Social representations about sexuality after cancer: A sociological perspective integrating life and earth sciences.

 $\it Maryama \; {\it El \; GHALI}^I, \it Fouzia \; {\it BORJ}^I$

¹Hassan II University of Casablanca, Research Laboratory on Socio-Anthropological Differentiations and Social Identities (LADSIS), Casablanca, Morocco https://orcid.org/0009-0009-7849-0736

Abstract. Cancer and sexuality are two complex and intimately linked fields that give rise to different social representations, influencing the way their sexualities are approached. People with cancer may face challenges that influence their sex lives due to the adverse effects of the disease and its treatments. And because of alterations in identity, body image and taboos surround their sexualities. These factors can contribute to negative perceptions about sexuality in cancer patients. It is essential to understand and recognize the various social representations in order to provide adequate support to people with dementia, while integrating a mixed methodology, through life stories with people with dementia, as well as questionnaires dealing with the sexuality axis. Stereotypes, prejudices, and social norms can contribute to stigmatization of these patients, and to the reinforcement of taboos, which can limit open discussion about sexuality during and after cancer and the enjoyment of a fulfilling and pre-cancer life. For an in-depth study of sexuality and cancer, it is imperative to adopt a multidisciplinary approach and collaboration between the social sciences, life sciences and earth sciences, through a sociological perspective.

Keywords: cancer, body, identity, social representations, sexuality, stigma.

1.Introduction:

In 2018, WHO counted about 570 000 women diagnosed with cervical cancer worldwide and about 311 000 died from the disease. In 2020, and according to the same source, 2.3 million women were diagnosed with breast cancer and 685,000 died from the same cancer. Gynecological cancer in women tops the list in Morocco. In 2019, 10,414 new cases of breast cancer were diagnosed in the kingdom. This is a major problem, both globally and domestically. Indeed, this cancer is the most common cause of death in women. [1] Still in Morocco, uterine cancer figures are around 3300 new cases and nearly 2500 deaths each year, this cancer (CCU) is the second largest female cancer among Moroccan women. [2] Prostate cancer is the second most commonly diagnosed cancer after lung cancer and the sixth leading cause of cancer death in men worldwide, with approximately 1,276,000 new cancer cases and 359,000 deaths in 2018 [3]. While in Morocco, and according to Dr. Loubna Abouselham" [4] who states that in men, lung cancer comes first, ahead of prostate cancer. This cancer is also common in men over 50 years of age, it represents the leading cause of cancer mortality in men over 70 years of age and ranks 2nd overall mortality after bronchopulmonary cancers.

Cancer is a global scourge and a major public health problem worldwide, because of its high mortality rate and especially the exorbitant cost and colossal economic losses in terms of deaths and years of life lost. [5] And if we link cancer to sexuality, this last theme disturbs that few researchers treat it. Sexuality has long been considered taboo and has always aroused mistrust, "Public debates and social science research on sexuality issues have multiplied, without eliminating resistance, direct or indirect, to this approach." [6]

In this research, we will address social representations of sexuality in their relationship to chronic cancer disease. Society often conveys taboos and stigmatizations around sexuality, while it does in relation to the sexuality of people with cancer. Patients may internalize their own beliefs, which can lead to a negative perception of their sexuality and a reluctance to discuss or express their needs, sufferings, and concerns. This justifies that "behind the appearance of naturalness such as sexuality hide social representations". [7] It therefore seems relevant to us to study this phenomenon, and this is where we must dig to flush out the knowledge of sick women and men buried in themselves who have the appearance of naturalness. These representations pushed us to search deeply and ask more precise questions and seek to understand the meaning that women and men give to their social representations and interpretations vis-à-vis sexuality after the experience of this chronic disease and its treatment affecting organs such as the breast, cervix, and prostate.

