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A STUDY ON SEXUAL AND PERSONAL HABITS OF WOMEN UNDERGOING SCREENING FOR CERVICAL DYPLASIA

Vashist S.[1], Singh N.*[2] Arya R.K.[3], Gupta G.K.[4] and Arora R.[5]

[1]Assistant Professor, Department of Community Medicine, World College of Medical Sciences and Research, Jhajjar.
[2]Professor Department of Community Medicine ESIC Medical College Faridabad.
[3]Ex Professor and Head, Department of Community Medicine, Santosh Medical College and Hospital, Ghaziabad.
[4]Professor, Department of Community Medicine, Santosh Medical College and Hospital, Ghaziabad.
[5]Ex-Professor and Head of the Department of Obstetrics and Gynaecology, Santosh Medical College and Hospital, Ghaziabad.

***Corresponding Author: Dr. Singh N.**
Professor Department of Community Medicine ESIC Medical College Faridabad.

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ABSTRACT

Background: Cancer of cervix is a common cancer that affects Indian women physically, psychologically, socially and financially in a grave manner. The disease affects not just the women but also her family and society. Development of cervical dysplasia is highly associated with age of first coitus and number of conception of women. This study was designed to study the correlation between sexual and personal habits of women and cervical dysplasia. **Aims and Objective:** This study was designed to study the sexual and personal habits of women undergoing screening for cervical dyplasia. **Methods:** A cross sectional study was done at the community health centre (CHC), Muradnagar, Ghaziabad (UP) in 2015-17. A sample size of1250 women was taken as per the eligibility criteria as aged above 30 years of age attending Gynaecology OPD at Community Health Center examined by using visual inspection using acetic acid (VIA) technique on uterine cervix . Those found to be VIA positive ,were sent for biopsy to confirm any dysplastic changes. The data was analyzed using SPSS version 17 (Statistical Package of Social Sciences) with the appropriate statistical tests. **Results:** Out of 1250 women 14 were found to be VIA positive, out of which 4 cases came out to be positive for dysplasia after doing biopsy under colposcopy. **Conclusions:** Contribution of male partner in development of CIN changes was also reflected in our study in cases where male partner was not using condom, was actively smoking or was having multiple sexual partners. These findings reveal that male partner has a significant contribution in development of CIN changes and thereby sexual health education of male partners is the need of the hour.

KEYWORDS: Cervical dysplasia, VIA screening, CIN changes (cervical intraepithelial neoplasia), Contribution of male partner (Condom usage), Smoking, Multiple sex partner.

INTRODUCTION

Cervical Cancer is the commonest cancer causing death among women in developing countries [1]. Cervical cancer is a malignant neoplasm arising from the cells originating in the cervix uteri. It is usually a very slow growing cancer that may not have symptoms for a long time but can be only detected in early stages with regular screening method. Cancer of the cervix is a common cancer that afflicts Indian women-physically, psychologically, socially and financially in a very grave manner. The disease affects not just the women but also her family and the society.

India has a national prevention programme for cancer since 1975, when emphasis was on equipping premier cancer institutions, which by 1984 – 85, shifted to primary prevention and early detection of cancer cases and by 1990 – 91, to the district cancer control programme. As of 2008, creation of new regional cancer centers, strengthening of existing regional centers, development of oncology wings in medical college and hospitals, the district cancer control program, and the decentralized NGO scheme were the priorities of the programme[2].

In 2010, cancer control became a part of a more comprehensive, larger program on non-communicable diseases called National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS) where the common risk factors are addressed in an integrated manner. This present program, initiated on a pilot basis, emphasizes risk reduction and, in addition, promotes opportunistic screening or screening through camps in women above 30 years at

different levels in rural areas and in urban slums. It also advocates comprehensive cancer care in district-level hospitals and tertiary care centers for strengthening cancer care[3].

Compared with other cancers, screening for cervical cancer is the most effective[4, 5]. However barriers to screening uptake such as lack of knowledge about the disease, a lack of familiarity with concept of prevention, geographical and economic inaccessibility of care, poor quality of services and lack of support from husband and families makes such a cost effective method go in vain[6, 7].

