

A study to assess the effectiveness of planned health education programme on knowledge regarding harmful effects of teenage pregnancy among adolescent girls in selected schools of east khasi hills, Meghalaya.

¹Mrs. Jodibala Haobijam, Guide, Lecturer, College of Nursing, NEIGRIHMS

²Mrs. Jyotima B. Handique, Co-Guide, Tutor, College of Nursing, NEIGRIHMS

³Dikshya Das, Bsc Nursing students, College of Nursing, NEIGRIHMS

³H. Hriiveinai, Bsc Nursing students, College of Nursing, NEIGRIHMS

³Ronita Dkhar, Bsc Nursing students, College of Nursing, NEIGRIHMS

³Sabia Jahan, Bsc Nursing students, College of Nursing, NEIGRIHMS

³Shabnam Kausar, Bsc Nursing students, College of Nursing, NEIGRIHMS

³Suprabha Kalita, Bsc Nursing students, College of Nursing, NEIGRIHMS

³Vung Hoih Kim, Bsc Nursing students, College of Nursing, NEIGRIHMS

³Watiyangerla O longchar, Bsc Nursing students, College of Nursing, NEIGRIHMS

Corresponding Author: Watiyangerla O longchar, Bsc Nursing students, College of Nursing, NEIGRIHMS

Citation this Article: Mrs. Jodibala Haobijam, Mrs. Jyotima B. Handique, Dikshya Das, H. Hriiveinai, Ronita Dkhar, Sabia Jahan, Shabnam Kausar, Suprabha Kalita, Vung Hoih Kim, Watiyangerla O longchar, “A study to assess the effectiveness of planned health education programme on knowledge regarding harmful effects of teenage pregnancy among adolescent girls in selected schools of east khasi hills, Meghalaya”, IJMSIR- May - 2023, Vol – 8, Issue - 3, P. No. 154– 162.

Type of Publication: Original Research Article

Conflicts of Interest: Nil

Abstract

Introduction: Globally about 16 million adolescent girls aged 15-19 years give birth each year. In India each year approximately 55,000 women die due to pregnancy or childbirth related complications ^[4].

In the state of Meghalaya, the increase in the Total Fertility Rate is a long-term impact of teenage pregnancy which also paves the way for the increase in morbidity and mortality rate for both the mother and her baby ⁵

Aim of the study: Assess the effectiveness of planned health education on knowledge regarding the harmful effects of teenage pregnancy.

Methodology: A pre-experimental one group pre-test post-test research design was carried out in selected schools of Meghalaya. A total of 175 adolescent girls were selected using purposive sampling technique. Assessment of pre-existing level of knowledge done by administering structured knowledge questionnaire was conducted, after three days planned health education was given. After a gap of seven days post-test was conducted.

Results: Out of 175 respondents 90 (51.43%) had average knowledge, 81(46.29%) had poor knowledge and only 04 (2.29%) had good knowledge regarding harmful effects of teenage pregnancy in pre-test. In the post test, 115(65.71%) had average knowledge and 55(31.43%)

had good knowledge and only 05 (2.86%) had poor knowledge regarding harmful effects of teenage pregnancy.

Conclusion: The study concluded that the planned health education programme was effective in enhancing the knowledge regarding harmful effects of teenage pregnancy.

Keywords: UNFPA, Pregnancy, Family Welfare.

Introduction

Adolescents aged between 10-19 years constitute 18% (approx. 1.2 million) of the world population. About 88% of them live in developing nations. India has the largest (243 million) number of adolescents comprising one-fourth of country's population. According to UNICEF, worldwide every 5th child is born to teenage mother. Worldwide 13 million births each year occur to girls younger than 19 years. Teenage pregnancy is an important public health in both developed and developing countries, as it is high-risk' or 'at-risk' pregnancy due to its association with various adverse maternal and fetal outcomes which results in increase mortality and morbidity of the mother and the child [2].

According to United Nations Population Fund (UNFPA), "Pregnancies among girls less than 18 years of age have irreparable consequences. It violates the rights of girls with life threatening consequences in terms of sexual and reproductive health, and poses high development cause for communities, particularly in perpetuating the cycle of poverty [3].

