EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE OF MOTHERS REGARDING FACTORS ASSOCIATED WITH EARLY MENARCHE AMONG SCHOOL GOING CHILDREN.

G Nissy, Asso. Prof. Thomas Rekha

Abstract

A Pre experimental study was conducted to assess the effectiveness of structured teaching programme on knowledge of mothers regarding factors associated with early menarche among mothers of school going children in selected wards at Kulanada Grama Panchayath. The objectives of the study were to assess the level of knowledge, to determine the effectiveness of structure teaching programme on knowledge and to find out the association between pre test level of knowledge of mothers regarding early menarche with selected socio demographic variables. Conceptual frame work was based on Imogen M Kings Goal Attainment theory (1989). The study was conducted at Anganawadi in ward I, IV and VII of kulanada Grama Panchayath.60 mothers were selected by non probability convenience sampling. The pretest level of knowledge was assessed using structured knowledge questionnaire and structured teaching programme given. Paired 't' test was used to compare the knowledge scores obtained before and after structured teaching programme. The result was found that the mean posttest score 14.67 with SD 2.78 was significantly higher than the pretest mean score 9.08 with SD 2.10 with a mean difference of 5.59. The calculated 't' value 19.34 is significant at P <0.01 level with degree of freedom 59. Hence we can conclude that the structured teaching programme was very much effective in improving knowledge of mothers regarding factors associated with early menarche among school going children.

Keywords: Knowledge; mothers; school going children; early menarche.

Introduction

"An ounce of prevention is better than a pound of cure"[1]

Childhood to adulthood transition takes place during adolescence period which is characterized by major biological changes like physical growth, sexual maturation, and psycho-social development. As per World Health Organization (WHO), adolescence is the age group of 10-19 years. Adolescent girls constitute 1/5th of the total Indian population. It is marked by enhanced food requirement, increased basal metabolic and biochemical activities, endogenous processes like hormonal secretions with their influence on the various organ systems of which menarche is the most important event in case of adolescent girls that requires specific and special attention.[2]

Menarche is an important milestone in the development of female adolescent unlike other pubertal changes that are gradual and continuous, menarche is a distinct event with a sudden and dramatic onset.[3] Variation in the timing of puberty such as onset and timing of menarche are marked between well of and under privileged population with a marked delay in menarche reported in under privileged girls. Studies have suggested that menarche tends to appear earlier in life as the social, nutritional and economic condition of the Society improves. Early onset of menarche has been the risk factor for breast cancer, ovarian cancer and other diseases. It has been noted that the average age of menarche is gradually going down.

Background of the study

Early age at menarche has been associated with several health complications, including higher risk for obesity, cardiovascular disease, metabolic syndrome, type 2 diabetes, preeclampsia, and various forms of cancer. Early age at menarche is more common among black women relative to other racial groups. Studies have identified early age at menarche as a risk factor for the development of uterine leiomyomata, or fibroids.[3]

From a public health perspective, differences in the timing of menarche at the population level are important because they could be linked to differences in health outcomes. In adulthood, an earlier age at menarche is associated with breast and endometrial cancers, obesity, type II diabetes, cardiovascular disease, and all cause mortality.[4] In addition, early menarche has been related to risk factors during adolescence including alcohol and tobacco use, early sexual debut, and teenage pregnancy.[5]

Statement of the problem

A study to assess the effectiveness of structured teaching programme on knowledge of mothers regarding factors associated with early menarche among school going children in selected wards at Kulanada Grama Panchayath.

Objectives

1. To assess the pretest and posttest level of knowledge of mothers regarding factors associated with early menarche among school going children.

2. To assess the effectiveness of structured teaching programme on knowledge of mothers regarding factors associated with early menarche among school going children.

3. To find out the association between pretest level of knowledge of mothers regarding factors associated with early menarche with selected socio demographic variables.

Hypotheses

H_{01}: There will be no significant difference in mean pre and posttest level of knowledge of mothers regarding factors associated with early menarche among school going children.

H_1: There will be a significant difference in mean pre and posttest level of knowledge of mothers regarding factors associated with early menarche among school going children.

H_{02}: There will be no significant association with pretest level of knowledge of mothers regarding factors associated with early menarche among school going children and selected socio demographic variables.

H_2: There will be a significant association with pretest level of knowledge of mothers regarding factors associated with early menarche among school going children and selected socio demographic variables.

Assumption∕hypotheses

The study assumes that:-

- The mothers may have some knowledge regarding factors associated with early menarche among school going children.

