

## A Study to Assess the Effectiveness of Structure Teaching Programme on Knowledge Regarding Health Promotional Activities Among Housewives in a Selected Urban area at Chakeisihani, Bhubaneswar, Odisha, India

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### Objectives of the Study

- Assess the knowledge of housewives regarding health promotional activities.
- Develop and validate a structured teaching programme on health promotional activities.
- To determine the effectiveness of structured teaching programme in terms of gain in knowledge on health promotional activities.

### Abstract

*Findings revealed that the highest percentage (40%) housewives were in the age group 31-40 years. It was also found that the highest percentage (92.5%) of the housewives were Hindu. The majority (42.5%) of the housewives educational qualification is primary. The majority (52.5%) of the housewives belongs to non-vegetarian.*

*The results revealed that the knowledge scores of the housewives were in pre test majority of the housewives 39 (97.5%) had poor knowledge where as, in post test 29(72.5%) of housewives excellent knowledge and 11(27.5%) had good knowledge. These scores revealed that majority of the housewives are good and excellent. Structured teaching programme administration was effective to enhance the knowledge of subjects on health promotional activities.*

*Item wise comparison showed that there is effectiveness of health promotional activities in increasing knowledge of the housewives. Highly significant difference was found between pre and post test knowledge scores.*

*The gain in knowledge score was statistically significant at  $p = 0.05$  and calculated paired 't'=3.24. The need for improving the level of housewives knowledge was widely recognized. There is a felt need for the improving knowledge of housewives regarding health promotional activities.*

**Keywords :** Demographic Variable, Structured Teaching Programme, Health Promotional Activity, sedentary lifestyle

### Introduction

“Without health, life is not life, it is only a state of languor and suffering an image of death”.

-BUDDHA

Lifestyle diseases are more widespread as countries become more industrialized. These diseases are potentially preventable with changes in diet, lifestyle & environment. The community health nurse has an important role to play in the prevention of such diseases in the community. The present study was intended to assess the effect of a planned educational intervention on

knowledge in relation to the housewives of selected urban community of Chakeisihani BBSR.

“Health is defined as a state of complete physical, mental and social well-being, not merely the absence of disease or infirmity”. Better health is central to human happiness. It makes an important contribution to economic progress.

Individual dietary life is influenced by several environmental factors such as age, education, job, economic level, family status, and residence. Housewives have less time to maintain

their health due to typical homemaking duties, which include maintenance of familiar dietary life and child care. Working housewives use instant and processed foods for reasons of convenience, which has high-calorie and lead to safety problems if consumed regularly. Consequently, this unbalanced diet and sedentary lifestyle becomes the main source for obesity. Changes in dietary intake and less physical activity of housewives leads to the social problem of obesity. Obese individuals tend to consume diets that have higher energy and fat contents than normal individuals.

Additionally, it has been reported that 10% increase in body weight can result in changes in plasma cholesterol and triacylglycerol levels. This is especially true for women over 40 years of age after menopause, who undergo decreases in female hormones and increases in abdominal fat. Women 40 and 50 years of age tend to suffer from lifestyle diseases, including hypertension and diabetes, and often have endocrine diseases and health problems after menopause.

In previous studies, it was reported that women 30 and 40 years of age tend to consume much more fruit, bakery goods, noodles, and beverages as snacks as well as favour processed food, resulting in obesity.

The World Health Organisation (WHO) constitution enshrines the highest attainable standard of health as a fundamental right of every human being. Health as defined by WHO is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The right to health means that states must generate conditions in which everyone can be as healthy as possible. Vulnerable and marginalized groups in societies tend to bear an undue proportion of health problems (WHO, 2015).

Women are usually a vulnerable population in many cultures; they become more vulnerable when they have to move from their homes for reasons such as conflict in their original homes to settle in a foreign country (Burgan D, 2005). Immigrant women being part of the vulnerable group, are socially excluded, and are vulnerable to health problems, due to language barriers, cultural conflicts, limited education, interpersonal isolation and lack of support system. To ensure health for all citizens, the preconditions and needs for specific groups should therefore be explored and taken into consideration so that targeted and holistic initiatives can be applied (Lene, 2012).

### Hypothesis

H1 : There will be a significant difference in the knowledge score between pretest and post test among the housewives.

### Methodology

A pre-experimental research design with pre & post test was undertaken on 40 housewives in the urban locality of Chakesiani, Bhubaneswar, Odisha selected by purposive sampling technique.

