

Clinical and epidemiological profile of patients undergoing treatment for cervical CA at the Oncology and Hematology Center of Cacoal-RO

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Abstract— Cancer is the name given to a set of more than 100 diseases that have in common the disorderly growth of cells that invade tissues and organs, and can spread (metastasize) to other regions of the body. Cancer of the cervix is caused by persistent infection by some types of Human Papillomavirus - HPV (called oncogenic). With approximately 530,000 new cases per year worldwide, cervical cancer is the fourth most common cancer among women, with the exception of non-melanoma skin cases. Describe the epidemiological profile of patients affected by cervical cancer undergoing treatment at a Cacoal oncology center, identifying the related risk factors. It was a field research, carried out in a descriptive and analytical manner, of a quantitative nature. The research was conducted with patients undergoing treatment for cervical CA at the Oncology and Hematology Center of Cacoal-RO. Participated in the research 5 patients diagnosed with cervical cancer, attended from 18 to 22 February 2019. The age of onset of early sexual activity was notable in this research where it was observed that all participants said they had had sex between 10 and 18 years old and also that 80% of the interviewees reported having had three or more sexual partners during their lifetime. The results indicate that women are exposed to several risks for the development of cervical cancer, such as: multiple sexual partners, premature intercourse, history of (STIs), multiparity and smoking, with sexual transmission by HPV being the main cause of cancer in women in developing countries. It was found that permanent health education, expansion of screening programs, greater commitment to primary prevention for an early diagnosis and rapid treatment are the strategies chosen to face the disease.

Resumo: Câncer é o nome dado a um conjunto de mais de 100 doenças que têm em comum o crescimento desordenado de células que invadem os tecidos e órgãos, podendo espalhar-se (metástase) para outras regiões do corpo. O câncer do colo do útero, é causado pela infecção persistente por alguns tipos do Papilomavírus Humano - HPV (chamados oncogênicos). Com aproximadamente 530 mil casos novos por ano no mundo, o câncer do colo do útero é o quarto tipo de câncer mais comum entre as mulheres, excetuando-se os casos de pele não melanoma. Descrever o perfil epidemiológico das pacientes acometidas pelo câncer de colo de útero que fazem tratamento em um centro de oncologia de Cacoal, identificando os fatores de riscos relacionados. Tratou-se de uma pesquisa de campo, realizada de forma descritiva e analítica, de cunho quantitativo. A pesquisa foi realizada com pacientes que realizam tratamento para CA do colo uterino no Centro de Oncologia e Hematologia de Cacoal-RO. Participaram da pesquisa 5 pacientes diagnosticadas com câncer de colo uterino, atendidas no período de 18 à 22 de fevereiro de 2019. A idade de início da atividade sexual precoce foi notável nesta pesquisa onde se observou que todas as participantes afirmaram terem tido a sexarca entre 10 e 18 anos e também que 80% das entrevistadas relataram ter tido três ou mais parceiros sexuais durante a vida. Os resultados indicam que as mulheres estão expostas a vários riscos para o desenvolvimento do câncer de colo uterino, tais como: múltiplos parceiros sexuais, prematuridade da coitarca, histórico de (ISTs), multiparidade e tabagismo, sendo a transmissão sexual pelo HPV a principal causa de câncer em mulheres de países em desenvolvimento. Constatou-se que uma educação em saúde permanente, ampliação dos programas de rastreamento, maior empenho na prevenção primária para um diagnóstico precoce e rápido tratamento são as estratégias eleitas no enfrentamento da doença.

Palavras-chaves— Câncer do colo de uterino. Prevenção. Perfil clínico e epidemiológico.