A study by National Commission for Protection of Child Rights (NCPDR), India Child Marriage and Teenage Pregnancy 2015-16, says prevalence of child marriage among 15-19 years old is 11.9%.

According to Shillong Times, Obstetrician and Gynecologist said teenage pregnancies are more common in rural areas with contributing factors such as lack of awareness.

Around 95% of adolescent births occur in low- and middle-income countries. Adolescents aged 15-19 years are twice as likely to die during pregnancy or childbirth as those aged over 20 years, whereas girls aged under 15 years are 5 times more likely to die [4].

Medical lecturer cum demonstrator of Regional Health and Family Welfare Training Centre, Dr. J. Lyngwa said easy access to communication and lack of education has increased the number of teenage pregnancies in the state [5].

Sharma J et.al. (2019) [6] conducted a pre-experimental study on the effectiveness of structured teaching programme on knowledge regarding complications of teenage pregnancy among adolescent girls. The result revealed that there was a significant difference between the mean pre-test (14.47) and post-test (32.66) knowledge scores, it denotes that there was an increased level of knowledge post intervention. The study concluded that structured teaching programme was affected in enhancing knowledge of adolescent girls about complications of teenage pregnancy [6].

Need of the study

Adolescence is a critical period in human physical and psychosocial development when an individual progresses from an immature state to a mature state capable of reproduction. Pregnancies in this stage of life account for 23% of the burden of disease arising from pregnancy and childbirth, despite only representing 11% of all births worldwide. They incur increased risk for a number of adverse growth and developmental outcomes, in both the offspring and the mother that are known to impact adversely on long-term morbidity and mortality risk [8].

Early maternal age at first birth is associated with chronic diseases and physical limitations in the older age [9]. The adverse obstetric and perinatal outcomes in adolescent mothers, younger than 20 years of age, were found to

include eclampsia, anaemia, haemorrhage, cephalopelvic dis proportion and prolonged labour ^[10].

A large percentage of low-birth-weight babies were found to be more among the teenage mothers ^[11]. Off springs born to teenage mothers have been shown to have lower IQ compared to children born to mothers who are more than 20 years of age ^[12].

Adolescent pregnancy compared to young adult hood pregnancy is associated with increased risk of stunting at 2 years of age in the baby ^[7]. Newborns born to pregnant adolescents were found to be at risk for anaemia, low iron stores and low ferritin levels ^[13].

95% of maternal mortality occurs in low- and middle-income countries because of adolescent pregnancy ^[8]. Poor parenting, poverty and peer influence are found to be the major causes of teenage pregnancy ^[9]. The major social consequences of teenage pregnancy include school dropouts and unemployment ^[14].

Mothers giving birth in their teens had 2.5 times the odds of having a lifetime behaviour disorder and Post Traumatic Stress Disorder (PTSD) and almost twice the odds of having at least one anxiety disorder compared to older women at first birth ^[15]. Highest incidence of Major Depressive Disorder (MDD) occurs in adolescents with less than 8 years of education and those who are both socio economically and psychologically underprivileged ^[16].

Since teenage pregnancy is increasing rapidly, it is our moral duty to educate the adolescent girls regarding teenage pregnancy and its harmful effects. Complications like anaemia, pregnancy induced hypertension, pre-term labour and low birth weight babies were more among the adolescents compared to the older ones.

Objectives of the study

Primary Objective: To evaluate the effectiveness of planned health education programme on knowledge

regarding harmful effects of teenage pregnancy among adolescent girls in selected schools of East Khasi Hills, Meghalaya.

Secondary Objective

- To assess the knowledge before and after planned health education programme regarding harmful effects of teenage pregnancy.
- To find out the association between knowledge and selected demographic variables.

Research hypothesis

H1: There will be significant increase in post- test knowledge scores than pre- test knowledge scores.

H2: There is a positive relation between health education programme and the knowledge gained by the participants.

Methodology

In this study the quantitative research approach was considered appropriate in order to assess the effectiveness of planned health education programme on knowledge regarding harmful effects of teenage pregnancy. One group pre-test post-test design was used.

