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Exploring the Intersection of HIV, Breast Cancer, and Wound Sepsis within the Healthcare System of Uganda

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ABSTRACT

This study delves into the complex intersection of HIV/AIDS, breast cancer, and wound sepsis within the healthcare system of Uganda, focusing on the Amuru, Kitgum, and Pader districts in Northern Uganda. The objectives were to identify, explore, and document the interplay of these diseases, particularly among females, and to understand the sociocultural and structural factors influencing disease progression and access to care. The prevalence rates of breast cancer and HIV/AIDS were found to be significant, with late-stage diagnosis being common, exacerbating the challenges of treatment. Wound sepsis emerged as a critical barrier to care, often leading to unnecessary abandonment of potentially curative interventions. The study highlights the urgent need for comprehensive healthcare system management to address the growing burden of non-communicable diseases and chronic illnesses in Uganda.

Keywords: HIV/AIDS, breast cancer, wound sepsis, healthcare system, Uganda and disease

INTRODUCTION

Breast cancer accounts for almost a tenth of total cases of cancer and also accounts for about ten percent of cancer among females in Uganda [1-3]. However, the prevalence rate and the estimated age-specific prevalence rate of the result of this study were computed to be 29.94% and 4.2% respectively [4-5]. This is consistent with other existing rates estimated for other related countries in East Africa and elsewhere in the world [6-7]. At the time of the HIV/AIDS pandemic, the growth linkage between breast cancer and HIV/AIDS was not very clear in Northern Uganda or elsewhere [8-11]. With gender inequalities that had persisted in Uganda among others and with the majority of males who also became the affected persons with HIV/AIDS, many women, such as those who were supposed to discuss their issues about breast cancer with their male spouses and who were taking even other traditional prescriptions from many traditional healers in the region, omitted to undertake Biophysical support program for the treatment of breast cancer disease [12-14]. Besides the death associated with some complications, the opportunity cost of time female breast cancer victims took while seeking services for the hopeful solution for the breast cancer disease was undoubtedly high [15-20].

HIV and Breast Cancer in Uganda

Despite the HIV-breast cancer nexus, the response to the epidemic of cancer has been poorly understood in the sub-Saharan African region. In a study, women in Kenya felt that "cancer was not a top-of-mind concern" and cited inadequate capacity of healthcare services in cancer management as a challenge [21-24]. Not even half of medical practitioners in small town Kenya and 10% of Ethiopian gynecologists had education on cancer. Health resources mobilized to treat and educate the public on breast cancer detection in much of sub-Saharan Africa are often targeted to reduce cancer mortality in the population. Given the limited infrastructure and financial constraints on the healthcare system of Uganda, the discourse on addressing cancer disparities in the population begs the need of those diagnosed with HIV [25-27].

Uganda is a country in which HIV rates of the population exceed 10% and breast cancer rates of women are more than 70%. Breast cancer is the second most common cancer among women in Uganda, the fifth most common cancer diagnosis, and the leading cause of cancer deaths [28-29]. HIV is the leading cause of death among adults and 1,200 people become infected every day. Those living with untreated HIV are likely to progress to AIDS, secondary infections, co-morbidities, and premature death [30-32]. The health infrastructure of Uganda, like that of many countries with a high prevalence of disease and a low per capita income, is designed to manage communicable diseases and address acute healthcare needs, with

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a minimal focus on non-communicable diseases or chronic illness [33-36]. With the increasing prevalence of breast cancer in Uganda and the high prevalence of HIV, and thus a high risk of co-infection in women, a thorough examination of the healthcare system in Uganda is warranted to understand the sociocultural and structural factors influencing breast cancer progression in women with HIV.

