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A Pre-Experimental Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Teenage Pregnancy and its Complication Among Adolescent Girls in Selected School of Bhilai (C.G.)

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***Abstract*: *Background:* Teenage pregnancy is one of the burning issue and emerging as a serious problem today all over the world and more so, in the developing countries like India, as early marriages and early pregnancy are the accepted cultural norms of our society. In recent years the incidence is increasing due to early onset of puberty. Early sexual activity in girls and relative lack of education on contraceptive methods. The teenage period itself constitutes a high risk group requiring high priority services. An extensive review of literature was done which enable the investigator to early depth the selected problem, to develop conceptual frame work, to construct the tool, analysis of data and for interpretation. *Objectives:* To assess the pre-test and post test knowledge regarding teenage pregnancy and its complication among adolescent girls. To assess the effectiveness of planned teaching programme regarding teenage pregnancy and its complication among adolescent girls. To find out the association between pre-test knowledge score with selected socio - demographic variable regarding teenage pregnancy and its complication among adolescent girls. *Hypothesis* H1: There is significant difference between pre and post test knowledge regarding teenage pregnancy and its complication among adolescent girl. H2: There is significant effectiveness of planned teaching programme regarding teenage pregnancy and its complication among adolescent girl. H3: There is significant association of pre-test knowledge score with selected demographic variable. *Material and Methods:* The conceptual frame work of the study was based on Calli Roys adaptation model, one group pre test, post test research design was adopted to assess the knowledge regarding teenage pregnancy and its complication among adolescent girl of Govt higher secondary school, sector 9 were selected by using non probability purposive sampling. A self-structured questionnaire was prepare to assess the level pf knowledge, the tool consist of two section A and B . A comprised of socio demographic data, B comprised of self-structure questionnaire which is also divided into four part, the content validity was obtained from 8 expert and the reliability was obtained from Karl pearson formula with r=0.97. Feasibility of the study was confirmed by pilot study which was done at Vidhaya Niketan School Amdi Nagar, Huduco, Bhilai Nagar, C.G., the main study was done on adolescent girls of Govt higher secondary school sector 9. The data obtained was analyzed and interpreted in term of objectives and hypothesis of the study, descriptive and inferential statistics were used for data analysis the level of significant was set at 1% level. Result of the study revealed that most of the adolescent girl had average knowledge regarding teenage pregnancy and its complication before administration of planned teaching programme, the pretest knowledge mean score calculated is 54.16 and post test was 78.47 and the 't' value calculated 6.24 which shows that the difference in mean of pre test and post test which is highly significant, there is significant association between age and caste. Hence it is calculated that the planned teaching programme and self-structure questionnaire developed by the researcher was found to be effective in improving the knowledge regarding teenage pregnancy and its complication among adolescent girl the finding of the study has implications in nursing education, practice, nursing administration and nursing research.**

***Keywords*: Knowledge, effectiveness, adolescent girl, panned teaching program, teenage pregnancy.**

1. Introduction

Teenage Pregnancy is defined as an under-aged girl becoming pregnant. The definition of "teens" according to Oxford Dictionary is, years of one's age from 13-19 years, both inclusive. UNICEF (2009) data that effect on adolescent mother of teenage pregnancy lead the medical problems and complication of teenage pregnancy as anemia, preterm delivery, abortion. Preterm delivery cases within 37 weeks of gestation. Below 10 gm. of Hb was considered as anaemia. The prevalence of anemia was quite high (56.66%) in teenage pregnancy. However severe (<7.9 gm) anemia was observed in 55.67% cases. Anemia in 102 (56.67%) indicates as most prevalent in the study. The complication of teenage pregnancy are preterm delivery 20 (11.11%) and abortion 58 (32.22 %). WHO report shows 36-40 % are anaemic in the developing countries due to iron deficiency and it is common complication