There are several suggested reasons for increasing incidence of cervical cancer cases and mortality associated with cervical cancer. The long interval between initial infection and disease indicates that there are other factors involved, such as sexual habits and personal habbits like smoking,usage of different contraceptive methods. Specific religious practices also modify the risk of developing cervical cancer in women following HPV infection [8].

METHODS

The study was done to find correlation between cervical dysplasia and sexual and personal habits of women undergoing screening for cervical dysplasia, study area was the Community Health Centre (CHC), Muradnagar, Ghaziabad. Period of study was from 01 September 2015 to 31 August 2017. This was a health centre based observation study done on 1250 women with cross-sectional sectional study design. All of the women coming under eligibility criteria aged above 30 years, attending Gynaecology OPD of CHC, Muradnagar, Ghaziabad was the study population. Purposive sampling was used to enroll all the women patients, attending the gynaecology OPD at CHC and coming in the eligibility criteria.

CRITERIA FOR SELECTION

Inclusion criteria

All of the women aged above 30 years, attending Gynaecology OPD of CHC, Muradnagar, Ghaziabad with all type of gynaecological complaints.

Exclusion criteria

Exclusion criteria were all women aged below 30 years; all women with history of hysterectomy done; all women who had undergone cervical cancer treatment in past; all currently pregnant women; and women who were not willing to give consent for the study.

Information of individual and family was collected by pre- designed, pre-tested and structured schedule. Reproductive health related complaints were noted followed by clinical examination and cervical cancer screening. VIA (Visual inspection under acetic acid) of cervix was done, women which came out to be VIA positive were sent for colposcopical guided biopsy to see dysplastic changes. The data collected was entered in MS Excel.

Method of doing VIA

(VIA) Visual examination was done with 4% acetic acid. Once the per speculum examination was done, 4% acetic acid was applied on the cervix with the help of cotton swab and observed with naked eyes after 1 minute. The respective changes in the colour and texture of the cervix were observed carefully. Any areas turning aceto-white over the cervix were identified as a positive sign of presence of cellular abnormalities. All the positive cases with VIA were sent for colposcopy aided cervical biopsy.

Ethical consideration

The study was initiated after getting clearance from the Ethical Board Committee of the Santosh University**.** The objective, the purpose and the method of the study were explained to all the participants in their local easy to understand language. A written consent, in the local language was obtained from all the participants who were eligible for the study.

Data analysis

The data collected was entered in MS Excel. After the master chart was prepared, it was coded as categorical variables. The data was analysed using SPSS version 17. (Statistical Package of Social Sciences) appropriate statistical test for the analysis of categorical variables was applied. Results were produced in form of frequencies and percentages. Chi-square and Fisher's exact test was applied for the relevant variables. A 'p' value obtained as less than 0.05 was considered as statistically significant.

RESULTS

Table 1: Distribution of the study population according to their Personal Habits.

Personal Habits of participants		Number (n=1250)	Percentage (%)
Any Contraception Used in last 6 months	None	362	28.9
	Barrier (Male condom)	563	45.0
	Oral Contraceptives	169	13.6
	IUCD	86	6.9
	Tubectomy	70	5.6
No. of Sexual Partners	1	1233	98.6
	>1	17	1.4
Dietary History	Vegetarian	566	45.3
	Non-Vegetarian	684	54.7
H/O Tobacco intake	Yes	58	4.6
	No	1192	95.4

Table-1 shows that less than half (45.0%) of the participants were using male condom as a method of family planning and rest were not using any barrier method for contraception. Almost thirty percent were not using any method of contraception. Fifty-eight participants (4.6%) reported to consume Tobacco. Majority (97.1%) of the participants reported to have one sexual partner while seventeen females reported to have more than one sexual partner.

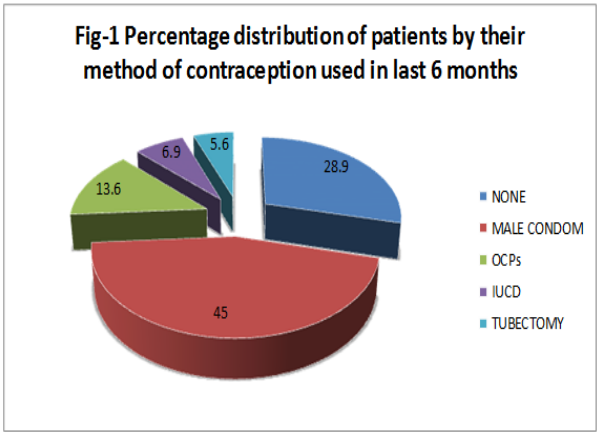


Table 2: Association of the Family Planning History of the Participants with their Cervical Biopsy Specimen Finding.