Resume: Cáncer es el nombre que se le da a un conjunto de más de 100 enfermedades que tienen en común el crecimiento desordenado de células que invaden tejidos y órganos y pueden diseminarse (hacer metástasis) a otras regiones del cuerpo. El cáncer de cuello uterino es causado por una infección persistente por algunos tipos de virus del papiloma humano - VPH (llamado oncogénico). Con aproximadamente 530.000 casos nuevos por año en todo el mundo, el cáncer de cuello uterino es el cuarto cáncer más común entre las mujeres, con la excepción de los casos de piel no melanoma. Describir el perfil epidemiológico de las pacientes afectadas por cáncer de cuello uterino en tratamiento en un centro de oncología Cacoal, identificando los factores de riesgo relacionados. Fue una investigación de campo, realizada de manera descriptiva y analítica, de carácter cuantitativo. La investigación se realizó con pacientes sometidas a tratamiento por AC cervical en el Centro de Oncología y Hematología de Cacoal-RO. Participaron en la investigación 5 pacientes diagnosticadas con cáncer de cuello uterino, atendidas del 18 al 22 de febrero de 2019. La edad de inicio de la actividad sexual precoz fue notable en esta investigación donde se observó que todas las participantes dijeron haber tenido relaciones sexuales entre los 10 años. y 18 años y también que el 80% de los entrevistados refirió haber tenido tres o más parejas sexuales durante su vida. Los resultados indican que las mujeres están expuestas a varios riesgos para el desarrollo de cáncer de cuello uterino, como: múltiples parejas sexuales, relaciones sexuales prematuras, antecedentes de (ITS), multiparidad y tabaquismo, siendo la transmisión sexual por VPH la principal causa de cáncer en mujeres en países en desarrollo. Se encontró que la educación permanente en salud, la ampliación de los programas de cribado, un mayor compromiso con la prevención primaria para un diagnóstico temprano y un tratamiento rápido son las estrategias elegidas para enfrentar la enfermedad.

Palabras-claves— Palabras clave: cáncer de cuello uterino. Prevención. Perfil clínico y epidemiológico.

I. INTRODUCTION

Cancer is the name given to a group of more than 100 diseases that have in common the disordered (malignant) growth of cells that invade the tissues and organs, and can spread (metastasize) to other regions of the body. Dividing rapidly, these cells tend to be very aggressive and uncontrollable, determining the formation of tumors (accumulation of cancer cells) or malignant neoplasms. On the other hand, a benign tumor simply means a localized

mass of cells that multiply slowly and resemble their original tissue, rarely constituting a risk to life (BRASIL, 2018).

World Health Organization data released indicate that 8.8 million people die of cancer each year (WHO, 2017). An estimate from the National Cancer Institute (2015) points to an increase in the occurrence of about 600 thousand new cases of cancer in Brazil in 2016 and 2017. Percentually speaking, in addition to prostate tumors

(28.6%), the most common types of cancer tumors in men lung (8.7%), intestine (8.1%), stomach (6.3%) and oral cavity (5.2%). However, in women the main ones are cancers of the breast (29.5%), intestine (9.4%), cervix (8.1%), lung (6.2%) and thyroid (4.0 %) will be among the main ones (BRASIL, 2018).

Cancer of the cervix is caused by persistent infection by some types of Human Papillomavirus - HPV (called oncogenic). Genital infection with this virus is very common and does not cause disease most of the time. However, in some cases, cellular changes may occur that may progress to cancer. These cell changes are easily discovered through the preventive exam (Pap smear), and are curable in almost all cases (BRASIL, 2018).

According to the 2013 Ministry of Health Protocol, the first two exams must be performed at an annual interval and, if both results are negative, the next should be performed every 3 years. The beginning of the collection must be at 25 years of age for women who already have sexual intercourse or active sexual life, following up to 64 years of age for women who have no previous history of the disease (BRASIL, 2013).

More than 90% of women who have cervical cancer have been exposed to HPV. With approximately 530,000 new cases per year worldwide, cervical cancer is the fourth most common cancer among women, with the exception of non-melanoma skin cases. It is responsible for 265 thousand deaths per year, being the fourth most frequent cause of cancer death in women (BRASIL, 2018).