In recent years, it has been demonstrated the influence of the social, environmental, cultural, physiological, and psychological consequences of the evolution of cancer on the experience of patients, during and after its treatment. [8] Sexuality is a specific sphere and also a dimension particularly affected by cancer, as well as by the treatment provided in the management of this chronic disease. If the localization of this chronic disease affects an organ responsible for sexual functioning, we therefore see the disruption of sexual functioning, however, patients may have social representations about the disease and its relationship to sexuality on feminine and male identity as well as on their bodies. So how is sexuality experienced during this cancer experience? The boundaries of the sexual are culturally and socially shifting. Because ethnocultural values play a decisive role in the construction of these boundaries. That said, the analysis of our research topic is not similar to the work done on sexuality in a cultural context other than ours. Finally, this study can provide valuable insights into how culture, religion and social context and norms shape social representations of sexuality after cancer in Morocco.

In summary, and with the collaboration of the Dar Zhor association with all the efforts made, the purpose of this article is to help sick people understand the possible changes, to find solutions to continue a satisfying sex life and to provide information to facilitate education and understanding of sexual and social issues related to cancer, thus ensuring the well-being of sick people. Until recently, the problem of sexuality in the context of cancer was rarely addressed from a sociological point of view in Morocco, although the genital localization is 40% of cancers [9]. Nevertheless, great taboos are present in the approach of these difficulties by patients. Communication about sexuality remains both an important concern for patients who rarely complain about it and an uncomfortable topic to discuss. So the objective of this research is organized to understand the relationship between the dysfunctions of the body sexually speaking, and the experience of a chronic disease which is cancer affecting men and women in so-called genital organs, as well as the social representations that these people have in relation to sexuality. How is sexuality socially represented after the experience of prostate, breast, and cervical cancer in sufferers?

1.1 Article maps:

The outline of our study will be as follows: The first part of this article will begin with a general introduction that summarizes the context and importance of the topic as well as the problem and objectives of the topic. Then we will proceed to the methodology that will detail the approach and tool chosen to proceed and analyse, as well as the location and participants

of this study. The second part is dedicated to the results and analysis of the data collected; it will be divided into three axes. Towards the end a third part to conclude with an opening to new tracks. Finally, it is the reference part that argues the mentioned quotes.

2. Methodology:

Due to the exploratory and taboo nature of this study, we favour a mixed empirical research approach. The qualitative approach (life stories) allows interaction with the participants in the study, as well as familiarization with their concerns, with their culture, including their values, their different social representations, their beliefs, and their models of behaviour and as they are experienced in everyday life as well as their state of health. On the other hand, the quantitative method is considered essential, because we did not get answers to some questions related to the taboo nature of sexuality. The use of a quantitative method, such as an anonymous questionnaire, can help ensure the anonymity and confidentiality of respondents. This can encourage them to share personal information about their sexuality more openly and honestly, minimizing the associated shame or embarrassment and without the requirement of direct face-to-face interaction.

The place of research is the association Dar Zhor, in Morocco more precisely in Casablanca. This association was founded by three friends who had lived the experience of cancer. Its primary mission is to support people with cancer, by offering them a place of welcome and healing. It contributes to the overall care of people with cancer and their wellbeing, outside of medical care facilities during and after their treatment. This study took place between January 2023 and May 2023. Patients over the age of "20" (legal age at marriage), with histologically confirmed breast cancer, and who had undergone conservative or radical surgery were included in the study. Married with or without children, and who gave informed oral consent to participate in the study. Also, part of this study will be women who have experienced cervical cancer with hysterectomy, which is a surgical operation to remove all or part of the uterus, and sometimes its annexes. Women married with or without children. And which are subject to care by specialists in the field of oncology. These individuals are "20 years of age and older." Also, as a participating population in our study, men with prostate cancer over the age of 50,[10] having undergone radical prostatectomy: which aims to remove the entire prostate as well as the seminal vesicles, in some cases, nearby lymph nodes are also removed. These men are married, with or without children.

