

CERVICAL CANCER IN WOMEN WITH HPV

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Abstract: Human papillomavirus (HPV) has a proven relation with cases of cervical cancer, with types 16 and 18 being at high oncogenic risk, thus being considered a predominant risk factor. This study aims to know the perception of women with HPV about their relationship with cervical cancer. A descriptive exploratory study of a qualitative nature was carried out in family health units located in the city of Brejo Santo. The sample consisted of 10 women with HPV diagnosed through pap smears, performed at family health units. For the data analysis, tables and themes were elaborated, followed by categories according to the women's statements. The data revealed that the most important risk factor was the precocity of sexual activity. As a response to the education and health activities, we verified that all were aware of the importance of the bi-annual follow-up to control the pathology. For the most part, the association of its contamination with the partner was revealed. Based not only on this study, we realized how essential it is to carry out sexual health education activities, aiming at the prevention of infections, or when not avoided, the appropriate treatment and control of complications.

Keywords: Cervical cancer, HPV, Interrelation, Preventive aspects.

Introduction

Throughout its history, mankind has always lived with the scourge of venereal diseases, those that are transmitted during sexual intercourse. For this reason, such diseases sedimented negative representations, strengthening stigmas, prejudices and suffering, causing many deaths and sequelae, especially when there were no antibiotics yet.

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The main agent named as cause of cervical cancer is the human papillomavirus (HPV). The Pap test (Papanicolaou) allows it to be done early detection in asymptomatic women, contributing to the detection of precursor lesions and disease in early stages. The preventive test is also characterized as a safe, sensitive and low-cost screening method. Although this method has been introduced in Brazil since the 1950s, it is estimated that about 40% of Brazilian women have never carried out the examination (Cruz, 2008).

The latest published data from the National Cancer Institute (INCA, 2007) regarding the estimates of new cases of cervical cancer expected in Brazil in 2008 is 18,680, with an estimated risk of 19 cases per 100,000 women. In the Northeast (18 / 100,000), this type of cancer occupies the second most frequent position. In the State of Ceará, the incidence is 17.8 / 100,000 and in Fortaleza city (18.49 / 100,000).

Cervical cancer is a serious public health problem in Brazil, and its impact is reduced through integrated control programs, as long as it is incorporated into the other levels of the health care system. Since 1984, the Ministry of Health has advocated the prevention of gynecological cancer as one of the basic actions in women's care, through the Comprehensive Assistance Program for Women's Health (PAISM), and has been proposing to extend gynecological care coverage to all women who are in the reproductive age group through primary health care centers (Brasil, 1994, Paula et al, 2002).

In recent years, there has been an impressive evolution regarding the relationship between cervical cancer and HPV; thus, between the 70's and 80's the first evidence of the probable association appeared and at the end of the 90's the viral presence was described in approximately 100% of the cases of cervical cancer; therefore, it has been stated that there is no cervical cancer without HPV (Nicolau, 2003).

It should be borne in mind that this type of cancer or lesions that precede it (pre-cancer) can be detected in almost 100% of the cases, through very simple preventive exams and to which all women can have access: the Papanicolaou and the Colposcopy (Parellada, 2005).

From the observation of this problem is that arose interest in developing a study on the perception of women with HPV treated at Family Health Program Units of the Brejo Santo City about their knowledge on cervical cancer and its association with HPV.

This research aims to raise awareness among health professionals, especially nurses revising its educational work on sexual and reproductive health for the prevention and

possible STD complications, as well as to support knowledge and scientific development related professionals.

Considering the socio-cultural determinants of these women we were able to perceive empirically through clinical practice, that there is a need for information that provides women's empowerment, something needed to combat the disease. Faced with this panorama, we traced for this study in order to know the perception of HPV infection and its association with cervical cancer in women carrying the virus seen at the Family Health Units in the municipality of Brejo Santo City, featuring socioeconomic subjects and gynecological history.