The Tool was developed in two sections. Section A includes the demographic variable and Section B includes a close-ended questionnaire related to health promotional activities.

Permission was obtained from the Local leader (*Corporator*) Chakesiani, Bhubaneswar to conduct the study. Also informed consent was taken from the individual housewives. Pretest was conducted by using a close-ended questionnaire. Intervention was done through a Structure Teaching Programme (STP) on Health Promotional Activities.

Post test was conducted after seven days. The data collected were analysed by using descriptive and inferential statistics.

### Results

Variables	Frequency	%
<b>Age in years</b>		
20-30 Yrs	15	37.5
31-40 Yrs	16	40
41-50 Yrs	9	22.5
>51 Yrs	0	0
<b>Religion</b>		
Hindu	37	92.50%
Muslim	2	5%
Christian	1	2.50%
Other	0	0
<b>Educational Qualification</b>		
Graduation	12	30%
Primary	17	42.50%
Secondary	11	27.50%
Illiterate	-	-
<b>Dietary Habit</b>		
Vegetarian	19	47.50%
Non vegetarian	21	52.50%

**Table 1:** Frequency and percentage distribution of data on demographic variable of housewives.

Level of knowledge	PRE TEST		POST TEST	
	Number	%	Number	%
Poor	39	97.50%	0	0
Good	1	2.50%	11	27.50%
Excellent	0	0	29	72.50%
Total	40	100%	40	100%

**Table 2:** Frequency and percentage wise distribution of housewives on level of knowledge of pre test and post test knowledge regarding health promotional activities.

The knowledge level of the housewives was found out by using a 3-point rating scale. Categorization of the housewives was done according to the scale. The scale interpretation is

- 0-10 shows poor knowledge
- 11-20 shows good knowledge
- 21-30 shows excellent knowledge

According to Table 2 and figure the pre-test score shows that 39 (97.5%) of housewives have poor knowledge, 1 (2.5%) of housewives have good knowledge and none of them have excellent knowledge.

The post test score shows that no housewives have poor knowledge, 11 (27.5%) of housewives have good knowledge and 29 (72.5%) of housewives have excellent knowledge regarding health promotional activities.

Sl. No	AREA	PRE TEST			POST TEST			DIFFERENCE IN MEAN %
		MEAN	S.D	MEAN%	MEAN	S.D	MEAN%	
1	Definition	0.725	0.4991	1.81%	2.175	3.33	5.44%	3.62%
2	Health promotional activity	6.3	9.695	15.75%	21.15	31.91	52.87%	37.12%
	Over all	7.025	10.77	17.56%	23.32	33.52	58.31%	40.75%

**Table 3:** Area wise distribution of mean, standard deviation, mean Percentage of pre test and post test knowledge scores of housewives Selected health promotional activity

As per table 3. Area wise comparison of mean, S.D and mean% of pre and post-test knowledge score of House wife regarding selected health promotional activities reveals that the highest pre-test mean score is  $6.3 \pm 9.69$  which is 15.75% for the area of health promotional activity. The lowest pre- test mean score is  $0.72 \pm 0.49$  which is 1.81% for the area “Definition of health promotional activity”

The highest post-test mean score is  $21.15 \pm 31.91$  which is 52.87% for the area “Health promotional activity” the lowest post test mean score is  $2.17 \pm 3.33$  which is 5.43% for the area “Definition of health promotional activity”.

The overall pre-test mean score is  $7.02 \pm 10.77$  which is 17.56 and post-test mean score is  $23.32 \pm 33.52$  which is 58.31%. The difference in mean% is 40.75% revealing the effectiveness of Structured teaching programme regarding health promotional activity.

Sl. No	ITEM	PRE TEST		POST TEST		EFFECTIVENESS
		FREQUENCY	MEAN%	FREQUENCY	MEAN%	
1	Health promotional activity is increased control and improves the health.	11	27.50%	29	72.50%	45%
2	Lack of exercise is characteristics of life expectancy mortality among women.	10	25%	28	70%	45%
3	In a year, pre mature death occurs among women is 48%.	8	20%	30	75%	55%

**Table 4:** Item wise comparison of pre-test and post-test knowledge scores for correct response on definition about health promotional activity.

Table 4. shows item wise comparison between pre and post test knowledge score for correct response on definition about health promotional activity. it shows that the highest post test mean percentage (75%) of the house wives responded correctly for the item. In a year, pre mature death occurs among women is 48% with effectiveness of 55%. The lowest post test mean % (70%) of the house wives responded correctly for the item “Lack of exercise is a character tic of live expectancy mortality among women” With effectiveness of 45%. However the highest effectiveness is 55% is for the item “In a year, pre mature death occurs among women is 48%”.