2.1 Data collection:

The tools chosen are qualitative analysis techniques such as coding or the creation of thematic matrices. This approach can be done using physical coding sheets, then thematic analysis is a commonly used method to analyse the discourses of life stories. As in this study, we also decided to use the quantitative approach based on descriptive statistical methods. It involves collecting numerical data and analysing it objectively to obtain a comprehensive and accurate understanding of behaviours, attitudes and experiences related to sexuality.

2.2 Data analysis:

In addition to closed multiple-choice questions, the questionnaire contains open-ended questions to allow respondents to freely express their diverse points of view, which we will address later.

This first graph presents the consequences of cancer on women's sexuality. The results state that 43% of women say that cancer alters their bodies, while 38.5% believe that cancer affects their femininity, however 17.5% have told the influence of their sexual perceptions because of cancer.

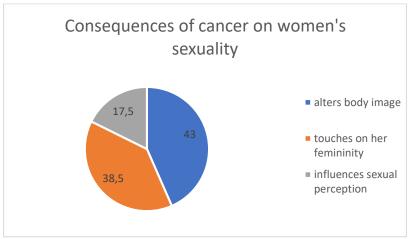


Figure 1: Questionnaire administered to women with breast and uterine cancer.

This second graph sheds light on the different consequences of cancer on male sexuality. A high percentage of 79.8% of men say cancer causes sexual impotence, while 13% feel abandoned by their wives, while 7.2% of men interviewed feel isolated and isolated.

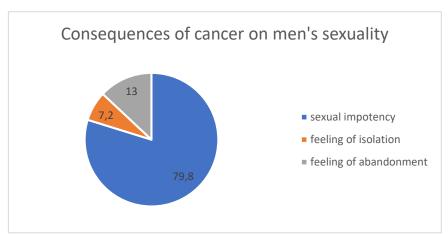


Figure 2: Questionnaire administered to men with prostate cancer.

3. Results:

Analyse the "oncosexual" problem (the impact of cancer or its treatments on sexual health and its possible dysfunctions): in this research, is closely linked to the different social representations that these people with urogenital or gynecological cancer or breast cancer have on their sexual experience. As well as the association's investment in support and accompaniment programs focused on taking charge of the health of the people concerned, and the role played by life and earth sciences in providing knowledge on the interactions and social factors that influence the sexual health of people with urogenital cancer, genital or breast.

4. Discussion:

There are some people who suffer for a long time in silence because they feel unprepared for real or supposed changes in their intimate lives, either due to lack of information or misunderstanding, about sexual morbidity and available solutions. Either outright by a primary socialization that they have received within the family institution, or by the

acquisition of social representations related to sexuality culturally constructed in connection with the specificity of the organ affected by a disease such as cancer.

Cancer is a disease that is part of the chronicity of its affections, both physically, emotionally, psychically, and also socially. However, the affection by this chronic cancer disease, concerns: the loss of a part of the body, which can also give a bad self-image, a disturbance of self-confidence, a fear of rejection, separation of the partner, a loss of reproductive functions, a loss of sexual desire, a decrease in sexual intercourse, a decrease in vaginal sensitivity, dyspareunia (*pain experienced during and after sex*), inability to reach orgasm, reduced vagina, and inability to complete penile penetration. [11]

Cancers, whether of gynecological or urogenital origin, and their invasive treatments are often responsible in patients for sexual disorders associated with significant psychological and social distress with an impairment of their quality of life. The majority lifestyle [12] of cancer patients is an important parameter for sexual life that also affects the private domestic sphere. Hence the importance of the role of the Dar Zhor association, which highlights the joint efforts of life and earth sciences, promotes dialogue, support, and awareness for a better understanding and to break taboos and reduce the stigma associated with sexuality in the context of the disease.

