

REVIEW ARTICLE

Intervention Strategies for the Prevention of Female Cervical Cancer

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Abstract: A competent intervention study was conducted to raise awareness of cervical cancer prevention among women who received Neck Pathology counseling at the Policlínico Universitario “Mártires de Jamaica”. The population consists of 326 cancer-free women. A simple random sample of 180 women was selected. The sociodemographic and knowledge variables that affect the increase of the disease were studied. The diagnosis was carried out and an education program was developed. It was found that the main age group was from 35 to 59 years old, affected by pre-university education, unprotected first sexual intercourse between the ages of 15–20, multiple births and unknown risk factors, especially human papillomavirus (HPV) infection. After the intervention, 100% of women knew the factors, causes and prevention methods of cervical cancer.

Keywords: Cervical cancer, Risk factors, Human papillomavirus

Received: December 13, 2020
Accepted: February 6, 2021
Published Online: February 27, 2021

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CITATION

Revé Quiala I, Velázquez Drangue DJ, Rojas Torriente K, *et al.*, 2021, Intervention Strategies for the Prevention of Female Cervical Cancer. *Cancer+*, 3(1):5–8.

DOI: [10.18063/cp.v3i1.359](https://doi.org/10.18063/cp.v3i1.359)

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1. Introduction

Cervical cancer or carcinoma of the cervix includes malignant tumors that occur in the lower fibromuscular part of the uterus that projects into the vagina. It is the second most common type of cancer in women and the most frequent in developing countries, with more than 400,000 cases diagnosed each year^[1].

According to the data provided by the 2010 Cuban Statistical Yearbook, cervical cancer is the third leading cause of death in women. 1,263 patients were diagnosed in 2009, of which 430 died, of which 200 were between the ages of 40 and 59, resulting in a potential loss of life of 32.1 years for this cause alone^[2]. A national study showed that more than 1,000 women were reported on the national cervical cancer register, with the highest rate reported in the eastern provinces, mainly Camagüey, Holguín and Guantánamo, with ages ranging between 35 and 55 (about 60%) with an average of 40 years^[3].

According to the Statistics Department of Provincial Health Directorate of the territory, Guantánamo province Diagnoses about 100 to 150 cases every year, 45% of which are women aged 35 and over^[4,5].

Despite the work carried out by the core working group and the staff responsible for the program, the incidence of cervical cancer has increased and people's awareness of the risk of these infections is low. Today, it is an objective reality that the phenomenon of genital HPV infection is a valuable global situation^[6], which leads to the highest incidence of sexually transmitted diseases, especially in the younger and more sexually active population.

2. Method

From September 2013 to February 2014, a descriptive cross-sectional study was conducted at the University Polyclinic “Jamaican martyrs” on women receiving cervical pathology counseling. These women had risk factors for cervical cancer and knew nothing about the prevention of cervical cancer.

There were 326 women in the institution, of which 180 patients were selected according to the inclusion criteria. The patients agreed to participate in the study and answered the questions in the form.

The sociodemographic and knowledge variables affecting the increase of the disease, such as age, education level, age of first sexual intercourse, number of births and awareness of risk factors of cervical cancer, were studied. Some conclusions and suggestions are put forward.

3. Result

When analyzing the age group (**Table 1**), it was found that the prevalence rate of 47 patients (26.1%) in the age group of 35–59 was the highest, and that of 4 women (2.2%) aged 60 and over was lower.

Table 1. Distribution of women by age group

Age group	No.	%
15–19	19	11.5
20–24	29	16.1
25–34	28	15.5
35–39	47	26.1
40–44	18	10.0
45–49	16	8.8
50–54	11	6.1
55–59	8	4.4
60 and above	4	2.2
Total	180	100.0

The most common schooling was pre-university School (41.6%), followed by university, accounting for 28.8% (**Table 2**). When we analyzed these results, we found that they were consistent with other authors, who found that pre-university education was the highest prevalence and college education, respectively^[7-9].

Table 2. Distribution by educational level

Educational level	No.	%
Primary	14	7.7
Secondary	39	21.6
Pre-university	75	41.6
University	52	28.8
Total	180	100.0

When analyzing the age of the first sexual intercourse (**Table 3**), 83.2% of people had the first sexual intercourse

between the ages of 15 and 20.

Table 3. Distribution of first sexual intercourse

Under 15	No.	%
15–17	97	53.8
18–20	53	29.4
More than 20	30	16.6
Total	180	100.0

When analyzing parity (**Table 4**), the largest number of females 128 are multiparous and only 52 of them are nulliparous.

Table 4. Distribution based on parity

Number of deliveries	No.	%
Nulipara	52	28.8
Multiparas	128	71.1
Total	180	100.0

Table 5 analyzes women’s knowledge level of cervical cancer risk factors. It was found that 88.3% of women did not know these risk factors before intervention, and only 11.6% of women knew these risk factors. After the intervention, 100% of the cases knew the risk factors.

Table 5. Understanding of risk factors for cervical cancer

Knowledge of risk factors	Before		After	
	No.	%	No.	%
Know	21	11.6	180	100
Don’t know	159	88.3	-	-
Total	180	100	180	100

4. Discussion

When analyzing other studies related to cervical cancer, Valdés Álvarez^[6] also found the advantage of this age group in his study on palliative treatment of cervical cancer.

An analysis of the level of education found that these results may be related to the social changes that have taken place in Cuba in recent years^[7,8], which have enabled women to integrate into all areas of social life.

When we analyzed the age of first sexual intercourse, these results were similar to those authors’ in other countries, who claimed that first sexual intercourse at a young age was a risk factor for the development of cervical precancerous and malignant lesions^[9-12]. Other studies carried out in Brazil and Denmark have reached the same results, and they believe that early sexual intercourse is an important risk factor for cancer^[13,14].

Multiparity is a risk factor for cervical cancer since obstetric procedures, whether childbirth or abortion, can have a significant impact on the histological changes of columnar epithelium, which can lead to tear or erosion, thereby damaging the cell proliferation of the membrane^[15,16].

Considering the understanding of the risk factors of

cervical cancer, most women (40) were unaware of the risk factors that cause cervical cancer.

Results regarding the risk factors are related to what was obtained by Dr. Yumilaidy Fabat Martinez. I Degree Specialist in Comprehensive General Medicine at the “Emilio Daudinot Bueno” University Polyclinic in Guantánamo. In the thesis cervical cancer, level of knowledge in women from the “Emilio Daudinot Bueno” University Polyclinic in Guantánamo that suggests that the least recognized risk factors were papillomavirus infection and sexual relations with an uncircumcised man^[17].

According to the reviewed literature, human papillomavirus infection is recognized by the WHO as the most important cause of cervical cancer, premature ejaculation, premature delivery and multiparity^[18,19].

5. Conclusion

Most of the females were between the ages of 35–59. At the pre-university level, sexually transmitted infection caused by Human Papillomavirus also affect the first relationship between the ages of 15–20, and their prevalence is higher.

Before the training, women did not know enough about cervical cancer, after the intervention, 100% of women knew the factors, causes and prevention of cervical cancer.

6. Proposal

It is recommended that this intervention be extended to all health areas as a form of education, that women be trained in the prevention of cervical cancer, and that trained women be used as community health promoters.

Conflict of interest

The authors declare that they have no conflict of interest.

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