Family Planning History of the Participants (in last 6 months)	BIOPSY FINDING		Total (n=1250)
	Positive	Negative	
None	1 (0.3%)	361 (99.7%)	362 (29%)
Barrier Method(Male condom)	0	563 (100%)	563 (45%)
Oral Pills	0	169 (100%)	169 (13.5%)
IUCD	2 (2.3%)	84 (97.7%)	86 (6.9%)
Tubectomy	1 (1.4%)	69 (98.6%)	70 (5.6%)
Total	4 (0.3%)	1246 (99.7%)	1250 (100%)
Fisher's exact test value=15.913 , p value = 0.003			

Table-2 shows that one biopsy positive case was found amongst participants who reported no usage of any method of family planning, two cases amongst females who were using IUCD and one who has undergone tubectomy in last 6 months. No biopsy positive cases was seen amongst females who were using condom or OCPs There was a statistically highly significant difference in the distribution of the females with the family planning method they were using and biopsy positive cases.

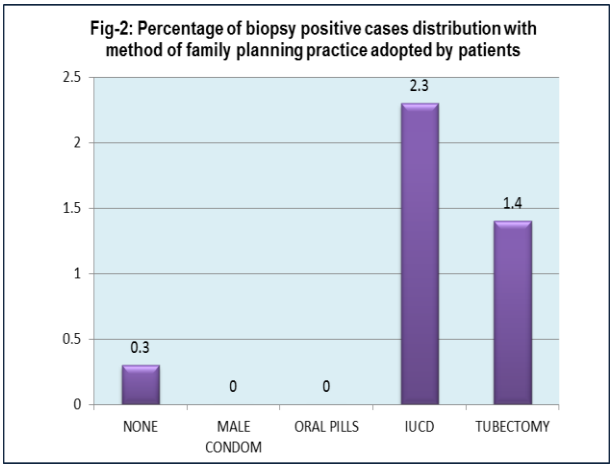


Table-3 Association of the number of sexual partners of the Participants with their Cervical Biopsy Specimen Finding.

Number of sexual partners of the Participants	BIOPSY FINDING		Total (n=1250)
	Positive	Negative	
One	3 (0.2%)	1230 (99.8%)	1233 (98.6%)
More than one	1 (5.9%)	16 (94.1%)	17 (1.4%)
Total	4 (0.3%)	1246 (99.7%)	1250 (100%)
Fisher's exact test value=16.717 , p value = 0.000			

Table-3 shows that three biopsy positive cases was found amongst participants who reported to have just one sexual partner while one biopsy cases was found amongst the females who had more than one sexual partner. There was a statistically highly significant difference in the distribution of the females with the number of sexual partners they were having and the biopsy positive cases.

Table 4: Association of the Dietary History of the Participants with their Cervical Biopsy Specimen Finding.

Dietary History of the Participants	BIOPSY FINDING		Total (n=1250)
	Positive	Negative	
Vegetarian	2 (0.3%)	564 (99.7%)	566 (45.3%)
Non-Vegetarian	2 (0.3%)	682 (99.7%)	684 (54.7%)
Total	4 (0.3%)	1246 (99.7%)	1250 (100%)
Fisher's exact test value=0.036 , p value = 0.849			

Table-4 shows that two biopsy positive cases were found amongst participants who were vegetarian by diet and two were found positive amongst the participants who were non-vegetarian by diet. This difference in dietary history and biopsy positive cases was found to be statistically not significant.

