



EFFECT OF A PLANNED TEACHING PROGRAMME (PTP) ON KNOWLEDGE REGARDING PRECOCIOUS PUBERTY AMONG MOTHERS OF GIRLS AGED 6-10 YEARS IN A SELECTED SCHOOL AT ERNAKULAM DISTRICT IN KERALA.

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KEYWORDS :

Introduction

"An ounce of prevention is better than a pound of care"

Children represent the future, and ensuring their healthy growth and development ought to be a prime concern of all societies. Early onset of puberty can cause several problems. The early growth spurt initially can cause tall stature, but rapid bone maturation can cause linear growth to cease too early and can result in short adult stature. The early appearance of breasts or menses in girls and increased libido in boys can cause emotional distress for some children.

A 2006 survey, conducted by the Federation of Obstetrics' and Gynaecologists' Societies of India, reported that girls were reaching puberty at 11 on an average -age earlier than the global average which was 13 at that time.

Indian gynecological experts pointed out that due to environmental pollution, unhealthy diet and lifestyle, the Indian girls, the average age of sexual maturity decreased from 13-14 to 10-11 years old, and the average development of the city girl younger than one year ahead of rural girls. Children with precocious puberty in the age between 5-9 years will need hospital treatment. 12 With urbanization, sedentary life style and improving nutrition, there is a sharp rise in urban obesity in India. Exposure to chemicals that mimic the properties of the female hormone estrogen is one of the reasons for fast-tracked puberty, the other is rising obesity. Estrogen-like chemicals in pesticides, plastics and shampoos and growth hormones found in meat and milk are contaminating the environment and triggering early sexual development in girls. Pesticides and their byproducts - such as DDE (a breakdown product of DDT) and PCBs (polychlorinated biphenyls) - work like estrogen and cause maturity in girls as young as eight.

Research shows that if a girl gets her first period before 12 years of age then the risk of breast cancer is 50% more than if she got it as 16. Doctors opine that for every delayed year of first menstrual period they could prevent thousands of breast cancers. With puberty age declining all over the world the risk of breast cancer was posing more threat to women.

Gynecologists, Care Hospital, Hyderabad reported that a few years ago there were hardly any cases of precocious puberty (attaining puberty before nine years of age) and that the average age of puberty has fallen from 13-14 years to 10-11 years. Besides, urban girls are maturing a year earlier than those in rural areas.

On March 5, 2007, the Health Day News medical website reported on a University of Michigan study that associated early puberty with obesity in girls: The study of 354 girls from 10 different regions in the United States found that increased body fat in girls as young as age 3 and large increases in body fat between the age of 3 and the start of first grade were associated with earlier puberty.

Statement of the problem

A study to assess the effect of a planned teaching programme (ptp) on knowledge regarding precocious puberty among mothers of girls aged 6-10 years in a selected school at ernakulam district in kerala.

Objectives

Objectives of the study were to:

- assess the knowledge of mothers of girls aged 6-10 years regarding precocious puberty
- determine the effect of ptp on knowledge regarding precocious puberty among mothers of girls aged 6-10 years
- find the association of knowledge on precocious puberty among mothers of girls aged 6 - 10 years with the selected demographic variables

Hypothesis

H1: The mean post-test knowledge of mothers of girl aged 6-10 years after the administration of ptp is significantly higher than the mean pre-test knowledge score

H2: There is significant association between level of knowledge and selected socio-personal variables

Methodology

Research approach: Quantitative research approach

Research design: Pre -experimental - one group pre-test- post-test design

Setting of the study: Govt. LP school, Mazhuvannoor at Ernakulam district.

Population: Mothers of girls aged 6-10 years.

Sample: 30 mothers of girls aged 6-10 years.

Sampling technique: Stratified random sampling technique.

Data collection Instrument: Structured Knowledge Questionnaire

Data collection process

After obtaining approval of ethics committee and permission from the authorities. The data was collected .30 sample were selected by using Stratified random sampling technique. After introducing about self and purpose of the study, written consent was obtained assuring maximum anonymity and confidentiality. Pre test was conducted to assess the knowledge of mothers of girls aged 6 -10 years regarding precocious puberty by using structured knowledge questionnaire. The Planned Teaching Programme was conducted on the same day about 45 minutes using Power point. The post test to assess the effect of Planned Teaching Program was conducted using the same tool on 5th day.

Data analysis

The data were analyzed, interpreted and organized under the following headings.

Section 1: Description of sample characteristics

Section 2: Knowledge of mothers of girls aged 6-10 years regarding precocious puberty'

Section 3: Effect of a Planned Teaching Programme on knowledge of mothers of girls aged 6-10 years regarding Precocious Puberty

Section 4: Association of pre test score of knowledge score of mothers of girls aged 6-10 years regarding precocious puberty with

the selected demographic variable.

