

Application of the arch of Charlez Maguerez on the implementation of penis cancer prevention strategies

Aplicação do arco de Charlez Maguerez na implementação de estratégias para prevenção do câncer de pênis

Aplicación del arco de Charlez Maguerez en la implementación de estrategias para prevención del cáncer de pene

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How to cite: Moraes-Filho IM, Francisco CR, Moraes RB, Félis KC, Carvalho-Filha FSS, Sousa TV. Application of the arch of Charlez Maguerez on the implementation of penis cancer prevention strategies. REVisA. 2020; 9(4): 804-9. Doi: <https://doi.org/10.36239/revisa.v9.n4.p804a809>

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Received: 20/07/2020
Accepted: 12/09/2020

RESUMO

Objetivo: Descrever a aplicação do Método do Arco da Problematização de Charles Maguerez para promover estratégias de promoção e educação em saúde nos acadêmicos de uma IES localizada no interior do estado de Goiás em relação à prevenção do câncer de pênis. **Método:** Trata-se de um estudo descritivo, com abordagem qualitativa. Utilizou-se para este estudo a população dos 422 estudantes dos cursos de enfermagem, farmácia e fisioterapia de uma IES, de uma cidade goiana. A partir deste pressuposto teórico e abordagem, foi realizada intervenção com base no arco da problematização. **Resultados:** Foram executados e descritos os passos: observação na realidade, levantamento de pontos-chaves, teorização, indicação de hipóteses de solução e aplicação à realidade. Foi criado um projeto extensionista intitulado "Lave o Seu Pinto" que teve foco na conscientização dos 27,5 % dos estudantes que apresentaram médio e baixo nível de conhecimento acerca do câncer de pênis. **Considerações finais:** A utilização de novas práticas educacionais e a avaliação do modo de ensino possibilitam a formação de um profissional holístico detentor de aptidões, a fim de prevenir doenças, como o câncer de pênis através de estratégias de promoção e educação em saúde. **Descritores:** Enfermagem em Saúde Comunitária; Aprendizagem Baseada em Problemas; Educação em Saúde; Saúde Pública; Promoção da Saúde.

ABSTRACT

Objective: Describe the application of Charles Maguerez's problem arc method to promote health promotion and education policies in academics of an HEI located in the interior of the state of Goiás in relation to penis cancer tests. **Method:** This is a descriptive study, with a qualitative approach. Used for this study in the population of 422 students of nursing, pharmacy and physiotherapy courses at an HEI, in a city in the interior of Goiás. Based on this theoretical assumption and approach, an intervention was carried out based on the problem arc. **Results:** the following steps were carried out and monitored: observation in reality, survey of key points, theorization, indication of solution hypotheses and application in reality. It was created in an extension project entitled "Wash your Pinto", which resulted in the awareness of 27.5% of students who had medium and low level of knowledge about penile cancer. **Final considerations:** The use of new educational practices and an assessment of the teaching method makes it possible to train a holistic professional who holds strategies for disease prevention professionals, such as penis cancer using health promotion and education strategies. **Descriptors:** Community Health Nursing; Problem-Based Learning; Health education; Public health; Health promotion.

RESUMEN

Objetivo: Describe la aplicación del Método del Arco de Problematización de Charles Maguerez para promover políticas de educación y promoción de la salud en académicos de una IES ubicada en el interior del estado de Goiás en relación a la prevención de cáncer de pene. **Método:** Este es un estudio descriptivo, con un enfoque cualitativo. Se utilizó para este estudio 422 estudiantes de cursos de enfermería, farmacia y fisioterapia en un IES, en una ciudad brasileña. A partir de este presupuesto y enfoque teóricos, se realizó una intervención basada en el arco de problematización. **Resultados:** Se llevaron a cabo y monitorearon los siguientes pasos: observación en la realidad, recogido de puntos clave, teorización, indicación de hipótesis de solución y aplicación en la realidad. Se creó un proyecto de extensión titulado "Lave o seu Pinto", que resultó en la concienciación del 27.5% de los estudiantes que tenían un nivel medio y bajo de conocimiento sobre el cáncer de pene. **Consideraciones finales:** El uso de nuevas prácticas educativas y una evaluación del método de enseñanza permiten capacitar a un profesional holístico que posee estrategias profesionales de prevención de enfermedades, como el cáncer de pene, utilizando aptitudes de educación y promoción de la salud. **Descriptores:** Enfermería en Salud Comunitaria; Aprendizaje basado en problemas; Educación en Salud; Salud pública; Promoción de la Salud.

