

## ORIGINAL ARTICLE

# Frequency of Cervical Cancer in Women Attending Gynae OPD with Complaint of Abnormal Vaginal Bleeding

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## ABSTRACT

**Aim:** Frequency of cervical cancer in women of reproductive age presenting with abnormal vaginal bleeding.**Methodology:** Descriptive cross sectional study, done at Department of Obs & Gynae, JPMC, Karachi**Duration of study:** Six months from 01-11-2014 to 30-04-2015Total 73 patients of age 18-45 years, having history of abnormal vaginal bleeding  $\geq 3$  menstrual cycles were selected. Pregnant woman, abortion within last 6 months, age  $>45$  years, fibroid/ tumors/ polyps, PID, gonorrhoea, or Chlamydia patients were excluded. Chi-square was used as test of significance with a P value  $\leq 0.05$  taken as significant.**Results:** Mean  $\pm$  SD age was  $38.12 \pm 4.33$  years. Mean  $\pm$  SD parity was  $2.21 \pm 1.67$  children (Range: 0-5). Mean  $\pm$  SD duration of presenting symptoms was  $7.45 \pm 2.81$  months (Range 3-11). About one fifth of patients (i.e. 19.2%) were of age between 18-25 years. A vast majority (i.e; 43.8%) were in 26-35 years age category while remaining (36.99%) patients were of age between 36-45 years. 12.3% women had no children, 35.6% had 1-2 children, 28.8% had 3-4 children while remaining 23.3% women had 5 children. 12 out of 73 (16.4%) women had cervical cancer confirmed through biopsy and histopathology of cervical tissue. Age was significant (P value = 0.003) while parity & duration of presenting symptoms were non-significant (P values = 0.110 & 0.405 respectively).**Conclusion:** The study found that almost every 6<sup>th</sup> women with abnormal vaginal bleeding is suffering from cervical cancer. Younger age women and those having lesser parity are less prone to this condition.**Keywords:** Abnormal vaginal bleeding, Cervical cancer, Postcoital bleeding

## INTRODUCTION

Any bleeding per vagina which is not part of a regular & normal menstruation period is called as abnormal vaginal bleeding<sup>1</sup>. It may include spotting of small amounts of blood between periods or extremely heavy periods in which a pad is soaked every one to two hours for two or more hours<sup>2</sup>. Risk factors for cervical cancer include infection with HPV, use of oral contraceptives and intrauterine device (IUD), immunosuppression, smoking, chlamydia infection, young age at the first intercourse and family history of cervical cancer<sup>3</sup>. Human papillomavirus (HPV) infection is very common in young women after the onset of sexual activity and, when it persists, the viral oncoproteins produce perturbation of the cell-cycle controls resulting in cervical intraepithelial neoplasia (CIN)<sup>4</sup>. About 80% of cervical cancers now occur in developing nations, where it is frequently the most common cause of death from cancer in women.<sup>5</sup> According to WHO statistics in 2010, the crude rate of cervical cancer in Pakistan is 13.6 per 100,000 women per year and mortality rate due to cervical cancer is 8.5 per year<sup>6</sup>.

## METHODOLOGY

**Inclusion Criteria:** Married women of reproductive age (18-45 years), sexually active women as noted on the history, H/O abnormal vaginal bleeding  $\geq 3$  menstrual cycles were included.**Exclusion criteria:** Pregnant woman, H/O abortion within last 6 months and patients of  $>45$  years of age were excluded.

The patients who present to Gynae OPD with complaints of abnormal vaginal bleeding were sorted out. Data was collected on name, age, parity, residence &amp; duration of symptoms. Punch biopsy was used to acquire the samples and were analyzed in the pathology department of JPMC. SPSS Version 16 was used. Permission was obtained from Ethical Review Committee.

