

Assessment of awareness of cervical cancer and pap smear screening among women of reproductive age group

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Abstract

Background: Most cervical cancers are caused by the human papillomavirus (HPV), which is transmitted through sexual contact. The present study was conducted to assess awareness of cervical cancer and pap smear screening among women of reproductive age group. **Materials & Methods:** 90 women age ranged 20-50 years visiting the department of Obstetrics & Gynecology were selected and a questionnaire was prepared and response was obtained from all. The responses of the study participants were scored as 1 point for a correct response, 0 for no response (don't know), and -1 point for an incorrect response. **Results:** Age group 20-30 years had 35, 31-40 years had 23 and 41-50 years had 32 patients. Age group 20-30 years had good awareness in 15%, 31-40 years had in 20%, 41-50 years had in 12%. Good awareness was seen in those having none education in 12%, primary in 20% and secondary in 50%. Good awareness in married was seen in 35%, single in 30%, widow in 35% and separated in 40%. Skilled in 45%, unskilled in 25% and semiskilled in 30%. Rural in 15% and urban in 40%. Good awareness was seen in those having socio-economic status I in 55%, II in 35%, III in 20%, IV in 5% and V in 0. The risk factors identified were weak immunity in 23, use of oral contraceptive pills (OCPs) in 15, many children in 45, having many sexual partners in 20, smoking in 14 and HPV infection in 19. **Conclusion:** Women of reproductive age group had inadequate knowledge regarding cervical cancer and pap smear screening.

Keywords: reproductive, cervical, cancer.

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Introduction

Cervical cancer comprises approximately 12% of all cancers in women. It is the second most common cancer in women worldwide, but the commonest in developing countries. Annual global estimates around the year 2000 are for 470 600 new cases and 233 400 deaths from cervical cancer annually. Eighty percent of these cases occur in developing countries[1]. Most cervical cancers are caused by the human papillomavirus (HPV), which is transmitted through sexual contact. HPV 16 and HPV 18 are strains known to be responsible for approximately 70% of all cases of cervical cancer and are usually asymptomatic[2]. Human Papilloma Virus is one of the most common sexually transmitted infections worldwide among both men and women and is found to be the most common cause of cervical intraepithelial neoplasia (CIN) and cervical cancer in females. Onset of sexual activity at an early age, unprotected sexual intercourse, multiple sexual partners or a partner with multiple sexual partners, intercourse with uncircumcised men are predispose to an increased risk of acquiring HPV infection[3]. The incidence of abnormal cervical cytologic findings during pregnancy is 0.72 to 1.67%. Approximately 86% of all squamous intraepithelial lesions (SIL) identified during pregnancy are classified as low-grade SIL, whereas 14% are high-grade SIL. High-risk human papilloma virus (HPV) is the cause of cervical cancer. It is a curable disease if early detection and precancerous lesion is timely treated[4].

Given the high number of women seeking prenatal care and the close follow up provided during this period, pregnancy and prenatal care offer an excellent opportunity to implement the cervical cytology test for premalignant condition in young age group patients[5]. The present study was conducted to assess awareness of cervical cancer and pap smear screening among women of reproductive age group.

Materials & Methods

The present study comprised of 90 women age ranged 20-50 years visiting the department of Obstetrics & Gynecology. All women were selected and their written consent was obtained.

Demographic profile of each woman such as name, age, etc. was recorded in case history proforma. A questionnaire was prepared and response was obtained from all. The responses of the study participants were scored as 1 point for a correct response, 0 for no response (don't know), and -1 point for an incorrect response. These scores were added up and percentages of total obtainable points were calculated. A score of $\geq 70\%$ was considered as good level of awareness, 50-69% considered as fair level of awareness and a score of $< 50\%$ was considered as poor level of awareness about cervical cancer. Results thus obtained were subjected for statistical analysis. P value less than 0.05 was considered significant.

Results

Table 1: Age wise distribution

Age group (Years)	Number	P value
20-30	35	0.72
31-40	23	
41-50	32	

Table I, graph I shows that age group 20-30 years had 35, 31-40 years had 23 and 41-50 years had 32 patients. The difference was non-significant ($P > 0.05$).