Subclinical and asymptomatic forms are manifestations that cannot be seen with the naked eye, and may affect the same sites as the clinical manifestation, however, not generating any signs or symptoms. The cervix is the place of greatest concern because of the close association with cancer there. Initial lesions, which reflect only the presence of the virus in the cervix, are called low-grade intraepithelial lesions / grade I neoplasia (CIN I); more advanced lesions and cancer precursors, in this place, are considered of high degree - NIC III (PINHEIRO et al., 2013).

Marana et. al., (2009) claim that due to its high prevalence, mainly in subclinical and asymptomatic forms, and its high effectiveness, the spread of HPV cases tend to be universal among sexually active individuals. Allied to these factors, the high rates of recurrence, confusing and making treatment difficult, and the marked association between verrucous lesions and cervical carcinoma (CA) have further increased the concern and interest in the evaluation of women infected by the virus.

The diagnosis of HPV is usually performed through clinical examination (Inspection). The wart has a raised,

papillomatous surface, or a curly surface. Initially, the lesions are small (1 to 5 mm in diameter), but they can progress to larger, pedunculated lesions and, eventually, take the shape of cauliflower, particularly in immunocompromised patients. In addition to the vulva, the perineal body and the anogenital region, these lesions can also grow in the canal of the anus, on the walls of the vagina and on the cervix (CALLAHAN and CAUGHEY, 2010).

This article aimed to describe the clinical and epidemiological profile of patients affected by cervical cancer undergoing treatment at a Cacoal Oncology Center, identifying the risk factors related to the onset of cervical cancer, identifying the socioeconomic profile and checking the past routine of Pap smear of these patients.

Given the above, as it is a high-rate infection with serious consequences, it is important to know more deeply about the pathology, as well as to identify the clinical and epidemiological profile of women affected by cervical cancer, so that both managers and professionals in the area can plan, implement and / or implement preventive actions in an attempt to reduce the impact on the health of the general population.

II. MATERIALS AND METHOD

It was a field research, carried out in a descriptive and analytical way, of a quantitative nature. The research was carried out at the Oncology Center of the municipality of Cacoal-RO, which is located 476 km from Porto Velho, capital of the state. It has an estimated population of 88,507 inhabitants (IBGE, 2017).

The population meeting the criteria to participate in data collection was a total of 05 women. Using an interview form developed by the researchers themselves containing 31 objective questions and one open question.

As inclusion criteria, it was established to evidence patients with a diagnosis of cervical cancer and to be under treatment, agreeing with the research and signing the Informed Consent Form (ICF), patients who are being treated for cervical cancer. uterus in outpatient follow-up and hospitalization and also patients aged 18 years and above. Patients discharged due to cure and patients who did not attend treatment during the proposed period of research were excluded from the research.

Data collection was carried out in February 2019, during two visits to the hospital unit. Initially, a search was made in the hospital admission book and records of the treatment outpatient clinic to identify patients who would be present at the time, during the collection variables were raised regarding age, race, marital status, monthly income,

paid activity, education, religion, place of birth, place of residence and origin, profession, age at which sexual activity started, number of sexual partners, use of condoms, if you have had any STIs, if you use contraception, age of first pregnancy, number of children, smoking history, if you have knowledge about HPV, if you have already had a preventive exam, when the exam was performed, how long ago you were diagnosed with cervical cancer, age at diagnosis, assessment of risk factors, history of cervical cancer in the family, if he had any chronic pathology, what type of treatment he was undergoing, presence symptoms before and after the treatment session, duration of treatment, and finally, he was asked to describe his feelings about the disease and the treatment.

After data collection, the information obtained was tabulated in an Excel® 2016 spreadsheet, presented in tables and graphs, and a database was built. Subsequently, this information was distributed according to the objectives of each stage of the research, such as Describing the clinical and epidemiological profile of patients affected by Cervical Cancer undergoing treatment at a Cacoal Oncology Center. Identify the presence of risk factors related to the appearance of cervical cancer and Identify the socioeconomic profile of patients undergoing treatment for uterine cancer;

In order to carry out the research in accordance with Resolution 466/12 of the National Health Council, it was necessary to approve the Ethics and Research Committee (CEP) of the Faculty of Biomedical Sciences of Cacoal-UNIFACIMED, under protocol number: 3.066.608 and signature of the consent form.