Cervical Cancer

According to Weinberg (1997) apud Ayoub et al (2000), cancer is a genetic disorder in which normal control of cell growth is lost. The tumor cell differs from the normal cell because it no longer responds to the normal mechanisms of growth control. The mechanism of development of all cancers is the mutation, the change of the genotype of the cell, either in the germinative lineage or, more often, in the cells of the somatic lineage.

Table 1 - General definitions of the TNM system

| | | |
|---|----------------------|---|
| T | Primary tumor | Size, extent, first tumor depth |
| | TX | Primary tumor cannot be assessed |
| | T0 | Absence of evidence of primary tumor |
| | Tis | <i>In situ</i> |
| | T1 a T4 | Increasing size and/or first tumor local extent |
| N | Regional lymph nodes | Extension and location of developed lymph nodes |
| | NX | It is not possible to evaluate regional lymph nodes |
| | N0 | Absence of regional lymph node metastasis |
| | N1 a N3 | Increased involvement of regional lymph nodes |

| | | |
|---|-----------------------|---|
| M | Distant Metastasis | Absence or presence of distant dissemination of the disease |
| | MX | It is not possible to evaluate disease at a distance |
| | M0 | Absence of disease at a distance |
| | M1 | Dissemination of disease at a distance |

Source: Otto (2002)

Table 2 - Selected guidelines for TNM staging

| Stage | TNM | FIGO | Cervical cancer |
|-------|------|------|---|
| 0 | T0 | | Absence of evidence of primary tumor |
| | Tis | 0 | Carcinoma <i>in situ</i> (pre-invasive) |
| I | T1 | I | Cervical carcinoma limited to the uterus (the body length should be disregarded) |
| IA | T1a | IA | Cervical carcinoma diagnosed only by microscopy |
| | T1a1 | IA1 | Stromal invasion ≤ 3 mm in depth and $e \leq 7$ mm in horizontal extent |
| | T1a2 | IA2 | Stromal invasion > 3 to 5 mm, horizontal extent of ≤ 7 mm |
| IB | T1b | IB | Tumor limited to colon greater than T1a2/IA2 |
| | T2 | II | Cervical carcinoma invades beyond the uterus but does not reach the pelvic wall or the lower third of the vagina |
| IIA | T2a | IIA | Without parametrial invasion |
| IIB | T2b | IIB | With parametrial invasion |
| | T3 | III | Cervical carcinoma with extension to the pelvic wall and / or compromising the lower third of the vagina and / or causing hydronephrosis or lack of kidney function |
| IIIA | T3a | IIIA | Tumor invades the lower third of the vagina without extension to the pelvic wall |
| IIIB | T3b | IIIB | Tumor extending to the pelvic wall and / or causing |

| | | | |
|-----|----|-----|---|
| | | | hydronephrosis or lack of kidney function |
| IVA | T4 | IVA | Tumor invades the mucosa of the bladder or rectum and / or extension beyond the true pelvis |
| IVB | M1 | IVB | Distant metastasis |

Source: Otto (2002)

Etiopathogeny

As for the risk factors related to HPV infection, the number of sexual partners during their lifetime is among the most important, as well as: habits of partners and age of the male partner in relation to women, increasing the risk as the higher the partner age (Baseman, 2005 apud Rama, 2008).

According to Fiorezi et al (2004), it was found that although sexual exposure is expressive, infections can also be acquired by self-inoculation of common skin warts during delivery (at the contact of the newborn with the genital tract of the infected mother) by touching non-sexual areas, through surgical gloves, cautery tips, underwear or soaps containing DNA / HPV. Menilk (1962, Apud Halbe, 1993), studying these viral particles, grouped them into the Papovaviridae family, bringing together papillomaviruses and polyomaviruses, both DNA viruses, capable of causing tumor growth and similar ultrastructural features.

Epidemiology

Genital infection caused by HPV is the most frequent sexually transmitted disease in the active sex population, according to the Health Department of Ceará (Ceará, 2002). These data are confirmed by Kiviat apud Freitas (2002), for whom HPV infection is the most frequent viral STD in the United States.

