Prevalence of Cervical Cancer Among Females with Complaints of Abnormal Vaginal Bleeding at Tertiary Care Hospital, Rawalpindi

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ABSTRACT

Objective: To determine the prevalence of cervical cancer and connect it with demographic variables among women who presented at the Farooq Hospital / Akhtar Saeed Medical College, Rawalpindi, with a history of abnormal vaginal bleeding.

Study Design: A descriptive cross-sectional study

Place and Duration of Study: This study was conducted at the Department of Obstetrics and Gynaecology at Farooq Hospital / Akhtar Saeed Medical College, Rawalpindi from July 15, 2022, and July 15, 2023.

Materials and Methods: A number of clinical and demographic variables were evaluated, such as age, parity, and amount of time from beginning of symptoms. The existence of cervical cancer was established by tissue biopsies and histopathology. To examine statistical significance, the Chi-square test was used.

Results: The average age of the population was 39.12 years, ±4.35 years. The mean SD time from the onset of symptoms was 8.14 months (interquartile range: 3–11). 50 patients, or 20% of the total, were between the ages of 17 and 25. A greater percentage of patients (45.60%) were between the ages of 26 and 35. Those that were left behind (34.40%) were between the ages of 36 to 47 years. 36% of women had one or two children, 28% had three or more, and the remaining 24% had five or more. Only 12% of women had no children. Of the 250 women, 39 (15.6%) had cervical cancer that was determined by biopsy and histology of the cervical tissue. The duration of the presenting symptoms and parity were not statistically significant (P = 0.130 and 0.455, respectively), whereas age was (P = 0.004).

Conclusion: Women with a history of irregular vaginal bleeding had a 15.6% risk of cervical cancer. Age showed a substantial correlation with the probability of being diagnosed with cervical cancer, highlighting the need of age-specific screening approaches and attentiveness in gynaecological evaluations.

Key Words: Cervical cancer , Irregular vaginal bleeding, Age-specific screening

INTRODUCTION

Cervical cancer is the main reason of women deaths from cancer in poor countries. Cervical cancer is the third most prevalent type of cancer in women under 45 in 146 of 185 countries. [1]

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Since emerging, low-income, and middle-income countries account for 86% of all cervical cancer deaths, this mortality rate also serve as a useful indicator of health inequities. Every year, 122,844 women in India are diagnosed with cervical cancer, and 67,477 of them pass away as a result of the disease.[2,3] Cervical cancer is one of the illnesses having a precancerous stage that may last for years before developing into an invasive sickness, allowing for early detection and treatment to lower the probability of dying from it. [4,5] Although the disease is avoidable and Pakistan lacks comprehensive screening, preventative, and vaccine programs, a significant portion of women still come with highly advanced stages of cancer, and the fatality rate is still fairly high The unknown prevalence and incidence of cervical cancer in Pakistani women may mostly be attributed to inadequate awareness and screening procedures.[6] It is the second most prevalent malignancy overall among females and among Pakistani women between the ages of 15 and 44, according to a study.[7]

Any bleeding that happens during a period that is not regular and expected is considered abnormal vaginal bleeding[8]. It might be very light bleeding that spots very little blood between intervals or heavy bleeding that soaks a pad "every one to two hours for two or more hours"[9]. The various risk factors for cervical cancer are HPV infection, intrauterine device (IUD) use, immunosuppression, smoking, chlamydia infection and a family history of the disease[10]. When sexual activity first begins, young women often get the human papillomavirus (HPV), and if the infection persists, viral oncoproteins disturb the control of the cell-cycle, which results in cervical intraepithelial neoplasia[11]. In Pakistan, the annual crude incidence of cervical cancer was 13.6/100,000 women, while the annual death rate was 8.5. In light of the topographical conditions and high incidence of cervical cancer, the present study aims to screen women who attend the gynecology OPD complaining of abnormal vaginal bleeding for cervical cancer.[12]

MATERIALS AND METHODS

Study Design and Setting: In the Department of Obstetrics and Gynaecology at Farooq Hospital / Akhtar Saeed Medical College, Rawalpindi, a cross-sectional research was conducted. The study ran from July 15, 2022, through July 15, 2023, a period of one year. The institutional ethical review committee gave its clearance before the trial started.

Inclusion criteria: Girls aged 17–47 who are sexually active. women who visited the gynaecology outpatient department (OPD) for medical care throughout the research period. Individuals who gave their verbal agreement to take part in the research.

Exclusion Criteria: Cervical cancer instances that have already been diagnosed. women whose vaginal haemorrhage is unknown. those who are currently pregnant or suffer from mental illnesses. women above 47 years old. individuals who have had an abortion during the last six months.