III. RESULTS AND DISCUSSION

Participated in the research 5 patients diagnosed with cervical cancer, attended at the Oncology and Hematology Center of Cacoal, Rondônia. It was analyzed on religious issues, questioning whether or not you practice any religion, and what is the religion. According to table 1.

Table 01: Sociodemographic data in patients undergoing treatment for cervical cancer at an Oncology Center in Cacoal / RO

Variable	answer	Percent
Age range	20 to 29 years	20%
	30 to 39 years	20%
	40 to 49 years	20%
	50 to 59 years	40%

Ethnicity	White	40%
	Parda	40%
	Black	20%
Marital status	Married	100%
Per capita income (in minimum wages - SM)	De 1 a 1½	20%
	De 1½ a 2	40%
	De 2 a 3	20%
	More than 3	20%
Education	Illiterate	20%
	Incomplete Elementary School	20%
	Complete high school	40%
	Post graduate	20%

Source: BATISTA, MILITÃO and FERREIRA, 2019.

As shown in Table 1, in relation to the socio-demographic data found in the survey, the average age of 40-year-old cancer patients, ranging from 20 to 59 years, was observed. The dominant age group was 49 to 50 years old. Some studies also claim that this is the age group with the highest prevalence of this pathology. As an example, we quote Soares et. al (2010) who in his study describes the predominance of women aged 45 to 55 years. For Rodrigues and Ferreira (2010) the highest prevalence of cervical AC in women is in the 55 to 64 age group. They also corroborate the studies by Carvalho and Queiroz (2011) who claim that there is a predominance of women in the age group of 46 to 55 years.

Regarding ethnicity, the different characteristics were observed, such as the variation in the intensity of melanin in the skin, and the state of RO is mixed. The available data originated from surveys of races such as: white, mixed race and black, but the predominance in this research was white and mixed race, with 40%. Of those surveyed, 100% reported being married. In a survey carried out in the city of Rio Grande, in the south of Brazil, it was found that women without a steady partner have higher prevalences in relation to the non-performance of the preventive exam of cancer (Fonseca et al., 2010).

Per capita income also showed variability, concentrating between 01 and 03 minimum wages and 60% of the participants worked in formal salaried jobs

when the cancer was diagnosed. In the research by Fonseca et al. (2010), 47.6% of the participants performed professional activities with formal jobs until the moment of illness. Gomes et al. (2017) explain that the relationship between income and the prevalence of cervical AC occurs due to the fact that women with low income are more vulnerable to contracting sexually transmitted infections, since they have less access to health services to perform the exam and they are still the ones that generally face greater financial difficulties to follow up on treatments.

This research did not find a relationship between education and the prevalence of cervical AC, as the participants have a very diverse education. Since 20% are illiterate, 20% have incomplete basic education, 40% said they have completed high school and the other 20% even attended a postgraduate course. In other studies such as Thuler, Bergmann and Casado (2012) and Prado et. al (2016) could not establish the relationship between schooling and prevalence of uterine CA, as, as in the present study, in both of them, varied schooling was observed. However, there are reports of an inverse relationship between education and prevalence of cervical AC. The authors who affirm this nexus, explain that low education contributes to non-adherence to the treatment of precursor lesions and, consequently, to the increased incidence of uterine cancer (CARVALHO & QUEIROZ, 2011; FONSECA ET. AL, 2010). Conversely, Cavalcante et al. (2014) states that, among the sociodemographic aspects, schooling revealed to be the variable with the highest risk for women to be affected by cervical cancer. The authors found a predominance of cases in women with no to three years of schooling (84.17%) while in women with more than eight years of schooling there was a low incidence (14.83%) (BASTOS, 2007).