Section 1: Description of sample characteristics

Table 1: Socio Demographic Characteristics

	Secondary	18	60
	Diploma / Graduate	12	40
	Post graduate/ Above	0	0
Occupation	House wife	13	43.33
	Medical / Para medical	0	0
	Other professionals	17	56.67
Monthly income	Below 1000	12	40
	1000 – 10,000	18	60
	10,000 – 20,000	0	0
	Above 20,000	0	0
Type of family	Nuclear	25	83.33
	Joint	5	16.67
Number of girl child	1	23	76.67
	2	7	23.3
	3	0	0
Previous exposure of knowledge regarding precocious puberty	Yes	6	20
	No	24	80
Source of information	News paper / radio	3	50
	TV / Internet	2	33.33
	Health talks by healthcare professionals	1	16.6
Experience with children who attained precocious puberty	Yes	20	66.67
	No	10	33.33

The above table shows that the majority 24 (80%) of the sample were in the age group of 25 – 30 year and of 60 % of the sample had secondary education. Majority 17 (56.67%) of the sample were other professionals. The majority 25 (83.33%) of the sample were belonged to nuclear family . Distribution of sample in relation to income, 18(60 %) belonged to income between 1000-10000.The distribution of sample in relation to their number of girl child that majority of sample 23 (76.67%) had 1 girl child, only 6 (20%) of mothers of girls aged 6-10 years had previous exposure of knowledge regarding precocious puberty and out of it 50 % had its source of information from news paper / radio. 20 samples (66.67%) of mothers of girls aged 6-10 years are having previous experience with children who attained precocious puberty.

Section 2 : Knowledge of mothers of girls aged 6-10 years regarding precocious puberty

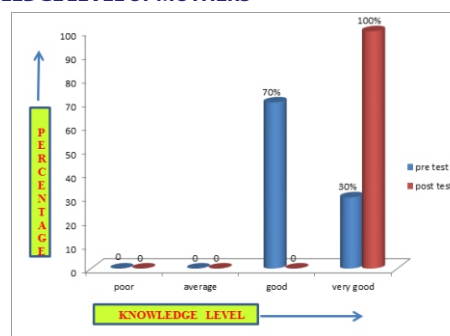
Table 2 : Mean and mean percentage knowledge of sample regarding precocious puberty. (N=30)

Maximum possible knowledge score	Pre test	Post test		
	Mean	Percentage	Mean	Percentage
32	24	75	28.66	89.56

This table shows that the post test mean knowledge score ($x_2 = 24$) and mean percentage (75%) was higher than that of the mean pre test knowledge score ($x_1 = 28.66$) and mean percentage (89.56 %). It was evident that the mean post-test knowledge score was higher than the mean pre-test knowledge score of mothers of girls aged 6-10 years.

Fig 1: The bar diagram showing the distribution of samples according to the knowledge level of mothers of girls aged 6-10years before and after the administration of Planned Teaching Programme

KNOWLEDGE LEVEL OF MOTHERS



This Cylindrical bar diagram shows that, in pretest 70% of sample were belonged to good level of knowledge followed by 30% of sample belonged to very good level of knowledge. Where as in post test all samples (100%) had very good knowledge regarding precocious puberty.

Section 3: Effect of Planned Teaching Programme on knowledge of mothers of girls aged 6-10 years regarding Precocious puberty

Table 3 : Mean, Standard deviation and t value of knowledge of sample regarding precocious puberty

Pre test	Post test	t value (cal)	t value (tab)		
Mean	SD	Mean	SD	13.85***	3.66
38.87	31.007	49.53	39.683		

***Significant at 0.001 level

This table depicts that the mean post test knowledge score (49.53) is significantly higher than the mean pre test knowledge score (38.37). The calculated t value ($t = 13.85$) is significant since it is greater than the t table value ($t_{29} = 3.66$) at 0.001 level of significance. The mean post test knowledge score of mothers of girls aged 6-10 years after administration of Planned Teaching Programme on precocious puberty is significantly higher than the mean pre test knowledge score. Hence the null hypothesis (H_0) is rejected and the research hypothesis is accepted. This showed that there was a significant improvement in the knowledge score of mothers after the Planned Teaching Programme.

Section 4: Association between the knowledge of mothers of girls aged 6-10 years and selected demographic variables.

There is no significant association between the demographic variables and the pretest knowledge of mothers. Hence the research hypothesis (H_2) rejected and null hypothesis (H_0) is accepted.

Conclusion

Parents especially mothers have significant role in providing appropriate care for the age range from birth till adolescent. The earlier occurrence of puberty was an ominous event that we can stop. What was striking in our continued lack of information on the chemicals in our environment and consequences they may have on human health. The answer, however must begin in the way we feed ourselves and our children. The most effective type of health care is vigilant and excellent self care. The government also needs to regulate more stringently the use and release of these chemicals into the environment. The mother can apply the knowledge effectively to promote children well being.

Recommendation

- Since it is a small sample study it can be replicated on a larger sample for generalizing the findings.
- An explorative study can be conducted to assess the problem faced by the child of Precocious puberty
- Qualitative research could be conducted on the same issue to explore the perceptions of the mothers regarding precocious

puberty explored in depth

- The study can be replicated both the parents , caregivers , teachers, L P school Students.

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