ORIGINAL

Introduction

Quality of life is directly associated with the characteristics of health promotion that determine the way and longevity that individuals will have. This is based on the rupture of the biomedical model that focuses on the social process of its production, choosing as an objective the defense of life and human development, surpassing the intervention model and moving to intersectoral practices, interdisciplinary knowledge that will add up to quality actions inherent in health promotion.¹

In Brazil, penile cancer is represented as the fourth most common type of cancer for men. The Midwest region occupies the eighth place in the ranking in relation to the regions with the highest prevalence of the disease.²

The main risk factors are ineffective penis hygiene, phimosis, due to the difficulty of cleaning caused by excess skin and may be associated with HPV infection, however, it is correct to mention that cancer remains as the etiology not yet fully clarified at the level populational.³

Primary prevention through preventive measures such as collective actions for training and instruction on pollution, mainly in the male population, based on direct interventionist actions on environmental and behavioral factors from the early stages of life, simulate an admirable tool that can make major events possible. affect preventive practices, not only preventing the appearance of neoplasms, but also substantially amortizing the proportion of cancer deaths.²

In a study conducted with 422 undergraduate students in the fields of nursing, pharmacy and physiotherapy on the level of knowledge about penile cancer, the results showed that 93.1% of the participants disagree that penile cancer is only found in individuals aged over 50 years; 88.4% understand that the lack of intimate hygiene can cause cancer; 73.9% reported that the presence of lesions on the penis for a long time is indicative of a malignant tumor; 89.3% pointed out that HPV infection is a risk factor; 89.3% stated that sexual intercourse with several partners and without protection is a risk factor; 91.5% confirm that penile cancer can lead to amputation of the genital organ; and 73.5% agree that bleeding and a bad smell in the penis area is indicative for carcinoma.⁴

In summary, students' knowledge was represented by: (72.5%), with a predominance of students with a high level of knowledge about penis cancer, followed by those with a medium level of knowledge (26.1) and (1, 4%) with low level of knowledge.⁴

After stratifying the results of the survey above, it was decided to carry out a health education intervention with the 27.5% of students who had medium and low level of knowledge about penis cancer. In this way, it qualifies the knowledge of such professionals who will serve the population in the future and will be disseminators of the knowledge to be disseminated in health promotion actions.

It is noteworthy that the objective of this study was to describe the application of the Charles Maguerez Questioning Arc Method^{5,6} to promote health promotion and education strategies in the academics of a Higher Education Institution (HEI) located in the interior of the state of Goiás in regarding the prevention of penile cancer.

Furthermore, the present study is justified by the need to discuss the topic with future professionals who will provide care and promote health education in assisting the male audience.

Method

This is a descriptive study, with a qualitative approach. Based on the results of previous research⁴ carried out by the same group of researchers, the population of 422 students from the nursing, pharmacy and physiotherapy courses of an HEI in a city in the interior of the State of Goiás, in which weakness in the knowledge of students about penis cancer and the strategies adopted by the male sample to prevent penile carcinoma.

Male and female students participated, aged 18 or over, regular students enrolled in the HEI and who agreed to participate in the study. Students who were not properly enrolled, under 18 years old, who did not remain at the HEI at the time of data collection and those who did not agree to participate in the research were excluded. Data collection took place between September and October 2018.

Based on a theoretical assumption and qualitative approach, in order to clarify part of the students about health care for the prevention of penile cancer, the Theory of Problematization was used through the principles of using the Charles Arch Method of Maguerez, in its aspect developed and adapted by Berbel.⁵⁻⁷

The arc method, developed by Charles Maguerez, consists of five stages: observation of reality, its starting point is the reality experienced about the problem raised; identification of the key points of the problem, from which the relevant and essential for the representation of the observed reality is selected; theorization, which consists of the theoretical foundation of the problem, when information needs to be substantiated, seeking explanations about the observed reality; elaboration of the solution hypothesis in which the search for solving the problem occurs in a critical and creative way, seeking the greatest number of possibilities and alternatives; application of actions to solve the identified points, seeking to transform them.⁵⁻⁷

The larger project was subject to the approval and approval of the Research Ethics Committee of the researched institution, under opinion No. 3,092,013 (Issued on December 18, 2018), in compliance with the Regulatory Guidelines and Norms for Research Involving Humans (Council Resolution National Health Board 466/12). A Free and Informed Consent Form was sent to the instruments, signed in two copies, authorizing voluntary participation in the research.

