A pre-experimental study to assess the effectiveness of planned teaching program on knowledge regarding pubertal changes among 8th standard girls in selected schools of Kanpur, Uttar Pradesh

ABSTRACT

Beginning from the day of conception even after birth and till death people go through many changes in life throughout various stages. The child first grows rapidly and they enjoy every drop of their life as they grow. But everything doesn’t feel to be normal as puberty begin. Although it was expected it feels so different and life will change. The word puberty is derived from the Latin word “Pubertas” which means the age of manhood. It refers to the physical rather than behavioral changes which occur when the individual becomes sexually mature and is capable of producing offsprings. Puberty is defined as a sequence of events by which the individual is transformed into a young adult by a series of biological changes. Adolescence begins with the onset of puberty. Adolescence is a stage of human development following early childhood. It commonly ends with the beginning of puberty, but may also be defined as ending with the start of the teenage year. Being prepubescent is not being the same thing as being pre-adolescent. Instead, pre-pubescent is a term of boys and girls who have not developed secondary sex characteristics, while pre-adolescent girls are generally defined as those ranging from 10 – 14 year. The point at which a child becomes a pre-adolescent is defined by the onset of pubertal or the beginning of the teenage stage. While known as pre-adolescents in psychology, the term pre-teens, preteenager or tween are common in every day used. Adolescents children, in fact, have a different view of the world from younger children in a more significant way. Typically, there is a more realistic view of life then instance fantasy-oriented world of earliest childhood. Adolescents have more mature sensible, realistic thoughts and actions: ‘The most “sensible” stage of development for the child is much less then pre-adolescent stage’. Adolescents may well view human relationships differently. Alongside that, they may begin to develop a sense of self-identity, and to have increased feelings of self-identity, and to have increased feelings of independence. Many pre adolescents will often start to question their own home life and surroundings around this time and they may also start to form opinions that may differ from their upbringing in regards to issues such as politics, religion, sexuality, and gender roles. It is the period of rapid physical, psychological, emotional, and behavioral changes. In physical changes includes growth in height and weight, breast changes like the pigmentation of the areola, enlargement of breast tissue and nipple, the appearance of pubic hair, activation of axillary sweat glands, the appearance of axillary hair, and the onset of menstruations. Emotional changes include depression, anger, irritability, fear, and anxiety. Another study shows that 28% do not like the changes due to puberty, in their body. On the other hands, studies concluded that reproductive health is ignored and queries go unanswered. Adolescence is a period of transition between childhood and adulthood. A time of physical, cognitive, social and emotional maturation as a boy prepare for manhood. Girls are future mother going through the puberty can challenging time for any girl. The precise boundaries for adolescents are difficult to define, but this period is customarily viewed as beginning with the gradual appearance of secondary sexual characteristics. Pre-adolescence which literally means, “to grow into maturity”. Therefore, pre-adolescents possess some knowledge about reproductive health and effective education to encourage healthy behavior. The most dramatic changes related to adolescence are the physical changes that occur as a part of the pubertal process. Puberty includes maturational, hormonal and growth process that occurs when the reproductive organ begins to functions and the secondary sexual characteristics develop during puberty, growth is disorganized confusing and rapid, compared to the relatively stable earlier period of childhood. When pubescent children are not informed about changes that take place at puberty, it is traumatic to undergo these changes and may develop an unfavorable attitude towards these changes.

Keywords— Preteenager, Childhood, Preadolescents, Psychological

1. INTRODUCTION

Puberty is the time of change for every girl. Due to lack of knowledge regarding puberty, the girls go through the physiological and emotional stresses and malpractices. In Indian society, most children's do not get adequate knowledge about their own bodies,
physiological changes and about menstruation. If we are providing accurate knowledge to the girls it will be helpful at the time of puberty.

During puberty, dramatic changes take place in a girl like growth spurts, reproductive system development and appearance of secondary sexual characteristics.

A cross-sectional study was conducted in Malaysia to determine perception toward menstruation and pre-menstrual syndrome to provide inside to menstrual-related education information in order to help adolescents girls manage the physical and psychological changes associated with menstruation 80% of girls are having deficient knowledge regarding menstruation and 20% having minimal knowledge.