Thus it reveals that structure teaching programme is effective for all items related to definition of health promotional activity.

SL. NO	ITEMS	PRE TEST		POST TEST		EFFECTIVENESS
		FREQUENCY	MEAN%	FREQUENCY	MEAN%	
1	Different type of exercise is a good practice to bring successful ageing.	6	15%	36	90%	75%
2	Smoking is responsible for decreasing the health status among women.	10	25%	32	80%	55%
3	Due to lack of exercise obesity is occur.	12	30%	29	72.5%	72.5%
4	30-45 min time need to do exercise.	9	22.5%	27	67.5%	45%
5	Improve the blood circulation and heart function is important for exercise.	6	15%	32	80%	65%
6	Eat natural and seasonal food is important for good health.	10	25%	39	97.5%	72.5%
7	3-4 times the women need to take meal in aday.	9	22.5%	32	80%	57.5%
8	Excessive salt and spicy food and sweet are avoided for normal health.	11	27.5%	35	87.5%	60%
9	Spicy food, sweets are avoided for women's good life style.	9	22.5%	32	80%	57.5%
10	Due to eating of excessive salt hypertension is occur.	11	27.5%	29	72.5%	45%
11	Sweet's is avoided in diabetes.	8	20%	39	97.5%	77.5%
12	Milk , meat, egg, fish are more protein content food.	9	22.5%	28	70%	47.5%
13	Pure ghee and butter is avoided for obesity.	9	22.5%	34	85%	62.5%
14	Vitamin is two types	9	22.5%	32	80%	57.5%
15	Vision , prevent infection function of vitamin A.	12	30%	28	70%	40%
16	Aged women are more affected in Arthritis.	18	45%	39	97.5%	52.5%
17	By proper care of the to body maintain hygiene and prevent infection.	7	17.5%	30	75%	57.5%
18	Breast self examination is required for women to defect any tumour or infection in the breast	10	25%	36	90%	65%
19	7-8 hours normally a women can sleep.	8	20%	28	70%	50%
20	Insomnia is occur due to sleep disturbance.	12	30%	26	65%	35%
21	Maintain personal hygiene is a good habit among house wife.	11	27.5%	34	85%	57.5%
22	Self satisfaction, self confidence, good physical activity is characteristics of mental health .	11	27.5%	31	77.5%	50%
23	Depression is the cause of mental illness.	6	15%	31	77.5%	62.5%

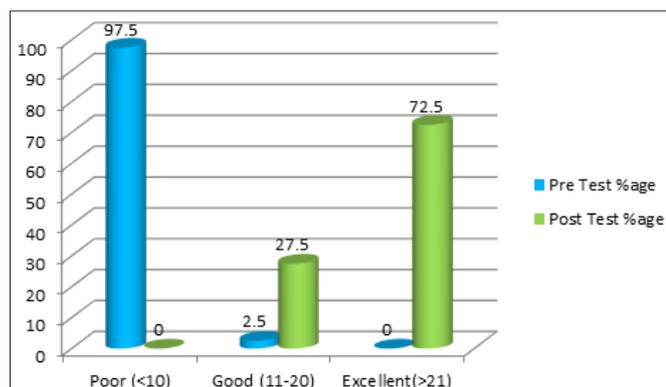
24	A highly stressed woman is a social factor in developing mental problem.	7	17.5%	31	77.5%	60%
25	Divorce is factor of mental status.	7	17.5%	25	62.5%	45%
26	Feeling happy shows positive mental health.	5	12.5%	34	85%	72.5%
27	Family support decreased stress, depression is a way to prevent mental illness.	10	25%	31	77.5%	52.5%

**Table 5:** Item wise comparison of pre and post test knowledge score for correct response on Health promotional activity

Table 5 shows the item wise comparison between pre test & post test knowledge score for correct response on health promotional activity. It shows that the highest post test mean% (97.5%) of the housewives responded correctly for the item “ aged women are more effectuated in arthritis, sweets are avoiding in diabetes, eat natural and seasonal food is important for good health” with effectiveness of 72.5%,77.5%,52.5%. The lowest post test mean%(62.5%) of the housewives responded correctly for the item “Divorce is a factor of mental illness” with effectiveness of 45%. However the highest effectiveness of 77.5% is for the item “sweets is avoided in diabetes”. Thus it reveals that structure teaching programme is effective for all the items related to health promotional activities.

