International Journal of Home Science

Chandani
Home Science Extension and
Communication Management,
College of Community Science
Dr. Rajendra Prasad Central
Agricultural University Pusa,
(Samastipur), Bihar, India

Dr. Meera Singh
Home Science Extension and
Communication Management,
College of Community Science
Dr. Rajendra Prasad Central
Agricultural University Pusa,
(Samastipur), Bihar, India

To assess the effect of selected educational intervention of health and hygiene on knowledge level of adolescent girls

Chandani and Dr. Meera Singh

Abstract
Hygiene is the fundamental requirement for a healthy, respectable, productive and purposeful life. Good hygiene creates a powerful shield against diseases. Several communicable diseases are also spread by human beings due to their poor personal hygiene. The present study was carried out in Pusa Block of Samastipur district in Bihar. The selection of the district and its one Community Development (CD) Block i.e., Pusa block was made purposively. Only two high school girls were selected for collection of information. The present study consists of rural high school girls in the age group of 14 – 18 years who were studying in 9th and 10th standard. From the selected school 20 girls were randomly selected from each class. The total sample comprised 80 adolescent girls from in Kasturba Gandhi Balika high School Vaini Pusa (40) experimental group and Government Girls High School (40) control group. The present study was found before intervention majority of girls had low level of knowledge in experimental group. In the control group girls had low level of knowledge. But, after intervention majority of girls had high level of knowledge in experimental groups and in control group girls had low level of knowledge. Findings showed that there was a significant difference between experimental and control group.

Keywords: Adolescent girls, knowledge level on health and hygiene.

Introduction
India has the biggest population of adolescent in the world being home to 243 million people matured (10- 19) years. India has found that adolescent girls (10- 19 year of age) have low health and hygiene status. The young girls also face greater social disadvantage as well and are less educated by and wide. Young girls don't have enough access to knowledge or administrations on imperative health and hygiene. Hygiene is the fundamental requirement for a healthy, respectable, productive and purposeful life. Good hygiene creates a powerful shield against diseases. Several communicable diseases are also spread by human beings due to their poor personal hygiene. Personal hygiene is the activity, habit or practice of keeping yourself clean, in particular as a way to preserve good health. Good hygiene habits can also protect other people's health. Personal hygiene includes such activities that a person conducts by cleanliness to care for one's body health and wellbeing. Thakre, S.B. *et al*. (2011) [1] observed from his findings that selected respondents from urban and rural areas don't have any awareness regarding adoption of hygiene practices. He suggested conducting training to bring changes among the school going girls. From Sarkar, M. (2013) [2] Evaluated from the result findings of his study that compare to male student, female respondents were more aware of personal hygiene and also, significant relationship was found between the practice and knowledge of personal hygiene among the primary school children living in the slum area. Through his research, Ruby Khatoon (2017) [3] found that through his study during pre-test the level of knowledge and adoption of practices were poor. But after the post test the extent of condition of respondents were satisfactory. Rekha Shekhawat (2019) [4] revealed that the level of knowledge about personal hygiene and also the adoption of practice were found to be high, but more awareness should be needed to bring of 100% change in the respondents.

Objectives of the study
To assess the effect of selected educational intervention of health and hygiene on knowledge level of selected adolescent girls.

Corresponding Author:
Chandani
Home Science Extension and
Communication Management
College of Community Science
Dr. Rajendra Prasad Central
Agricultural University Pusa,
(Samastipur), Bihar, India

Material and Methods
Selection of area
The present research was conducted in Pusa Block of Samastipur district in Bihar. The selection of the district and its one Community Development (CD) Block i.e., Pusa block was made purposively. Kasturba Gandhi Balika high school Vaini, Pusa and Government Girls high School Pusa were selected from Pusa block for collection of information as there is only two girl's school in the study area.

Selection of sample
The present study consists of rural high school girls in the age group of 14 – 18 years who were studying in 9th and 10th standard. From the selected school 20 girls were randomly selected from each class. The final sample comprised 80 adolescent girls from in Kasturba Gandhi Balika high School Vaini Pusa (40) (experimental group) and Government Girls High School (40) (control group)

Data collection
A well schedule was framed to collect information gain of knowledge on health and hygiene. Questions regarding personal health and hygiene, menstrual hygiene, food hygiene, home surrounding hygiene were formulated and pre-test and post - test in non-sample area with the aid of subject experts. They were presented with form' YES' and 'NO' type question of the respondents. The statistical tests and procedures were used for analysing the data with the help of statistical tools.