Data Collection: Included were patients who complained of unusual vaginal bleeding when they arrived at the gynecology OPD. It was necessary to gather information on the patient's age, name, parity, place of residence, and length of symptoms using a standard form.

Statistical Analysis: The software used for the collection and analysis of data was SPSS version 23. In this study, inferential statistics were used to ascertain any significant associations or patterns, while descriptive statistics were utilized to provide a concise summary of the clinical presentations and demographic characteristics.

RESULTS

The current study revealed that 15.6% women were suffered from cervical cancers. The age group of 36 to 47 is most prone to the cervical cancer among the patients studied. The younger patients among the studied patients were least effected with cervical cancer. The results were shown in the table 1, 2 and 3.

Table No. 1: Age distribution of the patients observed

Age (years)	Cervical cancer			P value
	Yes	**No**	**Total**	
17-25	0 (0%)	50 (20%)	50	
26-35	15 (13.1%)	99(86.9%)	114	0.004
36-47	24 (27.9%)	62 (72.1%)	86	
Total	39 (15.6%)	211 (84.4%)	250	

Table No. 2: Cervical cancer and Parity of the patients observed

No. of child	Cervical cancer			P value
	Yes	**No**	**Total**	
0	3 (10%)	27 (87.66%)	30	
1-2	16 (16.66%)	74 (83.66%)	90	0.130
3-4	11 (15.7%)	59 (84.3%)	70	
5 or more	9 (15%)	51 (85%)	60	
Total	39 (15.6%)	211(84.4%)	250	

Table No. 3: Symptomatic period of patient observed

Symptoms	Cervical cancer			P value
	Yes	**No**	**Total**	
3-4 months	7 (11.6%)	53 (88.4%)	60	
5-6 months	10 (12.5%)	70 (87.5%)	80	0.455
7-10 months	15 (23%)	50 (77%)	65	
11-12 months	9 (20%)	36 (80%)	45	

DISCUSSION

Out of 250 participants in the present research, 37 cases—or roughly 15% of cases—were of cervical cancer. In a different research, study[13] discovered that 19% of PCB patients also had cervical cancer, thus this percentage is a bit lower than what they observed. This gap may be the result of the present research included all patients with atypical vaginal bleeding, as opposed to the earlier study, which only included patients with post-coital haemorrhage. In the current research, patients were deemed to have abnormal vaginal bleeding if they had menorrhagia, postcoital bleeding, or intermenstrual bleeding. Another comparable research found cervical intraepithelial neoplasia in 17% of the women who reported vaginal bleeding.[14] Only 2.2% of women in a group of patients with postcoital and/or intermenstrual bleeding in another investigation developed cervical cancer. Regional differences may be seen in the incidence rates of cervical cancer as a consequence.[15] The current study determined that the mean age of our patients was 39.12 years ± 4.35 years standard deviations. In a study conducted in India that employed the screening approach to find cervical cancer, similar age patterns in women were found. Their sample of 4039 women had a mean age of 39.07 years. The study's age range was thus 30-65 years since it was a screening experiment that also included postmenopausal women, however the majority of participants (84%) were in their 30s and 40s. 80% of the patients in the current study were between the ages of 25 and 47. This is important because as people age, their vaginal bleeding differential diagnosis changes and their suspicion of cervical cancer increases. The current study strongly suggested that there was a connection between a woman's age and the likelihood of developing cervical cancer. While younger age groups had the lowest rate of cervical cancer, the elderly age group was more affected. The younger the age, the smaller the parity, and the lower the risk of cervical cancer, it follows. According to the current study's findings, the mean SD parity was 2.21 ±1.67 children. In addition, it was found that 13% of women had no children, 35% had one to two children, 29% had three to four children, and the remaining 23% had five children, the greatest parity. The current study also looked at the association between prolonged symptom duration and a higher burden of cervical cancer cases (P value = 0.405). Though several studies have examined the period of time after a cervical cancer diagnosis, none have shown a connection between that period of time and the prevalence of the disease. By having regular screenings with a Pap test, cervical cancer is often detected early. If a woman is over 30 years old and exhibiting signs like abnormal vaginal bleeding, these tests must be performed. The importance of screening may be understood by the fact that when the five-year survival rate is below 40%, >80% of patients are discovered at an advanced clinical stage.

CONCLUSION

According to the report, cervical cancer affects about every sixth to seventh woman who has irregular vaginal bleeding. Less prone to have this condition are women who are younger in age and who have fewer children. In developed countries, cervical cancer incidence and mortality may be decreased by increasing screening.

Author's Contribution:

Concept & Design of Study:	Taqdees Iftikhar
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