A Study to Assess the Effectiveness of Self-Instructional Module on Awareness Regarding Vaccination Against Cervical Cancer Among Teachers in Selected Primary Schools of Rahata Taluka

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***Abstract*—Introduction: Cervical cancer is a growth of cells that starts in the cervix. The worldwide incidence of cervical cancer is approximately 510,000 new cases annually, with approximately 288,000 deaths worldwide. Cervical cancer is ranked as the most frequent cancer in women in India. Objectives: 1. To assess the Awareness regarding vaccination against cervical cancer among primary school teachers. 2. To evaluate the effectiveness of self-instructional module on Awareness regarding vaccination against cervical cancer among primary school teachers. 3. To find out the association between knowledge regarding vaccination against cervicalcancer Among primary school teachers with their selected demographic variables Material and Methods: A pre-experimental one group pre-test post-test study design was used to assess the effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among primary school teachers. The sample consisted of 80 primary school teachers in selected schools. Non probability convenience sampling technique was used for the present study. The level of assess level of awareness regarding prevention of cervical cancer among primary school teachers. The results were analysed by descriptive and inferential statistics (mean difference, paired 't' test, chi square analysis). Results: In the pretest majority of the primary school teachers 61(76%) were having average awareness, 11(14%) were having poor awareness and 08(10%) were having good awareness. In the post-test majority of the primary school teachers 65(81%) were having good awareness, 14(18%) were having average awareness and 1(1%) were having poor awareness. The mean pretest score was 9.16 ± 2.08. whereas the mean post-test score was found out to be 15.15 ± 1.21. The mean difference was found out to be 5.99 with the standard deviation of mean difference was found out to be ±0.269. The calculated 't' value was found to be 22.21 with 'p' value 0.0001* which is significant concluding that the self- instructional module was found to be effective in improving level of awareness regarding vaccination against cervical cancer among teachers. Conclusion: The study findings have shown that the self-instructional module was effective to enhance awareness regarding vaccination against cervical cancer among primary school teachers**

***Index Terms*—Awareness, Self-instructional module, Cervical cancer, Vaccination**

I INTRODUCTION

Cervical cancer is a growth of cells that starts in the cervix. The cervix is the lower part of the uterus that connects to the vagina. Various strains of the human papillomavirus, also called HPV, play a role in causing most cervical cancers. HPV is a common infection that's passed through sexual contact. When exposed to HPV, the body's immune system typically prevents the virus from doing harm. In a small percentage of people, however, the virus survives for years. This contributes to the process that causes some cervical cells to become cancer cells.[1]

The worldwide incidence of cervical cancer is approximately 510,000 new cases annually, with approximately 288,000 deaths worldwide. Cervical cancer is ranked as the most frequent cancer in women in India. India has a population of approximately 365.71 million women above 15 years of age, who are at risk of developing cervical cancer. The current estimates indicate approximately 132,000 new cases diagnosed and 74,000 deaths annually in India, accounting to nearly 1/3rd of the global cervical cancer

deaths. Indian women face a 2.5% cumulative lifetime risk and 1.4% cumulative death risk from cervical cancer. At any given time, about 6.6% of women in the general population are estimated to harbor cervical HPV infection. HPV serotypes 16 and 18 account for nearly 76.7% of cervical cancer in India. Warts have been reported in 2–25% of sexually transmitted disease clinic attendees in India; however, there is no data on the burden of anogenital warts in the general community.[2]

Unlike many other cancers, cervical cancer occurs early and strikes at the productive period of a woman's life. The incidence rises in 30–34 years of age and peaks at 55–65 years, with a median age of 38 years (age 21–67 years). Estimates suggest that more than 80% of the sexually active women acquire genital HPV by 50 years of age.[2]

