IMPACT OF CHO LED EDUCATION PROGRAMME REGARDING PREVENTION OF CANCER CERVIX ON THE LEVEL OF KNOWLEDGE, AMONG THE WOMEN AT THE SELECTED VILLAGES OF BOUDH, ODISHA

Kamala Behera[1], DR. Jaquline Williams[2], DR. Manjubala Dash[3]

[1] Research Scholar, Himalaya University.

[2] Professor, Himalaya University.

[3] Prof & Head, Dept of OBG, MTPG & RIHS.

ABSTRACT:

Introduction: The cervical cancer screening is very low (22% to 36%) in India among women. HPV testing has been shown to be more sensitive than a pap smear exam. Several shreds of evidence proved that self-collection of samples for cervical cancer screening can increase participation and follow-up as well. Women may feel more feasible to collect their own samples, rather than going to visit a health worker for cervical cancer screening. **Objectives:** To assess the existing level of knowledge on prevention of cancer cervix among experimental and Control group women at the selected Villages of Boudh. **Methodology:** Quantitative research approach and Quasi experimental design was adopted in this study. Simple random sampling Technique was adopted to select the sample for the study. Total 20 Samples - 10 for experimental group and 10 for control group were selected. **Result and Findings:** The result shows that during pretest the mean was 6.1 with SD 4.23 whereas during post-test mean is 17.8 with SD 2.14. The mean difference was 10.3 with t value 6.65 shows highly significant. Similarly in the control group the mean level of Awareness was 2.1 with SD 2.66 and the mean of post-test is 6.1 with 3.17. **Conclusion:** This highlights knowledge increased in the experimental group after the education programme.

Keywords: Knowledge, Cancer cervix, Prevention, Education programme.

Cite this Article: Kamala Behera, Jaquline Williams, Manjubala Dash (2024). Impact of CHO Led Education Programme regarding prevention of Cancer Cervix on the level of Knowledge, among the Women at the Selected Villages of Boudh, Odisha. *International Journal of Innovative Research in Health Science*, 2 (1), 52-61.

Introduction

Prevalence of cervical cancer is most common in rural population in India. Demographic factors also play a very important role. Adequate screening measures and health awareness activities are helping in cancer identification and adequate prevention of cervical cancer. (1)

The Catalan Institute of Oncology/ The International Agency For Research On Cancer, fact sheet (2020-2021) estimated that 123907 women are diagnosed with cervical cancer and 77348 die from the disease. Cervical cancer ranks as the 2nd most frequent cancer among women in India and the 2nd most frequent cancer among women between 15 and 44 years of age. About 5.0% of women in the general population are estimated to bear cervical HPV-16/18 infection at a given time. About 83.2% of invasive cervical cancers are attributed to HPVs 16 or 18. yet prevention is achievable with systematic and advance hpv screening. (2-5)

The cervical cancer screening is very low (22% to 36%) in India among women,(6). A community-based pilot study on screening of cancer conducted under the Tamil Nadu health system project suggests a large proportion of women did not return for follow-up and screening services represent the existence of other individuals-, community- and health system level barriers such as lack of familial support, cancer-related belief, and inadequate referral systems, unpleasant experience with speculum examination. (7-10)

Hpv testing has been shown to be more sensitive than a pap smear exam. [11,12]. Several shreds of evidence proved that self-collection of samples for cervical cancer screening can increase participation and follow-up as well. Women may feel more feasible to collect their own samples, rather than going to visit a health worker for cervical cancer screening. (13)

Cervical screening can provide the greatest protection against cervical cancer, by reducing the risk of developing cancers caused by HPV at sites other than the cervix. (14,15) In this regard, ignorance, and less acceptability of screening is a big challenge in the prevention of the disease. Hence, the researcher planned to conduct this study in order to explore knowledge on cancer cervix

Objectives

- To assess the existing level of knowledge on prevention of cancer cervix among experimental and Control group women at the selected Villages of Boudh.
- To evaluate the effectiveness of CHO led education program on level of knowledge among the experimental group women at the selected Villages of Boudh, Odisha.

Hypotheses

- Ho1- There is no significant difference between pretest & post-test level of knowledge among experimental and control group women at selected villages of Boudh.
- Ho4- There is no significant association between post-test level of knowledge with selected demographic & obstetrical variables among experimental group women at selected villages of Boudh.

