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A Study to Assess Effectiveness of Planned Health Education on Knowledge Regarding Prevention of Selected Non-Communicable Diseases among Women Attending Mahila Sangha Meeting At Selected Urban Area Kolar

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Abstract

Non-communicable diseases (NCDs) are a major health problem in the world, more than two out of three deaths are due to NCDs. More than one in two deaths in India (60%) are because of NCDs. A large proportion of NCDs is preventable if correct information is provided by healthcare workers at the right time to practice a healthy lifestyle which in turn reduces their risk for NCDs. Hence, Women form an important pillar and are the primary nurturer of society, the study was carried out to assess the effectiveness of structured health education regarding the prevention of selected non-communicable disease among women. For the present study Quasi-experimental including one group pretest and post test design was used. First ethical clearance obtained and written permission was obtained from Director, (SKDRD) Shree Kshethra Dharmasthala rural development project B.C, Trust, Kolar. Through a convenient sampling technique using inclusion criteria, 30 women were selected, after taking written consent from the women, they were assessed through an interview schedule for knowledge of non-communicable diseases' prevention, followed by structured health education administered. Post-test was conducted after 30 days utilizing the same tool. The study revealed the mean score of knowledge in the pretest was 11.1 accompanied by SD of 1.6 whereas the mean score of knowledge in post-test was 13.6 accompanied by SD of 2.0. The obtained paired't' value — 9.53 denote that planned health education was effective in improve knowledge score among women at 0.05 level of significance. Study divulged women were lacking knowledge but after planned health education their knowledge score was improved to 2.5 and this also was supported by studies. Hence, the study deduced that planned health education was significantly effective in enhancing knowledge scores among

women regarding the prevention of selected non-communicable diseases.

Keywords: Noncommunicable diseases (NCDs); Prevention; knowledge; women; effectiveness of planned health education

Introduction

“Non-communicable diseases (NCDs) also determined as chronic disease and it tends to be of long duration and are a result of a combination of genetic, physiological, environmental and behavioural factors”.¹ According to (WHO) World Health Organization projections, the total number of mortality per year from NCDs at present is 40 million and the total yearly number of demise is expected to increase to 55 million by 2030 if prompt interventions are not done for prevention and control.²

Non-communicable diseases (NCDs), do not transmit from person to person. These diseases take a more time to develop and would not present symptoms in the early stages. They require treatment for several years, and some require life-long treatment. There are so many diseases that come under this group of conditions. The main types of NCDs are heart diseases (like heart attacks and stroke), cancers, diabetes, hypertension and chronic respiratory diseases (COPD, Asthma).³

Heart disease

Heart disease is a condition which affects only the heart. “The commonest type of heart disease is (CAD) coronary artery disease”, it occurs when thrombus clogged the arteries that supply blood to the heart muscle. Hence, blood supply reduces, and the heart receives less oxygen and fewer nutrients. This causes an interlude of blood flow to the heart while damaging the part of the cardiac muscle leading to ischaemia or infarction. This is called myocardial infarction or heart attack.⁴

Cancer

Cancer is a disease caused when part of the body grows abnormal cells, with the probable to invade to other parts of the

body. The most prevailing types of cancer in males are lung cancer, prostate cancer, colorectal cancer, and stomach cancer. In females, breast cancer, colorectal cancer, lung cancer, and cervical cancer. Due to abnormal growth of cells, the person may experience a lump, unexplained weight loss, abnormal bleeding, prolonged cough, and change in peristaltic movements.⁵

Diabetes

Diabetes mellitus is also known as a metabolic disorder that result when the body can't use glucose as normal. Glucose is the chief source of energy for the body's cells. The glucose level in the blood is controlled by a hormone called insulin, which is produced by islets of Langerhans of the pancreas. Insulin helps glucose get into the cells. In diabetes, the type 1 pancreas does not produce enough insulin (or the body can't respond naturally to the insulin that is made (type 2 diabetes). This causes increased blood glucose levels, leading to extreme thirst, increased urination, and weight loss.⁶

Hypertension

Hypertension is the condition in which an individual has a persistently increased blood pressure. Blood pressure is the pressure expended against the walls of arteries as it flows through them. When the heart contracts and pumped blood into the arteries called systolic pressure. When heart relaxes to fill blood, the pressure is called diastolic pressure. Systolic pressure is stated first and diastolic pressure second. When blood pressure is measured on two conjugative days, the systolic pressure readings on one and the other day are ≥ 140 mmHg and diastolic pressure readings on one and the other day are ≥ 90 mmHg. The majority of people with high blood pressure are unaware of the problem for the reason that it

may have no warning signs or symptoms. Hence, hypertension is called a "silent killer".⁷

The above non-communicable diseases occurring in India are due to changes in lifestyles and work stress are risk factors of non-communicable diseases. These are classified as modifiable and non-modifiable. Age, sex, race and family history come under non-modifiable and tobacco usage, exposure to second-hand smoking, unhealthy food habits, physically inactive and alcohol abuse are modifiable.⁸ for these risk factors, the productive age group is more vulnerable as these leads to premature death.

Hence, "the government has implemented the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS)". In this programme, important component is an examination of all healthy people who are 30 years of age group.⁹

So, healthcare workers play a vital role in the prevention of Non-communicable diseases by screening and conducting health awareness programmes for the public for early prediction and prevention of Non-communicable diseases.