Puberty and adolescent can be a wild ride for girls, especially when their first period arrives in many cultures the onset of puberty is a hugely significant life transition and a focus for all sorts of celebrations and rituals. Majority of girls usually lack scientific knowledge regarding puberty, menstruations and its hygienic practices. They are reluctant to discuss disembarrassing with their care-providers and often hesitate to seek help regarding menstrual problem from external sources. So girls should be educated in pre-adolescents period itself.

There is a need to give knowledge regarding pubertal changes among girls to make them aware of physical changes, mental or intellectual changes, emotional changes, social changes. Physical changes: In girls breast developed, hips become wider than the shoulder, hair grows on the underarms and pubic area. Mental or intellectual changes like the development of their intellect ability take pre-adolescents less accepting of what others say, make better decisions, control and coordinate their thoughts.

Emotional changes like adolescents are more emotional and this makes them open to being hurt or in danger. Girls become self-conscious because of the changes that are happening and feeling of insecurity.

Social changes like very self-conscious. They consider approval of friends and other pre-adolescents or peer as very important; enjoy with friends, pre-adolescents who grow up with family member showing love, guidance, and support for each other are likely to get involved with bad company and engage with the fight, smoking, and drinking.

2. REVIEW OF LITERATURE

Review of literature refers to the activities in the identification and searching for information on a topic and developing a comprehensive picture of the state of knowledge and topic. The review of the literature was undertaken for the purpose of defining the problem, clarifying the need for research and exploring what has been studied so far. The review was done by studying textbook, reviewing studied, conducted by authors, journals, articles, and reports.

- Review of literature related to the present study is organized under the following headlines:
- Review of literature related to knowledge and attitude regarding pubertal changes.
- Review of literature related to the effectiveness of planned teaching program.
- Review of literature related to knowledge and perception of school adolescents regarding pubertal changes.

2.1 Review of literature related to knowledge on pubertal changes

Rani Manisha, Sheoran Poonam, Yogesh Kumar, and Navjot Singh

They conducted a quasi-experimental study to assess the knowledge and attitude regarding Pubertal changes among Pre-adolescent girls in rural area India. The total sample size was 100. Which were selected by purposive sampling from two different rural govt. school of Ambala district. The knowledge and attitude of both schools were assessed using structured knowledge questionnaire. On the same day of pre-test; Pubertal Preparedness Programme (PPP) was administered only to the experimental group and on 12th day frequently asked question session was held only for the experimental group. After 28 days, post-test was taken to both the group. t value of pre-test score of pre-adolescent girls were 1.95 vs 1.75 was found to be non-significance 0.05 level of significance. Finding of unpaired ‘T’ values of post-test knowledge and attitude score were 14.25 vs 10.98 at 0.05 level of significance. Then knowledge and attitude of pre-adolescent girls were improved pubertal preparedness program.

Rani Manisha, Sheoran Poonam & Kumar Yogesh (2012)

They conducted a descriptive study to assess the knowledge and attitude regarding pubertal changes among pre-adolescents from government school of Ambala district. The sampling techniques (purposive sampling techniques). Their sample size was 204 pre-adolescents( 104 girls, 100 boys). The knowledge and attitude of both groups were assessed using structured knowledge questionnaire, on the same day of pre-test, pubertal preparedness program was administered only to the experimental group and on 12th day frequently asked question reinforcement session was held only for the experimental group. After 20 days, post-test was taken to both groups. findings of unpaired ‘t’ value of post-test knowledge and attitude scores of pre-adolescent boys were 14.25 vs 10.98 respectively in experimental and comparison/control/control group were found significant at 0.05 level of significance those, knowledge and attitude of pre-adolescent boys were improved with Pubertal preparedness program (PPP) and frequently asked question (FAQs) session.