4.1 Sexuality and cancer in Morocco: A doubly loaded taboo

The cancers we have mentioned can have consequences on sexual function. Breast cancer may require a mastectomy that alters a woman's body image, influencing her perception of her femininity and sexuality according to a collective cultural capital. Uterine cancer, involving a hysterectomy, can also influence self-image and sexuality. In addition, prostate cancer can cause impotence in men, which affects their sexual identity.

In a society like Morocco's, where tradition and modernity often meet in a conflictual way, talking about sexuality remains a delicate subject. The topic becomes even more complex when it is linked to a serious health experience such as breast and uterine cancer in women and prostate cancer in men. These types of cancer, by directly affecting the sexual organs, raise inevitable questions about gender identity, attractiveness and intimate relationships [13]. In Morocco, taboos related to sexuality and cancer are entangled to create an often-suffocating silence around these topics. Cancer patients may feel lonely and misunderstood, not only because of their illness, but also because of their inability to freely discuss their concerns and experiences about sexuality.

Sexuality, as a fundamental aspect of the human experience, does not disappear when cancer occurs. Yet, due to socio-cultural stigma and lack of open dialogue, many women and men interviewed with cancer in Morocco feel disconnected from their sexuality. The effects of cancer treatments on the body, such as surgery, chemotherapy, and radiation, also lead to unacceptable changes in the function and appearance of the sexual organs, exacerbating feelings of insecurity, isolation and abandonment. These challenges are magnified by the lack of information and support, and many health professionals may not feel comfortable discussing sexual issues with their patients. These patients, in turn, may be reluctant to ask questions or express concerns due to fear of judgment or rejection, because of the influence of social representations by various factors such as culture, religion, social norms and individual experiences and they await the initiative of health professionals. However, despite these obstacles, there are signs of hope and change. Local initiatives have begun to highlight issues of sexuality and cancer, encouraging more open dialogue, and offering psychosocial support to patients. These support groups play an important role in this movement, breaking the silence and challenging this phenomenon.

The sociological analysis of social representations of sexuality after these cancers makes it possible to understand that each person can have his own logic of understanding the defective sexuality after cancer, and these representations can evolve throughout the course of the disease and the healing process. We find that some people use associations that provide them with care and well-being sessions.

4.2 Living with cancer: towards integral well-being.

Cancer, one of the most feared diseases of our time. For people with breast, uterine or prostate cancer, the disease is not only a medical problem but also a psychological and social test. Their lives can be turned upside down by the diagnosis, treatment, and aftermath of the disease. How, then, to ensure the physical and moral well-being of these people? What are the underlying sociological issues?

It is essential to take into consideration that the disease is not limited only to biological aspects but is also influenced by the social context in which it manifests itself. The well-being of people with cancer is determined not only by their physical and physical health, but also by their social environment,[14] their economic situation, their access to quality care, and their relationships with their loved ones and community. Support is, of course, fundamental, psychological support is crucial to help patients cope with the stigma, anxiety and isolation [15] often associated with cancer diagnosis and treatment. Individual therapy, support groups, and support from family, friends, and partners can all play an important role. Social institutions, such as the Dar Zhor association where we did the fieldwork, have contributed a lot, offering free healing activities and support and wellness care programs individually or in groups from the 1st day of diagnosis and up to one year after the end of treatment of the person with cancer.

Finally, wellness practices such as: physical activity: to improve health behaviours such as smoking cessation and healthy eating: to address certain side effects of treatments such as fatigue and nausea. As well as relaxation techniques: to manage stress and emotions, and communication in discussion groups: in order to benefit from mutual aid, and to break isolation and meet other people facing cancer. All of these factors can help patients improve their physical health and emotional well-being, and feel understood, supported, and surrounded by others who are going through similar experiences. However, these practices are not always accessible to all, due to proximity because this association exists only in Casablanca.

In short, ensuring the well-being of people living with cancer requires an integral approach that considers their entire experience. It is not only the medical aspects that are at stake, but also the issues of social justice that are involved, compassion and community support. Similarly, we also explored the intersection between life and earth sciences to better understand the impact of cancer on sexuality.