Wound Sepsis in the Healthcare System of Uganda

Breast cancer is on the rise in Africa, with infection-related tumor types, such as those caused by human papillomavirus (HPV) and HIV, contributing to the growing percentage of advanced stage tumors and increasing mortality, despite overall lower incidence compared to fully industrialized countries [37]. In Uganda, it is estimated that breast cancer is the most common cancer among women, with the majority of patients presenting at late-stage disease and experiencing poor outcomes. Areas where the strength of the Ugandan healthcare system is greatest and where strong collaborations exist should aggressively be capitalized upon and used to confront the prevailing pressing disease states of the current era. However, these partners need to be selective of candidate diseases to address and ensure they do not miss the burgeoning NCD burden [38-39]. The HIV epidemic in Uganda has severely stretched the country's healthcare system. In light of this, champions and policymakers focused on the prevention and treatment of HIV-related illnesses by implementing policy and building clinical infrastructure. For instance, routine testing for HIV became the standard of care at The AIDS Support Organization (TASO) Clinic. While this reduction in the incidence of HIV infection is laudable, a recent shift of morbidity from HIV to non-communicable diseases (NCDs), as well as the re-emergence of certain endemic infections, suggests the need for more comprehensive healthcare system management to holistically address the disease burden of this East African country [39].

The Intersection of HIV, Breast Cancer, and Wound Sepsis in Uganda

The rates of breast cancer in Uganda are lower than in high-resource countries; however, challenges in diagnosis result in diagnosis at an advanced stage in the majority of women, illustrating the argument by Anderson and Rees that "...yes, eventually it will kill you." Despite the initial misconception of breast cancer as an HIV-associated cancer, necrotizing soft tissue infections and other post-surgical wound complications are major barriers to treatment for women with advanced breast cancer [23]. Women in this setting faced the barrier of delayed access to care due to limited education, empowerment, and caregiver support, leading to diagnostic and therapeutic delays. A profound lack of knowledge and understanding among healthcare workers compounded the situation. Then, wound complications of mastectomy and axillary dissection resulted in a complete, yet unnecessary abandonment of this supportive and potentially curative, even if palliative, intervention [25]. An understanding of the intersection of HIV, breast cancer, and wound complications in a low-resource setting is critical to make more substantial reductions in global health disparities. The review describes current barriers to care in the setting of high breast cancer mortality, the profound burden of sepsis and chronic wound complications, and the "full circle" impact of wound complications that we rarely encounter in the Western world. A complex background provides the setting for this intersection in Uganda with high HIV incidence and profound gender disparities. Despite comparable rates of HIV in men and women, significant cultural differences lead to substantial gender disparities in HIV care, with women being diagnosed earlier and currently at higher rates of understanding viral suppression and access to care, as disparities in control of viral suppression and taking medication exist for women [26-28].

REFERENCES

1. Rebecca Namuddu (2023). Attitudes and Practices of Mothers towards Neonatal Umbilical Cord Sepsis in Maternity Ward of Kitagata Hospital, Sheema District. INOSR Scientific Research. 9(2), 1-14.
2. R Sebwami. (2023). Evaluation of Male partner participation in prevention of mother to child transmission of HIV/AIDs at Hoima Referral hospital. INOSR Experimental Sciences. 11(2), 108-121.
3. Musinguzi Dickson. (2023). Factors influencing Utilization of Reproductive Health Service among Adolescents aged 12-19 Years in Mbarara Municipality Schools. NEWPORT INTERNATIONAL JOURNAL OF RESEARCH IN MEDICAL SCIENCES. 3(1).
4. Amon Banturaki, Dalton Kambale Munyambalu, Dickson Kajoba, Verah Bella Onchoke, Alina Peris, Prosper Ryamugwiza, Jacinto Amandua, Kingsley Akaba. (2024). Chronic obstructive pulmonary disease burden, grades and erythrocytosis at a tertiary hospital in western Uganda. BMC Pulmonary Medicine. 24(1), 119.

