A Pre Experimental Study To Assess The Effectiveness Planned Teaching Programme On Level Of Knowledge Of Adolescent Girls On Management Of Menstrual Disorders & Nutritional Anemia In Selected Rural Government High Schools (GHS), Mandigobindgarh, Patiala, Punjab, 2022.

Ms Deeksha[1]   Ms Navneet Kaur[2]   Ms Jasvir Kaur[3]   Mr Sandeep Singh[4]

Associate Professor   Associate Professor[2]   Assistant Professor[3]   Associate Professor[4]

School of Health Sciences

RIMT University, Mandi Gobindgarh, Punjab, India

Abstract : A pre experimental study with one group pre and post test design was adopted for the study. Then using simple random sampling technique-lottery method 400 adolescent girls were selected from five govt high schools who met inclusion criteria. The overall pretest mean knowledge scores was 24.24 with SD of 2.98 and the post test mean knowledge scores was 38.09 with SD of 2.37. The obtained paired "t" test value was 72.44 which shows statistical significance at $p < 0.05\%$

Key words: Knowledge about management of menstrual disorders and nutritional anemia and Planned teaching Programme.

Introduction

India is the one of the fastest growing youth populations in the world with an estimate 190 millions adolescent in which 22% are girls. A vast majority of adolescent girls in India are suffering from reproductive health morbidities which may affect normal life of adolescent and young adult women.[1] Adolescent is vulnerable period in the

human life cycle for the development of nutritional anemia which affects both sexes and all age group.[2]Adolescence itself is a period of growth and development and requires special attention to maintain and promote health and wellbeing.[3] During puberty growth is rapid, disorganized and confusing, compared to the relatively stable earlier period of childhood. It is a turbulent period of development, when changes of puberty occurs significantly. When pubescent children are not informed of the changes that take place at puberty, it is traumatic to undergo these changes and may develop unfavourable attitudes towards these changes.

(Beard JL Journal of nutrition et al. (2000)) And adolescent ageprovides a best prospect for combating anaemia if appropriately intervened, as iron deficiency and other To Identity the Prevalence of Anemia and Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Anemia Among Adolescent Girls Age Group 12-18 Years which are supposed to be most common cause can be intruded. Other causes include parasitic infections, enteropathic inflammation disorders affecting haemoglobin synthesis, red blood cell production/ survival (inherited or acquired). NFHS-4 states that 41.4% of non-pregnant women in age group of 15-49 years are anaemic in Haryana after adjusting the haemoglobin levels for altitude and smoking status. Very few studies have been conducted in Haryana regarding adolescent anaemia and therefore present study was done to study the magnitude and socio demographic factors related to anaemia among school going adolescent girls(Gupte S et. al. (2004).

group and requires the 2 efforts of the health care team. Globally, anaemia affects 1.62 billion individuals which corresponds to 24.8% of the residents and the population group with the highest amount of persons affected is nonpregnant women (468.4 million). Anaemia, as defined by low haemoglobin concentration, is a condition in which the number of red blood cells or their oxygen-carrying capacity is insufficient to meet physiologic needs which vary with age, gender, residential elevation, smoking behaviour, and different stages of pregnancy(Available from URL https:// en.wikipedia.org/wiki/Anemia. et. al.) Being a significant public health challenge in India ($\geq$40% prevalence) too, it is translating into substantial morbidities, particularly among the vulnerable adolescent girls affecting their physical growth, cognitive development, performance in school, work capacity and reproductive functions. Anaemic girls become the next generation of anaemic mothers, thus perpetuating this vicious cycle of malnutrition.

The world's adolescent people (age 10–19 years) is estimated to stand at more than 1 billion, yet adolescents remain largely neglected, difficult-to-measure, and hard to reach population in which the needs of adolescent girls, in particular, are often ignored. In India adolescents constitute about 25% of the population and form an important physiological group whose nutritional needs demand special attention (Rao V, 1987). Adolescence is a significant period of human growth and maturation, when unique changes occur and many adult patterns are established. Increased nutritional needs at this juncture relate to the fact

that adolescents gain up to 50% of their adult weight, more than 20% of their adult height, and 50% of their adult very thin mass during this time period(Available from ,www. gujhealth.com et. al.). The iron needs are high in adolescent girls because of the increased supplies for expansion of blood volume associated with the adolescent growth spurt and the onset of menstruation.