It is estimated that the incidence rates of infections caused by HPV can reach about 30-40% in patients under the age of twenty. After thirty-five years the prevalence decreases to

about 10%, and that of high-risk (oncogenic) HPV infections falls to about 5% (Schiffman, 1993 apud Freitas, 2002). While HPV infection decreases with age, the incidence of cervical cancer increases, suggesting that persistence of HPV infection is necessary to produce high-grade lesions. The peak incidence of cervical cancer occurs 5 to 10 years after HPV infection. However, gestation increases the infection rate to 30% (Freitas, 2002).

HPV Diagnosis

Diagnosis of HPV lesions is currently not only clinical. This may induce errors and consequently favor the evolution of intraepithelial neoplasias. A more accurate diagnosis requires the accomplishment of cytological and colposcopic examinations of the entire genital area, histological examination and identification of the viral group, hybrid capture and polymerase chain reaction (PCR), identifying the oncogenic HPV status. Peniscopia is indispensable because, because the lesions are asymptomatic in both sexes, man can represent a source of reinfection when the disease is not properly diagnosed and treated (Freitas, 2001).

Bastos (1998), presents the importance of performing other tests, which, despite not identifying viral types, diagnose the lesions caused by HPV:

- Cervical-vaginal cytology - smears obtained from the cervix and the posterior fornix of the vagina can provide the preventive diagnosis of the various forms of CIN.
- Colposcopy - is a resource of great value, not only for examining the ectocervix, but also for the endocervix. Associated with cervico-vaginal cytology, it considerably reduces the number of false negativities. Colposcopy is used to guide the cervical biopsy, using the Schiller's test.
- Acetic acid test - is of great value in the examination of the uterine cervix because the aceto-white zones show infection by HPV.
- Biopsy - guided by colposcopy and Schiller's test, allows obtaining a fragment for the histopathological examination, fundamental basis of the diagnosis.
- Conclusion or cervical amputation - this resource is a prophylactic and also a therapeutic method. It should be practiced every time the biopsy reveals CIN III.

Streaming

The HPV transmission routes are through sexual contact with infected people, which occurs in the vast majority of cases; in the maternal-fetal relationship during gestation, trans and immediate postpartum; and out of sexual contact, through fomites: towels, underwear, toilet bowls, bathtubs, gynecological instruments without quality guarantee in the sterilization process. However, it is not known how long the virus resists outside the body, however, it is considered that the transmission through contaminated objects cannot be ruled out (Parellada, 2005).

Regarding perinatal transmission, the presence of HPV 6, 11, 16 and 18 in the oropharynx, conjunctiva and genitalia of newborns was detected. However, a decrease in HPV-DNA positivity was observed during the neonatal period, suggesting more initial contamination than an actual infection (Ceará, 2002)

According to Halbe (1993), the common practice of orogenital sex may be the main mode of transmission in sexually active individuals. The presence of anogenital warts in children should always raise the issue of possible sexual abuse. Recent evidence, describing the HPV typing, may help define, in this case, who is the likely author. Oral examination should also be done.

The same authors reveal that laboratory evidence suggests that non-sexual transmission of HPV may also occur. Contaminated instruments can infect patients and may be the source of the spread of HPV. There is a possibility that the virus will be destroyed when exposed to the air for a long period of time. Hybridization research performed on surgical gloves detected in 50% of them the presence of HPV-DNA.

Nursing actions with HP-carrying client

According to Diógenes, Rezende and Passos (2001), the nursing actions implemented with the client with HPV are of fundamental importance for the control of the disease. Among these actions, the following stand out:

- Assess client's anxiety by guiding her about the illness;
- Explain the importance of treating the partner;

- Explain the treatment procedure and the complications that may arise;
- Avoid sexual intercourse during treatment;
- Provide health practices, proper nutrition, exercise, weight management and safe sex practices (use condoms, avoid multiple sexual partners);
- Show the importance of periodic gynecological examination;
- Provide perineal hygiene. Such measures are added by Paradiso (1998) of:
- Inform the client about the possibility of recurrence, as current therapies do not eliminate HPV.
- To stress the importance of using condoms to protect against HPV.
- Advise women about the need to screen for cervical cancer throughout the life course.

