of the nation is an irreplaceable national resource. Our hopes and goals for the future are embodied in our children. Children are our future. They are the most defenseless members of the society as a whole. Children have received special attention for research due to the fact that their condition is a sensitive indicator of health. Children who have good physical and mental health are more likely to mature into adults who also enjoy good health.

Growth and development usually refers to a unit and is expressed as the sum of the numerous changes that take place during the life time of an individual. Growth is a process of physical maturation resulting in an increase in size of the body and various organs. It occurs by multiplication of cells and an increase in intracellular substance. It is a quantitative change of the body which can be measured in inches/centimeters and pounds/kilograms. It is a progressive and measurable phenomenon.

Development is a process of functional and physiological maturation of the individual. It is a progressive increase in skill and capacity to function. It is related to maturation and myelinations of the nervous system. It includes physical, emotional, and social changes [2]. It is a qualitative aspect of maturation and is difficult to measure. It is orderly, not haphazard, and is having direct relaxation between each stage and the next. Development involves physical (Gross motor, Fine motor, Visual and Hearing), cognitive (Language, Solve problems, Gain knowledge) and emotional development.

A toddler is a young child who is of age of learning to walk between infancy and childhood. Toddling usually begins between the age of 12 months and 24 months. During the toddler stage, the child also learns a great deal about social roles, develops motor skills and first starts to use language. The first three years of a child's existence are considered to be the most formative years of their lives. As a result, the care that a kid receives during these years has a significant impact on the child's subsequent growth and development. The majority of moms, especially those living in rural areas, lack knowledge regarding the fundamentals of proper child care, such as proper feeding and weaning procedures, healthcare, and dietary requirements. Feeding, particularly in the early years of life, has an effect that lasts throughout a person's entire life. This is due to the fact that under nutrition and malnutrition have been shown to induce varied degrees of growth retardation in infants and children. Therefore, the childcare developmental program should be given the highest priority because the progress and prosperity of a country are

dependent on the care that is given to the children in that country [3].

Previous studies have shown that parents with little understanding of how children develop exhibited neglectful and abusive attitudes toward their kids and were frustrated by the discrepancy between their expectations and their kids' developmental stages. On the other hand, parents who were knowledgeable displayed high levels of competence and self-efficacy [4]. Due to the fact that pediatric treatment and interventions frequently rely on a mother's observations for decision-making and medical counseling, studies conducted in Western nations have highlighted the significance of parental knowledge about child development. Pediatricians also frequently rely on parents to provide information on developmental milestones; when parents are aware of such developmental milestones, interaction with a physician is more fruitful. Early treatments could result from parental awareness of and skill in spotting developmental delays or anomalies, [5,6] which is crucial for promoting a child's health and preventing disease. For public health education programs to implement an effective interventional strategy that would result in maximum outreach, it is necessary to understand the baseline level of information held by a targeted audience regarding children's developmental milestones. There aren't many studies measuring parental awareness of developmental milestones in the nursing literature [7]. Only one study, which revealed physicians noticed a discrepancy between maternal awareness and children's health difficulties, revealed parental knowledge of developmental milestones in Haryana. The purpose of this study is to determine the awareness levels of parents in selected areas of Haryana regarding children's developmental milestones [8] in light of the significance of this topic and the dearth of information on it.

Objectives

- To assess the knowledge of mothers regarding the growth and development of toddlers before and after the test.
- To investigate the impact of a structured teaching program on toddlers' growth and development [4].
- To examine the association between the pre-test knowledge of mothers regarding the growth and development of toddlers and selected socio-demographic factors

Methodology

A pre-experimental design, was conducted on mothers of toddlers visiting the Anganwadi's of the Ratia, Haryana, India, for 4 weeks (23-04-2018 to 30-04-2018) [6].

Study Population and Criteria

The target population of this investigation was mothers of toddlers. The study population consisted of mothers who brought their children to one of many area Anganwadi centers in and around Ratia, Haryana. Children between the ages of one and three were used in the study [9]. Participants who can read and write in Hindi are readily available for the duration of the study [10]. Non-participants and those who were absent from the Anganwadi during data collection were eliminated from the samples.

Sample Size and Sampling Technique

In this investigation, a convenience sampling technique was used. The study's sample was comprised of mothers of toddlers and those who met the sample criteria [11].

Study tools and technique

The researcher made tools and sent them to four nursing experts and medical professionals to make sure the information was correct. Based on their suggestions and advice, the required changes were made. The changed tools were used to gather information. The following parts make it up.

- **Section A:** Demographic Variable It deals with demographic data which was used to collect the characteristics of the samples. Age, Educational Status, Occupational Status, Number of Children, Religion, Previous knowledge regarding growth and development.
- **Section B:** Structured Interview Schedules on Growth and Development This questionnaire includes a total of thirty questions as well as possible answers. The structured

interview schedule was divided into general growth and development information, physical development, cognitive development, fine motor development, social development, and linguistic development.