2.2 Review of literature related to effectiveness of planned teaching programme

Shettykuma Ajith, George, P. Alphoni, K. J Beena

A pre-experimental study to assess the effectiveness of planned teaching program on knowledge regarding pubertal changes among adolescent girls in selected high school of Udupi district. The study participant (100) were assessed through a questionnaire and selected by purposing sampling. Data shows that the mean knowledge score of the group before the intervention was 16.96 _ 3.816. for an intervention ( The planned teaching program) the mean knowledge score was 24.05 _ 3.036. which
Meenakshy Mrs., Santhakumari Surya, Saramma D.
A Quasi-experimental study to assess the effectiveness of structured teaching program on knowledge regarding puberty among girls in selected schools at Varkala. The sample size is 80 pre-adolescent girls age group 9–10 year, studying in 5th standard in selected school at Varkala-taluk. Data analysis revealed that there was a significant improvement in the level of knowledge of pre-adolescent girls after planned teaching program. There was no significant association between the level of knowledge of pre-adolescent girls and selected socio-demographic variables.

2.3 Review of literature related to knowledge and perception of school adolescents regarding pubertal changes
Singh Kumar Kaushal Kendra, Srivastava Ujjaval
A cross-sectional study was conducted to explore knowledge and perceptions of school Adolescents regarding pubertal changes and Reproductive health in the urban area of Varanasi city of Uttar Pradesh, India. It consists of 650 boys and 1022 girls of 9th and 11th standard of both Hindi and English medium schools, both girls and boys are interviewed by a self-administered planned questionnaire maintaining a high level of confidentiality the result shows that adolescents of Hindi medium school are more ignorant regarding sexual health than those of English medium schools. The majority of girls gather information on sex from internet websites over two-third girls discuss their personal problem by their parents. Only 16.4% Hindi medium school girls know that the mother is responsible for the determination of the gender of the child, and 60% of girls have knowledge of about menstruation. The conclusion revealed that knowledge of school-going adolescent girls are poor about pubertal changes and reproductive health issues.

3. STATEMENT OF PROBLEM
A Pre-experimental study to assess the effectiveness of planned teaching program on knowledge regarding pubertal changes among 8th standard girls in selected schools of Bareilly (U.P).

4. AIM
The aim of the study to assess the effectiveness of planned teaching program on knowledge regarding pubertal changes among 8th standard girls in a selected school of Bareilly (UP).

5. OBJECTIVES
- To assess the knowledge regarding pubertal changes among 8th standard girls.
- To evaluate the effectiveness of planned teaching program regarding pubertal changes among 8th standard girls.
- To find out the association between pre-test knowledge score with their selected demographic variables.

6. OPERATIONAL DEFINITIONS
- Assess: It refers to the process used to identify the level of knowledge of pre-adolescent girls regarding pubertal changes.
- Effectiveness: In this study, effectiveness is the impact of planned teaching program on knowledge level regarding pubertal changes among 8th standard girls.
- Planned teaching program: It refers to a systematic organized teaching program prepared by the investigators and validated by experts containing information about pubertal changes.
- Knowledge: knowledge refers to the information gained during the study regarding pubertal changes among 8th standard girls.
- Pubertal changes: It refers to sexual and other physical maturation that occurs during puberty as a result of hormonal changes in 8th standard girls.

7. HYPOTHESIS
H0: There will be no significant association between the knowledge of 8th standard girls with their selected demographic variables.
H1: There will be a significant difference between pre-test and post-test knowledge of 8th standard girls.

8. VARIABLES UNDER STUDY
Variables are the qualities, properties or characteristics of persons, thing or situation that change or vary.
(a) Independent variables: According to Treece and Treece (1988), the independent variable is the one variable that stands alone and not dependent on any other. It is the cause of the action. In this study planned teaching program is the independent variable.
(b) Dependent variables: According to Treece and Treece, 1988 Dependent variables are the effect of the independent variable and cannot exist by itself. In this study, the level of knowledge of girls is the dependent variable.
(c) Demographical variables: An uncontrolled variable that greatly influences the results of the study is called the demographic variables. In this study, demographic variables are religion, the profession of the mother, the profession of father, type of family, source of information.
9.1 Religion
   (a) Hindu
   (b) Muslim
   (c) Sikh
   (d) Christian