Regarding religious practice, the present study found that this factor does not interfere in the performance of the cervical cancer preventive exam, demonstrating that, unlike others, the religion factor does not constitute an obstacle in the performance of the exam. Among the literature that analyzed this relationship, there was a positive combination between practicing some religion and taking preventive measures (INCA, 2018).

When asked about the age of onset of sexual activity, the responses were notable, and it was observed that all participants said they had had sex between 10 and 18 years of age. Among those involved in the study by Prado et. al (2016) sexarche occurred before the age of 14 in 30.5%, while in 50.8% it occurred between 15 and 17 years. The sexarche has occurred more and more precociously. In Brazil, the average age of first sexual intercourse is 14 years for males and 15 for females (HUGO, et al., 2011). According to Ramos (2014), socioeconomic status and

education are the main factors associated with early sexual activity.

It should also be noted that 80% of the interviewees reported having had three or more sexual partners during their lifetime. In an investigation by Fonseca et. al (2010) in Roraima on the 330 patients with cervical cancer, the average was 4.2 of sexual partners during their lifetime. Soares et. al (2010) ensures that the greater the number of sexual partners throughout life, the greater the chances of developing cervical AC, since there is a greater exposure to HPV and other sexually transmitted infections.

Regarding the use of condoms, it can be seen that 60% said they never used it, 40% sometimes, and none of the participants answered that they always use it. Souza and Costa (2015) warn that the main risk reduction behavior for cervical CA is the use of female and male condoms in all sexual relations, as these decrease the risk of HPV contamination by more than 80%. And when faced with the presence of any STI, 100% denied it.

About the contraceptive method used by the participants, the research showed that 60% take hormones orally, also known as birth control pills, 20% have undergone uterine tube ligation surgery, also called tubal ligation and 20% do not use any type of contraceptive method. It is worth noting that the prolonged use of birth control pills has been associated as a risk factor for the development of cervical CA (MASCARELLO et al. 2012). Rafael and Moura (2012) explain that although there is no consensus on the consequences of using oral contraceptives in relation to the genesis of cervical cancer, some studies point out that hormonal contraception can lead to an increase in HPV infections.

Subsequently, through the analysis of the questionnaires, the number of children was assessed and then demonstrated that 60% said they had 3 children. The average fertility rate found among the interviewees was 2 children. According to the study by Prado et al. (2016), the majority of women affected by cervical CA have three or more children. Carvalho and Queiroz (2011) highlight the possibility that high-grade injuries are more frequent in women who have had one to three deliveries, and infiltrating carcinoma, in those who have had between four and six deliveries, highlighting the importance of the association between discharge parity and increased risk of developing cervical cancer. The authors also clarify that contemporary women increasingly seek to have fewer children. The fertility rate has been declining, which is also associated with socioeconomic factors in the Brazilian population (Rafael and Moura, 2012).

Smoking is one of the biggest risk factors to be considered regarding the incidence of cervical AC. The

study found a smoking history in 60% of the interviewees, with 40% ex-smokers and 20% passive smokers. Teles, Muniz and Ferrari (2013), observed that 48% of a total of 65 women with cervical changes were smokers. The authors point out that the number of smokers, among females, has increased worldwide, influenced by numerous economic and socio-cultural factors, especially in developing countries, making tobacco one of the major causes of this type of tumor.

When asked about knowledge about HPV, 80% of patients reported having information about this pathology. This information is antagonistic to the results generally found in analogous studies, which generally show a great lack of knowledge about the disease. This is what Morato et al. (2013) when analyzing 15 articles on the topic. The results of the present study are also in contrast to those described in studies by Fonseca et. al (2010) where 83.3% of patients reported total ignorance of HPV.

A survey by Costa and Goldenberg (2013) carried out with young people and adolescents in the state of São Paulo also revealed high levels of ignorance about HPV. The authors describe that although the majority of the interviewees have already heard about HPV, there is limited knowledge about specific issues related to transmission, the development of associated diseases and, correspondingly, the forms of prevention.