Treatment

The goal of treatment should be to remove visible warts and eliminate undesirable symptoms. Relapses are relatively frequent because even destroying the wart cannot completely eliminate the existing viruses in the genital area. As with any viral disease, the success of treatment depends to a large extent on the specific resistance of each individual. Thus, general measures are also important to help improve defense mechanisms, such as: reducing stress, stopping smoking, eating well and adequate hours of sleep (Parellada, 2005).

To Freitas (2001) it should focus on the real need for treatment, since there is insufficient knowledge to determine cases that will regress spontaneously, persist or evolve to an intraepithelial lesion. Therefore, multiple factors should be evaluated for the institution of appropriate treatment, such as: clinical picture, association with intraepithelial lesion, patient age, risk of transmission, associated immunodeficiency, patient anxiety and legal aspects. As a contribution to the solution of this problem, the Secretary of Health of the State of Ceará states that all treatments are directed only at the eradication of visible lesions, which does not mean a cure, since subclinical and / or latent lesions persist (Ceará, 2002).

In reality, HPV is not treated and the lesion caused by it is destroyed. Before the destructive treatment of these lesions, control of the associated infections is important. This destruction can be effected by physical methods: laser, electrocauterization, cryocauterization or surgical excision; by chemical methods: 80% trichloroacetic acid, 5-fluoruracil, bleomycin,

podophyllin and podophyllotoxin; and immunotherapeutic methods: imiquimod and interferon. The chemical and immunotherapeutic treatment is reserved for patients outside the gestational period (Febrasgo, 2004).

Method

This study consists in a descriptive exploratory research and, according to the approach of its problem, is qualitative in nature. Leopardi (1999) argues that this type of research is used when accurate measurement instruments cannot be used, by making use of subjective data, through studies, whether in a particular case, program evaluation or program proposals.

Field study context

This study was carried out in Family Health Units, located in the city of Brejo Santo - CE, which is distant from the capital Fortaleza 508 km. The mentioned municipality counts on 13 units of Family Health (USF), being eight in the urban zone and five in the rural zone. According to data from IBGE (2007), the population is close to 44,000, corresponding to a coverage of 93% of the population assisted.

Study subjects

Ten (10) women, selected on the basis of a nurse's appointment, were selected to facilitate the researcher's access to the study subjects, since this research is qualitative research whose scope seeks to understand the knowledge of the infection and its association with cervical cancer. These women underwent the Pap test previously, in which result the Human Papillomavirus (HPV) was detected.

Data collection process

Data collection from the study was performed from March to June 2016, using the interview technique.

The instrument was divided into two parts: the first, aimed at obtaining socioeconomic data from women; and the second, on gynecological and obstetrical data, including questions to investigate their knowledge about HPV and its relationship with uterine cervical cancer.

Data analysis

The study data were analyzed from successive readings for understanding and apprehension of ideas and information cited by the research subjects. As well as the testimony classification.

Ethical Considerations

In this research, the ethical aspects contained in resolution 510/2016 regulating the research involving human beings were taken into account, particularly in relation to data about people attended or participants in that study.

However, for the interviews, a consent form was used, where it was read and signed by the women who agreed to participate in the study, and were assured of their anonymity.

It is important to highlight that these women were identified with the following flower names: Helaine, Rose, Carmem, Lia, Geni, Valeria, Magna, Ana, Flora and Tereza, thus ensuring anonymity and, as a way of thanking them for their serenity providing the reports of the diagnosis of the pathology under study because of its association with cervical cancer.

Analysis data Presentation

Featuring Research Subjects

The predominant age group of women with HPV interviewed is between 19 and 25 years (6), that is, starting in the late teens age group, for young adulthood. Therefore, three (3) of them are in the range of 35 to 40 years, and only one (1) in the postmenopausal age, at 59 years.

