

Full Length Research Paper**Effectiveness of Structured Education on Florescence Test Colposcopy in the Diagnosis of a Typical Metaplasia Dysplasia and Carcinoma in situ of the Cervix among Women of Reproductive age.****Angel Rajakumari G***Professor, Department of obstetrics and Gynecology, Annai Dora College of Nursing, Aundipatty, Tamilnadu, India.***Abstract:**

This study was conducted in Paras Hospital, Gurgaon, Haryana, India and was undertaken to evaluate the effectiveness of structured education on knowledge and attitude regarding florescence test colposcopy in the diagnosis of atypical metaplasia dysplasia and carcinoma in situ of the cervix among women of reproductive age. A pre-experimental one group pretest - posttest design was adopted for this study. 30 women under the age group of 35 to 45 years and attending the gynae outpatient department were selected by using simple random sampling technique. Data was collected regarding demographic variable, knowledge, attitude on colposcopy. Level of knowledge, attitude of the women was evaluated using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. Structured teaching programme was conducted on the same day on group wise each group consists of 5 members. Data collection was done in Hindi and English. At the end of the teaching the doubts were cleared. Then 10 minutes was allotted for discussion. The analysis of finding indicates that 38.3% of mothers had inadequate knowledge, 53.33% had negative attitude regarding colposcopy. A well planned structured teaching programme was given to the same group. The effectiveness of programme showed high level of significance at $p < 0.001$ level. It showed that structured teaching programme was an effective method to improve the knowledge, attitude and there by the diagnosis of atypical metaplasia dysplasia and carcinoma in situ of the cervix.

Keywords: Colposcopy, Knowledge, Attitude, diagnosis of carcinoma of the cervix

Introduction

Over the last 30 years cervical cancer morbidity and mortality rates have dropped significantly in Canada, from approximately 30 per 100 000 to 7 per 100 000 women.¹ This change has been widely attributed to the availability of cervical screening via cytological sampling. Colposcopy has evolved to become a tool for evaluating those with abnormal cytology and obtaining histological samples by biopsy. Treatment of lesions can then be performed, usually preserving fertility and making major surgery unnecessary.³ numerous jurisdictions have developed guidelines^{4–8} for colposcopy, and these have been reviewed in developing this document. Cervical cancer screening is organized within each province and territory in Canada. Screening programs issue screening and follow-up recommendations for abnormal screening results, including referral for colposcopy. The diversity and status of cervical screening in Canada has been summarized elsewhere (Blake-Mortimer J et al. 1999).

Cervical Cancer is a leading cause of death globally. The World Health Organization estimates that 7.6 million people died of cancer in 2005 and 84 million people will die in the next 10 years if action is not taken. More than 70% of all cancer deaths occur in low- and middle-income countries, where resources available for prevention, diagnosis and treatment of cancer are limited or nonexistent. But because of the wealth of available knowledge, all countries can, at some useful level, implement the four basic components of cancer control – prevention, early detection, diagnosis and treatment, and palliative care and thus avoid and cure many cancers, as well as palliating the suffering. Cancer control: knowledge into action, WHO guide for effective programmes is a series of six modules that provides practical advice for programme managers and policy-makers on how to advocate, plan and implement effective cancer control programmes, particularly in low- and middle-income countries. (Kumar, Vinay; Abbas et al 2007)

Colposcopic management of cytological abnormalities

Screening and colposcopy recommendations vary across provinces and territories and have been documented elsewhere.⁹ Current guidelines for colposcopy referrals can be summarized as follows: referral for colposcopy is recommended for persistent ASCUS, persistent or incident LSIL, ASC-H, HSIL, and AGC, as well as for Pap smears that suggest squamous or glandular carcinoma. HPV testing is not widely available; however, when reflex HPV testing shows the presence of oncogenic or HR-HPV with ASCUS cytology, referral for colposcopy is recommended. (Naina Kuma.2012).