- **Section C:** Scoring and Interpretation

Level of Knowledge	Scores
Inadequate	0 - 10
Moderate	20-Nov
Adequate	21 - 30

Table 1: Level of Knowledge.

Data collection Process and Data Analysis

The pilot study was carried out in a similar context. Six samples that met the study's requirements were selected and data was gathered, followed by a structured teaching program and a post-test on the seventh day to evaluate the study's effectiveness and practicality. The researcher first received permission from the authority. The data was collected from 23-04-2018 to 30-04-2018 when the researcher visited the selected Anganwadi on day 1 and informed the samples about the study and obtained signed informed permission [12-14]. A pre-test was then gathered from samples via interview. Data collection from each sample took 25-30 minutes. Later, audio-visual aids were used to teach the samples. On the seventh day of structured training, chosen samples were assessed post-test. Descriptive statistics like percentage, mean, and standard deviation will arrange and summarize sample numerical data [15]. The level of significance of the hypothesis and the association between socio-demographic variables and mothers' knowledge of toddler growth and development will be tested using inferential statistics tests such chi-square test Table 2.

S. No	Demographic Variable	Frequency	Percentage
		(f)	(%)
1	Age (Years)		
	25 - 27	27	45
	28- 30	24	40
	Above 30	9	15
2	Education of Mother		
	Illiterate	4	6.66
	Primary	15	25
	Secondary	24	40
	Senior - Secondary	11	18.34
	Degree / Diploma	6	10

3	Occupation of Mother		
	House Wife	31	51.66
	Government Job	10	16.67
	Private Job	19	31.67
4	Number of Children		
	One	12	20
	Two	36	60
	More than two	12	20
5	Previous Knowledge regarding growth and development of children.		
	Yes	42	70
	No	18	30
6	Source of Information		
	Family	11	18.33
	Friends	14	23.33
	Personnel	9	15
	TV/Radio/Newspapers	8	13.34
	No Source	18	30

Table 2: Shows the frequency and percentage distribution of samples according to socio-demographic variables (n = 60).

Most samples (45%) were 25–27 years old. Samples aged 28–30 were 24 (40.00%). Only 9 samples (15.00%) were over 30. Samples were mostly secondary level 24 (40.00%). 15 (25.00%) samples were primary schooled. Eleven (18.34%) samples were senior-secondary. The few degree/diploma samples were 6 (10%). Few samples were illiterate 4 (6.66%). For mother occupation, 56.66% of the participants were hose wives, whereas 19 (31.67%) worked in private. Ten (16.67%) government workers were sampled. Most samples have 36 children (60.00%). Twelve samples

(20%) had one or more children. Samples' child growth and development knowledge shows majority 42 (70.00%) samples have prior knowledge, while 18 (30.00%) do not. Most samples (30.00%) have no sources for toddler growth and development information. Friends informed samples 14 (23.33%). Family provided information for 11 (18.33%). The 9 (15.00%) samples obtained information from other personnel. Few samples (8/13.34) used TV/Radio/News-Paper.

Level of Knowledge	Pre-Test		Post-Test	
	Frequency	Percentage	Frequency	Percentage
Inadequate	41	68.33	0	0.00
Moderate	19	31.67	16	26.66
Adequate	0	0.00	44	73.34

Table 2: Frequency and percentage distribution of samples pre-test and post-test knowledge (n = 60).

The above table shows the frequency and percentage distribution of samples pre-test and post-test level of knowledge.

In terms of the pre-test, 41 (68.33%) of the sample has an inadequate level of knowledge. There were 19 (31.67%)

samples with a moderate degree of understanding. None of the samples had a sufficient level of knowledge. In terms of the post-test, 44 (73.34%) of the sample has a sufficient level of knowledge. There were 16 (26.66%) samples with a moderate degree of understanding. None of the samples had an insufficient level of expertise.

Test	Mean	Mean Difference	Standard Deviation	't' Value	'P' Value
Pre-Test	1.32	1.41	0.469	17.737*	0.001*
Post-Test	2.73		0.446		

*-Significant at 'P' level < than 0.05

Table 3: Mean, Mean Difference, Standard Deviation, 't' test score, and 'P' Value of samples in Pre-Test and Post-Test.

- The table above displays the average pre-test and post-test values, the average difference between them, the standard deviation values, and the 't' test values.
- The average pre-test value was recorded as 1.32, whereas the average post-test value was seen to be 2.73.
- The calculated result for the mean difference was

1.41. The standard deviation number for the pre-test was 0.469, whereas for the post-test it was 0.446. The calculated t-value was 17.737. The p-value obtained from the statistical analysis was determined to be 0.000. This demonstrates the efficacy.