A cross-sectional study was conducted to assess the prevalence menstrual problems and nutrition deficiency among adolescent girls studying in senior secondary schools at Shimla in India. For the study 870 students aged 10-19 years were included. The results showed that 53.6% of adolescent girls had anemia with menstrual problems like menorrhagia, polymenorrhea, or irregular menstrual cycle cycles as compared to (46.40%) non-anemic due to nutrition deficiency. The study concluded the adolescent girls need to be educated on management of menstrual problems and nutrition deficiency

Materials and Method

A pre experimental with one group pre and post test design was adopted for the study. The study sample comprised of 400 adolescent girls were selected from five govt high schools. Simple random sampling technique was used to collect the data. The tool consists of three parts: Part A: Socio Demographic Variables to obtain information on aspects like age religion, parents educational, parents occupation, type of food and source of information. Part B: Structures Knowledge questionnaire. The questionnaire was consist of 52 items on management of menstrual disorders & nutritional anemia. one mark was awarded for the correct answer and no mark was awarded for wrong answer. The total score was 52.

Part C: Biophysiological parameters: This section consists of 4 items such as height, weight, Hb% and BMI. Biophysiological parameters are assessed using standardized instruments.

Results

The results showed that majority (80.75%) of adolescent girls had inadequate knowledge and after planned teaching programme there was no improvement in biophysiological parameters such as BMI and Hb%. This was supported by the study on Effectiveness of planned teaching programme on knowledge of menstrual irregularity among adolescent girls. It reveals that majority 52(87%) of the adolescent girls had inadequate knowledge and eight (13%) moderate knowledge regarding menstrual irregularity. The study concluded that planned teaching programme effective in improving knowledge on management of menstrual disorders and nutritional anemia.

Comparison of pre test and post test knowledge of Adolescent Girls on management of menstrual disorders and nutritional anemia in experimental group

N=400

	Knowledge of Adolescent girls management on menstrual disorder and nutritional anemia				
	One group pre test and post test				
	Mean	**SD**		**Df**	**T**
Pre test knowledge score	24.24	2.98		69	72.44
Post test knowledge score	38.09	2.37		69	**72.44**

t = **72.44***

Maximum Score = 70 level

*Significant at $p<0.05$

There was a significant difference between the pre knowledge and post knowledge mean score of adolescents with management of menstrual disorders and nutritional anemia which was statistically significant at $p<0.05$ level.

Hence it was inferred that planned teaching programme increases the knowledge score of the group, so the research hypothesis(H_0 1) was rejected and alternative hypothesis was accepted.

Discussion

Pre knowledge score shows that (71.75%) adolescents on management of menstrual disorder and nutritional anemia were having good knowledge

Post knowledge score shows that 80.75% adolescents on management of menstrual disorder and nutritional anemia were having good knowledge.

Hence it was inferred that planned teaching programme was increases the knowledge score of adolescents on management of menstrual disorder and nutritional anemia was significant at p<0.05 level.

Conclusion

The findings of the study revealed that planned teaching programme significantly increases knowledge level of adolescents on management of menstrual disorder and nutritional anemia.

References

1.World Health Organization, Adolescent health and development [Internet]. SEARO. [cited 2019 Oct 24]. Available from: http://www.searo.who.int/child_adolescent/topics/adolescent_health/en/

2. Gedam JK. Study of reproductive health problems in adolescent girls at ESIC PGIMSR, MGM Hospital, Parel, Mumbai: a retrospective study. Int J Report Contracept Obstetrics Gynecol. 2017 Sep 23;6(10):4285–90.

3. Adinma ED, Adinma JIB. Perceptions and Practices on Menstruation Amongst Nigerian Secondary School Girls. Afr J Reprod Health [Internet]. 2017 Jun 20 [cited 2019 Oct 24];12(1). Available from: https://www.ajrh.info/index.php/ajrh/article/view/623

4. Correlates of the menstrual problems among rural college students of [Internet]. [cited 2019 Oct 24]. Available from: https://journals.indexcopernicus.com/search/article?articleId=604388 5. Latham, Michael C. Human nutrition developing world. Journal of Food and Nutrition. 1997;3(1):147-155

5. Gupta N, Kochar GK. Pervasiveness Of Anemia In Adolescent Girls Of Low SocioEconomic Group Of The District Of Kurukshetra (Haryana). Internet J Nutr Wellness [Internet]. 2008 Dec 31 [cited 2019 Oct 24];7(1). Available from: http://ispub.com/IJNW/7/1/10913