- The structured teaching programme may help to increase the knowledge level of mothers regarding factors associated with early menarche among school going children.

Conceptual framework

Imogene M Kings Goal Attainment Theory

Variables

Demographic variables

In this study, the demographic variables were age, religion, type of family, dietary pattern, education of mother, occupation of mother, family income, number of girl children below 11 years of age, weekly consumption of chicken or meat, weekly consumption of block eggs, weekly consumption of junk foods, main source of information on early menarche

Dependent variable

Knowledge of mothers regarding factors associated with early menarche.

Independent variable

Structured teaching programme on factors associated with early menarche.

Setting of the study

Anganawadis in ward I, ward IV and ward VII of Kulanada Grama Panchayath, Pathanamthitta, Kerala.

Population

The population in this study was mothers who were belong to ward I, ward IV and ward VII of Kulanada Grama Panchayath.

Sample

60 mothers

Sampling technique

Non Probability Convenience sampling technique

Inclusion criteria

Mothers who are:-

- willing to participate
- available at the time of data collection
- having female school going children below 11 years of age.

Exclusion criteria

Mothers who are:-

- not able to read and write Malayalam/English.
- already underwent awareness programme on early menarche.
- in medical profession.

Tool and instruments

Tool 1: Structured questionnaire

Section A – Socio demographic proforma to collect the demographic data.

Section B - Structured knowledge questionnaire.

Technique: Structured interview schedule.

Development and selection of tool

The sources for the tool construction were:

- Review of literature from books, journals and other publications.
- Framing the outline of content of structured teaching programme.
- Preparation and organization of content.
- Discussion with doctors and experts in the field of obstetrics and pediatrics.
- Discussion with nursing experts which includes the guide and others.
- Review of the standardized tool and related tools developed by others.

Content validity of the instrument

In order to infer the content validity of the tools, the prepared instruments along with the problem statement, objectives, hypothesis, operational definitions, lesson plan were submitted to ten experts.

Reliability of the instrument

Split half method was used to estimate the homogeneity. The scores of the items were first divided into two equal halves with odd and even numbers and the reliability was found by using split half method r = 0.757.

Data collection process

Step 1 : Prior permission was obtained from the concerned authority of Kulanada Grama Panchayath. Sample selection was done by using non probability convenience sampling technique. On the basis of study subjects the samples are collected from wards by using interview method. Based on the ethical aspect of research, socio demographic data was collected using the structured questionnaire and pretest was conducted after obtaining informed consent from the subjects. The respondents were assured about the anonymity and confidentiality of the information provided by them. The pretest was done in ward I on 2-12-2016 and 3-12-2016, in ward IV on 6-12-2016 and 7-12-2016 and in ward VII on 9-12-2016 and 10-12-2016 using structured knowledge questionnaire prepared by the researcher and informed the date and venue of structured teaching programme.

Step 2: Structured teaching programme on factors associated with early menarche was given to the study subjects for duration of 2 hours by using relevant teaching aids at Anganawadi in ward I on 05/12/2016, in ward IV on 08/12/2016 and ward VII on 12/12/2016.

Step 3 : Post test was conducted for the study subjects by using structured knowledge questionnaire after 7th day of the structured teaching programme, in ward I on 13/12/2016, in ward IV on 16/12/2016 and in ward VII on 20/12/2016.

Data analysis

Descriptive: Frequency, percentage distribution, mean percentage and standard deviation.

Inferential: Paired 't' and chi-square test.

Results

The major findings of the study are presented below

Section I: Distribution of subjects according to socio demographic variables.

- More than half of the subjects (53.3%) were in the age group of 25-30 years.
- Majority of the subjects (85%) belonged to nuclear family.
- Less than half of the subjects (46.6%) were Hindu
- More than one third of the subjects (35%) had higher secondary education.
- Less than three fourth of the subjects (70%) were house wife.
- Less than half of the subjects (46.7%) had monthly income Rs. 20,000 – Rs. 30,000.
- Less than three fourth of the subjects (70%) have 1 girl child below 11 years of age.
- Less than half of the subjects (45%) take chicken or meat once or twice in a week.
- Less than half of the subjects (48.3%) take block eggs once or twice in a week.
- Less than two third of the subjects (60%) take junk foods once or twice in a week.
- Less than one third of the subjects (30%) got information from newspaper and magazines.

Section II: Analysis of Pre and posttest level of knowledge of mothers regarding factors associated with early menarche among school going children.