S. No	Demographic Variables	Level of Knowledge		χ ² Value	Level of Significance
		Inadequate	Moderate		
1	Age (Years)			0.116NS	0.944
	25 - 35	18	9		
	36 - 45	17	7		
	46 - 55	6	3		
2	Education of Mother			9.418NS	0.51
	Illiterate	4	0		
	Primary	12	3		
	Secondary	18	6		
	Senior - Secondary	4	7		
3	Occupation of Mother			6.117NS	0.47
	House Wife	25	6		
	Government Job	4	6		
	Private Job	12	7		
4	Number of Children			0.822NS	0.663
	One	7	5		
	Two	25	11		
5	Previous Knowledge regarding Growth and Development			0.620NS	0.31
	Yes	30	12		
	No	11	7		
6	Source of Information			8.962NS	0.386
	Family	10	1		
	Friends	11	3		
	Personnel	3	6		
	TV/Radio/Newspaper	6	2		
No Sources	11	7			

NS = Not Significant at 0.05 level of significance

Table 4: Shows the level of association between pre-test knowledge and selected socio demographic variables.

To test the association between pre-test knowledge and age the null hypothesis can be stated as follows. Ho: There will be no significant association between pre-test knowledge and socio-demographic variables. In the above we could find that none of the socio-demographic variables are associated with pre-test knowledge. So we accept null hypothesis in this case.

Discussion

The point of this study was to find out how well an organized teaching program helped mothers learn about the growth and development of toddlers.

Based on the ages of the samples, most of them were between the ages of 25 and 27 (45.00%). Based on the education levels of the samples, most of them (40.00%) were from the middle school level. In terms of what their mother did for a living, just over half of the samples (56.66%) were wives. The number of children in the samples shows that most of them had 36 (60.00%). Knowing about the growth and development of toddlers before the sample shows that most of the people (42/70.00%) already knew this. The samples' sources of information show that most of them (30.00%) did not have any means for getting information about the growth and development of toddlers [16,17]. Friends were the ones who told the samples 14 (23.33%) the information. Other studies have come to the same conclusions as this one. did a study to find out how much mothers in a developing country knew about how young children grow and learn. The study's results showed that there were 1,200 mothers of children younger than 3 years old. Most of the moms had kids between the ages of 25 and 36 months, which is 258 (24.5%). Most of the mothers (574 of them) were having more than two children. The mother had most of her schooling up to elementary school level 462 (43.8%). A huge majority of the mothers (935, or 88.6%) do not have jobs.

The first study objective was to examine toddler growth and development knowledge pre- and post-test.

Most sample 41 (68.33%) lacks pre-test knowledge. There were 19 (31.67%) moderately knowledgeable samples. No sample had enough knowledge. Most of the sample had adequate post-test knowledge 44 (73.34%). There were 16 (26.66%) somewhat knowledgeable samples. None of the samples were ignorant. The following studies supported the conclusions.

Evaluated a structured education program on milestone development among infant mothers in rural, Wardha District.

The study found that pre-test knowledge scores were bad, average, good, and exceptional. Pre-test knowledge scores were bad for 8.33% of baby moms, average for 71.67%, and good for 20%. The mean knowledge score was 6.93 ± 1.83 . Post-test knowledge scores for baby mothers were 26.67% good and 73.33% outstanding assessed Ludhiana mothers' understanding of child milestone development. The survey found that 53% of moms had good toddler milestone development knowledge.

The second objective of the study was to assess the Effectiveness of structured teaching programme on growth and development of children

According to Table - III, the mean value before the test was 1.32, whereas the mean value after the test was 2.73. 1.41 was the value that represented the mean difference. The value of the standard deviation for the pre-test was 0.469, whereas the value for the post-test was 0.446. 17.737 was the value of the letter 't' The value of 'P' was found to be 0.000. It demonstrates the usefulness of the method.

Studies supporting the above results are below

They examined the effectiveness of structured toddler milestone development training. Pre-test mean knowledge score and standard deviation of mothers regarding ICDS program was 14.3 1.78, which rose post-test to 23.3 2.03. Pre- and post-test scores show considerable improvement in mothers' knowledge (paired 't' value = 38.684 & p value < 0.0001). This study assessed the Isfahan Mothers' Participation Project after two years. The study found significant differences between the two groups in maternal self-esteem, training performance, weekly study time, education program participation, knowledge of growth monitoring cards, ability to draw growth curves, and knowledge of growth curve types ($P < 0.001$).

Conclusion

The primary insights gained from this investigation led the researchers to arrive at the following conclusions. Before participating in a structured training program, the vast majority of moms lacked insufficient understanding regarding their children's growth and development. Following participation in the structured training program, there was an increase in the mothers' level of knowledge regarding child development and growth.

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