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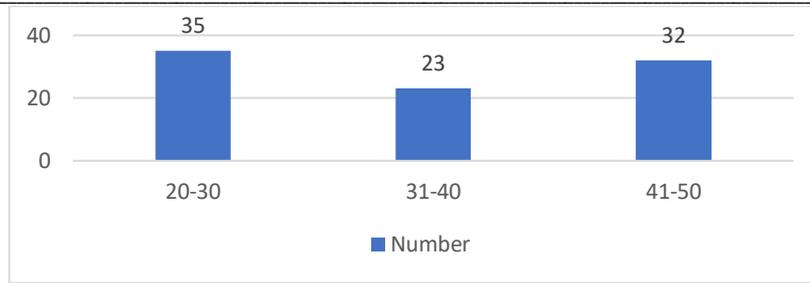


Fig 1: Age wise distribution

Table 2: Level of awareness on cervical cancer

Parameters	Variables	Good	Fair	Poor	P value
Age group (Years)	20-30	15%	20%	65%	0.04
	31-40	20%	35%	45%	
	41-50	12%	24%	64%	
Education	None	12%	12%	76%	0.02
	Primary	20%	25%	55%	
	Secondary	50%	35%	15%	
Marital status	Married	35%	40%	25%	0.03
	Single	30%	30%	40%	
	Widow	35%	25%	40%	
	Separated	40%	22%	38%	
Occupation	Skilled	45%	35%	20%	0.01
	Unskilled	25%	20%	55%	
	Semiskilled	30%	28%	42%	
Development	Rural	15%	45%	40%	0.02
	Urban	40%	10%	50%	
Socio- economic status	I	55%	30%	15%	0.05
	II	35%	45%	20%	
	III	20%	50%	30%	
	IV	5%	50%	45%	
	V	0	0	100%	

Table II, graph II shows that age group 20-30 years had good awareness in 15%, 31-40 years had in 20%, 41-50 years had in 12%. Good awareness was seen in those having none education in 12%, primary in 20% and secondary in 50%. Good awareness in married was seen in 35%, single in 30%, widow in 35% and separated in 40%. Skilled in 45%, unskilled in 25% and semiskilled in 30%. Rural in 15% and urban in 40%. Good awareness was seen in those having socio- economic status I in 55%, II in 35%, III in 20%, IV in 5% and V in 0. The difference was significant (P<0.05).

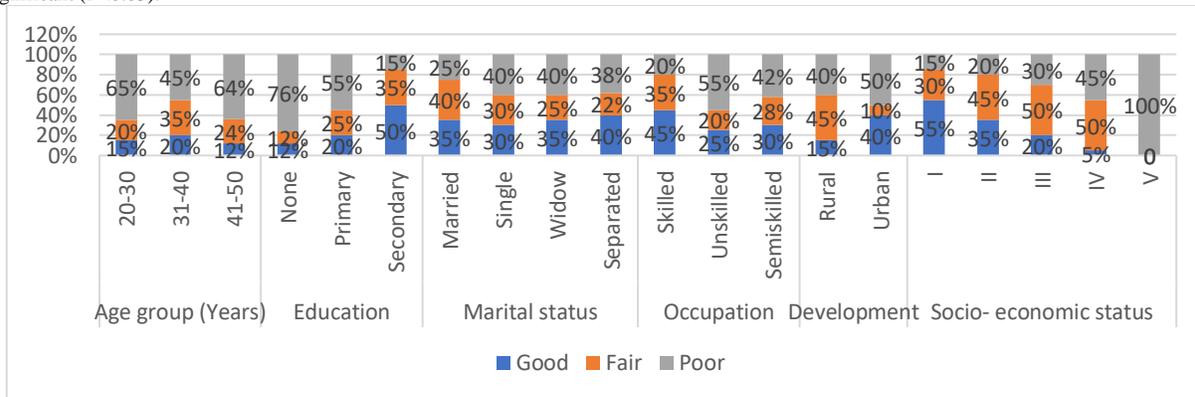


Fig 2: Level of awareness on cervical cancer

Table 2: Assessment of risk factors

Risk factors	Number	P value
Weak immunity	23	0.05
Use of oral contraceptive pills (OCPs)	15	
Many children	45	
Having many sexual partners	20	
Smoking	14	
HPV infection	19	

Table III, graph III shows that risk factors identified were weak immunity in 23, use of oral contraceptive pills (OCPs) in 15, many children in 45, having many sexual partners in 20, smoking in 14 and HPV infection in 19. The difference was significant ($P < 0.05$).