4.3 Cancer and sexuality: an interdisciplinary perspective at the intersection of life and earth sciences

The fight against cancer is a challenge that mobilizes a wide variety of scientific disciplines. From medicine to sociology, the approach is inherently multidimensional. The analysis of social representations of sexuality after breast and uterine cancer in women, and prostate cancer in men, is no exception to this rule. In this part of the article, we explored this theme at the intersection of life sciences and earth.

It is well established that cancer and its treatments can have a visible impact on sexuality. Body changes, pain and fatigue can influence the body and its image, as well as intimate relationships. Sexuality and social representations are not reduced to a mere biological dimension, they are also shaped by social, cultural, religious, and individual factors. These representations play an essential role in the construction of our identity and in our way of interacting with others and the world around us, hence their complexity. In some societies, sexuality after cancer can be a taboo subject, shrouded in exclusion and silence. In others, it may be approached with more openness, but often accompanied by stereotypes. [16]

The life sciences approach allows us to understand the biological and physiological mechanisms of cancer and its treatments, as well as their effects on sexuality. It also allows

us to study the impact of environmental factors, such as pollution, exposure to certain chemicals or the quality of food, on cancer risk. For its part, the earth sciences approach leads us to reflect on the influence of geographical and environmental factors on cancer prevalence and access to care. For example, in some regions, early access to early diagnosis and treatment may be limited, which can have consequences for survival and quality of life, including sexuality. [17]

In addition, earth sciences help us understand how our lifestyles and societies interact with our environment, and how these interactions can influence our health and well-being, such as sexuality. Knowledge of the potential impacts of cancer and its treatment on sexual function helps individuals navigate these challenges and develop effective coping or resistance strategies.

In short, the analysis of these axes allowed us to better understand the complexity and diversity of this experience. And highlights the importance of a holistic and interdisciplinary approach to understanding and improving the quality of life of people living with cancer, and to building a more inclusive and environmentally friendly society. In addition, research in the life and earth sciences can help deconstruct common sense and prejudice about cancer and sexuality, which can contribute to more accurate and nuanced representations.

5. Conclusion:

The trauma associated with cancer diagnosis and treatment can influence mental health, social and emotional well-being, and sexuality. This can inhibit sexual desire and the ability to enjoy sex. People with cancer also fear rejection or misunderstanding by their partners, which can influence their sexual behaviours and attitudes. Notwithstanding the bodily changes influence the self-image, the identity of these sick people as well as their social representations of sexuality. Sociocultural norms and expectations about sexuality also influence how these actors perceive their sexuality after a cancer diagnosis. According to the results found and, in our culture, virility and femininity [18] are related to the ability to be sexually active. As a result, individuals who can no longer be sexually active because of their illness, cancer or treatment feel marginalized or stigmatized.

Understanding the biology and physiology of cancer and sexuality can help inform social representations of sexuality after cancer. Knowledge of the potential impacts of cancer and its treatment on sexual function can help individuals navigate these consequences and develop effective coping and resilience strategies. Interviewees often have ideas already constructed about cancer and sexuality that may be based on their beliefs. However, the chronic disease of cancer is not limited to the medical dimension, but also encompasses social and cultural aspects. Ensuring the well-being of people with cancer requires a multidimensional approach to improving the quality of life of people affected by cancer and that takes into account their physical health, emotional well-being, and social environment. This has involved social and psychological support [19], physical well-being programmes, and communication and sharing practices.

In conclusion, it is important to recognize that sexuality after cancer is a complex field and influenced by various social representations. In addition, this multidimensional approach, which also integrates knowledge of life and earth sciences, provides a better understanding of the sociological and environmental issues related to this issue. This may include knowledge about hormonal changes, medication side effects, and alteration of the body. This approach, which consists of considering environmental factors in the study of sexuality after cancer, opens up new research perspectives for the future. Taking a closer look at the underlying mechanisms and specific environmental influences that may affect sexuality after cancer. By exploring this avenue of research, we could develop more targeted prevention, intervention, and support strategies to improve the quality of sexual life of people who have lived through cancer.