Results and Discussion
Over all knowledge gain by the respondent's experimental group before and after the educational intervention:-
To check the knowledge before and after educational intervention, experimental group (i.e. 40 respondents) were compare.

Table 1: Distribution Score range of knowledge and mean score and standard deviation of experimental group and control group before intervention.

Group	Range of Differential gain.	Coefficient range	Total mean score	Mean score	Standard deviation
Experimental group (pre- test)	(<1.6- >4.2) = 2.6	0.44	119	2.9	3.08
Experimental group (post -test)	(<8.3- >12.8) = 4.5	0.21	444	11.1	3.3

The data presented in this table reveals that the highest score s obtained by the respondents of pre -test (experimental group) were >4.2 and lowest was < 1.6 with a range of 2.6 and coefficient range was 0.44 and total mean score was 119 and mean score was 2.9 and standard deviation 3.08. The data

presented in this table reveals that the highest scores obtained by the respondents of post-test (experimental group) were >12.8 and lowest was 8.3 with a range of 4.5 and coefficient range was 0.21 and total mean score was 444 and mean score was 11.1 and standard deviation 3.3.

Table 2: Overall knowledge score in the experimental group before and after educational intervention

S. No.	Experimental group N= 40					
	Pre test			Post test		
	Category	F	%	Category	F	%
1.	Low (<1.6)	16	40%	Low (<8.3)	12	30%
2	Medium (Between 1.6 - 4.2)	15	37.5%	Medium (Between 8.3-12.85)	10	25%
3.	High (>4.2)	9	22.5%	High (>12.85)	18	45%

The distribution score of knowledge of the respondent is presented in the table. I.e. is seen in the experimental group that majority of the respondents (40%) obtained knowledge score between low category. followed by (37.5%) obtained score between medium category, 22.5% obtained score between high category.

The distribution of knowledge score of the respondent is presented in the table. i.e. is seen in the experimental group that majority of the respondent (45%) obtained knowledge score between high category. followed by (30%) obtained score between low category, 25% obtained score between medium category.
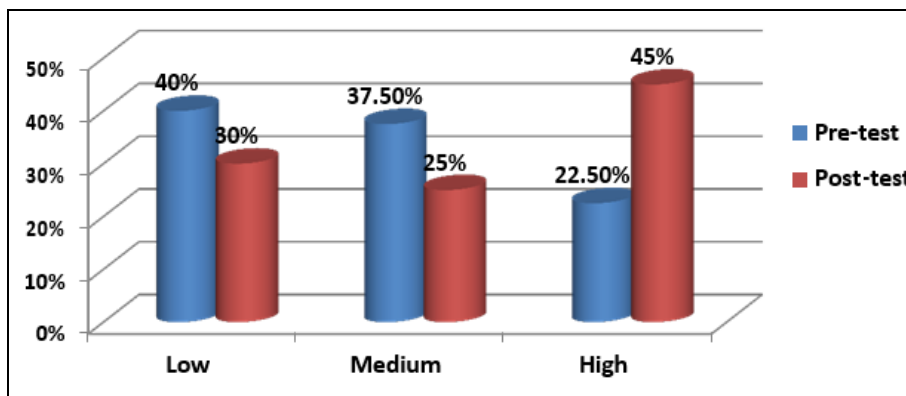

Fig 1: Knowledge gain by the respondent's experimental group before and after educational intervention

Over all knowledge gain by the respondent's control group before and after the educational intervention: To

check the knowledge gain before and after intervention, of control group 40 respondents) were compare.

Table 3: Distribution score range of knowledge and standard deviation and mean score in the experimental group and control group after the educational intervention

Group	Range of differential gain	Coefficient range	Total mean score	Mean score	Standard deviation
Control group pre- test	(<1.17 - >2.9) = 1.7	0.42	83	2.07	2.1
Control group post test	(<5.05 - >9.03) = 3.9	0.28	283	7.07	4.7

The data presented in this table reveals that the highest score s obtained by the respondents of pre -test (control group) were >2.9 and lowest was< 1.17 with a range of 1.7 and coefficient range was 0.42 and total mean score was 83 and mean score was 2.07 and standard deviation 2.1.