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## RESULTS

The detail of results is given in tables 1,2,3

Table 1: Age distribution

Age (Yrs)	Cervical cancer			P value
	Yes	No	Total	
18-25	0 (0%)	14 (100%)	14	0.003
26-35	5 (15.6%)	27 (84.4%)	32	
36-45	7 (25.9%)	20 (74.9%)	27	
Total	12 (16.4%)	61 (84.6%)	73	

Table 2: Cervical cancer and Parity

	Cervical cancer			P value
	Yes	No	Total	
No child	(11.1%)	8 (88.9%)	9	0.11
1-2 Children	4 (15.4%)	22 (84.6%)	26	
3-4 Children	4 (19.1%)	17 (80.9%)	21	
5 Children	3 (17.7%)	14 (82.4%)	17	
Total	12 (16.4%)	61 (84.6%)	73	

Table 3: Duration of symptoms

Symptoms	Cervical cancer			P value
	Yes	No	Total	
3-4 months	2(11.8%)	15 (88.2%)	17	0.405
5-6 months	3(12.5%)	21 (87.5%)	24	
7-10months	4 (20%)	16 (80%)	20	
11-12months	3 (25%)	9 (75%)	12	

## DISCUSSION

The frequency of cervical cancer in current study was found to be 16.4% (12 out of 73). This rate is slightly lower than that documented by another study by Abu J et al.<sup>7</sup> in which 19% of patients of PCB had cervical cancer. This difference may be due to the fact that mentioned study had taken only post-coital bleeding patients while the current study had taken all patients with abnormal vaginal bleeding. In the current study, abnormal vaginal bleeding meant patients presenting with any of menorrhagia,

postcoital bleeding or intermenstrual bleeding. Another similar study found that cervical intraepithelial neoplasia was detected among 17% women who presented with vaginal bleeding.<sup>8</sup> Another study which sampled patients presenting with postcoital and/or intermenstrual bleeding found that only 2.2% of these women had cervical cancer. Thus there are differences in cervical cancer incidence rates among different region of world.<sup>9</sup>

The current study found that mean  $\pm$  SD age of our patients was  $38.12 \pm 4.33$  years. A study from India which used the screening technique for detecting cervical cancer also found the similar age patterns of women. In their sample of 4039 women, the mean age was 39.07 years. Because it was a screening study, so they included postmenopausal women also and therefore the range of ages was 30-65 years, however majority of participants (84%) of that study were aged 30-49 years. In current study, about 81% of patients were in age of 26-45 years age. This is important because with change in age pattern, the differential diagnosis of vaginal bleeding changes and suspicion more lies to the cervical cancer. The current study significantly found that age of woman had some relationship with incidence of cervical cancer. The elder age was more affected while the frequency of cervical cancer was lowest among younger age. It has an implications that younger the age lesser the parity thus lower risk of cervical cancer.<sup>9</sup>

Regarding the parity, the current study found that mean  $\pm$  SD parity was  $2.21 \pm 1.67$  children. Further it was also noted that 12.3% women had no children, 35.6% had 1-2 children, 28.8% had 3-4 children while remaining 23.3% women had 5 children which was the higher parity. The current study also evaluated that patients presenting with longer duration of their symptoms were having more burden of cervical cancer cases (P value = 0.405). Although other studies have taken the time since diagnosis of cervical cancer but none has documented the relationship of time with incidence of cervical cancer.<sup>11</sup> Cervical cancer can usually be found early by having regular screening with a Pap test. If women is having symptoms like abnormal vaginal bleeding and she is >30 years of age then these tests must be done. The importance of screening can be understood from the fact that >80% of cases are diagnosed at an advanced clinical stage when the five-year survival is <40%.<sup>12</sup>

## CONCLUSION

The study found that almost every 6th women with abnormal vaginal bleeding is suffering from cervical cancer. Younger age

women and those having lesser parity are less prone to this condition. In developed world, the incidence and mortality from cervical cancer can be decreased by increasing the screening.

**Conflict of interest:** Nil

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