Results and Discussion

The problematization of reality seeks to solve detectable problems, thus enabling the development of reflective and critical reasoning of the professionals who use it.⁸⁻⁹

Reality Observation

There was a predominance of students with an average age of 26.85 years old, female, single, with approximately one child on average, of Catholic religion and most enrolled in the nursing course. The students' knowledge was represented by: (72.5%), with preeminent students with a high level of knowledge about penile cancer, followed by those with medium level of knowledge (26.1) and low level of knowledge (1.4%).⁴

Survey of Key Points

In a positive way, the study demonstrated compliance in 72.5% of the sample in relation to the predominance of correct answers in all the questions presented that were based on: the incidence of penile cancer is not only in people over the age of 50, the periodicity of penile hygiene in order to prevent cancer, the appearance of penile lesions for a long time that may be indicative of carcinoma, HPV infection considered as a risk factor, unprotected sex, amputation of the penis due to disease and bleeding and bad smell in the region.⁴

The negative points highlighted were that 27.5% of the students had medium and low level of knowledge about penile cancer, thus being able to guide the people who attended in their professional practice in an erroneous manner, causing the increase of this problem in this population assisted.⁴

Theorization

Among the clinical forms of cancers that often affect the male population, penis cancer stands out. An unusual neoplasm in developed countries, unlike what occurs in regions of low socioeconomic class, as in most of the Northeast of Brazil.¹⁰

Penile cancer, although considered rare in developed countries, has relevant incidence rates in Brazil. The increase in neoplasms in the male population is due to the adjustment of multiple factors, some of which are environmental, genetic and lifestyle habits, such as smoking, physical inactivity, poor diet, obesity, alcoholism, resulting from exposure to infectious agents, sexual intercourse without condoms and multiple partners.¹⁰⁻¹¹

This number of factors increases the risk of developing certain types of cancer, and the single reduction of only one of them may be small to cover the effectiveness of precautionary actions.¹¹

Researchers reiterate the seriousness of good hygiene as a factor in preventing penile cancer and prove that sexually transmitted infections are linked to the disease, indicating that sexual conduct with countless partners without condoms is extremely risky and contributes considerably to the increase of this neoplasm.¹²

Furthermore, men are more susceptible to certain pathologies when compared to women. This factor is associated with the precarious demand for health services, contributing negatively to health prevention and promotion, considering that, according to studies in this segment, they see themselves as virtuous beings, immune to illness, a factor that influences statistics current, especially when related to penile cancer.¹³

Thus, the operationalization of guidance as an instrument of health education is an indispensable artifact for people to acquire habits for carrying out self-care, providing a healthy and productive life. Health education promotes changes in daily practices, causing quality of life and greater longevity.¹⁴⁻¹⁵

Solution Hypotheses

In this context, it was proposed to create an extension program of health education for the academic community, in order to demystify the way of understanding the incidence of penile cancer in the population and how health education can reduce this problem.

Application to Reality

Under this bias, an extension project entitled “Wash Your Pinto” was created with the focus of raising awareness among 27.5% of students who had medium and low level of knowledge about penis cancer.

This project was developed through educational innovation strategies including pedagogical practices in the perspective of innovation as a reflective possibility and problematization of the teaching action, after reflection of the developed praxis that gives relevance to what is already done in a new way, or that is, to do something new, to do something as it was not done before.^{9,16-17}

Through the motivation of nursing students, a week of specific actions was created, from which health promotion and education actions were developed through lectures and lectures within the classrooms and in the corridors on the subject that had elapsed, flyers who talked methods of prevention and health promotion about cancer of the penis, based on: cleaning the penis daily with soap and water; using condoms during sexual intercourse; perform penis hygiene after sexual intercourse and masturbation; always try to have good hygienic habits and perform inspections of the penis when you are in the bath to detect lesions and, when this occurs, seek a health care service.

The students spent in all IES rooms teaching pharmacy, nursing and physiotherapy students to put on a condom, clarifying doubts, and stressing the importance of penile cleaning with soap and water for the purpose of preventing injuries and distributing condoms.

Final Considerations

The academy becomes a place that gives students the opportunity to have a better understanding of their condition as professionals and citizens. This leads us to understand and choose the academic environment as a laboratory for the construction of the professional self and therefore, of their respective practices. Therefore, health promotion and education are of paramount importance for the unveiling of educational resources that add up to the professional praxis of each one, in order to reduce aggravating factors in the health area that can be prevented through education. À vista disso, a utilização de novas práticas educacionais e a avaliação do modo de ensino possibilitam a formação de um profissional holístico, detentor de estratégias profissionais com o propósito de prevenir doenças, como o câncer de pênis através de estratégias de promoção e educação em saúde.