9.2 Profession of mother
   (a) Private job
   (b) Govt. job
   (c) Housewife
   (d) Other

9.3 Profession of father
   (a) Private job
   (b) Govt. job
   (c) Self-employed
   (d) Other

9.4 Types of family
   (a) Nuclear family
   (b) Joint family
   (c) Extended family

9.5 Source of information
   (a) Mass media
   (b) Family member / Friends
   (c) Schoolteacher
   (d) Health professionals

10. MATERIAL AND METHODS
10.1 Quantitative research approach
Research design: A research design selected for study is “Pre- experimental research” to assess the effectiveness of planned teaching program on knowledge regarding pubertal changes among 8th standard girls. One group pre-test and post-test design.

Settings of the study: Selected schools of Kanpur (UP).
Population: 8th standard girls.
Sample: 8th standard girls in selected schools of Kanpur (UP).
Sampling techniques: The sample will be selected by non-probability (Convenient sample technique) as it will be the most suitable one for the present study.
Sample size: The sample size of the present study consists of 40 girls studying in 8th standard.
Sample criteria:
   (a) Inclusion criteria: Pre-adolescents girls who are willing to participate in the study.
   (b) Exclusion criteria: Pre-adolescents girls who are not willing to participate in the study.

10.2 Description of the tool
The tool may have two sections:
   • Section 1: Demographic data: This section of the tool consists of items pertaining of demographical variables of girls like, religion, the profession of the mother, a profession of father, type of family, source of information, regarding pubertal changes among 8th standard girls.
   • Section 2: knowledge questionnaire on pubertal changes: This section consists of knowledge questionnaire to assess the pre-test and post-test knowledge regarding pubertal changes among 8th standard girls in a selected school of Kanpur (UP), a total number of the questionnaire is 30 related to pubertal changes.

10.3 Method of data collection
Interview method, Data collection procedures:
Step 1: Administration of questionnaires to all 40 subjects to assess pre-test knowledge regarding pubertal changes among 8th standard girls.
Step 2: Implementation of planned teaching program on knowledge regarding pubertal changes among 8th standard girls.
Step 3: Post-test will be conducted using the same questionnaires after one week of implementation of the planned teaching program.

10.4 Reliability and validity
Content validity: Validity refers to whether an instrument measures accurately what it is supposed to be measured. Fest (1995) The content validity of the planned questionnaire will be determined by the expert’s opinion. The expert will be requested to give valuable suggestion for the purpose of developing a better relevant tool to perform the study as per suggestion changes will be incorporated.
10.5 Pilot study
• A pilot study is a small skill version or trial run of measure study. Kerlinger NF, (1973)
• A pilot study will be done in the selected school of Bareilly. 10% of the total sample size will be taken for the pilot study. After obtaining informed consent the tool will be administering to the 8th standard girls who fulfilling inclusion criteria. All the collected data will be analyzed by descriptive and inferential statistics.

10.6 Data analysis
• Data analysis means the computation of certain indices or measures along searching for patterns relationship that exists among the data groups. It involves estimating the value of unknown parameters of the populations and testing of hypothesis for drawing inferences. Kothari C. R (1995)
• Analysis of data will be done in accordance with the objectives. It will be done by using the descriptive and inferential statistics that is by calculating mean, frequency, percentage distribution, t-test to identify the effectiveness & chi-square test for association of planned teaching program regarding pubertal changes among 8th standard girls with selected variables. Reliability of the tool was estimated by split-half formula.
• The demographic data are represented in the form of tables and will be represented by using graph and pie diagrams. The data knowledge would be analyzed by the knowledge score.

10.7 Ethical consideration
• Administrative permission will be taken from, Principal of Excel College of Nursing.
• Clearance will be taken from the Principal of selected schools of Kanpur (U.P.).
• Informed consent to be taken from the parents.
• Ascent form will be taken from the samples.
• Confidentiality and anonymity of the subject will be maintained throughout the study.

11. REFERENCES
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