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of teenage pregnancy. Incidence according to the WHO 2008 an estimated 2.0-2.4 million adolescents resort to abortion. In India alone, 30% of all induced abortions are performed on women who are under 20. A report by 'Save the Children' found that annually 13 million children are born to women under 20 years, worldwide. More than 90% of these births occur in developing countries. Complications of pregnancy and childbirth are the leading cause of mortality among women between 15-19 years in such areas.20 In India, teenage pregnancy constitutes 8-14% of total pregnancies. Chhattisgarh 2015-16 National Family Health Survey (NFHS-4) Teenage pregnancy Among young women age 15-19 in Chhattisgarh, 5 percent have already begun childbearing, that is, they have already had a live birth or are pregnant with their first child, down from 15 percent in NFHS-3. Less than one percent of women age 15-16 years have started childbearing, but this proportion increases sharply to 6 percent among women who are 18 years old and to 17 percent among women who are 19 years old. Young women who had no schooling or less than five years of schooling are more than five times as likely to have begun childbearing as young women with 12 or more years of schooling

Objectives:

1. To assess the pre-test and post test knowledge regarding teenage pregnancy and its complication among adolescent girls.
2. To assess the effectiveness of planned teaching programme regarding teenage pregnancy and its complication among adolescent girls.
3. To find out the association between pre-test knowledge score with selected socio - demographic variable regarding teenage pregnancy and its complication among adolescent girls.

Hypothesis:

1. H1: There is significant difference between pre and post test knowledge regarding teenage pregnancy and its complication among adolescent girl.
2. H2: There is significant effectiveness of planned teaching programme regarding teenage pregnancy and its complication among adolescent girl.
3. H3: There is significant association of pre-test knowledge score with selected demographic variable.

2. Material and Method

A pre experimental study with one group pre test, post test design was used for assessing the effectiveness of educational programme regarding teenage pregnancy and its complication among adolescent girls of selected school of Bhilai sector 9. In this study sample are adolescent girl comprised of 60 adolescent, the method of the sample selection of purposive sampling, the tools had two sections. Section A socio demographic profile and section B was structure questionnaire which consist of four part, Part I basic concept of teenage pregnancy, Part II contributing factor of teenage pregnancy part III Impact on mother and baby part iv prevention and management.

The analysed data has been organised and presented in the following section, Section I-Distribution of subjects according to sociodemographic variables in frequency and percentage.

Section-II: Area wise analysis of pretest and posttest knowledge score regarding teenage pregnancy and its complication among adolescent girls as per criteria, Overall Analysis of pretest and posttest knowledge score regarding teenage Pregnancy and its complication among adolescent girls as per criteria, Section-III: Analysis to evaluate effectiveness of planned teaching programme regarding teenage pregnancy and its complication among adolescent girls on level of knowledge using paired t-test. Section-IV: Chi-square analysis to find out association of pretest knowledge score with selected sociodemographic variable regarding teenage pregnancy and its complication among adolescent girls.

Socio-demographic data:

In relation to age, maximum 37(61.7%) where in the age group of 14-16 year and 23(38.33%) where in age group of 17-19 year. With regards to religion that maximum adolescent girls, 54(90%) were Hindu 3(5%) are Christian & Muslim finding regarding Cast that maximum,24(40%) Were belong to OBC, 22(36%) belong to S.T & 10(17%) Were belong to S.C & 4(7%) Were belong to General .With regards to Education status of father , Maximum 25(42%) were educated to primary school ,22(36%) were educated upto middle school & 8 (14%) were educated to high school & 5(8%) were educated to above. Finding regarding education of mother maximum 21(35%) were educated up to primary school and high school & 12(20%) were educated upto middle school, 6(10%) were educated up to above .As per occupation status of father of adolescents girl, 21(35%) were private, 18(30%) were self-employed & 11(18%) were government & 10(17%) were employed .Finding regarding occupation of mother of adolescent girls maximum mother 32(54%) were housewife and 13(23%) were self-employed private & 8(14%) were private and 5(9%) were government. In relation to monthly income maximum 33(55%) were belong to monthly income 5000-10,000 and 17(29%) were belong to 10,000-20,000and 3(5%) were belong to 20,000-25000 and 7(11%) belong to above 25000. In relation to previous knowledge maximum 60(100%) having knowledge regarding teenage pregnancy and its complication. In relation to source of knowledge maximum 30 (50%) were school, college, 14(24%) adolescent girl got knowledge from family member /relatives, 8(13%) were mass media & health personnel have less knowledge regarding teenage pregnancy and its complication.