Pre-test \Rightarrow planned health education programme \Rightarrow Post-test.

The study was conducted at selected schools of East Khasi Hills, Meghalaya which are Kendriya Vidyalaya, Eastern Air Command (EAC), Upper Shillong; Don Bosco Higher Secondary School, Smit; St. Francis Higher Secondary School, Smit In the present study, samples are 175 adolescent girl students studying in VIII and IX of selected schools.

In this study, sampling technique was purposive sampling technique.

Data collection procedure

Prior to data collection, approval was taken from the Principal of College of Nursing NEIGRIHMS and permission was obtained from the principal of selected

schools. Data was collected from 3 (three) schools from 28th April, 2019 to 10th May,2019 over a period of 2 weeks. 175 numbers of participants who met the inclusion criteria were selected. Prior to the data collection a written consent from the parents of the participants was taken by sending the informed consent documents through the students. Assent from the students were taken on the day of data collection. Pre-test was done and analyzed. Three days following the pre-test, planned health education programme was implemented. After seven days, post-test was done and analysed.

Results

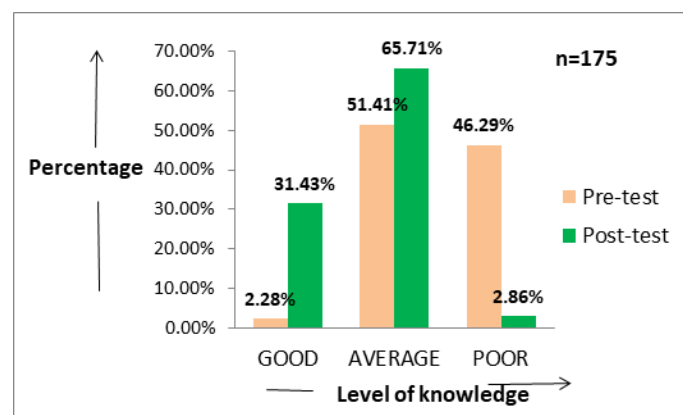
Section 1: Frequency and percentage distribution of the respondents according to the Socio-demographic data

Variables	Frequency (f)	Percentage (%)
Class		
VIII	66	37.71%
IX	109	62.29%
Age		
12 - 14	136	77.71%
15 - 17	39	22.29%
Religion		
Christian	119	68.00%
Non-Christian	56	32.00%
Education status of father		
Literate	142	81.14%
Illiterate	33	18.86%
Education status of mother		
Literate	152	86.86%
Illiterate	23	13.14%
Total number of family member		
3 - 6	101	57.71%

7 - 10	60	34.29%
11- 14	14	08.00%
Type of family		
Nuclear	132	75.43%
Joint	43	24.57%

Table shows that majority of the students 109(62.29%) are from class ix and most of the participants 136 (77.71%) belong to the age group of 12-14 years.119 (68.00%) belong to Christianity. Majority of the respondent’s father 142 (81.14%) and respondents’ mother 152 (86.86%) are literate. Majority of the respondents 101 (57.71%) have 3-6 family members and 132 (75.43%) are from nuclear family.

Section 2: Frequency and Percentage distribution of pretest and posttest knowledge score regarding harmful effects of teenage pregnancy



Mean, Standard deviation and Z-test value of pre-test and posttest knowledge score of the respondents regarding harmful effects of teenage pregnancy.

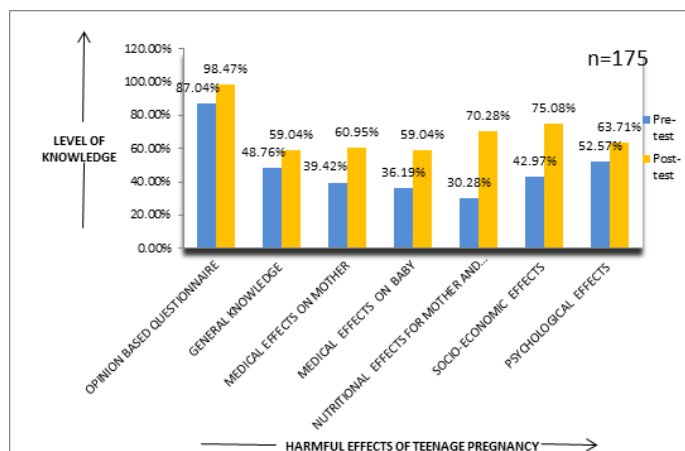
Knowledge score	Mean	SD	Z-test value	Tabulated value
Pre-test	9.96	2.73	14.93*	2.0
Post-test	14.14	2.79		