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5. Joseph Odongo. (2023). Factors Affecting Menstrual Hygiene Among Schoolgirls Attending Outpatient Department at Kampala International University Teaching Hospital, Ishaka Bushenyi. INOSR Scientific Research. 9(2), 40-50.
6. A Ahura. (2023). Awareness, Approach and Practice of Youth towards preclusion of Sexually Transmitted Infections at KIU-TH, Ishaka Bushenyi District. IDOSR JOURNAL OF SCIENTIFIC RESEARCH. 8(2), 74-88.
7. Joseph Atupele Mwabaleke, Ibe Michael Usman, Andrew Emmanuel Tito, Kebe Edet Obeten, Mikail Umar Isyaku, Ekom Monday Etukudo & Victor Adolf Fischer (2023) Perceptions and Challenges Faced by Undergraduate Medical Students in Studying Anatomy: A Case Study at Kampala International University – Western Campus, Uganda, Advances in Medical Education and Practice, 1129-1135, DOI: 10.2147/AMEP.S427136.
8. Kyarisiima P. (2023). Factors influencing the use of Traditional Medicine during Labour among women attending maternity ward at Ishaka Adventist Hospital, Bushenyi District. IAA Journal of Biological Sciences. 10(1), 18-37.
9. Miria Nawana. (2023). Exploration of The Factors Contributing To Under Utilization of Artificial Contraceptives In Female Nursing Students of Kiu. Idosr Journal of Biochemistry, Biotechnology and Allied Fields. 8(2), 15-27.
10. Jc Gabula. (2023). Evaluation Of Awareness, Approach And Practices On Condom Usage Among Young People Attending Kiu-Teaching Hospital, Ishaka Municipality, Bushenyi District, Western Uganda . Idosr Journal of Applied Sciences. 8(1), 1-14.
11. R Kamanyire. (2023). Evaluation of Factors contributing to high Alcoholism among Youths in Adumi Village, Arua District Uganda. IDOSR JOURNAL OF SCIENTIFIC RESEARCH. 8(2), 1-17.
12. JM Piranok. (2023). Evaluation of factors that contributes to post-partum haemorrhage in Pregnant Women at KIU-T. H. IDOSR JOURNAL OF EXPERIMENTAL SCIENCES. 9(2), 64-77.
13. C Muhanguzi. (2023). Evaluation of the Knowledge, Attitude and Practices of Nurses in the Management of Diarrhea in Children at Kampala International University Teaching Hospital, Uganda. INOSR Scientific Research. 9(1), 25-37.
14. Kereen Sande. (2023). Evaluation of the Risk Factors and Prevalence of Cerebral Malaria in Children below 10 Years in Kiryandogo General Hospital. IDOSR JOURNAL OF SCIENCE AND TECHNOLOGY. 9(1), 75-85.
15. Adnan Hussain Shahid, Manjul Tripathi, Aman Batish, Jani Parth, Raj Kumar Bhatta, Bipin Chaurasia, Ehanga Idi Marcel, Amanjit Bal, Pinaki Dutta, Sandeep Mohindra, Chirag K Ahuja. (2023). Letter to the Editor Regarding" Small Cell Glioblastoma of the Sella Turcica Region: Case Report and Review of the Literature". World neurosurgery. 171, 185-189.
16. Ehanga Idi Marcel, Gidugu Venkata Ramdas, Bipin Chaurasia. (2022). Letter to the Editor Regarding" Awake Craniotomy with Functional Mapping for Glioma Resection in a Limited-Resource-Setting: Preliminary Experience from a Lower-Middle Income …World Neurosurgery. 164, 463-464.
17. Jethro Atumanyire. (2023). Incidence, Characteristics, and Consequences of Surgical Site Infections after Laparotomy at Hoima Regional Referral Hospital. INOSR APPLIED SCIENCES. 10(3), 189-201.
18. Franck Katembo Sikakulya, Robinson Ssebuufu, Xaviour Francis Okedi, Moris Baluku, Herman Lule, Sonye Magugu Kiyaka, Joshua Muhumuza, Selamo Fabrice Molen, Godefroy Nyenke Bassara, Musa Abbas Waziri, Stephen Mbae Kithinji, Mugisho Munyerenkana Leocadie, Byamungu Pahari Kagenderezo, Jeannot Baanitse Munihire, Bienfait Mumbere Vahwere, Ahmed Kiswezi, Patrick Kyamanywa. (2023). Local anesthesia versus saddle block for open hemorrhoidectomy: cost-analysis from a randomized, double blind controlled trial. BMC Health Services Research. 23(1), 1283.
19. Joshua Muhumuza, Selamo Fabrice Molen, William Mauricio, Jorge Soria La O, Jethro Atumanyire, Nyenke Bassara Godefroy, Musa Abbas Waziri, Stephen Mbae Kithinji, Kiyaka Magugu Sonye, Mugisho Munyerenkana Leocadie, Franck Katembo Sikakulya, ByaMungu Pahari Kagenderezo, Musafiri Simba Lionel, Mumin Farah, Herman Lule. (2023). Effect of Chewing Gum on Duration of Postoperative Ileus Following Laparotomy for Gastroduodenal Perforations: Protocol for a Randomized Controlled Trial. International Journal of Surgery Protocols. 27(1), 9.
20. Solomon Magezi (2023). Factors Influencing Youth alcoholism in Ishaka Division Bushenyi-Ishaka Municipality. INOSR Experimental Sciences. 11(12), 56-76.

