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SOCIAL DETERMINANTS OF PATIENTS WITH PENILE NEOPLASIA DETERMINANTES SOCIAIS DE PACIENTES COM NEOPLASIA PENIANA DETERMINANTES SOCIALES DE PACIENTES CON NEOPLASIA PENIANA

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ABSTRACT

Objective: to describe the social determinants of patients diagnosed with penile cancer treated in a university hospital. **Method:** this is a quantitative, descriptive and retrospective study, in which the characteristics of the patients treated between 1982 and 2013 were searched. The data was analyzed and tabulated by descriptive statistics, after the presentation in tables and figures. **Results:** the study was composed by 107 patients, among these, the average age of 63.7 years prevailed, married, with white skin color and complete primary education and retirees. Conclusion: it can be concluded that social determinants can serve as a basis for the oncology nurse to identify vulnerable groups and, thus, establish preventive measures and health education for those who are at risk of the disease. **Descriptors:** Penile neoplasias; Nursing Oncology; Men's Health; Neoplasias; Nursing; Medical-Surgical Nursing.

RESUMO

Objetivo: descrever os determinantes sociais dos pacientes diagnosticados com câncer de pênis atendidos em um hospital universitário. **Método:** trata-se de um estudo quantitativo, descritivo e retrospectivo, em que se procedeu à busca pelas características dos adoecidos atendidos entre os anos de 1982 e 2013. Analisaram-se e se tabularam os dados pela estatística descritiva, após a apresentação em tabelas e figuras. **Resultados:** compôs-se o estudo por 107 pacientes, entre estes, prevaleceu a idade média de 63,7 anos, casados, com cor da pele branca e ensino fundamental completo e aposentados. **Conclusão:** conclui-se que os determinantes sociais podem servir de base para que o enfermeiro oncológico identifique grupos vulneráveis e, assim, estabelecer medidas preventivas e educação em saúde para aqueles que estão em risco da doença. **Descritores:** Neoplasias Penianas; Enfermagem Oncológica; Saúde do Homem; Neoplasias; Enfermagem; Enfermagem Médico-Cirúrgica.

RESUMEN

Objetivo: describir los determinantes sociales de los pacientes diagnosticados con cáncer de pene atendidos en un hospital universitario. **Método:** se trata de un estudio cuantitativo, descriptivo y retrospectivo, en que se procedió a la búsqueda por las características de los enfermos atendidos entre los años 1982 y 2013. Se analizaron y se tabularon los datos por la estadística descriptiva, después de la presentación en tablas y figuras. **Resultados:** se compuso el estudio por 107 pacientes, entre éstos, prevaleció la edad media de 63,7 años, casados, con color de la piel blanca y enseñanza básica completa y jubilados. **Conclusión:** se concluye que los determinantes sociales pueden servir de base para que el enfermero oncológico identifique a grupos vulnerables y, así, establecer medidas preventivas y educación en salud para aquellos que están en riesgo de la enfermedad. **Descritores:** Neoplasias del Pene; Enfermagem Oncológica; Salud del Hombre; Neoplasias; Enfermería; Enfermería Médico-Quirúrgica.

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INTRODUCTION

Penile cancer (PC) is an uncommon neoplasia in the world, represented by less than 1% of malignant tumors.¹ It is noticed that its main occurrence is in India, with 3.32 cases per 100 thousand male inhabitants.² In parts of the African continent penile neoplasias account for more than 20% of the total number of neoplasms diagnosed annually,³ whereas in Latin America the literature estimates that ten to 20% of malignancies diagnosed in men are in the penis, highlighting Paraguay, where penile cancer may account for 45-76% of tumors diagnosed.^{1,4}

It is known that epidemiological studies on this type of neoplasia are scarce and divergent, so the study of the Epidemiologic Study on Penile Cancer in Brazil,² in which the incidence of penile cancer is described as 2.9-6.8 per 100 thousand inhabitants, which makes Brazil one of the countries with the largest number of cases of this disease in the world. It was also evaluated the distribution of 283 cases between May 2006 and June 2007, and it was identified that the majority occurred in the North and Northeast regions (53.2%), followed by the Southeast region (45.54%), among men with age greater than 46 years (78.96%), who had phimosis (60.42%), some with a history of human papillomavirus (HPV) infection (6.36%), smokers (35.68%) and predominantly low-income. It can be seen, in the comparison of this scenario with that of other diseases, that penile cancer has little prominence; however, its relevance is not related to its epidemiological characteristic, but to its clinical importance, considering that the main therapeutic behavior consists of the total or partial withdrawal of the penis, psychologically compromising the life of the amputated man and his social relations.