Regarding the provenance of the women surveyed, three (3) of them come from rural areas, accompanied by two rural family health units (FHU) and seven (7) of them come from the urban area, served in the five FHUs raffled at headquarters. Regarding the gynecological characteristics, we highlighted menarche initially, which among those interviewed occurred predominantly between 11 and 12 years old, six (6), followed by four (4) between 13 and 15 years. Duncan (2004) mentions that in Brazil, menarche is between 11.8 years and 12.2 years. With regard to the age of the first sexual intercourse, we observed that the majority (6) started the sexual life before the age of 20, and only four (4) revealed that it occurred between 20 and 24 years.

When asked about condom use during the first sexual intercourse, we observed that the great majority (7) reported not having used it. It is interesting to highlight some of her justifications such as the participant Rosa, who stated that she did not even exist when she started her sex life, and Margarida reported that she was not aware of its importance for the prevention of STDs.

Regarding the use of another type of contraceptive, we identified that two (2) are pregnant, one (1) uses injectable contraceptives, three (3) use oral contraceptives and (1) one uses the tablet technique.

As for the number of partners, it is interesting to note that for the most part seven (7) related to only one partner, two (2) of them reported having had two, and one (1) affirmed previous "fixed" relationships with three partners.

Regarding the diagnosis of another STD, half of the sample (5) mentioned the occurrence of another STD, among them the presence of herpes (1), candidiasis (2) and bacterial vaginosis (*Gardenerella*) (2). It is worth mentioning that they are not considered exclusively sexual, considering the occurrence of fomites, as well as immune alteration.

Data regarding the cervical examination performance

Regarding the first preventive examination in the life of the women of this study, this occurrence ranged from two years to thirteen years prior to the date of the interview. However, we showed that in four (4) the first exam was also the time of the discovery of HPV, and in association with the age of these women, they had ages ranging from 19 to 25 years at the time of discovery.

"It was a couple of years ago, that I did the first prevention, then as I did this prevention, I detected the HPV, then the nurse sent me to do the treatment, then I finished the treatment all right, that's why when I went to do the next prevention, no longer detected anything. " (Lia)

Themes and Categories

Before the speeches of the subjects of the study, the speeches and expressions were analyzed and the following themes and categories of analysis were found, namely:

THEME - Feelings experienced Facing the Diagnosis

Category - Fear of pathology

"Fear (breaths), fear of everything, there is no explanation for fear" (Helaine)

Significantly, the fear of the diagnosis of HPV represents the fear of cancer, and its own aspects, culturally absorbed by the population and associated with the idea of pain and death, as highlighted in the following clippings:

"Yeah, it's the fear of having cancer, huh?" (Rose)

"I was afraid of being a disease that had no cure" (Tereza)

Fear is the overwhelming feeling about information that some types of HPV influence

the genesis of cervical cancer, thus revealing an interest in knowing its true risks.

*"At first I was very scared, because I already thought that I had cervical cancer, but then I went to get information in books, the internet, and I saw that the virus if you treat it, it does not cause any cancer [...]. At the time it was a scare, because the name already scares a human papillomavirus, I thought I was less than a year old ..."
(Magna)*

The investigated women also expressed aspects that involve conjugality, with feelings present before the HPV infection, where the "trust" in the partner was "broken" and revealed by the infection.

*"I was very scared and angry with my fiancé" (Valéria)
"Woman, it could only have been from my husband's wretch" (Tereza)*

THEME - KNOWLEDGE ABOUT HPV

Category - Basic HPV Understanding

The exploration of women's talk about the level of knowledge about the disease revealed that they were all aware of their health problem. Representing the result of the health education work carried out through the dissemination of STDs in general, focusing on HPV and other associated risk factors in the development of cervical cancer.

"It's a virus (pause), virus, virus, it's the HPV virus, right?" (Helaine)

"I believe that I know these sexually acquired diseases, and that there are some that need to be with a very direct contact" (Carmem).

We note that the most relevant information was the association of HPV as a virus transmitted through sexual intercourse. It is interesting to note that the majority of interviewees classify the virus as exclusively sexually transmitted, but the violet participant emphasizes that among the forms of contamination, the most common is sexual.

Category - Emphasis on treatment

We noticed that the most relevant information related to the importance of the treatment, as a form of prevention of complications, mention mainly cervical cancer.

