PRACTICE GUIDELINE

Cervical Screening Awareness and Practice among Medical Personnel

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Abstract

Objective: The objective of this study was to assess awareness about cervical screening among medical and paramedical personnel.

Design: This was a cross-sectional study.

Place and duration: The study was conducted by Gyne unit-II, Jinnah Hospital/ AIMC Lahore, over a period of one month.

Material and methods: Three hundred and thirty personnel were interviewed. Out of them 243 were doctors and 87 were nurses. Each subject was asked to fill up a proforma designed to assess the knowledge about screening, source of information, associated risk factors, e.g age at first coitus, vaginal discharge, vulvo-vaginal warts, postcoital bleeding and/ or family history of cervical malignancy. Reasons for not doing cervical smear and future plans for screening were also evaluated.

Results: The majority of doctors (241 = 99%) had good knowledge about cervical screening, while only 53 nurses (60.9%) had some information mainly through discussion with doctors. Despite good knowledge only 27 doctors (11.0%) and 5 nurses (5.7%) underwent screening. Nearly 77% of all subjects intended to have future screening provided facility is easily accessible.

Conclusion: Our group included medical and paramedical staff who are definitely more educated than general public regarding importance of cervical screening, yet results revealed only 9.9% compliance rate among both doctors and nurses. There is intense need for mass media campaign for public awareness and clinical workshops for medical personnel.

Keywords: Cervical screening, awareness, medical personnel.

INTRODUCTION

Cervical cancer has a major impact on the lives of women world-wide, particularly in developing countries. According to the latest global estimates, 493,000 new cases of cervical cancer occur each year among women and 274,000 women die of the disease annually.[1] About 83% of new cases are in developing countries, where it is the leading cause of cancer deaths among women.

The regions hardest hit by cervical cancer are among the worlds, poorest. Parts of Asia have the highest incidence rates over 30 per 100,000/ women .[2] Approximately 1.4 million women worldwide are living with cervical cancer.[3] This estimate reflects the accumulation of new cases each year and the fact that few women in developing countries receive early screening and treatment. Considering natural cycle development of cervical cancer, two to five times this many women, or up to 7 million worldwide, may have precancerous conditions that need to be identified and treated.[4]

Traditionally global efforts to prevent cervical cancer have focused on screening women for abnormal cervical cytology, treating the condition before it advances and providing appropriate follow-up care. Todate, screening efforts have relied largely on the Pap smear, a test that has long been used to detect abnormal cytology.

The lack of effective screening and treatment strategies is a major reason for the sharply higher cervical cancer rates in developing countries. Without access to viable programs, women from poor communities generally seek care only when they develop symptoms and the cancer is advanced and difficult to treat. A major barrier to prevention and treatment is lack of awareness about cervical cancer itself and of ways to prevent the disease. In some communities myths and misconceptions about the disease also pose barriers to prevention.

Detection of cervical cancer in its, earliest stages is life saving, as survival of cancer of the cervix uteri depends on the stage of disease at diagnosis. Although 92% of women have 5 year survival when the cancer is localized, only 13% survive with distant disease.[5] Introduction of screening programs to population naïve to screening reduces cervical cancer rates by 60-90% within 3 years of implementation.[6,7] This reduction in mortality and morbidity with introduction of the cervical screening is consistent and dramatic across populations.

Oldest organized mass screening programs, based on Pap smear, have been working for 40 years in some countries effectively, reducing the incidence of cervical cancer.[8] Yet awareness regarding cervical screening procedures and its significance lacks remarkably in developing countries.

SUBJECT AND METHODS

The present study was designed to assess the awareness about cervical screening among medical and paramedical personnels in different hospitals of Lahore. This study was conducted by giving them structured questionnaires.

Doctors and nurses of different hospitals and of different specialities were asked about their awareness and knowledge of cervical screening. NCCN/ACOG performa adopted locally was given and interviewee's knowledge was judged. The proforma included following questions:

- Age, parity, professional and marital status
- Knowledge about cervical screening and source of information
- Age at 1st sexual contact
- H/O vaginal discharge, warts or itching and/or postcoital bleeding.
- Family H/O cervical malignancy.
- Previous H/O cervical smear, if yes when it was done first and last and how many times.
- If cervical screening not done what was the reason?
- What about future screening?
- The information gained from proforma were analyzed and tabulated and results obtained are discussed in below.