Table 1
Overall analysis pre test and post test knowledge score of subject by frequency and percentage

S.No.	Scoring criteria over all	PRE TEST				POST TEST			
		Frequency	Percentage	Mean	Mean%	Frequency	Percentage	Mean	Mean%
1	Poor knowledge (0-12)	0	0	0	0	0	0	0	0
2	Average knowledge (13-24)	14	23.3	27.35	75.9	0	0	0	0
3	Good knowledge (25-36)	46	76.7	19.5	54.16	60	100	28.25	78.47

Area wise analysis of pretest and posttest knowledge score of subjects regarding teenage pregnancy and its complication among adolescent girls.

Table 1, Fig. 1, shows the area wise analysis of knowledge score. In pre-test the area of basic concept, contributing factor, impact on mother and child and preventive measures regarding teenage pregnancy and its Management the mean score is (1.43, 7.08, 5.45, and 7.36) and mean score percentage are (47.6%, 59%, 60.5% and 61.33%) SD are (0.84, 2.08, 1.93, and 1.78) respectively. While in the posttest the mean score are (2.15, 9.51, 7.26, and 9.31) and mean score percentage are (81.66%, 79.25%, 80.66% and 77.58%) respectively. The SD are (0.89, 1.83, 1.35, and 2.11) respectively. The postest mean score and mean score percentage is comparatively higher than the pretest mean score and mean score percentage.

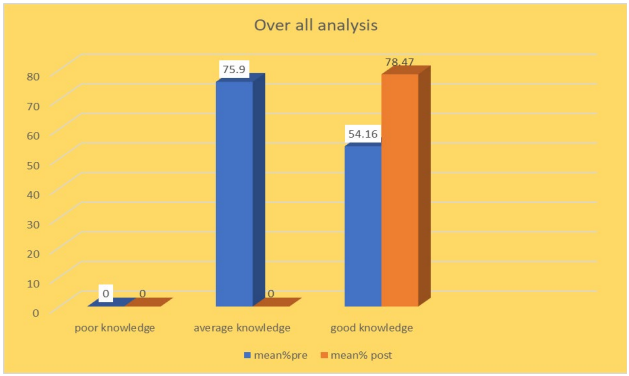

Fig. 1.

Among 60 adolescent girls, in pretest 46(54.16%) girls have good knowledge regarding teenage pregnancy, 14(75.9%) have average knowledge regarding teenage pregnancy. However, in the post test majority of girls 0(0%) scored average knowledge, 60(78.47%) have good knowledge regarding teenage pregnancy & its complication. Section III-Paired t-test to evaluate effectiveness of planned teaching programme regarding teenage pregnancy and its complication on level of knowledge. Depicts the effectiveness of planned teaching programme in improving the level of knowledge regarding teenage pregnancy and its complication among adolescent girl in school. The mean score percentage of pretest is 59.25% while post test 78.47%. the standard deviation of Pretest is 4.19 & post test is 3.78 , there is significant gain in post test knowledge score in after the administration of planned teaching programme as the calculated "t" value is (6.24) is greater than the table value (9) at p>0.05% level of significance & DF 59. Hence, the hypothesis H2 (There will be significant effectiveness of planned teaching programme regarding teenage pregnancy and its complication among adolescent girl) is accepted at p>0.05%, as the mean post test knowledge score of adolescent girl regarding teenage pregnancy and its complication is significantly higher than mean pretest knowledge at level of p<0.05.

Association between pretest knowledge score with selected socio-demographic variable regarding teenage pregnancy and its complication. Depicts Clearly that there is significant association between pretest knowledge and selected sociodemographic variable in relation to Age and caste to knowledge on teenage pregnancy and its complication as the calculated chi-square value is (60.2,13.96) is greater than table value (12.59) respectively at the degree of freedom df=6,While there is no significant association between pretest knowledge score with selected sociodemographic variable in relation to religion, education of father, education of mother, occupation of father, occupation of mother, monthly income, information regarding teenage pregnancy, previous knowledge, the calculated chi square value is (8.23, 5.14, 6.76, 9.09, 6.06, 9.21, 10.65) and the table value is (12.59, 5.99) respectively at the df=6, 2. Hence the hypothesis H3 is accepted in regards to age and caste and rejected in regards to religion, education of father, education of mother, occupation of father, occupation of mother, monthly income, information regarding teenage pregnancy, previous knowledge.