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21. Mugabi Patrick. (2023). Evaluation of Factors that are influencing quick initiation of Breast Feeding in Post Natal Mothers at Kabale Regional Referral Hospital. IDOSR Journal of Biology, Chemistry and Pharmacy. 8(1), 1-14.
22. Edinah Tushabe. (2023). Evaluation of the Factors that affect Medical Waste Disposal at Ishaka Adventist Hospital, Bushenyi District, Uganda. IDOSR Journal of Biochemistry, Biotechnology and Allied Fields. 8(1), 13-25.
23. Alum, E. U., Obeagu, E. I., Ugwu, O. P. C., Samson, A. O., Adepoju, A. O., Amusa, M. O. Inclusion of nutritional counseling and mental health services in HIV/AIDS management: A paradigm shift. Medicine (Baltimore). 2023;102(41):e35673. http://dx.doi.org/10.1097/MD.0000000000035673. PMID: 37832059; PMCID: PMC10578718.
24. Alum EU, Obeagu EI, Ugwu OPC, Egba SI, Ejim Uti DE, Ukaidi CUA, Echegu DA. Confronting Dual Challenges: Substance Abuse and HIV/AIDS. Elite Journal of HIV, 2024; 2(5): 1-8. https://epjournals.com/journals/EJHIV
25. Alum, E. U., Obeagu, E. I., Ugwu, O. P.C., Aja, P. M. and Okon, M. B. HIV Infection and Cardiovascular diseases: The obnoxious Duos. *Newport International Journal of Research in Medical Sciences(NIJRMS)*,2023; 3(2): 95-99. https://nijournals.org/wp-content/uploads/2023/07/NIJRMS-3-295-99-2023.pdf.
26. Alum, E. U., Ugwu, O. P.C., Obeagu, E. I. and Okon, M. B. Curtailing HIV/AIDS Spread: Impact of Religious Leaders. *Newport International Journal of Research in Medical Sciences (NIJRMS)*, 2023; 3(2): 28-31. https://nijournals.org/wp-content/uploads/2023/06/NIJRMS-32-28-31-2023-rm.pdf
27. Obeagu, E.I., Alum, E.U. and Obeagu, G.U. Factors Associated with Prevalence of HIV Among Youths: A Review of Africa Perspective. *Madonna University Journal of Medicine and Health Sciences*, 2023; 3(1): 13-18. https://madonnauniversity.edu.ng/journals/index.php/medicine
28. Alum, E. U., Ugwu, O. P. C., Obeagu, E. I., Aja, P. M., Okon, M. B., Uti, D. E. Reducing HIV Infection Rate in Women: A Catalyst to reducing HIV Infection pervasiveness in Africa. International Journal of Innovative and Applied Research. 2023; 11(10):01-06. DOI: 10.58538/IJIAR/2048. http://dx.doi.org/10.58538/IJIAR/2048
29. Obeagu, E. I., Nwosu, D. C., Ugwu, O. P. C. and Alum, E. U. Adverse Drug Reactions in HIV/AIDS Patients on Highly Active Antiretro Viral Therapy: A Review of Prevalence. NEWPORT INTERNATIONAL JOURNAL OF SCIENTIFIC AND EXPERIMENTAL SCIENCES (NIJSES). 2023; 4(1):43-47. https://doi.org/10.59298/NIJSES/2023/10.6.1000