RESULTS

Total 364 medical and paramedical personnel were enrolled in study. Out of them 264 were doctors and 100 were nurses. Age and parity distribution is revealed by Tables 1 and 2. Most of doctors (194 = 73.5%) and nurses (57 = 57%) were of 20-30 years. Table 3 shows marital status. Almost 60% of doctors and 67% of nurses were married. Among married personnel, 53.5% of doctors and 55.2% of nurses had their 1st intercourse between 20-25 years and 46.5% doctors and 54.8% nurses had their 1st coitus after 25 years (Table 4).

Table 5 highlights coexistent symptoms and risk factors. Most common symptom was vaginal discharge with or without pruritis vulvae in both doctors (47.6%) and nurses (41%). Only 8 doctors (3%) and 3 nurses (3%) had positive family H/O cervical malignancy.

Among doctors, 260 (98.5%) had good knowledge about cervical screening, mainly gained by medical education, while only 61 nurses (61%) had some information gained through discussion with doctors and other medical colleagues (Table 6). Despite good knowledge, only 30 doctors (11.4%) gave H/O

Table 1: Age distribution

Age (years)	*Doctors N=264*		*Nurses N=100*	
	No	*%age*	*No*	*%age*
≤ 20	–	–	1	1
20-30	194	73.5	57	57
31-40	50	19	30	30
≥ 40	20	7.5	12	12

Table 2: Parity distribution

Parity	*N = 159*		*N = 67*	
	No	*%age*	*No*	*%age*
P0	28	17.7	10	15
P1-P3	121	76	41	61.2
≥ P3	10	6.3	16	23.8

Table 3: Marital status

	Doctors		*Nurses*	
	No	*%age*	*No*	*%age*
Married	159	60.2	67	67
Unmarried	105	39.8	33	33

Table 4: Age at 1st sexual contact

Age (years)	*Doctors N= 159*		*Nurses N= 67*	
	No	*%age*	*No*	*%age*
≤ 20	1	0.6	4	6
20-25	85	53.5	37	55.2
26-30	71	44.6	24	35.8
31-35	2	1.2	2	3
≥ 35	–	–	–	–

Table 5: Coexistant risk factors and symptoms

Risk factors	*Doctors*				*Nurses*			
	Married		*Unmarried*		*Married*		*Unmarried*	
	No	*%age*	*No*	*%age*	*No*	*%age*	*No*	*%age*
Vaginal discharge	68	42.8	5	4.8	35	35	6	6
Postcoital bleeding	15	9.4	–	–	5	5	–	–
Pruritis vulve	39	24.5	1	0.95	26	26	3	3
Vulval Warts	–	–	–	–	–	–	–	–
Family H/O cervical malignancy	8		3		3		3	

Table 6: Knowledge about cervical screening and its, source

Knowledge	*Doctors n=264*		*Nurses n=100*	
	No	*%age*	*No*	*%age*
Yes	260	98.5	61	61
No	4	1.5	39	39
Source of information				
Medical education	260	98.5	8	8
Medical collegues	–	–	53	53
Internet/ media	–	–	–	–

Table 7: Previous cervical smear and its frequency

Previous	*Doctors n = 264*		*Nurses n = 100*	
cervical smear	*No*	*%age*	*No*	*%age*
Yes	30	11.4	6	6
No	234	88.6	94	94
Frequency	**Doctors (n=30)**	**%age**	**Nurses (n=6)**	**%age**
Once	24	80	5	83.3
Twice	4	13.3	1	16.6
Thrice	2	6.7	–	–

Table 8: Reason of not doing cervical screening

Reasons	*Doctors*		*Nurses*	
	No	*%age*	*No*	*%age*
Shyness/hesitation	3	1.3	2	2
No knowledge/ indications	63	26.9	32	32
Casual attitude	5	2.1	1	1
Fear of unforeseen disease	3	1.3	–	–
Lack of easy availability	5	2.1	–	–
Too busy routine	4	1.7	–	–
No response	151	64.5	65	65

previous cervical screening which was done only once in 24 (80%) doctors. Six (6%) nurses had cervical smear which was done only once in 5(83.3%) nurses (Table 7).