More than half (56.7%) of subjects` had average knowledge where as less than half (41.6%) of them had poor knowledge and very few (1.7%) of them had good knowledge regarding factors associated with early menarche among school going children before structured teaching programme. After conducting the structured teaching programme more than three fourth (75%) of them had average knowledge remaining one fourth (25%) of them had good knowledge and none of them had poor knowledge regarding factors associated with early menarche among school going children.

Section III: Comparison of pretest and posttest level of knowledge of mothers regarding factors associated with early menarche.

In pretest more than half (56.6%) of the subjects had average knowledge, less than half (41.6%) of them had poor knowledge and very few (1.8%) of them had good knowledge regarding factors associated with early menarche where as in posttest three fourth of the subjects (75%) had average knowledge, one fourth of the subjects (25%) had good knowledge and none of them had poor knowledge regarding factors associated with early menarche.

Section IV : Effectiveness of structured teaching programme on knowledge of mothers regarding factors associated with early menarche among school going children.

Paired 't' test was used to compare the knowledge scores obtained before and after structured teaching programme. It was found that the mean posttest score 14.67 with SD 2.78 was significantly higher than the pretest mean score 9.08 with SD 2.10 with a mean difference of 5.59. Since the calculated 't' value 19.34 which was greater than the table value (2.66) with degree of freedom 59 at p< 0.01 level of significance. Hence we can conclude that the structured teaching programme was very much effective in improving knowledge of mothers regarding factors associated with early menarche among school going children.

Section V: Association between mean pretest knowledge score of mothers regarding factors associated with early menarche and selected socio demographic variables.

The calculated chi-square value for weekly consumption of block eggs (17.758) was greater than the table value (12.59) with degree of freedom 6 at P<0.05 level of significance.

Hence the null hypothesis (H_{02}) can be rejected and research hypothesis (H_2) can be accepted. **Discussion**

Objective 1: To assess the mean pretest and mean posttest knowledge scores of mothers regarding factors associated with early menarche among school going children.

In this study, More than half (56.7%) of subjects` had average knowledge where as less than half (41.6%) of them had poor knowledge and very few (1.7%) of them had good knowledge regarding factors associated with early menarche among mothers of school going children before structured teaching programme. After conducting the structured teaching programme more than three fourth (75%) of them had average knowledge remaining one fourth (25%) of them had good knowledge and none of them had poor knowledge regarding factors associated with early menarche among mothers of school going children.

Objective 2: To assess the effectiveness of structured teaching programme on knowledge of mothers regarding factors associated with early menarche among school going children.

In this present study, Paired 't' test was used to compare the knowledge scores obtained before and after structured teaching programme. It was found that the mean posttest score 14.67 with SD 2.78 was significantly higher than the pretest mean score 9.08 with SD 2.10 with a mean difference of 5.59. Since the calculated 't' value 19.34 which was greater than the table value (2.66) with degree of freedom 59 at p< 0.01 level of significance. Hence we can conclude that the structured teaching programme was very much effective in improving knowledge of mothers regarding factors associated with early menarche among school going children.

Objective 3: To find out the association between pretest levels of knowledge of mothers regarding factors associated with early menarche among school going children with selected socio demographic variables.

Data presented in table 4 reveals that the calculated chi-square value for weekly consumption of block eggs (17.758) was greater than the table value (12.59) with degree of freedom 6 at P<0.05 level of significance.

Hence the null hypothesis (H_{02}) can be rejected and research hypothesis (H_2) can be accepted. So it can be concluded that there is a significant association between the pretest and posttest level of knowledge with weekly consumption of block eggs and there was no association with Age, type of family, educational status, occupational status, religion, family income per month, number of girl children below 11 years of age, weekly consumption of chicken or meat, weekly consumption of junk foods and main source of information.

Conclusion

The present study revealed that structured teaching programme was effective in improving knowledge of mothers. There is association between pretest level of knowledge with selected socio demographic variable. Findings of the study suggested that structured teaching programme can be used as an effective intervention programme to improve the knowledge level.

References

1. http://ehstoday.com/health/ounce-prevention-better-pound-cure.

2. Prado C Martinez, Menarche age as an indicator of socio-economic level in emigrants. Med J [internet] 4: 157-171 (1995).

3. Thomas F. Renaul, international variability of ages at menarche and menopause: patterns & main determinants Hum Biology [cited 2001 February; 73: 271-290.

4. Kaplowitz P, Pubertal development in girls: secular trends. Current Opinion in Obstetrics & Gynecology [cited 2006]; 18 (5): 487-491.

5. Shahabuddin AK, Adolescent nutrition in a rural community in Bangladesh. Indian J Pediatrics [cited 2000]; 67: 93