

The ACTION Study: Development and evaluation of an online curriculum for breast cancer genetic testing & counselling for Nigerian healthcare providers



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Introduction

- **Breast cancer in Nigeria:** Driven by early onset (15-39 years, late-stage diagnosis (>80% Stage III/IV), high prevalence of triple-negative tumors (~40%).
- **Context:** Limited access to genetic testing and counseling, shortage of trained genetic counselors & training programmes
- **Intervention:** In our study we designed, developed and implemented a hereditary breast cancer educational curriculum tailored for Nigerian HCPs

Methods

Curriculum Development:

- Developed collaboratively through virtual meetings
- Modules: Epidemiology, Hereditary Breast Cancer Principles, Communicating Genetic Test Results, and Clinical Management

Hybrid Design:

- Online learning over one-month via Moodle-based platform
- Featured interactive videos, printable workbooks, assessment strategies, and supplementary resources.

Team Formation: June - Sept 2023

- Multidisciplinary team from West Africa and North America
- Includes genetic counselors, surgical oncologists, gynecologists, and education experts

Invitations to Apply

- Invites sent to all cadres of HCPs in tertiary hospitals across Nigeria



Objective

To develop and assess the effectiveness of a breast cancer genetics educational curriculum for Nigerian healthcare providers (HCPs) delivered through e-learning and in-person formats

Results

- Twenty-six (67%) trainees completed the curriculum and provided feedback through a Likert-scale evaluation
- 81% strongly agreed the curriculum met its objectives, with 85% praising its overall effectiveness.
- 65% strongly agreed the course provided real-world examples, though 15% felt it needed more cultural relevance
- 81% reported improved knowledge of *BRCA1/2* pathogenic variants, 77% gained a clearer understanding of genetics, 69.2% felt confident in their understanding of hereditary cancer, and 73% believed learning about genetic testing would positively impact their practice
- Altogether 96% viewed online learning positively, though 12% suggested improvements to module duration

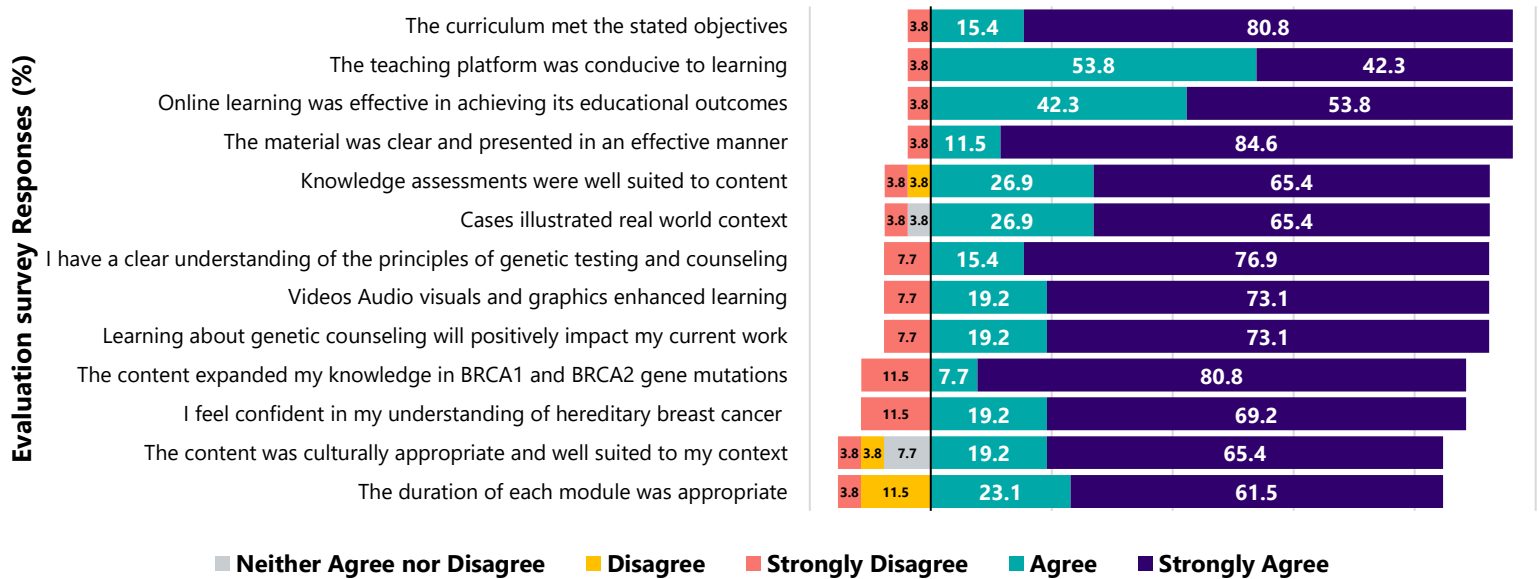


Figure 1: Online Course Evaluation

Conclusion

- The e-learning course was well received and deemed effective by HCP trainees throughout Nigeria.
- This collaborative effort underscores the vital role of accessible education to support genetic counseling services in Nigeria and advocate for equitable breast cancer care globally.

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