
**BACKGROUND**
- Approximately 85% of children diagnosed with cancer and 95% of deaths occur in countries that use less than 5% of cancer funding\(^1\).
- Rwanda is a low-income developing country with a population of about 11 million people\(^2\).
- The cancer registries that exist in Rwanda are hospital-based and limited to the patients that are diagnosed and treated at a hospital in Africa\(^3\).
- Cancer registries are instrumental in fighting cancer worldwide, since it provides data on incidence and mortality rates among a variety of population groups\(^4\).
- The obstacles to unfavorable outcomes may include lack of physician training in oncology, no known robust children’s cancer registry in Rwanda, as well as lack of data and diagnostic equipment, treatment outcomes, and burden of disease in pediatric cancers that exist in Rwanda\(^5,6\).
- Through a partnership with International Health Initiatives (IHI), a non-profit global health organization has partnered with the Rwanda Children’s Cancer Relief (RCCR) organization, the Rwanda Health Initiative Needs and Outreach (RHINO) project has been established. RHINO has accomplished a nation-wide needs assessment of healthcare personnel in order to design a plan to determine a cancer care plan.

**METHODS**
- Performed a collaborative (IHI AND RCCR) needs assessment of childhood cancer across Rwanda.
- 515 healthcare providers were questioned, with a local Rwandan physician, on knowledge regarding cancer screening, diagnosis, management, and use and availability of resources. Funded by the Kenyon Foundation and approved by NSU IRB and the Rwanda ministry of Health\(^1\).
- Conducted over four months, de-identified, and securely transmitted electronically to NSU for analysis. The data provided the status of pediatric cancer registries in Rwanda\(^5\).
- Barriers to Pediatric Cancer Patients Seeking Medical Treatment in Rwanda (n=501)
- 86% of the Rwanda population has internet access and utility\(^2\).
- Based on the literature-based review on cancer registries, an ideal pediatric population-based registry should include cancer origin, incidence, diagnostic features, effective treatment, and survival rates, that are prevalent in Rwanda and standardized across other registries\(^6\).

**RESULTS**
- Approximately 90% of healthcare providers in Rwanda lack training in pediatric cancer\(^6\).
- 60% of these providers provided care to 1 to 5 pediatric cancer patients yearly\(^1\).
- Over 90% of providers believe that less than 25% of families are able to afford treatment\(^1\).
- There is also a lack of resources at hospitals, with only 5.6% of providers having access to a CT scanner\(^1\).
- About 40% of families often consulted with traditional healers before resorting to physicians when prior treatments fail\(^1\).

**CONCLUSION**
- IHI and RCCR, through the RHINO project, has illustrated the importance of education in enhancing pediatric cancer care in Rwanda since the majority are not adequately trained to manage these patients.
- Inter-professional telemedicine and cancer registries are an effective method to provide information to health professionals\(^6\) since a majority of the population has internet access.

**DISCUSSION**
- The RCCR website will allow us to implement programs to educate and train physicians, as well as establish a population-based children’s cancer registry.
- This will help educate physicians on pediatric cancer by increasing the availability and sharing of real-time data, epidemiological patterns, and treatment outcome.
- The data will also improve prevention methods and cancer control and, by design, reduce the mortality rates of pediatric cancers in Rwanda\(^6\).
- This initiative is currently underway to establish a web-based children’s cancer resource center, including an interprofessional telemedicine service on children’s cancer and awareness and advocacy campaigns for children’s cancer in Rwanda.
- The next steps include:
  - Performing a population based survey on the prevalent pediatric cancer types that exist in Rwanda to develop the cancer registry
  - Research available resources to be included on the RCCR website for healthcare professionals to access

**REFERENCES**