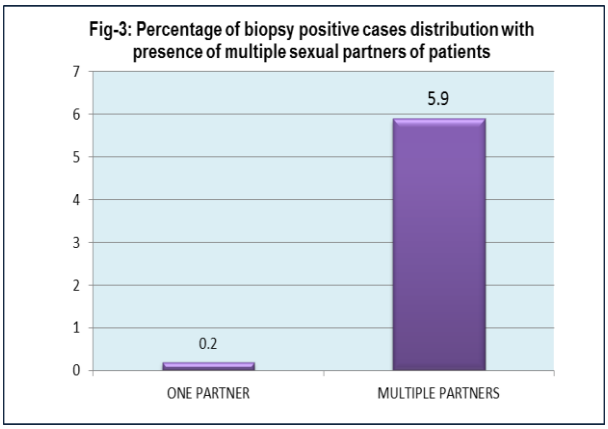
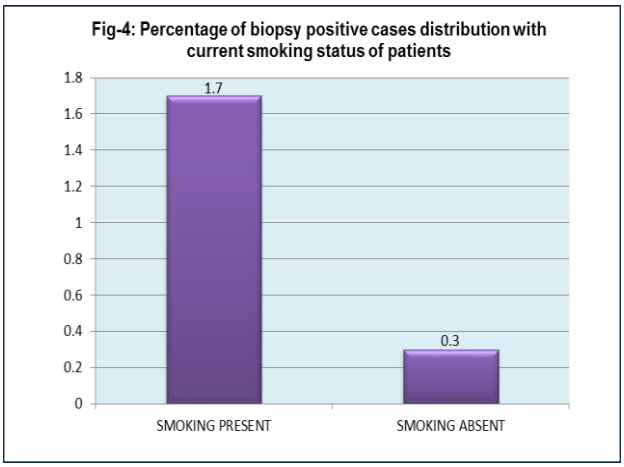


Table 5: Association of the smoking status of the Participants with their Cervical Biopsy Specimen Finding.

Smoking status of the Participants	BIOPSY FINDING		Total (n=1250)
	Positive	Negative	
Positive	1 (1.7%)	57 (98.3%)	58 (4.6%)
Negative	3 (0.3%)	1189 (99.7%)	1192 (95.4%)
Total	4 (0.3%)	1246 (99.7%)	1250 (100%)
Fisher's exact test value=3.759 , p value = 0.053			

Table-5 shows that three biopsy positive cases were found amongst participants who never smoked and one biopsy cases was found amongst the females who reported to smoke. There was a statistically significant difference in the distribution of the females with their smoking history and the biopsy positive cases.



DISCUSSION

Our study showed that (Table-3) less than half (45.0%) of the participants were using male condom as a method of family planning and rest were not using any barrier method for contraception. Almost thirty percent were not using any method of contraception. Fifty-eight participants (4.6%) reported to consume tobacco. Majority (97.1%) of the participants reported to have one sexual partner while seventeen females reported to have more than one sexual partner. Amongst the male partners of study population nearly fourty percent (37.8%) reported to consume alcohol and most (61.8%) reported to consume tobacco. Less than half (48.9%) of the male partners were using condom as reported by the participants, while thirty six males were reported to have more than one sexual partner.

Also the study revealed that (Table-2**)** one biopsy positive case was found amongst participants who reported no usage of any method of family planning, two cases amongst females who were using IUCD and one who has undergone tubectomy in last 6 months. No biopsy positive cases was seen amongst females who were using condom or OCPs There was a statistically highly significant difference in the distribution of the females with the family planning method they were using and biopsy positive cases.

S Franceschi et al. in their multicenter case-control study in Chennai, Southern India revealed that the use of oral contraceptives (2 cases and 11 controls) and intra-uterine device (3 cases and 11 controls) was rare and unrelated to ICC (invasive cervical cancer) risk. Tubal ligation was the most commonly reported contraceptive method (47 cases and 67 controls) and was associated with an OR of 0.6 (95% CI 0.4–1.0), which is again not significant.[9]

Our study showed that significantly higher proportion of CIN changes was seen amongst the women who had more than one sexual partner compared to women who were in monogamous relationship with single sexual partner. (Table-19) In line with our study **S Franceschi et al**. in their multicenter case-control study in Chennai, Southern India revealed that having had ≥2 lifetime sexual partners (OR *vs.* 1 = 4.0) were significant risk factors for ICC.[9]

The study revealed that (Table-5) significantly higher proportion of cases of CIN changes were seen amongst women who were currently smoker compared to women who were non-smoker**.** As observed by **Buckley at al.** in their case- control study on cervical cancer patients The relative risk for women who smoked was 7·0, and this was independent of any of the sexual risk factors.[10]

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Ethical approval: The study was approved by the Institutional Ethics Committee

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