3. Discussion

Section-I: Distribution of subjects according to sociodemographic variables in frequency and percentage.

Above finding is supported by Bhalerao, showing that 7% belong to 15-17 years. But compared to a study done by Kumar Ashok 2007, 33% are 15-17 years, and our study results show improvement. Results of our study show an increase in trend compared to the study of Renuka 2008, in which only 2% are in the 15-17 years category. Soula O et al.'s (2001) study included pregnant teenagers under 15 years of age, whereas Goonewardane (2005) studied teenagers in two groups, 13-16 years and 17-19 years. The findings in these studies on teenage pregnancy varied depending on the upper limit of age taken in those studies. For example, the result of our study showing 26% less than 18 years of age might be because our study was done in a backward area, where the literacy rate is too low, considering teenage pregnancy as a norm.

Section-II: The first objective was to assess the pretest and posttest knowledge regarding teenage pregnancy and its complication among adolescent girls.

Area wise analysis of pretest and posttest knowledge score of subject regarding teenage pregnancy and its complication among adolescent girls. In pre-test the area of basic concept, contributing factor, impact on mother and child and preventive measures regarding teenage pregnancy and its Management the mean score is (1.43, 7.08, 5.45, and 7.36) and mean score percentage are (47.6%, 59%, 60.5% and 61.33%) SD are (0.84, 2.08, 1.93, and 1.78) respectively. While in the posttest the mean score are (2.15, 9.51, 7.26, and 9.31) and mean score percentage are (81.66%, 79.25%, 80.66% and 77.58%) respectively. The SD are (0.89, 1.83, 1.35, and 2.11) respectively. The postest mean score and mean score percentage is comparatively higher than the pretest mean score and mean score percentage. From the above finding it can been seen that the posttest mean score percentage is highest in the area of Basic concept of teenage pregnancy and its complication (81.66%) after administration of planned teaching programme and probably because the adolescent girls got the previous knowledge from their family member and from mass media regarding teenage pregnancy and its complication.

Above finding is supported by the study Chahande MS

(2000) has reported an incidence of 5.4% still births in study group Vs 2.4% in control group. Studies by Sharma AK (1999) and Ambedkar (1999) also support this. There was no significant difference in complications like abruption, malpresentations, twins, PROM, abruption and medical disorders between the study and control group.

The overall pretest and post knowledge score regarding teenage pregnancy and its complication among adolescent girls Among 60 adolescent girls, in pretest 46(54.16%) girls have good knowledge regarding teenage pregnancy, 14(75.9%) have average knowledge regarding teenage pregnancy. However, in the post test majority of girls 0(0%) scored average knowledge, 60(78.47%) have good knowledge regarding teenage pregnancy & its complication. In Pretest, majority of girls had poor knowledge level because of lack of awareness regarding teenage pregnancy and its complication while in post test ,there is increase in the knowledge level because of the planned teaching programme had helped them to gain knowledge.

The above study is supported by (March of Dimes) 2009. Antenatal care Pregnant teenagers are least likely of all maternal age group to get early and regular prenatal care. In the present study, there were 18.8% of unbooked cases with less than three antenatal visits throughout pregnancy. Maternal complications like anaemia, pre-eclampsia and eclampsia were more in unbooked cases. Shobana patted et al. found 40.4% of pregnant teenager to have had inadequate or nil antenatal checkup. All of them were immunized against tetanus.

Section-III: With the view to achieve the second objective: Test to evaluate effectiveness of planned teaching programme regarding teenage pregnancy and its complication on level of knowledge was analysed. Analysis to evaluate effectiveness of planned teaching programme regarding teenage pregnancy and its complication on level of knowledge .It shows the "t" value obtained from the pre test knowledge of adolescent girls (mean =21.33, mean%=59.25% & S.D =4.19) and posttest knowledge of adolescent girls (mean=28.25, mean%=78.47%, SD= 3.78) was 6.24 at df 59 and it was significant i.e. greater than the table value 5.0 at the level 0.05 level of significant (p> 0.05). which represent that there is significant gain in knowledge score in posttest after the administration of intervention planned teaching programme regarding teenage pregnancy and its complication on level of knowledge.