Methodology

Quantitative research approach and Quasi experimental design was adopted in this study. Simple random sampling Technique was adopted to select the sample for the study. Total 20 Samples - 10 for experimental group and 10 for control group were selected.

Criteria for the Selection of the Sample

Inclusion Criteria: -

- Married women aged 25 to 65 years living in selected village of Boudh.
- Willing to participate in the study
- No previous hysterectomy
- Available during the data collection

Exclusion Criteria:

- unmarried
- Pregnancy
- Having hysterectomy
- Active bleeding per vagina

DEVELOPMENT AND DESCRIPTION OF THE TOOL

- The tool was developed after extensive review of literature, internet search and expert's advice which helped the researcher to select most suitable tool using in this study was semi structured questionnaires with the interview schedule for quantitative approach.
- Tool consists of two sections
- Section –A-Demographic and Obstetrics Variable
- Section-B- A semi-structured interview schedule to assess the level of knowledge regarding prevention of cancer cervix methods.

Description of the Tool:

Section A:

- A semi structured interview schedule has been prepared to collect -
- demographic variable such as age, education, religion, occupation, type of family. monthly income & screening pattern.
- Obstetrical variable as number of children, menstrual history, family planning method , history of STD & sexual activity history etc.

Section-B: It consist of Semi-Structured Interview schedule to assess the level of knowldge regarding prevention of cancer cervix. Total 20 question were framed with total score 20. all question had four multiple choice response except question number 6,7 they have 9 multiple choice with one correct response, For each correct response carries one score and incorrect response carries 0 score.

The interpretation score are subjected as follows -

Level of knowledge	SCORE	PERCENTAGE
Inadequate knowledge	00 – 7	00 - 33%
Moderately adequate knowledge	08– 14	34 - 66%
Adequate knowledge	15 –20	67 - 100%

Intervention

Experimental group CHO led education given	Control group No education given

DESCRIPTION OF THE INTERVENTION:

VIDEO consist of following content (SSM Group)

- What is hpv infection?
- What is human Papilloma virus (HPV)
- Risk Factor For Hpv Infection
- Signs and Symptoms of Hpv Infection
- Incubation period of cervical cancer
- Prevention measures
- Who should get screened
- Storage of sample, Result & interpretation
- Procedure for self sampling method

Data collection Procedure

The formal verbal permission was obtained from the panchayat of village to do the data collection. Informed written consent was obtained from the subjects prior to the data collection. The subjects had the freedom to withdraw from the study at any time.The women who met the inclusion criteria and who are willing to participate in the data collection were included in this study. Total 10 women in experimental group & 10 women in control group were included.The researcher introduced herself to the subjects. The purpose of the study was clearly explained to the Subjects and Privacy and confidentiality were maintained.The Data was collected in three phase.

Phase I –

Experimental group

Socio-demographic data & Pre-test for level of knowledge regarding hpv screening has conducted among the study participant.The education programme has been conducted for the experimental group . Post test on level of knowledge carried out one week after the education programme.

For control Group

Socio-demographic data & Pre-test for level of knowledge regarding hpv screening has conducted among the study participant. No education given to the participants. Post test on level of knowledge done one week after the sensitization programme.

Result and Findings:

Regarding demographic variable the study findings are: majority 40% and 70% of women were in the age group of 25-35yrs and 36-45yrs in the experimental and control group respectively. 40% women in both group were having Graduation and more level of education. All the women are married and Hindus in both group. 60% women were house wives in both the groups. Around 80 % women had income below Rs. 15000. About 60% in the experimental group and 90% in the control group women were in Joint Family. [Tab-1]

Table 1: : Frequency and percentage Distribution of Demographic variables of woman under study

Variables		Experimental Group (n-10)		Control Group (n-10)	
		Frequency	Percentage	Frequency	Percentage
Age of the Women	25-35 year	4	40.0	2	20.0
	36 – 45 years	3	30.0	7	70.0
	46 – 55 years	2	20.0	1	10.0
	56 -65 year	1	10.0	0	0.0
Marital Status	Married	10	100.0	10	100.0
Duration of marriage	0-5 Years	4	40.0	0	0.0
	6-10 Years	2	20	5	50
	>10 Years	4	40	5	50
Variables		Experimental Group (n-10)		Control Group (n-10)	
		Frequency	Percentage	Frequency	Percentage
Religion	Hindu	10	100.0	8	80.0
	Muslims	0	0	1	10.0
	Christian	0	0	1	10.0
Educational Status	Illiterate	3	30.0	2	20