Cervical cancer begins when healthy cells in the cervix develop changes in their DNA. A cell's DNA contains the instructions that tell a cell what to do. The changes tell the cells to multiply quickly. The cells continue living when healthy cells would die as part of their natural life cycle. This causes too many cells. The cells might form a mass called a tumor. The cells can invade and destroy healthy body tissue. In time, the cells can break away and spread to other parts of the body. Most cervical cancers are caused by HPV. HPV is a common virus that's passed through sexual contact. For most people, the virus never causes problems. It usually goes away on its own. For some, though, the virus can cause changes in the cells that may lead to cancer.[3]

Globally, cervical cancer is the fourth most common cancer in women, with around 660 000 new cases in 2022. In the same year, about 94% of the 350 000 deaths caused by cervical cancer occurred in low- and middle-income countries. The highest rates of cervical cancer incidence and mortality are in sub-Saharan Africa (SSA), Central America and South-East Asia. Regional differences in the cervical cancer burden are related to inequalities in access to vaccination, screening and treatment services, risk factors including HIV prevalence, and social and economic determinants such as sex, gender biases and poverty. Women living with HIV are 6 times more likely to develop cervical cancer compared to the general population, and an estimated 5% of all cervical cancer cases are attributable to HIV.[4]

I.1 Statement of problem: "A study to assess the effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among teachers in selected primary schools of rahata taluka"

I.2 Objectives of the study:

1. To assess the Awareness regarding vaccination against cervical cancer among primary school teachers.
2. To evaluate the effectiveness of self-instructional module on Awareness regarding vaccination against cervical cancer among primary school teachers.
3. To find out the association between knowledge regarding vaccination against cervical

H1: There will be significant difference in the pre-test and post-test knowledge scores regarding Vaccination Against Cervical Cancer Among Primary School.

H2: There will be significant aasociation between post-test knowledge score with selected demographic variables

II. MATERIALS AND METHODS

Research Design: For the present study a pre-experimental one group pretest post-test design was taken into consideration to assess the effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among primary school teachers.

Setting of the study: This study was conducted in selected primary schools in Rahata Taluka

Sample: Samples were primary school teachers in selected schools who were fulfilling inclusion criteria for sample selection and sample size for the present study 80

Sampling technique: A non-probability convenience sampling technique was used for the study.

Tools of data collection: The tool consisted of 03 parts

Part: I- It comprised of socio-demographic variables of late adolescent girls including age,

gender, education, religion, marital status, teaching experience, subjects taught and any educational programme

Part: II- It comprised of 20 structured questionnaires to assess level of awareness regarding prevention of cervical cancer among primary school teachers.

Part: III-It comprised of self-instructional module regarding prevention of cervical cancer.

Reliability

The reliability was assessed by using test-retest method and the obtained reliability score was 0.72. Hence it

was highly reliable and the tool was used in this study.

Pilot Study

In order to check the feasibility, reliability and practicability of the study, pilot study was conducted among 15 primary school teachers in selected schools.

Data collection procedure

The procedure of data collection was done over a period of 2 months in selected school. A permission for conduction of the study was obtained from the taluka health officer/block developmental officer, principal of selected schools.

The participants under the study were introduced about the nature and purpose of the study and an informed consent were obtained from the subjects.

Pre-test was done for assessment of awareness regarding vaccination against cervical cancer.

A self-instructional module regarding prevention of cervical cancer was provided as an intervention among primary school teachers and post- test was done on day 5 post intervention to assess post-test level of awareness regarding vaccination against cervical cancer.

Ethical consideration: Ethical permission was obtained from ethical committee of Smt. SEVP CON, with vide letter no: Written informed consent was obtained from the study participents.

II RESULTS

Organisation of the findings

The data was analysed and presented in the following sections –

Section I: Distribution on demographic variables of primary school teachers

Section II: Pretest and post-test level of awareness regarding vaccination against cervical cancer among primary school teachers.

Section III: Effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among teachers by paired t test

Section IV: Association between post-test level of awareness regarding vaccination against cervical cancer among teachers with selected demographic variables.