Level of Knowledge	Pre Test		Post Test	
	Number	%	Number	%
Poor (<10)	39	97.5	0	0
Good (11-20)	1	2.5	11	27.5
Excellent(>21)	0	0	29	72.5

**Table 6:** Frequency and percentage wise distribution of knowledge scored by house wives in pre & post test.



3 point rating scale based on their secured scores. The score is pre test depicts that maximum number of housewives (39) of 97.5% were secured score between 0-10 shows that poor level of knowledge. 1 number of housewives of 2.5% were secured score between 11-20 reveals that good knowledge and 0% of housewives were secured between 21-30 shows that no one had excellent knowledge.

In post test maximum (29) housewives with 72.5% were secured score between 21-30 depicts that excellent level of knowledge after implementing structured teaching programme. Only 11 housewives with 27.5% were secured score between 11-20 shows that good level of knowledge but 0% secured score between 0-10 which reveals that no one had poor knowledge after structured teaching programme.

### Hypothesis Testing

To assess the effectiveness of STP regarding health promotional activities, hypothesis is tested by using paired ‘t’ test is calculated to assess the significant difference in pre test and post test knowledge score of housewives regarding selected health promotional activities.

H<sub>1</sub>: There will be significant difference between pre and post test knowledge scores of housewives regarding selected health promotional activities.

AREA	“t” VALUE	LEVEL OF SIGNIFICANCE
Definition of health promotional activity	8.875	Highly significant
Health promotional activities	8.831	Highly significant

**Table 7 :** Comparison between difference of pre test and post test knowledge score of the housewives regarding selected health promotional activities.

( df- 39), (Table value-2.02), (p≤ 0.05) paired “t” test calculated to assess the significant difference between pre and post test knowledge scores which shows highly significant difference between area wise score values of pre test and post test knowledge score. Hence, the null hypothesis is rejected (p≤0.05) and the statistical hypothesis is accepted.

Thus it can be interpreted that STP is effective for all the area and there is a difference between pre and post test knowledge scores of house wives regarding selected health promotional activities

GROUPS	MEAN	SD	MEAN DIFFERENCE	“t” VALUE	TABLE VALUE(p≤0.05)
Pre test	7.025	10.775	16.2	3.24	2.02
Post test	23.32	33.52			

Table.8: Comparison between overall knowledge scores of pre test and post test of the housewives regarding selected health promotional activities.

Table.8: Reveals that means standard deviation and paired “t” test value of knowledge scores regarding health promotional activities in pre and post test. The obtained post test mean value 23.32 is higher than the pre test mean value 7.025. The mean difference between pre and post test is 16.3 and the paired “t” value is 3.24 of 2% level of significance which is while significance. The mean value for post test was significantly higher. Thus, the null hypothesis was rejected.

It is inferred that housewives have significantly higher knowledge after structure teaching programme.

### Discussion

3 point rating scale based on their secured scores. The score is pre test depicts that maximum number of housewives (39) of 97.5% were secured score between 0-10 shows that poor level of knowledge. 1 number of housewives of 2.5% were secured score between 11-20 reveals that good knowledge and 0% of housewives were secured between 21-30 shows that no one had excellent knowledge.

In post test maximum (29) housewives with 72.5% were secured score between 21-30 depicts that excellent level of knowledge after implementing structured teaching programme. Only 11 housewives with 27.5% were secured score between 11-20 shows that good level of knowledge but 0% secured score between 0-10 which reveals that no one had poor knowledge after structured teaching programme. (tab. 4.2.1)

Area wise comparison of mean, SD, mean percentage of pre test and post test knowledge scores of housewives depicts that the highest pre test mean score is  $6.3 \pm 9.69$  with mean percentage 15.75% for the area of “health promotional activities”. The lowest pre test mean score was  $0.72 \pm 0.49$  with mean percentage 1.81% for the area of “definition of health promotional activity” where as the highest post test mean score was  $21.15 \pm 31.91$  with mean percentage 52.87% for the area, “health promotional activities”. The lowest post test mean score  $2.17 \pm 3.33$  with mean percentage 5.43% for the area, “definition of health promotional activity”. The overall pre test mean score was  $7.02 \pm 10.77$  with mean percentage 17.56 and post test mean score was  $23.32 \pm 33.52$  with mean percentage 58.31. (Tab.4.3.1)

This is inferred that there is great difference in knowledge scores of housewives in different areas after implementing STP which shows gaining of knowledge during post test and effectiveness of STP.

