

8-10-2023

Developing Interactive Cancer Education Application for Parents of Children with Cancer in Ethiopia

Nataliya Berbyuk Lindström

Division of Information Systems, nataliya.berbyuk.lindstrom@ait.gu.se

Leul Deribe

Addis Ababa University, leul.deribe@gmail.com

Adamu Addissie

College of Health Sciences, Addis Ababa University, adamuaddissie@gmail.com

Follow this and additional works at: https://aisel.aisnet.org/treos_amcis2023

Recommended Citation

Berbyuk Lindström, Nataliya; Deribe, Leul; and Addissie, Adamu, "Developing Interactive Cancer Education Application for Parents of Children with Cancer in Ethiopia" (2023). *AMCIS 2023 TREOs*. 99.

https://aisel.aisnet.org/treos_amcis2023/99

This material is brought to you by the TREO Papers at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2023 TREOs by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Developing Interactive Cancer Education Application for Parents of Children with Cancer in Ethiopia

TREO Talk Paper

Nataliya Berbyuk Lindström

Department of Applied IT
University of Gothenburg
Nataliya.berbyuk.lindstrom@ait.gu.se

Leul Deribe

School of Nursing and Midwifery
Addis Ababa University
leul.deribe@gmail.com

Adamu Addissie

School of Public Health, Addis Ababa University
adamuaddissie@gmail.com

Abstract

Childhood cancer is an increasing public health burden in Ethiopia. The cancer survival rate in Ethiopia is believed to be below 20% (Buhlinger et al., 2021) and shortages of chemotherapeutic agents, treatment facilities, and skilled health professionals are common challenges in pediatric oncology.

The limited number of health professionals and treatment centers in comparison with high patient flow results in parents and children with cancer receiving a minimum or no information. At the same time, in Africa, the use of mobile phones is rapidly increasing, turning mobile applications into an accessible tool for providing opportunities to overcome disparities in access to health services and health information (Nyende, 2020). In our planned project, we aim at developing an interactive pediatric cancer information application targeted at parents/caregivers of children with cancer in Ethiopia.

At this moment, we have conducted a series of focus groups and individual interviews with the oncology staff and parents/caregivers of children diagnosed with cancer, represented in the country to assess the information needs. From the studies we conducted, we identified a large discrepancy between the parents' needs for information and what they get from healthcare providers. Accordingly, we prepared a family handbook for parents of children with cancer. This handbook will be used to guide the contents and approach we use for designing the application. The next step will be developing a prototype in collaboration with the oncology and IT staff from Black Lion Hospital, Ethiopia and Sahlgrenska University and RISE Institute, Sweden. The prototype will be tested by family members and staff in different parts of Ethiopia. Finally, we will evaluate the test results and develop the final version of the application.

The outcomes of our project will help to increase access to information about pediatric cancer, contributing to decreasing psychological problems and improving the quality of life for families with children with cancer. As the number of oncology centers and health providers in Ethiopia is limited, the project will also contribute to minimizing the burden for healthcare providers.

References

- Buhlinger KM, Borlagdan J, Agegnehu B, et al. 2021. Results of a pre-implementation analysis of Ethiopia's national pediatric cancer registry. *J Oncol Pharm Pract* 2021;27:1940–7.
- Nyende, H. 2020. "Maternal healthcare service transformation: Exploring opportunities for IT use in task shifting". In Proceedings of the Hawaii International Conference for Systems Sciences (HICSS) pp. 3639–3648), 7–10 January 2020, Maui, HI, USA.