The data presented in this table reveals that the highest scores obtained by the respondents of post-test (control group) were >9.03 and lowest was <5.05 with a range of 3.9 and coefficient range was 0.28 and total mean score was 283 and mean score was 7.07 and standard deviation 4.7.

Table 4: Overall Knowledge score in the control group before and after educational intervention.

S. No.	Control group N= 40					
	Pre test			Post test		
	Category	F	%	Category	F	%
1.	Low< 1.17	20	50%	Low< 5.05	16	40%
2	Medium 1.17 – 2.96	4	10%	Medium 5.05 – 9.03	8	20%
3.	High> 2.96	16	40%	High> 17.5	16	40%

The corresponding values in the control group were 50% respondent obtained score between low categories followed by 40% obtained score between high categories. 10% obtained score between medium categories.

The distribution of knowledge score of the respondents is presented in the table. i.e. is seen in the control group that majority of the respondents (40%) obtained knowledge score between low and high category. followed by (20%) obtained score between medium category.
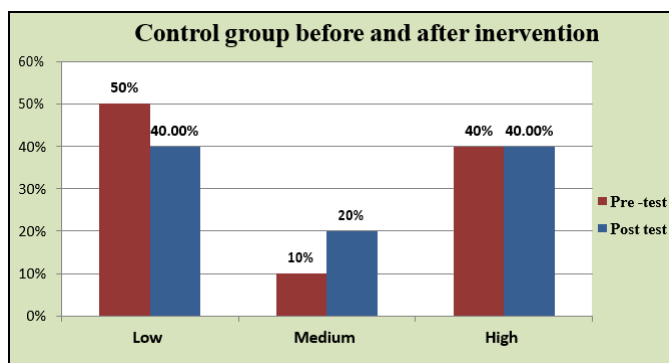

Fig 2: Knowledge gain by the respondent's control group before and after educational intervention.

Table 5: Over all comparison between experimental group and control group test score for their gain in knowledge of respondents before and after intervention.

Group	Average score	Calculated t value
Experimental group (pre- test)	2.9	22.03 **
Experimental group (immediate post- test)	11.1	
Differential gain		
Control group (pre- test)	2.07	10.4**
Control group (post -test)	7.07	
Differential gain	4.97	

**Significant at the 0.05 level.

Result presented in table show that there was significant difference in the experimental group pre -test and post test score of the respondents as calculated t value was found to be 22.03**. Followed by control group pre -test and post test score of the respondents as calculated t value was found to be 10.4** significant at 5 percent level of significance, indicating that there was significant gain in knowledge immediate intervention.

Conclusion
The present research was found before intervention majority of girls had low level of knowledge (40%) in experimental group. In the control group girls had (50%) low level of knowledge. But, after intervention majority of girls had high level of knowledge (45%) in experimental groups and (40%) in control group girls had low and high level of knowledge. Findings showed that there was a significant difference between experimental and control group of both adolescent girls. It was found that the level of awareness increase after the distribution of the materials which prepared for the training.

References
1. Thakre SB *et al*. Menstrual Hygiene: Knowledge and Practice among Adolescent School Girls of Saoner, Nagpur District. Journal of Clinical and Diagnostic Research, October 2011;5(5):1027-1033. Available on http://www.jcdr.net (accessed on 15 September 2016).
2. Sarkar M. Personal hygiene among primary school children living in a slum of Kolkata, India. J Prev Med Hyg. 2013;54(3):153-158. Available on https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4718376 / (accessed on 02 September.
3. Ruby Khatoon, Beena Sachan, Mohsin Ali Khan, JP Srivastava Impact of school health education program on personal hygiene among school children of Luck now district, J Family Med Prim Care [serial online] 2017 [cited 2020 Jan 24] 2017;6:97-100. Available from: http://www.jfmpc.com/text.asp?2017/6/1/97/214973.
4. Rekha Shekhawat, Vikram Singh Sodha, Nikita Sharma, Mahesh Verma. Knowledge and practice regarding personal hygiene among students of government schools of Bikaner, Rajasthan 2019. DOI: https://doi.org/10.33545/comed.2019.v2.i2b.15 International Journal of Advanced Community Medicine.