* Significant at “p” ≤0.05

Table depicts that the mean pre –test knowledge score is 9.96 and the mean post-test knowledge score is 14.14. The pre-test SD is 2.73 and the post-test SD is 2.79. The

Z-test value is 14.93, which is more than the tabulated value (2.0) which is significant at $p \leq 0.05$ level. It shows that health education programme was effective.

Domain-wise distribution on percentage level of knowledge on harmful effects of teenage pregnancy in pre-test and post-test of the respondents.



Section 3: Chi-square value showing Association between Knowledge and selected demographic variables.

Demographic variables	Good	Average	Poor	Tabulated value	Df	Chi-square
Class						
VIII	12	51	03	5.99	df=2	9.11*
IX	43	64	02			
Age						
12 - 14	48	84	04	5.99	df=2	4.37
15 - 17	07	31	01			
Religion						
Christian	43	79	03	5.99	df=2	1.97
Non-Christian	12	36	02			
Educational status of father						
Literate	47	92	03	5.99	df=2	2.32
Illiterate	08	23	02			
Educational status of mother						
Literate	48	106	03	5.99	df=2	5.95

Illiterate	07	09	02	9.49	df=4	2.38
Total number of family member						
3 - 6	35	64	02			
7 - 10	18	40	02			
11 - 15	02	11	01	5.99	df=2	5.15
Type of family						
Nuclear	46	81	05			
	09	34	00			

*Significant $p < 0.05$ level

Table depicts that the computed chi square value of Class ($\chi^2 -9.11^*$), Age ($\chi^2 -4.37$), religion ($\chi^2 -1.97$), educational status of father ($\chi^2 -2.32$), educational status of mother ($\chi^2 5.95$), total number of family member ($\chi^2 2.38$), Type of family member ($\chi^2 5.15$) were found to be statistically not significant except the class.

Section 4: Findings related to positive relationship between health education programme and knowledge gained by the participants.

Correlation between Health Education Programme and Knowledge gained by the participants.

Variable	Mean %		Correlation coefficient (r)
Knowledge score	Pretest	Posttest	
	9.96	14.14	0.2

Table depicts that the mean percentage of pre-test knowledge score was 9.96 and the post-test was 14.14. The Correlation between Health Education Programme and Knowledge gained by the participants was $r=0.2$. This shows that there is a low positive relationship.

Discussion

In this section, the major findings of the present study have been discussed with reference to the results obtained by other investigators in the same aspect.

In the present study, it was found that among 175 secondary students, 51.43% had average knowledge, 46.29% had poor knowledge and 2.28% had good knowledge in the

pretest. Whereas in the posttest 65.71% had average knowledge, 31.43% had good knowledge and 2.86% of secondary students had poor knowledge regarding the harmful effects of teenage pregnancy. A similar study was conducted by Sapkota D Shubha on “A study to evaluate the Effectiveness of structured teaching Programme on knowledge and attitude regarding the teenage Pregnancy among Early Adolescent Girls in selected school at Bangalore, Karnataka”. The result revealed that the pre-test knowledge was 45.5%, and in post-test it was 78.83%.

In the present study it was found that majority of the respondent’s educational status of the father (81.14%) and educational status of the mother (86%) respectively. These finding are in consistent with the finding reported by Kote swaramma D, Swarna S where literacy rate of father was 90% and mother was 72%.

Conclusion

The study showed that majority of the respondents had average knowledge score after the intervention. The health education on harmful effects of teenage pregnancy helped to increase the knowledge of the respondents and sensitized them to different aspects of harmful effects of teenage pregnancy. It also provides health education on prevention of teenage pregnancy. It was found that respondents had a significant increase in scores from pre-test to post-test.