		Frequency	Percentage	Frequency	Percentage
	Primary & middle school level	2	20.0	4	40
	Secondary school level	1	10.0	0	0
	Graduation	4	40.0	4	40
Variables		**Experimental Group (n-10)**		**Control Group (n-10)**	
		Frequency	**Percentage**	**Frequency**	**Percentage**
Occupation	House wife	6	60.0	6	60
	Self-employee	1	10.0	1	10
	Government employee	2	20.0	3	30
	Private employee	1	10.0	0	0
Monthly Income in Rs.	Less than 12019	8	80.0	8	80.0
	More than 32050	2	20.0	2	20.0
Type of Family	Nuclear family	4	40.0	1	10.0
	Joint family	6	60.0	9	90.0
Variables		**Experimental Group (n-10)**		**Control Group (n-10)**	
		Frequency	**Percentage**	**Frequency**	**Percentage**
Any family history of cervical cancer	Yes	0	0.0	0	0.0
	No	10	100.0	10	100.0
Do you suffer with any disease condition for	No	10	100.0	8	80
	Yes	0	0.0	2	20

which you are taking medicine					
Screening Pattern for hpv	Never screened	10	100.0	9	90
	Under screened	0	0.0	1	10

Variables		Experimental Group (n-10)		Control Group (n-10)	
		Frequency	Percentage	Frequency	Percentage
Number of Children	0.00	0.0	1.0	1.0	10.0
	1.00	2.0	20.0	0.0	0.0
	2.00	5.0	50.0	6.0	60.0
	3.00	0.0	0.0	3.0	30.0
	4.00	2.0	20.0	0.0	0.0
	5.00	1.0	10.0	0.0	0.0
Frequency of sexual activity past three month	Active	4	40.0	4	40.0
	Occasional	6	60.0	6	60.0

Variables		Experimental Group (n-10)		Control Group (n-10)	
		Frequency	Percentage	Frequency	Percentage
Are you using any contraception	Yes	4	40.0	2	20.0
	No	6	60.0	8	80.0
If yes, what is the method used	Condom	1	10.0	1	10
	Injectable	2	20.0	0	0
	IUCD	1	10.0	0	0
	Sterilization	0	0.0	1	10

Variables		Experimental Group (n-10)		Control Group (n-10)	
		Frequency	Percentage	Frequency	Percentage
Do you have painful or	Yes	1	10.0	1	10.0
	No	9	90.0	9	90.0

irregular menstrual history					
Do you feel pain or bleeding during or after sexual activity	Yes	0	0.0	0	0.0
	No	10	100.0	10	100.0
Do you have any history of genital infection or abnormal discharge	Yes	1	10.0	0	0
	No	9	90.0	10	100
If yes, details of disease condition and medicine	fungal infection	1	10.0	0	0

With regard to level of knowledge the mean pre and posttest level of knowledge in the experimental group shows that during pretest the mean was 6.1 with SD 4.23 whereas during posttest mean is 17.8 with SD 2.14. The mean difference was 10.3 with t value 6.65 shows highly significant. Similarly in the control group the mean level of knowledge was 2.1 with SD 2.66 and the mean of posttest is 6.1 with 3.17. The mean difference was 4 with t value 13.41 which is not significant. This highlights knowledge increased in the experimental group after the education programme more than control group. [Tab-2]

Table 2: Comparison of pre and posttest mean knowledge regarding prevention of cancer cervix among experimental group & Control group women

Group	Level of knowledge	n	Mean	SD	Mean Diff.	Paired t test	P Value
Experimental Group	Pre Test	10	6.1	4.23	10.3	6.65	P=<0.01 **SIGNIFICANT**
	Post Test	10	17.8	2.14			
Control Group	Pre Test	10	2.1	2.66	4.0	13.41	P=2.96
	Post Test	10	6.1	3.17			

Comparison of Posttest level of knowledge between group I and II shows that the mean of group I was 17.8 with SD 2.14 and group II mean was 6.1 with SD 3.17. The t value was 9.67 with $p<0.05$, shows significant difference. Hence it is concluded that CHO led education programme was effective for experimental group to increase the knowledge among women regarding screening methods. [Tab-3]

Table 3: Comparison of post test level of knowledge in experimental group & control group women

Post Test	Group	n	Mean	SD	t Value (unpaired)	P Value
Post test level of knowledge	Experimental	10	17.8	2.14	9.67	<0.05
	Control	10	6.1	3.17		

Conclusion

From these above finding it is concluded that education programme is effective to increase knowledge about prevention of cancer cervix.