The main reason for cervical screening was either cervical ectopy or discharge in 20 out of 30 doctors (66.6%) and all 6 nurses (100%), while postcoital bleeding was indication for screening in 2 (6.6) doctors. It was done for screening purpose only in 8 (26.6%) doctors. None of the nurses had prophylactic cervical screening.

Noncompliance for cervical screening due to inadequate movitiation and knowledge is the main reason as shown in Table 8. Most of the doctors (63 = 26.9%) and nurses (32 = 32%) found it unnecessary in the absence of any symptoms. Other causes included hesitation (3.3%), lack of easy availability (2.1%) and busy daily routine (1.7%).

Interestingly only 151 doctors (57.2%) and 50 nurses (50%) had positive attitude towards future screening while 27 (10.2%) doctors and 10 nurses (10%) still considered cervical screening unnecessary in the absence of symptoms. 24(9.0%) doctors and 30 (30%) nurses had no intention for future screening. While 9 doctors (3.4%) required further counseling. 72 doctors (27.3%) and 10 (10%) nurses did not respond.

DISCUSSION

Cervical cancer is the commonest gynecological cancer seen in Pakistani women. Millions of women worldwide never undergo cervical cancer screening and hundreds of thousands die prematurely without ever knowing about their disease. This preventable disease kills an estimated 274,000 women every year, affecting the low socioeconomic and most vulnerable

Table 9: What about future screening

Response	*Doctors*		*Nurses*	
	No	*%age*	*No*	*%age*
Yes	151	57.2	50	50
No	24	9.0	30	30
If needed or advised	27	10.2	10	10
Will think about	9	3.4	–	–
After 35 years	7	2.6	–	–
After postgraduation	1	0.4	–	–
No response	72	27.3	10	10

women.[4] Every year some 83% of the worlds, new cases and 85% of all cervical cancer deaths occur in developing countries.[9]

Cervical cancer prevention relies on early detection of cervical cancer precursors through cytology based screening programs. In both developed and developing countries, there is high prevelance of precursor lesions and invasive cancer in previously unscreened population.[10,11] However in developing countries fewer than 1% of women at need receive screening services.[12]

This study aimed to assess the awareness status of medical and paramedical personnel who are supposed to have an adequate knowledge about cervical screening as this information is considered to be an integral part of their medical and paramedical education. The nurses demonstrated a poor knowledge regarding awareness (61%), which is less than desirable.

The doctors had good knowledge of cervical screening but, interestingly very few (11.36%) had actually practiced the standard protocols of cervical screening and this again was not purely for screening purpose, but for certain coexistant problems like vaginal discharge (66.6%).

Hernandez in his four phase study about awareness, reported that the first phase (1985-89) was based on Q and A brochure, which increased the awareness but did not remove the misconceptions. The second phase about more conservative messages failed to reach the targeted audience. However in fourth phase that included teenagers, using mass media campaign, proved fruitful.[13]

Lack of awareness about cervical screening among both educated and uneducated community is the main cause for failure of screening programs. Building of mass awareness about the importance of cervical screening, clinical workshops for medical and paramedical staff, working to mitigate the effects of social barriers and most importantly training local health care providers in appropriate clinical skills should be cornerstone of any comprehensive cervical cancer prevention and control programs.

For ultimate effectiveness the screening programs have to be integrated with overall reproductive and primary health care programs. It is mandatory that members of the target population actively participate in the design of cervical cancer health education programs.

CONCLUSION

Our group included medical and paramedical staff who are definitely more educated than general public regarding importance of cervical screening, yet results revealed only 9.9% compliance rate among doctors and nurses. There is intense need for mass media campaign for public awareness and clinical workshops for medical personnels.

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