"They told me that if you do not treat it right, it can turn cancer" (Violet)

"Is that he gives the cancer, right? From the cervix, if not treated, if you do not do the right treatment, right?" (Rose)

Category - Relation between HPV with cervical cancer

When we inquired about the link of HPV with cervical cancer, we noticed that it was unanimous the opinion that they are closely linked. Although many information provided during the educational lectures, often held at the nursing consultation before the gynecological cancer prevention exam, there is still a lack of knowledge of the disease by our clients, leading us to reflect on the most appropriate methodology to be used for sexual health education.

"It is that if not treated, can, is, can with time later turn into uterine cancer" (Lia)

"Oxente, it's all about, because if you do not treat HPV, it turns into a very serious disease, which is cancer of the uterine cervix" (sunflower)

"It has because it is from the cervix, it has everything to do, that with time can have cancer of the cervix" (Flora)

"That is a virus that if not treated from the start can cause uterine cervix cancer" (Geni)

According to the Secretary of Health of Ceará (2002), the control of HPV transmission and promotion of early diagnosis should include constant information to the general population as a prevention strategy.

Category - Contamination attributed to the partner

Concerning the knowledge about the contamination, it is noticed that the great majority, seven (7), attributes the contamination to the husband, either through trial of betrayal, as well as to the previous relations of the partner, it is interesting to comment that one of them attributes contamination with early onset of sexual activity.

"I do not know no, I just think it was his, because he spends the year without coming home, and man does not live without a wife, right?" (Rose)

"Through unprotected relationships with my husband" (Geni)

THEME - Partner genital changes

Category - No lesion or change

When asked about the occurrence of genital injury in her partner, half the sample denied any change.

"No, it does not present anything, not a kind of wart, no discharge, nothing, nothing" (Lia)

"No, I look, I scrutinize enough to see if you have it or not" (Helaine)

We found that women with HPV clinical lesions end up adopting the posture of examining their partners to confirm if they also have these lesions, however failure to confirm lesions in the partner seems to produce uncertainty as to how they actually got the infection.

Category - Clinical signs or discomfort

Therefore, of the five (5) who reported changes in their partners, three (3) reported clinical signs of HPV lesions and two (2) cited only symptoms of discomfort (discharge and itching).

"It has warts on the head of the penis" (Geni)

"He had a little sign on his penis" (Tereza)

We note that all women seek to see HPV-related changes in their partners, mainly because they associate their contamination with them.

"When we were still living together, I saw that he had a run-down in his underwear" (Rose)

"No, I do not know, I only see him scratching" his parts ", (laughter)" (Valéria)

According to the Department of Health of Ceará (Ceará, 2002), genital warts are more frequent in women than in men, with a multicentric distribution.

Category - Independent Changes Monitoring

Regarding medical follow-up, we found that almost only those who presented lesions sought follow-up, and only two of those who did not report any alterations were followed through peniscopia and topical treatment respectively.

"After the first examination that was done and gave negative and, to this day did not appear any change, there, no more" (Magna)

Final considerations

The realization of this work has become a remarkable experience in my life trajectory, because it is approaching subjects that are in constant researches and, through them, it has increased even more the interest to know the problem. To know the predominant relation between human papillomavirus (HPV) and cervical cancer that both frighten the sexually active population, as well as health professionals, leading them to reflect on the value of health education activities.

Based on this problem, we decided to know the perception of HPV-positive women about the association of subtypes of this virus with cervical cancer, since it is a predominant factor in this occurrence, but only those who contracted it could describe their knowledge and feelings about this problem relationship.

It is essential to practice the actions of Sexual Health Education in the day-to-day care of the female population, focusing on the risk factors for the development of cervical cancer, and the importance of periodic preventive examination, aiming at the early detection of changes pre-neoplastic diseases.

It is expected that the study provided relevant information on the subject and that it can promote health professionals, especially the nurse practitioner in evaluating the actions currently underway and in identifying the need to plan and implement new strategies aimed at the promotion and maintenance of women's health.

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