There is 3 items in the area “Definition of health promotional activity”. In pre test out of 3 items correct response of housewives varies from 20-27.5% and in post test it varies from 70-75%. The highest effectiveness was 55% for the item “in a year pre mature death occur among women is 48%” and lowest effectiveness was 45% for items “Health promotional activity is increase control and improve the health” and “lack of exercise is a characteristics of life expectancy mortality among women” [tab.4.3.2].

There are 27 items in the area “health promotional activities”. In pre test out of 27 items correct response of housewives varies from 2.5% to 45% and in post test it varies from 62.5% to 97.5%. The highest effectiveness was 77.5% for the item “sweet is avoid in diabetes” and lowest effectiveness was 35% for the item “insomnia is occur due to sleep disturbance” [tab.4.3.2]. It shows the effectiveness of STP.

Analysis and Interpretation of data collected revealed that the pre test knowledge mean score is  $7.02 \pm 10.77$  which is 17.56% of the total mean score, where as during the post test the total mean score was  $23.32 \pm 33.52$  which is 58.31% of the total mean score which shows the effectiveness of STP on health promotional activities among housewives.

### Conclusion

From the findings the present study is can be concluded that STP on health promotional activity among housewives was effective to improve the knowledge.

In pre-test before implementation of STP, the housewives had poor knowledge (97.5%) and after implementation of STP the housewives had excellent knowledge (72.5%) and good knowledge (27.5%) regarding health promotional activities which shows the effectiveness of STP.

Highly significant different was found between the pre-test and post-test knowledge scores of housewives regarding health promotional activities. Further STP was effective for all the content area regarding health promotional activity.

### Recommendation

Keeping in view the findings of the present study, the following recommendation were made:-

- A similar study on a large sample may help to draw more definite conclusion and make generalisation
- A pre experimental study can be undertaken with control groups.
- A similar study can be conducted in other settings.
- A similar study can be conducted among working women.

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## References

1. Pendernola, J., Murdaugh Carolyn, L., & Parsons Ann Mary. (2006). *Health promotion in nursing practice*. (5<sup>th</sup> edition). Upper Saddle River, NJ:prentice. Retrieved from [https://umbrella.lib.umb.edu/discovery/fulldisplay?vid=01MA\\_UMB:01MA\\_UMB&search\\_scope=MyInst\\_and\\_CI&tab=everything&docid=alma995389603503746&lang=en&context=L&isFrbr=true](https://umbrella.lib.umb.edu/discovery/fulldisplay?vid=01MA_UMB:01MA_UMB&search_scope=MyInst_and_CI&tab=everything&docid=alma995389603503746&lang=en&context=L&isFrbr=true)
2. A. Krishnan<sup>1</sup>, S. K., Kapoor. All Medical Journals Issues Contents Editorial Board & Information View Point: National Health Promotion Initiative: An idea whose time has come: *Indian Journal of Community Medicine*, 31(2), (2006-04 - 2006-06). Retrieved from <https://www.indmedica.com/journals.php?journalid=7&issueid=73&articleid=914&action=article>
3. United Nations HEALTH and HUMAN services DISEASE PREVENTION AND HEALTH PROMOTION AT HHS Available from <http://www.hhs.gov/news/factsheet/diseaseprevention.html>. Access date 17/11/2008
4. National Family Health Survey III, Punjab: A Brief Account. Available from <http://ncbi.nlm.nih.gov/pubmed.com>. Access date 11/11/2008
5. Lifestyle modification can reduce diabetes risk: Study. Available from <http://specials.rediff.com/news/2006/jan/31spec1.htm> Access date 12/09/2008
6. Helmy, F.E., Ahmed, M.H. (2002). *Community Health Nursing Department*, Faculty of Nursing, Health promotion activities among working and non-working adult women, 77(3-4), 429-49. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/2022471/>
7. Halfon, S.T., Kodama, A.M., & Arbeit, W. (1991). *The health status of working women in Hawaii*. 50(1), 18-23. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/2022471/>
8. Paluck, E.C., Allerdings, M., Kealy, K., & Dorgan, H. (2006). Health promotion needs of women living in rural areas: an exploratory study. 11(2), 111-6. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/16630437/>
9. Suh, Y.O. (1994). A comparative study on health promotion lifestyles between employed and unemployed women. 3(1), 93-113. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/7953885/>
10. Park, K. (2012). *Essentials of community health nursing*, (6<sup>th</sup> edition) BANARSIDAS BHANOT-JABALPUR. pg-508.

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