References

1. Gupta M, Bhatnagar N, Bahugana P. Inequity in Awareness and Utilization of Adolescent Reproductive and Sexual Health Services (ARSH) IN Union Territory, Chandigarh, North India. *Indian Jouenal of Public Health*. 2015, March; 59 (1): 9-17. doi:10.4103/0019-557x.152846 Available from: https://www.researchgate.net/publication/273470232_Inequity_in_awareness_and_utilisation_of_adolescent_reproductive_and_sexual_health_services_in_union_territory_chandigarh_north_india [Access on 2018 oct 28]

2. Sharma J, Siddiqui MI, Sandhya. Effectiveness of Structured Teaching Programme on Knowledge regarding complication of Teenage Pregnancy among Adolescent Girls. *Int. Nur. Edu. and Research*. 2019;7(2): 157-164. doi:10.5958/2454-2660.2019.00032.2. Available from https://www.researchgate.net/publication/333281837_Effectiveness_of_Structured_Teaching_Programme_on_Knowledge_regarding_Complications_of_Teenage_Pregnancy_among_Adolescents_Girls [Access on 2019 Jul 11]

3. <https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy> [Access on 2019 Jul 11]

4. Total fertility rate in Meghalaya alarming. *The Shillong Times*. 2012 Aug 11. Available from: <https://www.google.com/amp/www.theshillongtimes.com/amp/2012/08/11/total-fertility-rate-in-meghalaya-alarming/> [Access on 2019 Jul 11]

5. Ngugen PH, Scott S, Neupane S, Tran LM, Menon P et al. Social, biological, and programmatic factors linking adolescent pregnancy and early childhood under nutrition: a path analysis of India’s 2016 National Family and Health Survey. *Lancet Child Adolesc Health*. 2019 Jul; 3 (7): 463-473. doi:10.1016/S2352-4642(19)30110-5 Available from: <https://www.ncbi.nlm.nih.gov/pubmed/31105055> [Access on 2019 Jul 11]

6. Gupta Das M. Fewer teen marriages in India: Govt. *Hindustan times*. 2018 Sep 11. Available from: <https://Hindustan-times.com/india-news/fewer-teen-marriages-in-india-over-a-decade-govt/story173DWOabvSWIEJYeY6Jul0.html>

7. Singh J. Study reveals link between teenage pregnancy and child stunting. *The Hindu Business line*. 2019 May 19. Available from: <https://www.thehindu.com/news/national/story173DWOabvSWIEJYeY6Jul0.html>

business line. com/ news/ science/ study – reveals – link - between – teenage - pregnancy-and-childs-stunt-growth/ article 27162773.ece [Access on 2019 Jul 1]

8. W Johnson, SE Moore. Adolescent pregnancy, nutrition, and health outcomes and low-and-middle-income countries: what we know and what we don't know. *An International Journal of Obstetrics and Gynaecology*. 2015 December 2:123(10): 1589-1592. DOI: 10.1111/ 147-0528. 13782. Available from: [https:// obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.13782](https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/1471-0528.13782) [Access on 2019 Feb 15]

9. Pirkle CM, de Albuquerque Sousa AC, Alvarado B et. al. Early maternal age at first birth is associated with chronic disease and poor physical performance in older age: cross -sectional analysis from the International Mobility in Aging Study. *BMC Public Health* [Internet]. 2014 March: 14 (293). doi: 10.1186 /1471 -2458-14-293. Available from: [https:// bmc public health. Bio med central. com/ articles/10.1186/1471-2458-14-293](https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-293) [Access on 2018 Nov 2]

10. Moraes AN, Likwa RN, Nzala SH. A retrospective analysis of adverse obstetric and perinatal outcomes in adolescent pregnancy: the case of Lua pula Province, Zambia. *Maternal Health, Neonatology and Perinatology* [Internet]. 2018 October :4 (20). Available from [https:// mhnpjournal.biomedcentral.com/articles/10.1186/s40748-018-0088-y](https://mhnpjournal.biomedcentral.com/articles/10.1186/s40748-018-0088-y) [Access on 2019 Mar 3]