Colposcopic examinations were performed by nurse practitioner colposcopists, general gynecologists, gynecologic oncology fellows, or gynecologic oncologists. The standard protocol included conventional visual assessment, application of 5% acetic acid, identification of the squamocolumnar junction and transformation zone, recognition of suspected CIN lesions for biopsy and overall colposcopic impression. The overall colposcopic impression was categorized as normal or benign abnormality (cervicitis/atrophy/polyp), atypical metaplasia, low grade, and high grade or cancer. Clinicians were asked to take colposcopically directed cervical biopsies from the worst of any abnormal-looking areas. They were also asked to take additional biopsies from

other areas suspicious for CIN. Endocervical curettage was performed according to the clinicians' judgment, often in cases where the transformation zone or proximal extent of a cervical lesion was not adequately visualized. (Thomas M Julian, MD.(1997

Materials and Methods

The formal permission was obtained from the obstetrics and gynecology director. The investigator selected 30 women who were under the age group of 35 to 45 years and attending the Gynae outpatient department. Who fulfilled the inclusion criteria were selected by using simple random sampling technique. The time taken by each woman to fill up the questionnaire was 30 – 40 minutes. The investigator first introduced her to the women's and developed a good rapport with them. An oral consent was obtained from the reproductive age group women and confidentiality of the responses assured. Data was collected regarding demographic variables, knowledge, attitude on colposcopy and cryotherapy. The investigator assessed the level of knowledge, attitude of the women by using structured questionnaire and modified three point Likert Scale and by using checklist through one to one teaching by lecture, demonstration, video clippings and verbalization. Structured teaching programme was conducted on the same day on group wise each group consists of 5 members. Data collection was done in Hindi and English and the questionnaire was distributed to each student. At the end of the teaching the doubts were cleared. Then 10 minutes was allotted for discussion.

The questionnaire for present research study comprises of three sections.

Section A

It consists of demographic variables which includes age of the individual, religion, marital status, education, type of family, previous exposure to knowledge.

Section B

Multiple choice questions to assess the knowledge of diagnosis of atypical metaplasia, dysplasia and carcinoma in situ of the cervix. This is divided into two parts.

Part I: Questions related to carcinoma in situ of the cervix

Part II: Questions related to colposcopy.

Section C

Modified three point Likert scale to assess the attitude regarding colposcopy. This section includes 10 items with choices as agree, uncertain and disagree.

Scoring procedure

Section B

The total number of knowledge questions was 20. All the questions had four alternatives with one right answer. A score of "one" was given for every correct answer and score of "zero" was given for every wrong answer. The total score was converted into percentage and interpreted as follows,

Adequate knowledge	-	>75%
Moderate knowledge	-	50 – 75%
Inadequate knowledge	-	<50%

Section -C

To interpret the level of attitude the score was classified as,

Positive attitude	-	>75%
Favorable attitude	-	50 – 75%
Negative attitude	-	<50%

Attitude questions consist of both positive and negative statements. The score given for positive questions were as follows,

Agree	-	2
Uncertain	-	1
Disagree-		0

Similar for attitude negative question scored as follows,

Agree	-	0
Uncertain	-	1
Disagree-	-	2

Results

Table 1: Mean and standard deviation of knowledge, attitude on carcinoma in situ of the cervix of womens.

Domain	Pretest		Posttest		't' value
	Mean	S.D	Mean	S.D	
Knowledge	4.84	0.64	9.105	0.505	18.37*** (S)
Attitude	4.64	0.59	7.19	0.849	8.55*** (S)

N = 30

p<0.01, *p<0.001, S – Significant

Table 1 denotes the mean and standard deviation of knowledge, attitude of women’s on cervical cancer and colposcopy. Observing the pretest level of mean knowledge score was 4.84 with S.D 0.64 and posttest level of mean knowledge score was 9.105with S.D 0.505and the‘t’ value of 18.37 showed high level of significance. With respect to the pretest mean attitude score was 4.64 with S.D 0.59 and posttest mean attitude score was 7.19 with S.D 0.849 and the‘t’ value of 8.55 showed high level of significance.

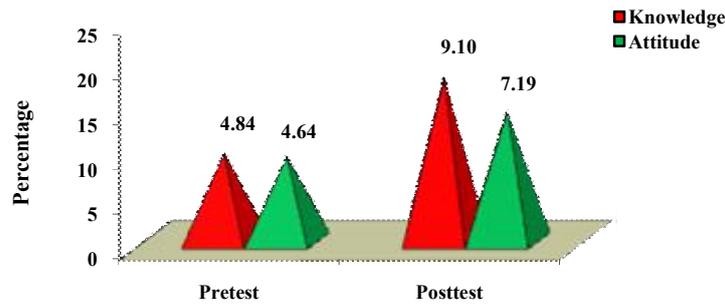


Fig 1. Mean and standard deviation of knowledge, attitude of women’s on cervical cancer and colposcopy.