In a study that analyzed the emotional responses in men with penicillized penile cancer in a reference institution in the treatment of cancer in the State of Pernambuco, 15 men were selected for the study, and their most frequent responses were insomnia, suicidal ideation, fear and immense sadness.⁵ It was verified, although it has not been deepened in the data, that the disease has an important emotional impact on the lives of the subjects.

It will be influenced, by the aforementioned emotional impact, in the form of confrontation that the man will face before the illness. In a survey of 30 Canadian men with various cancers, three strategies for managing the disease in their lives were

identified: strengthening of resources, maintenance of the family and social relations.⁶ Participants in these activities were based on a variety of behaviors to respond to the demands that social contexts impose and which men assume as male ideals, such as strength, control, and stoicism. It is thus demonstrated that it is a challenge to be with cancer, but the greatest difficulty lies in seeking help and maintaining the male role. Thus, the process of getting sick is guided by the experience that each man has with the disease.

It is understood that the nurse is one of the health professionals who, during his praxis, provides assistance to the health of men from prevention, treatment, to survival, through care and education. However, in order for these processes to be effective, it is necessary to add to their behavior the attitude of recognizing the social determinants that characterize this population and its relation to the scientific evidence. In this perspective, it is proposed to study the social determinants of men with penile cancer who were treated at Hospital das Clínicas of the University of São Paulo at Ribeirão Preto Medical School (HCFMRP/USP) in order to map the scenario of the disease in the area agreed between the institution and the municipalities of São Paulo, complementing this information with the database on penile cancer in the State of São Paulo.

OBJECTIVE

- To describe the social determinants of patients diagnosed with penile cancer treated at a university hospital.

METHOD

In this study, the precepts of descriptive research are described, as it proposes to describe phenomena in real-life situations, providing characteristics of particular individuals, situations or groups, and their results allow for the identification of possible relationships between them and development of hypotheses that provide a basis for further research.⁷

Data was then collected with the support of the Medical Data Sector of the HCFMRP, and this survey was carried out in January 2016. The sample was composed of 107 men with PC attended at HCFMRP/USP, among the years from 1982 to 2013, since the institution works with a delay in the registry of rare neoplasias. It turns out that the data source was the bank of medical records that the institution maintains; however, that sector

fragmented its database in two periods, one from 1982 to 1999 and another from 2000 to 2013. By this fragmentation, the equation of the variables for the banks was committed. It should be noted that similar variables were the attendances per year, city of origin, age group, color and marital status, but only for the period from 2000 to 2013 were the variables schooling and occupation and, therefore, these data will be presented separately. The data was passed on to the researcher through the *Microsoft Office Excel 2010 for Windows®* program.

The analysis was based on descriptive statistics, with the objective of organizing and summarizing observations. Through this form of analysis, the researcher can present a summary of the general characteristics of a set of data, which may take several forms, including: tables, graphs and numerical summary measures.⁸

The involvement of human beings in the research and ethical care of researchers was considered and, in compliance with Resolution Num. 466/2012 of the National Health Council,⁹ this study is part of the doctoral project "The experience of penile cancer and its Treatments in the perspective of the sick", being submitted to the Research Ethics Committee (REC) of the University of São Paulo at Ribeirão Preto College of Nursing

(EERP-USP) and approved on 04/03/2013 under the CAAE protocol: 07484812.0.0000.5393.

There are many taboos related to PC illness, and the primary information that would make it possible to elucidate various real-life situations faced by healthcare professionals is scarce. This perspective is followed by the data provided by the institution where this study was carried out, so that they did not allow the construction of a broad sociodemographic and clinical profile of the patients. However, the research was limited to the description of a retrospective situational picture of patients with PC attended at the HCFMRP, which are extremely important to guide future research in the area and particular care. The local determinants provide subsidies to understand the regional and national reality, since, from them, the established policies are implemented.

RESULTS

In the period from 1982 to 2013, in the HCFMRP, 107 patients with PC, with an average of 3.3 visits per year which represented a low incidence of the disease. However, it is observed each year, in figure 1.

Figure 1. Distribution polygon of the patients according to the year of care from 1982 to 2013. Ribeirão Preto (SP), Brazil, 2014.

The municipalities were organized by the Secretary of Health of the State of São Paulo, through 17 Regional Directorates of Health (DIR), obeying the Decree DOE nº 51.433, of December 28, 2006. It is, therefore, HCFMRP to serve the municipalities belonging to DIR XIII, however, we identified patients from DIR and distinct states, as observed in figure 2.

Key: DIR XIII: Regional Directorate of Health XIII; OC: Other Cities; OS: Other States; NI: Not Informed. DIR XIII comprises the municipalities of: Altinópolis, Barrinha, Batatais, Brodowski, Cajuru, Cássia dos Coqueiros, Cravinhos, Dumont, Guariba, Guataporá, Jaboticabal, Jardinópolis, Luís Antônio, Monte Alto, Pitangueiras, Pontal, Pradópolis, Ribeirão Preto, Santa Cross of Hope, Santa Rita do Passa Quatro, Santa Rosa do Viterbo, Santo Antônio da Alegria, São Simão, Serra Azul, Serrana, Sertãozinho.