30. Obeagu, E. I., Obeagu, G. U., Alum, E. U. and Ugwu, O. P. C. Anemia as a Prognostic Marker for Disease Progression in HIV Infection. *IAA Journal of Biological Sciences*. 2023; 11(1):33-44.https://doi.org/10.59298/IAAJB/2023/3.2.23310
31. Obeagu, E. I., Obeagu, G. U., Alum, E. U. and Ugwu, O. P. C. Comprehensive Review of Antiretroviral Therapy Effects on Red Blood Cells in HIV Patients. *INOSR Experimental Sciences*. 2023; 12(3):63-72. https://doi.org/10.59298/INOSRES/2023/6.3.21322
32. Obeagu, E. I., Obeagu, G. U., Alum, E. U. and Ugwu, O. P. C. Persistent Immune Activation and Chronic Inflammation: Unraveling Their Impact on Anemia in HIV Infection. *INOSR Experimental Sciences*. 2023; 12(3):73-84. https://doi.org/10.59298/INOSRES/2023/7.3.21322
33. Obeagu, E. I., Obeagu, G. U., Alum, E. U. and Ugwu, O. P. C. Understanding the Impact of HIV-Associated Bone Marrow Alterations on Erythropoiesis. *INOSR Scientific Research*. 2023; 10(1):1-11. https://doi.org/10.59298/INOSRSR/2023/1.2.12222
34. Obeagu, E. I., Obeagu, G. U., Alum, E. U. and Ugwu, O. P. C. Advancements in Immune Augmentation Strategies for HIV Patients. *IAA Journal of Biological Sciences*. 2023; 11(1):1-11.https://doi.org/10.59298/IAAJB/2023/1.2.23310
35. Obeagu, E. I., Obeagu, G. U., Odo, E. O., Igwe, M. C., Ugwu, O. P. C., Alum, E. U. and Okwaja, P. R. Combatting Stigma: Essential Steps in Halting HIV Spread. *IAA Journal of Applied Sciences*. 2023; 11(1):22-29. https://doi.org/10.59298/IAAJAS/2024/3.5.78156
36. Obeagu, E. I., Obeagu, G. U., Odo, E. O., Igwe, M. C., Ugwu, O. P. C., Alum, E. U. and Okwaja, P. R. Revolutionizing HIV Prevention in Africa: Landmark Innovations that Transformed the Fight. *IAA Journal of Applied Sciences*. 2024; 11(1):1-12. https://doi.org/10.59298/IAAJAS/2024/1.3.5288
37. Obeagu, E. I., Obeagu, G. U., Odo, E. O., Igwe, M. C., Ugwu, O. P. C., Alum, E. U. and Okwaja, P. R. Disaster Fallout: Impact of Natural Calamities on HIV Control. *IAA Journal of Applied Sciences*. 2024; 11(1):13-21. https://doi.org/10.59298/IAAJAS/2024/2.5.9243.

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38. Obeagu, E. I., Obeagu, G. U., Ugwu, O. P. C. and Alum, E. U. Navigating Hemolysis in Expectant Mothers with Sickle Cell Anemia: Best Practices and Challenges. *IAA Journal of Applied Sciences.* 2024; 11(1):30-39. https://doi.org/10.59298/IAAJAS/2024/4.78.99.11
39. Obeagu, E. I., Obeagu, G. U., Odo, E. O., Igwe, M. C., Ugwu, O. P. C., Alum, E. U. and Okwaja, P. R. Nutritional Approaches for Enhancing Immune Competence in HIV-Positive Individuals: A Comprehensive Review. *IDOSR JOURNAL OF APPLIED SCIENCES*. 2024; 9(1)40-50. https://doi.org/10.59298/IDOSRJAS/2024/1.7.8.295

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