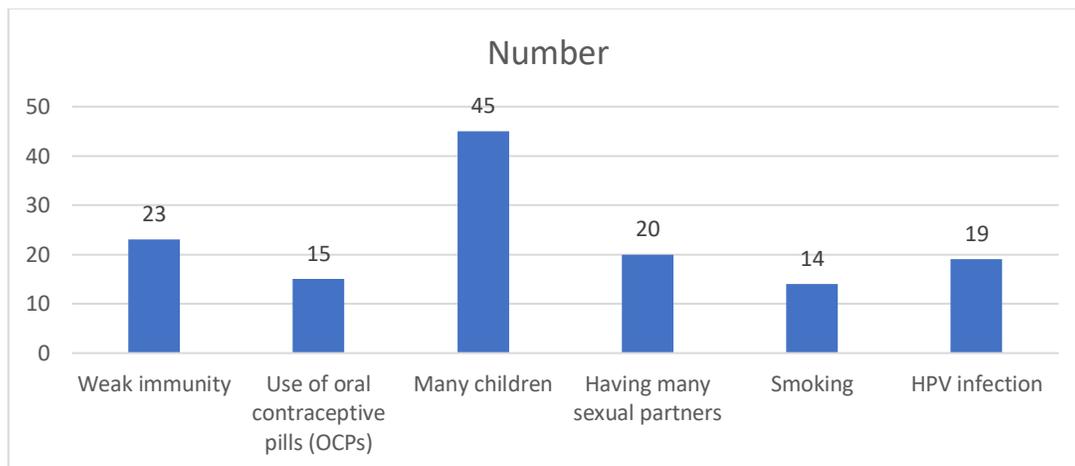


Fig 3: Assessment of risk factors

Discussion

Cervical cancer is one of the most easily preventable cancers among all the female genital tract malignancies. It can be prevented by screening asymptomatic women for precancerous lesions (CIN) and treating these lesions before they progress to invasive malignancy[6]. The natural history of progression from mild cervical dysplasia to invasive carcinoma cervix is approximately 10-20 years, which makes cervical cancer an easily preventable disease and provides a rationale for its screening[7]. Studies have indicated that multiple sexual partners may increase a person's risk of HPV transmission[8,9]. Other risk factors for HPV infection include multiple sexual partners, a higher number of sexual partners, HIV infection, and the use of non-barrier contraception[10]. Younger age and the number of years performing sex work have been also associated with an increased risk of HPV infection among FSW[11]. The present study was conducted to assess awareness of cervical cancer and pap smear screening among women of reproductive age group. In present study we found that age group 20-30 years had 35, 31-40 years had 23 and 41-50 years had 32 patients. Naik et al[12] found that among the 426 women interviewed, 246 women (57.7%) had heard about cervical cancer. However, only 30 (7%) had good level of awareness of cervical cancer, 102 (23.9%) had fair, level of awareness, while 294 (69.1%) had poor level of awareness about the disease. Only 15.5% of women were aware about the warning signs and symptoms of cervical cancer while 19.7% had good level of awareness about the risk factors of cervical cancer. A small proportion of women interviewed (11.3%) had good level of awareness regarding prevention and screening of cervical cancer. Majority of women i.e. 288 (67.6%) had never heard about Pap smear. Out of the 138 women who were aware of Pap smear, only 54 (39.1%) had undergone Pap smear testing. Majority 63.4% women were of the opinion that cervical cancer can be treated; while 5.6% thought that there is no treatment available for the disease. We found that age group 20-30 years had good awareness in 15%, 31-40 years had in 20%, 41-50 years had in 12%. Good awareness was seen in those having none education in 12%, primary in 20% and secondary in 50%. Good awareness in married was seen in 35%, single in 30%, widow in 35% and separated in 40%. Skilled in 45%, unskilled in 25% and semiskilled in 30%. Rural in 15% and urban in 40%. Good awareness was seen in those having socio-economic status I in 55%, II in 35%, III in 20%, IV in 5% and V in 0. Priya et al[13] conducted a study on 200 antenatal women. Ayre's spatula was used to conduct smear tests. The pap smear report revealed that 26% of the subjects had inflammatory changes and for 66% it showed negative for intraepithelial lesion and for only 1% of the subjects had signs related to carcinoma cervix in which one patient had Atypical

Squamous Cell of Undetermined Significance (ASCUS) and another patient had Low-grade Squamous Intraepithelial Lesion (LSIL) and no satisfactory sample was able to be obtained in 6% of the subjects. In present study authors found a statistically significant association between the age at marriage and the pap smear report, lower the age at marriage. We observed that risk factors identified were weak immunity in 23, use of oral contraceptive pills (OCPs) in 15, many children in 45, having many sexual partners in 20, smoking in 14 and HPV infection in 19. Ilesanmet al[14] examined the pattern of cervical cancer screening service utilizations among FSWs in the Abuja metropolis. This descriptive cross-sectional survey used a purposive sampling technique to select 406 respondents via a structured questionnaire including questions regarding whether they had been screened for cervical cancer, the frequency of screening and type of screening method. The response rate among the participants was 97.6%. The mean age of the FSWs was 32 ± 5.1 years. Regarding the pattern of screening age, the mean age at the first screening was 28 ± 4.3 years. Only 81 (20%) participants had been screened annually, and visual inspection with acetic acid was most frequently used (20.9%). Respondents preferred to undergo screening in their brothels. The awareness of screening services was high however, the utilization of cervical cancer screening services remained low, as 246 (60.6%) FSWs had never been screened. The non-utilization of screening services was related to poor accessibility and a lack of awareness and interest.

Conclusion

Authors found that women of reproductive age group had inadequate knowledge regarding cervical cancer and pap smear screening.

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