Figure 2. Distribution map of patients according to DIR XIII from 1982 to 2013. Ribeirão Preto, São Paulo, Brazil, 2014.

A rate of incidence for DIR XIII of 1.3 persons / year per ten thousand inhabitants was identified (base population: 644,115 male inhabitants).

The ages ranged from the second to the ninth decade of life, and the mean age of the

patients was 63.7 years (standard deviation = 12.3). It was noted in the color distribution that the majority of patients (83.2%) were white, whereas for marital status, the highest percentage (57%) was among the married. This information is detailed in table 1.

Table 1. Distribution of patients, according to age, color and marital status, from 1982 to 2013. Ribeirão Preto (SP), Brazil, 2014.

Variables	N	(%)
Age group		
20 - 29	1	0.9
30 - 39	7	6.5
40 - 49	17	15.9
50 - 59	29	27.1
60 - 69	30	28.1
70 - 79	15	14.1
80 - 89	7	6.5
90 - 99	1	0.9
Total	107	100
Color		
White	89	83.2
Black	18	16.8
Total	107	100
Marital Status		
Single	20	18.7
Married	61	57
Stable union	2	1.9
Divorced	9	8.4
Widow	15	14
Total	107	100

The percentage of 66.7% of the patients who had only complete elementary school was high, with one being considered elementary school and the other high school; already in

relation to the occupation, the highlight was the retirees, with 37.8% of the patients. Table 2 shows the highlights mentioned.

Table 2. Distribution of patients, according to the level of education and occupation, between 2000 and 2013. Ribeirão Preto (SP), Brazil, 2014.

Variable	N	(%)
Level of schooling		
Incomplete elementary school	5	11.1
Complete elementary school	30	66.7
Completehighschool	2	4.4
Illiterate	8	17.8
Total	45	100
Occupation		
Retired	17	37.8
Autonomous	1	2.2
Carpinter	1	2.2
Salesperson	2	4.4
Farmer	8	17.8
Mechanic	1	2.2
Driver	2	4.4
Shepherd	1	2.2
Bricklayer	4	8.9
Painter	2	4.4
General Services	1	2.2
Not applicable*	4	8.9
Total	45	100

* Unemployed patients and patients whose occupation was not reported were classified as "not applicable".

Of the 107 patients treated in the period from 1982 to 2013 for the treatment of CP, 32 deaths (29.9%).

DISCUSSION

The variation in care between 1982 and 2013 is shown in figure 1. It is inferred that the incidence of the disease is low in the region comprising DIR XIII and other cities in the State of São Paulo, six of which are the number maximum number of new cases attended in one year and an average of 3.3 visits/year performed at HCFMRP. In the study titled Epidemiologic Study on Penile Cancer in Brazil, ² conducted in agreement with the Brazilian Society of Urology, 283 new PC cases were identified between May 2006 and August 2007, through contact with Brazilian urologists, which verified that 149 (53.02%) reported cases occurred in the North and Northeast regions of the country, demonstrating that the South and Southeast regions have a lower PC incidence. It is inferred that this situation occurs because these regions have a better index of human development, since the PC is directly related to populations of low economic condition. For this reason, it is understood that, for this study, the 107 cases identified in the 32-year interval are consistent with the literature findings.

According to the Population-Based Cancer Registry of the National Cancer Institute José Alencar Gomes da Silva (INCA), 595 cases of penile cancer in Brazil were recorded between 2010 and 2015, with an average of 99, 16 cases per year. It was found that the region with the highest incidence in the

country was the Southeast, with 369 registered cases, and, secondly, the North region, with 79 cases registered in this six-year period, demonstrating that the PC has different incidence in the regions from the country.¹⁰

It can be seen from figure 2 that, although most of the patients are from DIR XIII, some are still from other cities and distinct states, and this may have occurred because in 2006 only DIR XIII was regularized, culminating in the organization of access to tertiary health services. It is also considered that the municipality of Ribeirão Preto has a prominence in the region due to the concentration of hospitals and health specialists,¹¹ which attracts the population in search of health care.