Objectives

- Evaluate the knowledge on prevention of non-communicable diseases among women attending mahilasanga meetings at selected urban areas, Kolar, using structured knowledge questionnaires.
- To evaluate the effectiveness of planned health education programmes among women attending mahilasanga meetings by comparing knowledge scores of pretest and post-test.
- Find interrelation between the level of knowledge with selected sociodemographic variables.

Material and Methods

- **Research Approach :** Quantitative research approach.
- **Research Design :** Quasi-experimental with single group pre-test and post-test design was used.
- **Setting of the Study :** In Kolar district, different women's associations are existing to empower women such as Gramaabivrudhisangha, Graminakoota, Sthrishakthi Sangha and Sri Kshethra Dharmasthala gramabivrudhi yojane. For the Present study, Shree Kshethra Dharmasthala gramabivrudhi yojane was selected because this women's group meet once in a week to discuss their home furnishings needs, save money, and gradually take out affordable loans for agricultural and domestic needs.
- **Population :** The population consists, of women attending mahila sangha meetings.
- **Sample and Sample Size :** In this study, the sample consists of 30 women attending Shree Kshethra Dharmasthala gramabivrudhi yojane sangha meeting at

Kurubpet and Gowripet of Kolar was selected.

- **Sampling Technique :** The purposive sampling technique was used for this study.

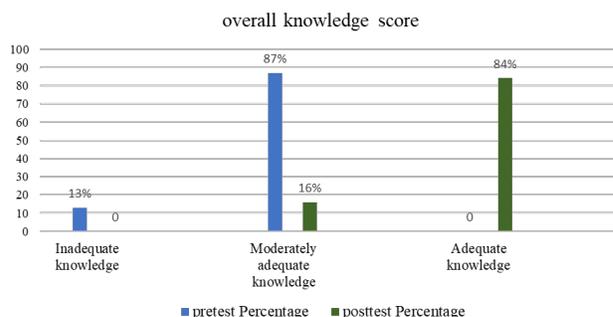
Results

The study revealed that the mean score of knowledge in the pretest was 11.1 accompanied by SD of 1.6 whereas the mean score of knowledge in the post-test was 13.6 accompanied by SD of 2.0. The obtained paired 't' value was 9.53 designate that planned health education was effective in improving knowledge score among women at 0.05 level of significance.

Table 1. Comparison of pre-test and post-test knowledge score (n= 30)

Variables	Mean	SD	df	Paired " t " Value	P value
Pretest knowledge	11.1	1.6	29	9.53 SS*	0
Posttest knowledge	13.6	2			

SS=Statistically Significant at 0.05 level.



The majority (87%) of the women had moderately adequate knowledge whereas 13% of them had inadequate knowledge and none of them had adequate knowledge in the pretest whereas in the post-test, Majority (84%) of the women had adequate knowledge, 16 % of them had moderately adequate knowledge and none of them had inadequate knowledge.

The Table 2 projected the fisher's exact value of post-test knowledge score with selected socio-demographic variables. There were 5 variables taken to find out the association. Hence, the second Null hypothesis stated in the study was accepted.

Discussion

Concerning the effectiveness of planned health education regarding the prevention of non-communicable diseases, the pretest knowledge mean score was 11.1 with SD of 1.6 whereas

Table 2. Association of post test knowledge scores with selected socio-demographic variables (n= 30)

Sl. No	Variables	Post test knowledge		Df	P	Inference
		Below Median	Above Median			
		≤14	>14			
Age						
1	≤40	11	9	1	*1.00	NS
	>40	6	4			
Marital status						
2	Unmarried	1	1	1	*1.00	NS
	Married	16	12			
Education						
3	Literate	16	12	1	*1.00	NS
	Illiterate	1	1			
Occupation						
4	Employed	12	7	1	*1.00	NS
	Un-employed	5	6			
Income						
5	≤10,000	11	11	1	*0.40	NS
	>10,000	6	2			

NS: Statistically not significant at 0.05 level.

the mean post-test score was 13.8 with SD of 2.0. The obtained paired 't' value was 9.53 which was greater than the table value (1.98) indicating significant difference between pretest and post-test knowledge scores. This was supported by the study on the Effectiveness of health education-based conventional intervention methods to reduce non-communicable diseases risk factors among the rural population in Bangladesh.¹⁰

Women form an important pillar of the society, and they are the primary caretakers in each family in every country of the world. But unfortunately researchers not focused much studies on women the literature reviewed in the present study showed the gaps in the following areas:

- Most of the studies were done on adolescence.
- Lack of Studies with regard to women on non-communicable diseases.
- Lack of Interventional Studies with regard to women on modifiable risk factors of non-communicable diseases.

Limitations

- The study was limited to Shree Kshethra Dharmasthala gramabivrudhi yojane at Kolar.
- The women's group was limited to only 30.

Recommendations

- A Similar study can be replicated using larger populations.
- A True Experimental study can be conducted by using educational interventions to evaluate the effectiveness of a structured health education program.
- A research study can be conducted by using educational interventions for each modifiable risk factor of non-communicable diseases separately.
- Lack of Studies about women on non-communicable diseases. More research studies can be conducted among women.

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