Section I: Distribution on demographic variables of primary school teachers

In present study, majority of the primary school teachers 42(53%) were of 26-30 years of age, 26(32%) were of 31-35 years of age, 8(10%) were of more than 36 years of age and 4(5%) were of less than 25 years of age. Majority 40(50%) were female and 40(50%) were male. Majority 58(72%) have completed with post-graduation, 22(28%) have completed with post-graduation and no one was having diploma. Majority of the 30(38%) were Hindu, 25(31%) were of other religion, 17(21%) were Muslim and 8(10%) were Christian. Majority 72(90%) were married and 8(10%) were unmarried. No one was widowed or divorced. Majority of the 42(53%) were having 6-10 years of experience, 26(32%) were having 11-15 years of experience, 8(10%) were having more than 16 years of experience and 4(5%) were having less than 5 years of experience. Majority 21(27%) were teaching mathematics, 20(25%) were teaching language subjects, 17(21%) were teaching social sciences, 13(16%) were teaching science and 9(11%) were teaching other subjects. Majority 80(100%) have not undergone any educational programme regarding vaccination of cervical cancer

Section II: Awareness regarding vaccination against cervical cancer among primary school teachers

The present study shows that in the pretest majority of the primary school teachers 61(76%) were having average awareness, 11(14%) were having poor awareness and 08(10%) were having good awareness. The mean pretest score was 9.16 ± 2.08. Whereas in the post-test majority of the primary school teachers 65(81%) were having good awareness, 14(18%) were having average awareness and 1(1%) were having poor awareness. The mean post-test score was found out to be 15.15 ± 1.21.

Section III: Effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among teachers

This current study revealed effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among primary school teachers concluding that the mean pretest score was 9.16 ± 2.08 whereas the mean post test score was 15.15±1.21. The mean difference was found out to be 5.99 with the standard deviation of mean difference

was found out to be ±0.269. The calculated 't' value was found to be 22.21 with 'p' value 0.0001* which is significant concluding that the self-instructional module was found to be effective in improving level of awareness regarding vaccination against cervical cancer among teachers.

Section IV: Association between the post-test level of awareness regarding vaccination against cervical cancer among teachers with their selected demographic variables.

The study findings concluded that concludes that there was no any significant association of post-test awareness regarding vaccination against cervical cancer among teachers with selected demographic variables except any educational programme regarding vaccination against cervical cancer.

III DISCUSSION

Effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among teachers

This current study revealed effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among primary school teachers concluding that the mean pretest score was 9.16 ± 2.08 whereas the mean post test score was 15.15±1.21. The mean difference was found out to be 5.99 with the standard deviation of mean difference was found out to be ±0.269. The calculated 't' value was found to be 22.21 with 'p' value 0.0001* which is significant concluding that the self-instructional module was found to be effective in improving level of regarding vaccination against cervical cancer among teachers.

This study was supported by Rajan, where a SIM administrated to 60 married women after assessing pre-test knowledge on the prevention of cancer cervix. The study showed that there was a greater increase in mean post-test knowledge score 24.92 (±2.560) compared to that of the mean pre-test knowledge score 8.65 (±3.369). The paired t-test value for overall knowledge was 30.73 with the post-test mean percentage score (83.06) was high when compared to that of the mean percentage of pre-test knowledge score (28.83)[5].

Association between the post-test level of awareness regarding vaccination against cervical cancer among teachers with their selected demographic variables.

The study findings concluded that concludes that there was no any significant association of post-test awareness regarding vaccination against cervical cancer among teachers with selected demographic variables except any educational programme regarding vaccination against cervical cancer.

The study findings were supported by Deorukhkar, where findings revealed that there was no significant association between post-test knowledge score and demographic variables like age, education, occupation, age at marriage, number of children, per capita monthly income, family history of cancer and diet. Hence, the stated null hypothesis (H0) was rejected as there was significant association was found between the level of knowledge and their demographic variables.[6]

IV CONCLUSION

The study was conducted to evaluate effectiveness of self-instructional module on awareness regarding vaccination against cervical cancer among teachers in selected school. The finding showed that the self-instructional module was found to be effective in improving level of awareness regarding vaccination against cervical cancer among primary school teachers.

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