The above finding is supported by NS Nair conducted (1999) an experimental study to evaluate the effectiveness of planned teaching programme on selected aspects of teenage pregnancy among the adolescent girls. Findings of the study shows that; in the pre test, 19.77% of the subjects had poor knowledge, whereas post test scores showed that 96.5% of the subjects had good knowledge and 3.49% of the subjects had an average knowledge regarding reproductive health and adolescent pregnancy. The post-test 21.11+3.26 this difference of the mean was found to be a true difference + (85) = 31.30 at 0.0001 level of significance. The 't' value of 31.30 was significant at 0.0001 level of significance. With the view to achieve the second objective : Test to evaluate effectiveness of planned teaching programme regarding teenage pregnancy and its complication on level of knowledge was analysed. It shows the "t" value obtained from the pre test knowledge of adolescent girls (mean =21.33, mean%= 59.25% & S.D=4.19) and posttest knowledge of adolescent girls (mean=28.25, mean%=78.47%, SD= 3.78) was 6.24 at df 59 and it was significant i.e., greater than the table value 5.0 at the level 0.05 level of significant (p> 0.05). which represent that there is significant gain in knowledge score in posttest after the administration of intervention planned teaching programme regarding teenage pregnancy and its complication on level of knowledge .

Section-IV: The fourth objective of the study was to find out the association between pretest knowledge scores with selected sociodemographic variable regarding teenage pregnancy and its complication among adolescent girls in selected school (C.G.).

Analysis to find out association of pretest knowledge score regarding teenage pregnancy and sociodemographic variable. its complication with selected sociodemographic variable. There is significant association between pre test knowledge and selected sociodemographic variable in relation to Age and caste to knowledge on teenage pregnancy and its complication as the calculated chi-square value is (60.2, 13.96) is greater than table value (12.59) respectively at the degree of freedom df=6.While there is no significant association between pretest knowledge score with selected sociodemographic variable in relation to religion, education of father, education of mother, occupation of father, occupation of mother, monthly income, information regarding teenage pregnancy, previous knowledge, the calculated chi square value is (8.23, 5.14, 6.76, 9.09, 6.06, 9.21, 10.65) and the table value is (12.59 ,5.99) respectively at the df =6, 2.

The above finding is supported by Nyakubega Peter (2008) conducted a cross-sectional descriptive analytical study on factors associated with adolescent pregnancies among secondary school students at Tanga. Low socioeconomic status was found to be an important cause for adolescent pregnancies as 57.1% of respondents suggested. Other factors responsible were luxury and deprivation of education to girls (43.5% and 16.5% respectively). Source of reproductive health education was contrary to most previous studies as 82.6% reported to get it from parents and health centres, while schools and peer groups contributed only 29.1% and 7.2% respectively.

4. Implications and Conclusion

The findings of the study has an implications for the nursing profession. The present study has several implication for nursing education, nursing practice, nursing administration and nursing research.

Nursing practice:

Educational programme related to teenage pregnancy and its complication can be conducted in the clinical field.

- The present study would help the nurse to understand the level of knowledge of teenage pregnancy and its complication.
- Nursing personnel should be able to educate about teenage pregnancy and its complication to the nursing student .
- The nurse at clinical setting can identify the teenage

girls who is at risk of developing consequences related to teenage pregnancy and its complication.

Nursing administration:

- Nursing administrator can plan various in service training programme for the staff of clinical setting.
- They should develop policies guidelines and relevant information about sex education for the adolescent girls.
- A periodic evaluation and supervision should done by the nursing administrator to improve the health care of the consumer's knowledge.

Nursing education:

- Students must be taught regarding sex education, teenage pregnancy and its complication so that they may implicate or apply this knowledge to their daily life.
- The nurse educator should emphasize the ill-effects of physical inactivity & importance of physical activity after complication of teenage pregnancy.
- Short term- course or in-service education programmes can be organized for nursing personnel to update their clinical expertise in providing specialized care.

Nursing research:

The research plays an important role to improve the body of knowledge in nursing:

- Research should be done on knowledge to increase awareness among staff nurses on teenage pregnancy and its complication.
- Present study would help nurses and others health care personnel to understand level of knowledge of teenage pregnancy and its complication.
- Extensive research is needed in the area so that associated complication of teenage pregnancy can be prevented.

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