11. Borah M, Agarwal R. Maternal and socio-demographic determinants of low birth weight (LBW): A community-based study in a rural block of Assam. *Journal of Postgraduate Medicine* [Internet]. 2016; 62 (3): 178-181. doi:10.4103/0022-3859.184275. Available from: [https:// www. research gate. net/ publication/ 304192953_Maternal_and_socio_demographic_determinants_of_low_birth_weight_LBW_A_community_based_study_in_a_rural_block_of_Assam](https://www.researchgate.net/publication/304192953_Maternal_and_socio_demographic_determinants_of_low_birth_weight_LBW_A_community_based_study_in_a_rural_block_of_Assam) [Access on 2019 Feb 9]

12. Khatun M, Al Mamun A, Scott J, William GM, Clavarino A, Najman JM. Do children born to teenage parents have lower adult intelligence? A prospective birth cohort study. *PLoS one* [Internet]. 2017 Mar; 12 (3). doi: 10.1371/ Journal. pone. 0167395. e collection 2017. Available from: [https:// www. ncbi. nlm. nih. gov/ m/ pub med/28278227/](https://www.ncbi.nlm.nih.gov/pubmed/28278227/) [Access on 2019 Feb 7]

13. Lee S, et al. prevalence of anemia and associations between neonatal iron status, hepcidin, and maternal iron status among neonates born to pregnant adolescents. *Pediatr Res* [internet]. 2016 Jan; 79 (1-1); 42-8. doi: 10.1038/ pr. 2015. 183. Available from: [https:// www. ncbi. nlm. nih. gov/m/pub med/263884/](https://www.ncbi.nlm.nih.gov/pubmed/263884/) [Access on 2019 Apr 19]

14. Gyan Charles. The effects of Teenage Pregnancy on the educational attainment of girls at Chorkor, A Suburb of Accra. *Journal of Educational and Social Research* [Internet]. 2013 September; 3 (3): doi: 10.5901/ jesi. 2013.v4n3p53. Available from: [https:// www. research gate. net/ publication/ 256482306 _ Effects _ of _ teenage _ pregnancy _ on _ the _ educational _ attainment _ of _ girls _ at _ Chorkor _ a _ suburb _ of _ Accra](https://www.researchgate.net/publication/256482306_Effects_of_teenage_pregnancy_on_the_educational_attainment_of_girls_at_Chorkor_a_suburb_of_Accra) [Access on 2018 Nov 23]

15. Tabet M, MS, Louise H. Flick et al. Age at First Birth and Psychiatric Disorders in Low-Income Pregnant Women. *Journal of Women's Health* [Internet] 2016 Aug 1; 25 (8): 810-817. doi:10.1089/jwh.2015.5236 Available from: [https:// www. ncbi. nlm. nih. gov/ m/ pub med/ 23567600/](https://www.ncbi.nlm.nih.gov/pubmed/23567600/) [Access on 2018 Nov 3]

16. Coelho FM, Pinheiro RT, Silva RA et al. Major depressive disorder during teenage pregnancy: socio-demographic, obstetric and psychosocial correlates. *Brazilian Journal of Psychiatry* [Internet]. 2013 Mar; 35 (1): 51 - 56. Available from: [http://dx.org/ 10.1016/ j. jrbp. 2012.03.006](http://dx.org/10.1016/j.jrbp.2012.03.006). [Access on 2018 Nov 3]