Acknowledgements:

We would like to express our deep gratitude to the members of the DAR ZHOR association, as well as to all participants in our research for their valuable contribution, their commitment, their open-mindedness. And their willingness to share their experiences has been key to enriching our understanding of issues related to cancer and sexuality. Their generosity and courage were a source of inspiration throughout this study. We are grateful to have had the opportunity to work with such a dedicated association and such remarkable participants. Their collaboration has been invaluable and has contributed to the quality of this research. We extend our sincere thanks to them for their support and valuable contribution. I warmly thank the people who corrected and proofread our article, for their dedication and professionalism throughout the writing process. Their comments, suggestions and corrections helped refine our ideas and improve the coherence and accuracy of this article.

References:

- 1. Registre Cancer Grand Casablanca 2013_2017
- 2. Plan National.al de Prévention et du Contrôle du Cancer 2010_2019, ministère de la santé fondation lalla Salma Maroc 2010
- 3. iibid
- 4. Chef du service de prévention et du contrôle du cancer à la direction de l'épidémiologie et de lutte contre les maladies au ministère de la santé".
- 5. Discours du ministre de la santé PR Khalid ait Taleb, 'PNPCC 2'
- 6. Bozon M, (2018) « sociologie de la sexualité », Cursus Sociologie Ouvrage publié sous la direction de François de Singly 'Armand Colin' P 13
- 7. Berger P & Luckmann T, (1966) « la construction sociale de la réalité » Masson/Armand Colin, Paris, Deuxième édition pp 342
- 8. Siles. J and Tarquinio.C, (2017) « Sexologies » Volume 26, Pages 87-95
- 9. Selon la « SOCIÉTÉ SAVANTE DES MALADIES ET CANCERS DE L'APPAREIL DIGESTIF »
- 10. Selon le : Service de Prévention et du Contrôle du Cancer à la Direction de l'Épidémiologie et de Lutte Contre les Maladies au ministère de la Santé
- 11. Rust.J & Golombok.S (1985) « The Golombok Rust Inventory of Sexual Satisfaction (GRISS) ». British Journal of Clinical Psychology, 24(1), p 63-64
- 12. Derbez.B, Rollin. Z, (2016) Expériences du cancer « Sociologie du cancer », pages 73 à 98
- 13. Abbott-Anderson K, Young PK, Eggenberger SK. (2020) "Adjusting to sex and intimacy: Gynecological cancer survivors share about their partner relationships."
- 14. Thoits, P. A. (2020). "Sociological perspectives on emotional well-being and physical illness". Social Psychology Quarterly, 83(1), 8-28.
- 15. Götze H, Friedrich M, Taubenheim S,Dietz A, Lordick F, Mehnert A. (2020) "Depression and anxiety in long-term survivors 5 and 10 years after cancer diagnosis. Support Care Cancer".
- 16. Martin N et Johnston V, (2009) "Stigmatisation et troubles mentaux : un enjeu collectif", revue le partenaire, vol 18, n 1, p3-36
- 17. Calabrese M G, et Lopes,F, en janvier (2020)."Socioeconomic Disparities in Cancer survival: Does Access to Knowledge and Information Matter?" Publié dans la revue Cancer Epidemiology, Biomarkers & Prevention.
- 18. MEIDANI.A, Alessandrin. A (2019) "Quand le cancer rencontre le genre" dans Revue française de sociologie, pages : 201 à 224
- 19. Munir, F., Yarker, J., & McDermott, H. (2020). The impact of cancer on the psychological and social well-being of cancer survivors: A systematic review. Psycho-Oncology, 29(5), 881-893.