The age range of patients with PC was varied, but it was identified that the highest incidence was in men aged 60 to 69 years (30 cases). There is the age group of 50 to 59 years, also, as significant, with 29 cases. These data are similar to other epidemiological studies conducted in the States of Rio de Janeiro and Pará, as well as a Brazilian survey on penile cancer in which it is stated that, despite cancer being a common disease from the sixth decade of life to Brazil, its incidence occurs in the age group from 40 to 70 years of age, as in a study carried out in the Netherlands.^{2,12-4}

The high percentage of white color (83.2%) is consistent with the findings of other researchers. It has been shown, through data from the National Program of the Registry of Cancer of the United States, that the ethnicity of patients with PC may change from region to

region, because, while in that country the incidence of cases is among African Americans, in the Netherlands, Caucasians are the most incident group,^{10,14} and in Brazil the highest PC index is Caucasian (75.61%), consistent with the findings of this study.²

In terms of marital status, the highest number of patients was married (57%), similar to the study of penile cancer⁶ in which it was found that most men are married or have a stable relationship. In the study Looking past the obvious,¹⁵ wives, ex-wives and girlfriends play a key role in supporting men after PC. It is described, in research, that married men can identify more previously the cancerous lesion than singles.¹⁰

Information on the level of education and occupation of the men assisted is presented in table 2. It is identified that most of them have low level of education, which reflects in the occupations presented; already the high number of retirees is a reflection of the cases from the sixth decade of life. In the Penile Cancer study,¹⁶ are influenced by socioeconomic characteristics and religious behavior, hygiene practices, and this assertion is also corroborated in other studies.^{2,14}

The etiology of PC is related, in most cases, to the presence of phimosis or poor organ hygiene. It should be noted that in a man with the presence of phimosis, there is a tenfold greater risk of developing the disease than in other men. It involves the accumulation of smegma and the presence of bacteria that colonize this material in the promotion of cancer in penile epithelial cells. HPV has been shown to be an important carcinogen for PC and is involved in many cases, with HPV-16 and HPV-18.⁴, being the most identified serotypes and low socioeconomic status is also an important risk factor, such as smoking.¹

According to the guidelines of the Brazilian Society of Urology,¹⁸ it is pointed out that the only way to diagnose PC is through biopsy. After collection of the tissue, the carcinoma is classified according to the Broders classification system as: well differentiated, moderately differentiated and undifferentiated. It is also assisted by the physical examination, the health professional to identify the extent of the tumor; however, it is advised that, in lesions where the extension can not be precise only with the physical examination, an image examination will assist in this tumor delimitation.

For the literature, the number of deaths in several factors is varied, but the main indicator for survival is lymph node metastasis (five-year survival). A patient's death can be

predicted by other factors, such as PC stage at initial diagnosis, response to treatment from a physiological perspective (surgery), and the psychological perspective (depression).^{14,18-9}

Due to the lack of prospective studies on PC, the management of the disease is based on the experience of other centers specialized in the treatment of urological cancers. It is inferred that, until now, the gold standard for the treatment of PC is total or partial penectomy, but, due to the aggressiveness of the surgery, due to its psychological and functional consequences, other therapeutic forms have been used, such as radiotherapy, brachytherapy and chemotherapy. Radiotherapy and brachytherapy are considered as important alternatives for the treatment of PC, as it preserves the structure and functionality of the penis, besides controlling the disease at the local level.⁴

Through the therapeutic process as a whole, repercussions in the life of man are generated. In a review study,¹⁹ carried out with a focus on the psychosocial and psychosocial quality of life, by the researchers of six studies, that PC treatment has negative effects on well-being in 40% of men, and the presence of psychiatric symptoms in 50% of the same clientele. Sexual and psychological dysfunction are also present in two-thirds of patients, however, the studies did not deepen this perspective, which indicates knowledge gaps in the literature about the feelings of the surviving man of PC.

It is believed that Nursing has an important role in disease prevention, developing strategies such as: health education with children from an early age; how to do penis hygiene; to make the subjects aware of the importance of self-examination and the use of condoms in sexual relations.²⁰ Note that there is no Nursing care protocol for PC care and prevention, therefore, it is up to the nurses to know their population and, from that moment on, to associate their knowledge with their work practice.

CONCLUSION

It is understood that the PC cases seen in the HCFMRP have characteristics similar to the other studies already developed in Brazil and Abroad, regarding the low annual and population incidence, the highest number of cases in the age groups of 50-69 years of age, ethnicity Caucasians (white), married and of low schooling status.

It is known that the social determinants described are some of the risk factors for PC

development, however, there are other factors that were not reached by this research, and there is a need to deepen the cultural relations that permeate the life of the man with cancer. It is also considered the possibility of underreporting. The social aspects can be used as a basis for the nurse to identify vulnerable social groups and thus establish preventive measures of the PC, helping in the campaigns for the prevention of the disease. The 32-year interval presented in this investigation corresponds to the data available in the collection period.

It is concluded that the presented variables are relevant to have a broad view of the patients attended with PC in the HCFMRP, as well as for the characterization of this region. It is also demonstrated that there are gaps in knowledge about the disease and sick people, instigating the realization of new studies in the area. The importance of developing future research on the subject to strengthen evidence on the disease and guide future care is emphasized.

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