In this sense, early detection and condom use, daily hygiene and the non-promiscuity of sexual partners are relevant points in the prevention and detection of the disease. The predominance of nursing in this study is of paramount importance, since it is responsible in Brazil, in the vast majority, for the promotion and prevention of health through national policies that are implemented by professionals at the entrance door of the Unified Health System.

Acknowledgment

This study did not receive any funding.

Reference

1. Campos OM; Rodrigues Neto JF. Qualidade de vida: um instrumento para promoção de saúde. *Revista Baiana de Saúde Pública*. 2008; 32(2):232-240.
2. Paiva EP, Motta MCSM, Griep RH. Barreiras em relação aos exames de rastreamento do câncer de próstata. *Rev. Latino-Am. Enfermagem*. 2011; 19(1): 73-80.
3. Panis C, Kawasaki AC, Pascotto CR, Justina EY, Vicentini GE, Lucio LC, et al. Revisão crítica da mortalidade por câncer usando registros hospitalares e anos potenciais de vida perdidos. *Einstein (São Paulo)*. 2018;16(1):eAO4018.
4. Moraes-Filho IM, Nery MRT, Santos SS, et al. Knowledge level and preventive strategies on penile cancer in health area degree students. *J Cancer Prev Curr Res*. 2018;9(6):290-293. DOI: 10.15406/jcpr.2018.09.00370
5. Berbel NAN. A problematização e a aprendizagem baseada em problemas: diferentes termos ou diferentes caminhos? *Interface (Botucatu)*. 1998; 2(2): 139-154.
6. Prado ML, Velho MB, Espíndola DS, Sobrinho SH, Backes VMS. Arco de Charles Maguerez: refletindo estratégias de metodologia ativa na formação de profissionais de saúde. *Esc Anna Nery (impr.)* 2012; 16 (1):172-177.
7. Zanotto MAC; Rose TMS. Problematizar a própria realidade: análise de uma experiência de formação contínua. *Educação e Pesquisa*. 2003; 29(1):45-54.
8. Colombo AA; Berbel NAN. A Metodologia da Problematização com o Arco de Maguerez e sua relação com os saberes de professores. *Semina: Ciências Sociais e Humanas*. 2007; 28 (2):121-146.
9. Moraes-Filho IM, Arantes AA, Carneiro KKC, Santos OP, Félis KC, Carvalho-Filha FSS. Desmistificando o significado de inovação educacional. *Rev Inic Cient Ext*. 2019; 2(3): 118-9
10. Barros ÉN, Melo MCB. Câncer de pênis: perfil sociodemográfico e respostas emocionais à penectomia em pacientes atendidos no Serviço de Psicologia do Hospital de Câncer de Pernambuco. *Rev. SBPH*. 2009; 12 (1): 99-111.
11. Guimarães JTF, Oliveira FBM, Silva MV da RS da, Branco TB, Miranda RH da S, Soares KSS, et al. Avaliação do conhecimento de homens acerca do câncer de pênis e práticas preventivas. *Revista Eletrônica Acervo Saúde*. 2017; Esp. (8):S803-S810.
12. Ministério da Saúde (BR). Instituto Nacional do Câncer (INCA). Estimativas da incidência e mortalidade por câncer no Brasil. Rio de Janeiro (RJ): Ministério da Saúde; 2003.
13. Vaz CAM, Souza GB, Moraes-Filho IM, Santos OP, Cavalcante MMFP. Contribuições do enfermeiro para a saúde do homem na atenção básica. *Revista de Iniciação Científica e Extensão*. 2018; 1(2):122-126.
14. Salci M, Meirelles BS, Silva DMV. Primary care for diabetes mellitus patients from the perspective of the care model for chronic conditions. *Rev. Latino-Am. Enfermagem*. 2017; 25: e2882.
15. Guimarães GC, Rocha RM, Zequi SC, Cunha IW, Soares FA. Penile cancer: epidemiology and treatment. *Curr Oncol Rep*. 2011; 13(3): 231-9.
16. Zanchet BMBA, organizador. Prática pedagógica no ensino médio: a possibilidade de inovação na perspectiva da emancipação. São Luís: EDUFMA, 2009.
17. Rojas FLL, Kehrig RT, Biato ECL, Santos NC. Educação permanente em saúde: o repensar sobre a construção das práticas de saúde. *J Health NPEPS*. 2019; 4(2):310-330.

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