REFERENCES

1. Bruni, Laia et al.The Cervical cancer screening programmes and age-specific coverage estimates for 202 countries and territories worldwide: a review and synthetic analysis Lancet Global Health, Volume 10, Issue 8, e1115 - e1127.

2. Nwabichie, C. C., Manaf, R. A., & Ismail, S. B. (2018). Factors Affecting Uptake of Cervical Cancer Screening Among African Women in Klang Valley, Malaysia. Asian Pacific journal of cancer prevention : APJCP, 19(3), 825–831. https://doi.org/10.22034/APJCP.2018.19.3.825

3. Siddharthar J, Rajkumar B, Deivasigamani K. Knowledge, awareness and prevention of cervical cancer among women attending a tertiary care hospital in puducherry, India. J Clin Diagn Res 2014;8:OC01-3.

4. Driscoll SD. Barriers and facilitators to cervical cancer screening in high incidence populations: A synthesis of qualitative evidence. Women Health 2016;56:448-67.

5. Institute National du Cancer. La situation du cancer en France. 2012.

6. Haute Autorité de Santé. Etat des lieux et recommendations pour le dépistage du cancer du col de l'utérus en France. 2010.

7. Patra S, Upadhyay M, Chhabra P. Awareness of cervical cancer and willingness to participate in screening program: Public health policy implications. J Cancer Res Ther 2017;13:318-23.

8. Bobdey S, Sathwara J, Jain A, Balasubramaniam G. Burden of cervical cancer and role of screening in India. Indian J Med Paediatr Oncol. 2016;37(4):278–85.

9. Sancho-Garnier H, Tamalet C, Halfon P, Leandri FX, Le Retraite L, Djoufelkit K, et al. HPV self-sampling or the Pap-smear: a randomized study among cervical screening nonattenders from lower socioeconomic groups in France. Int J Cancer. 2013;133(11):2681–7.

10. Sancho-Garnier H, Tamalet C, Halfon P, Leandri FX, Le Retraite L, Djoufelkit K, et al. HPV self-sampling or the Pap-smear: a randomized study among cervical screening nonattenders from lower socioeconomic groups in France. Int J Cancer. 2013;133(11):2681–7.

11. Arbyn M, Weiderpass E, Bruni L, de Sanjosé S, Saraiya M, Ferlay J, Bray F. Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis. Lancet Glob Health. 2020 Feb;8(2):e191-e203. doi: 10.1016/S2214-109X(19)30482-6. Epub 2019 Dec 4. Erratum in: Lancet Glob Health. 2022 Jan;10(1):e41. PMID: 31812369; PMCID: PMC7025157.

12. World Health Organization. (2020). WHO recommendations on self-care interventions: human papillomavirus (HPV) self-sampling as part of cervical cancer screening. World Health Organization. https://apps.who.int/iris/handle/10665/332333. License: CC BY-NC-SA 3.0 IGO

13. Kumar MS, Shanmugapriya PC, Kaur P. Acceptance of cervical and breast cancer screening and cancer awareness among women in Villupuram, Tamil Nadu, India: A cross sectional survey. Clin Epidemiol Glob Heal 2015;3:S63-8. Available from: https://www.ceghonline.com/article/S2213-3984(15)00075-5/fulltext.

14. Yeh PT, Kennedy CE, de Vuyst H, et al. Self-sampling for human papillomavirus (HPV) testing: a systematic review and meta-analysis. BMJ Global Health 2019;4:e001351. doi:10.1136/ bmjgh-2018-001351

15. Hawkes D, Keung MHT, Huang Y, McDermott TL, Romano J, Saville M, Brotherton JML. Self-Collection for Cervical Screening Programs: From Research to Reality. Cancers (Basel). 2020 Apr 24;12(4):1053. doi: 10.3390/cancers12041053. PMID: 32344565; PMCID: PMC7226191.