As can be seen in table 02, there was a predominance of the group of women who underwent the last preventive exam more than 01 year ago. Regarding the time of diagnosis, it was identified between those who were diagnosed less than 3 months ago and those who received the diagnosis more than a year ago. With regard to the age that the patients had when receiving the diagnosis, those aged between 40 and 59 years stand out.

Table 02: History of patients undergoing treatment for cervical cancer at an Oncology Center in Cacoal / RO

Variable	answer	Percent
Last time preventive	Less than 03 months	20%
	From 03 to 06 months	20%
	More than 01 year	40%
	Never did	20%
Diagnosed how long	Less than 03 months	40%
	From 03 to 06 months	20%
	More than 01 year	40%

Age of diagnosis	From 20 to 29 years	20%
	From 30 to 39 years	20%
	40 to 49 years	40%
	50 to 59 years	20%
Risk factors	Did not do preventive	60%
	Smoking	40%
Family History of Cancer	Yes	20%
	Not	80%
Treatment Type	Chemo + Radiotherapy	100%
	Brachytherapy	80%
	Surgery	40%
Symptoms before treatment	Pelvic pains	40%
	Bleeding	60%
	Discharge	
Symptoms during treatment	Pelvic pains	
	Weight loss	
	Other symptoms	
Treatment time	Less than 03 months	
	More than 01 year	

Source: BATISTA, MILITÃO and FERREIRA, 2019

According to family history, 80% answered that they did not have family members with such pathology. Regarding the proposed treatment, chemotherapy stood out with 100%, followed by brachytherapy and surgery. Before the treatment, the symptoms were concentrated in hemorrhages and discharge, and afterwards, the weight loss and pelvic pain that remained were highlighted. In the pursuit of the treatment, the time until the moment of the research, had been of 60% for those with more than 03 months.

IV. CONCLUSION

This research allowed us to observe that cervical cancer can be diagnosed early through a simple

examination such as the Pap smear, in sexually active women, predominantly between 25 and 59 years of age and easily available in the UBS. It is also understood that screening for cervical cancer must be performed periodically, maintaining high coverage to reduce incidence and mortality.

It proved to be important to know the reasons previously discussed and, since then, that Primary Health Care is defined as a primary component for the promotion and prevention of health, working on actions related to the theme, thus aiming at the possibility of increasing the number of women who regularly carry out preventive collection, and also actively search for missing patients. In fact, cervical cancer is known for its high mortality rate, but it is totally preventable, since there are several actions for its control, such as the technologies that detect in the initial stage and treatment for HPV injuries, enabling cure if diagnosed early.

Based on what was proposed in the objectives of this article, it was shown that the risk factors for the development of this type of cancer are related to the appearance of cervical cancer. Such as multiple sexual partners, prematurity of sexarche, multiparity and smoking, with sexual transmission by HPV being the main cause of cancer in women in developing countries.

According to the true hypothesis, which says "The risk factors with the highest prevalence among patients affected by uterine cancer and who are undergoing treatment at the Oncology and Hematology Center of Cacoal-RO differ from those found in other studies conducted in Brazil", was confirmed through education data, risk factors and knowledge about HPV.

It is believed that studies of this nature can provide more specific and targeted data about the clinical and epidemiological reality, which can support the development of strategies for the prevention of cervical cancer. Epidemiological research reports that in different demographic regions, records are an important source for studies, highlighting risk factors and injuries. Maintaining permanent surveillance of the entire population, especially those at risk, and the control of this type of cancer.

Considering the results obtained in the research, it is evident the importance of new studies on the theme addressed, as well as a greater involvement of health and government agencies, in order to reduce the number of cases of cervical cancer. Permanent health education, expansion of screening programs, greater commitment to primary prevention, early diagnosis and rapid treatment are the strategies chosen to face the disease. Women should be encouraged to know and prevent risk factors. Prevention is

also important among younger women who start sex earlier and earlier.

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