17. Ergen EB, Yayla CA, Sanverdi I, Oz kaya E, Kilicci C, Kocakusak K. Maternal-fetal outcome associated with adolescent pregnancy in Tertiary referral center: a cross-sectional study. *Ginekologia polska* 2017 Dec; 88 (12): 674-678.doi:10.5603/GP. a2017.0120 Available from https://www.researchgate.net/publication/322270360_Maternalfetal_outcome_associated_with_adolescent_pregnancy_in_a_tertiary_referral_center_a_cross-sectional_study [Access on 2018 Nov 2]
18. Park JS, Jung I, Youn JC, Cho HY. Impact of adolescent pregnancy on hyper tension in post-Meno pausal women. *Journal of Hypertension* [Internet].2016 Jan;34(1): 47-53.doi:10.1097/HJH.00000 000000 00747 Available from: <http://www.ncbi.nlm.nih.gov/pubmed/26630213/> [Access on 2018 Oct 28]
19. Bakwa KF, Valerio EG, Bosa VL, Al fama CO et al. Adolescent pregnancy: Maternal and fetal outcomes in patients with and without Pree clampsia. *Pregnancy Hyper tens* [Internet].2017 oct;10: 96-100.doi: 10.1016/j.preghy.2017.06.009. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/29153698/> [Access on 2018 Nov 2]
20. Restrepo-Mesa SL, et al. Teen Mother and newborn nutritional status in a group of teenagers of the city of Madeline. *Nutrition Hospital*.2015 sep 1; 32 (3): 1300-7.doi: 10.3305/nh. 2015. 32. 3. 9406. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/26319853> [Access on 2018 Oct 28]
21. Banerjee B, et al. teenage pregnancy: a socially inflicted health hazard. *Indian Journal of Community Medicine*. 2009 jul; 34 (3): 227-31.doi:10.4103/0970-0218. 55289.; 34 (3): 227-31. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/15151515>
22. Pirkle CM, de Al buquerque Sousa AC, Alvarado B et.al. Early maternal age at first birth is associated with chronic disease and poor physical performance in older age: Cross-sectional analysis from the International Mobility in Aging Study. *BMC Public Health* [Internet]. 2014 March;1 4 (293). doi: 10.1186/1471-2458-14-293.Available from: <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-293>. [Access on 2018 Nov2]
23. Rai SK, Anand K, Misra P, Kant S, Upadhyay RP. Public heath approach to address maternal mortality. *Indian J Public Health*. 2012 Jul-Sep; 56 (3): 196-203. doi:10.4103/0019-557X.104231 Available from <https://www.ncbi.nlm.gov/pubmed/23229211/> [Access on 2019 Jan 23]
24. Kafle PP, Pakuryal KN, Regmi RR, Luintel S. Health problems and social consequences in teenage pregnancy in rural Kathmandu Valley. *Nepal Med Coll J*.2010 Mar;12(1):42-4 Available on <https://www.ncbi.nlm.nih.gov/pubmed/20677609/> [Access on 2018 Dec 2]
25. Sapkota SD. A Study To Evaluate The Effectiveness of Structured Teaching Programme on Knowledge and Attitude Regarding The Teenage Pregnancy Among Early Adolescents Girls in Selected School At Bangalore, Karnataka April 2017. *IOSR-JNHS*. doi: 10.9790/1 959: 06020 67787 Available from https://www.researchgate.net/publication/316177384_A_study_to_evaluate_the_effectiveness_of_structured_teaching_programme_on_knowledge_and_attitude_regarding_teenage_pregnancy_among_adolescent_girls
26. D Kote swamma, S. Swarna. Effectiveness of Structured Teaching Programme on Hazards of Teenage Pregnancy in Adolescent Girls. *Asian Journal of Nursing Education and Research* [Internet].2016;6(2): 229-232.doi: 10.5958/ 2349-2996.2016.00043.4. Available from: <http://ajner.com/AbstractView.aspx?PID=2016-6-2-16> [Access on 2018 Dec 4]
27. Sharma SK. *Nursing Research and Statistic*. 2nd ed. New Delhi: Rlex India Pvt Ltd;2014.39,138,206,24

27. Kotdawala P, Salui V, Krishna U R. Adolescent girl-
An update.1st ed. New Delhi: Jaypee brothers' medical pub
lishers (P) Ltd;2000.93
28. Myors K A, Johnson M, Langdon R. Coping styles
of pregnant adolescents. Public health nursing, 2001; 18
(1): 24-32.doi:10.1046 /j.1525-1446. 2001. 00024. x.
Available from: [https:// www. research gate. net/ public
ation/ 12080 383 _ Coping _ Styles _ of _ Pregnant _
Ado lescents](https://www.researchgate.net/publication/12080383_Coping_Styles_of_Pregnant_Adolescents)
29. Sheth S S. Essentials of gynecology .2nd ed. New
Delhi: Jaypee brothers medical publishers(P)Ltd;2011.64