

EVALUATION OF POTENTIAL RISK FOR DEVELOPING TREATMENT ASSOCIATED LATE EFFECTS AMONG CHILDHOOD CANCER SURVIVORS AT BUGANDO MEDICAL CENTRE, MWANZA, TANZANIA

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Abstract

Purpose Evaluate the potential risk for long-term complications related to cancer therapy among childhood cancer survivors who completed treatment in Tanzania at Bugando Medical Centre (BMC), and compare the relative risk assessment of BMC survivor cohort and British Childhood Cancer Survivor Study (BCCSS) cohort. **Methods** Files of all patients age <18 yo with an oncologic diagnosis who received and completed their treatment at BMC from 2016 to 2022 were retrospectively reviewed. Extracted data included patient demographics, primary disease diagnosis and site, treatment received, and cumulative treatment doses. BCCSS risk assessment was assigned. Predicted long term follow up surveillance needs were extrapolated from published Children's Oncology Group Long-Term Follow-Up Guidelines. **Results** A total of 173 patients were included in the survivor cohort (47% female, average age =7). The most common diagnoses were Burkitt lymphoma (26%, n=45) and Wilms (30%, n=52). Within the cohort, 98% received chemotherapy (n=170), 49% (n=73) underwent tumor resection, and 18% (n=32) received radiation. Distribution of BCCSS late effect risk assessment included 6% low risk (n=10), 80% moderate risk (n=139) and 14% (n=24) high risk. Based on treatment received, the late effects with highest potential risk were cardiomyopathy (57% of patients, n=98), bladder and urinary tract toxicity (50%, n=87), and ototoxicity (22%, n=38). **Conclusion** Childhood cancer survivors at BMC have a higher risk of late effects as compared to published survivor cohorts in high-income countries. There is a need to develop and improve long-term follow-up care for survivors by enhancing patient and provider education to promote early detection of late effects.[1](#fn-0002)

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