Table 2: Correlation of pre and posttest level of knowledge and attitude on florescence test colposcopy of womens

N = 30

Domain	Knowledge		Attitude		'r' value
	Mean	S.D	Mean	S.D	
Pretest	4.84	0.641	4.64	0.59	0.15*
Posttest	9.105	0.505	7.19	0.849	0.45***

*p<0.05, ***p<0.001

Table 2 shows the correlation of pre and posttest level of knowledge and attitude on florescence test colposcopy among women’s. The analysis reveals that the pretest level of knowledge mean score was 4.84 with S.D 0.641, the attitude mean 4.64 with S.D 0.59and overall ‘r’ value was 0.15 which significant at p<0.05 level.The posttest level of knowledge mean score was 9.105 with S.D 0.505, the attitude mean 7.19 with S.D 0.849 clearly indicates a positive correlation between knowledge and attitude (r = 0.45) which is significant at p<0.001 level.

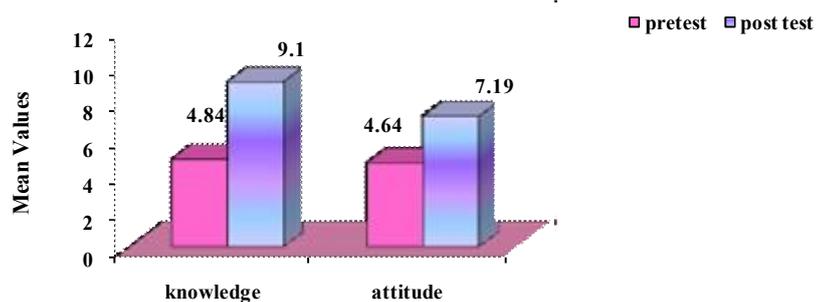


Fig 2. Correlation of pre and posttest level of knowledge and attitude on florescence test colposcopy among women’s.

Discussion

The pretest level of mean knowledge score was 4.84 with S.D 0.64 and posttest level of mean knowledge score was 9.105with S.D 0.505and the‘t’ value of 18.37 showed high level of significance. With respect to the pretest mean attitude score was 4.64 with S.D 0.59 and posttest mean attitude score was 7.19 with S.D 0.849 and the‘t’ value of 8.55 showed high level of significance. It is a very important aspect because without knowledge on prevention of cervical cancer women’s cannot be prepared for assuming responsibility of women’s health. In order to find the relationship between pretest knowledge and selected variable chi –

square test was used. The study shows that there is no significant relationship between age, educational qualification, residential area, and marital status on the existing knowledge of diagnosis of atypical metaplasia, dysplasia and carcinoma in situ of the cervix.

Conclusion

The study concluded that after the structured teaching programme the women had adequate knowledge, moderately favorable attitude. In relation to effectiveness of structured education, majority of them 28(96.67%) had adequate knowledge on diagnosis of atypical metaplasia, dysplasia and carcinoma in situ of the cervix. The study revealed that 17(68.33%) of them had moderately favorable attitude on colposcopy examination. As women are referred to colposcopy based on increasingly sensitive screening tests, there is a need to have a diagnostic examination with the best accuracy possible.

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References

- Blake-Mortimer J et al. (1999). Improving the quality and quantity of life among patients with cancer: a review of the effectiveness of group psychotherapy. *European Journal of Cancer*, 35:1581–1586.
- Kumar, Vinay; Abbas, Abul K.; Fausto, Nelson; & Mitchell, Richard N. (2007). *Robbins Basic Pathology* (8th ed.). Pp. 718–721.
- Naina Kuma.(2012). Cryotherapy in Cervical Intraepithelial Neoplasia. *IJPR Vol. 2 Issue 4*. Pp. 127-131
- Thomas M Julian, MD.(1997), *A Manual of Clinical Colposcopy*. The Parthenon Publishing Group, Newyork, Pp 29-3