



Developing a hereditary cancer education program for healthcare providers in Nepal



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Introduction

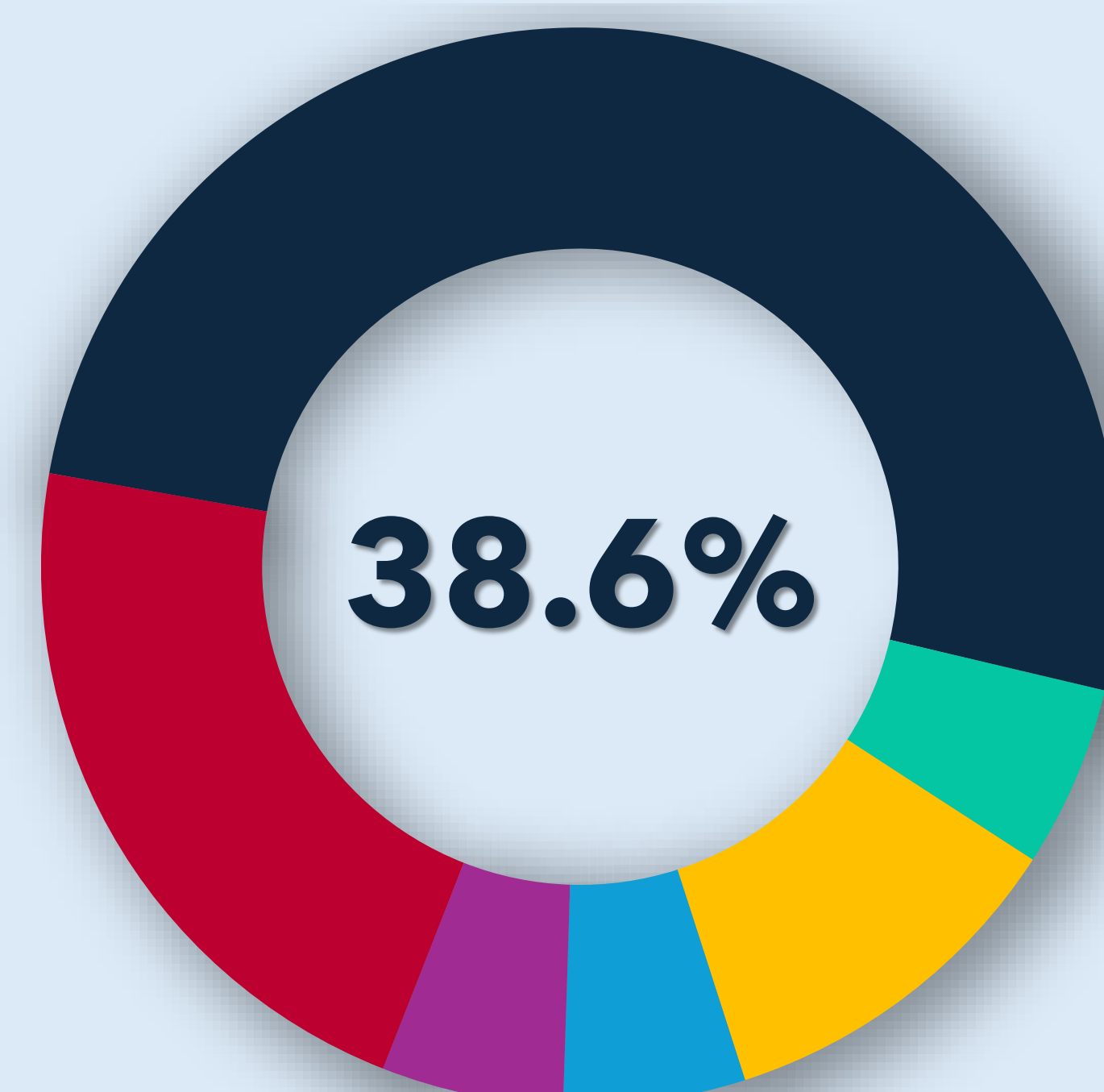
- Breast cancer (BC) is the most common cancer in Asian women. **Nepal** is rich in diversity, with a mix of ethnicities, languages, and cultures.
- Nepalese women are often diagnosed at a **younger age** and at **advanced stages**, with >50% presenting with Stage III-IV disease. **Triple-negative BC** is also more prevalent (~35%), with poorer survival outcomes.
- These features point to genetic susceptibility for BC among Nepalese patients.



Nepalese patients face a high hereditary BC risk

Germline genetic testing is integral in contemporary BC management → International guidelines recommend *BRCA1/2* testing for all newly diagnosed patients.

Prevalence of hereditary BC in Nepal



• **Clinical implementation of genetic testing is limited in Nepal due to a critical shortage of trained genetics professionals**

• Our team previously developed a curriculum for healthcare providers (HCPs) in Nigeria. Findings suggest the most effective means for providing genetic counselling services is through training non-genetics clinicians^{1,2}.

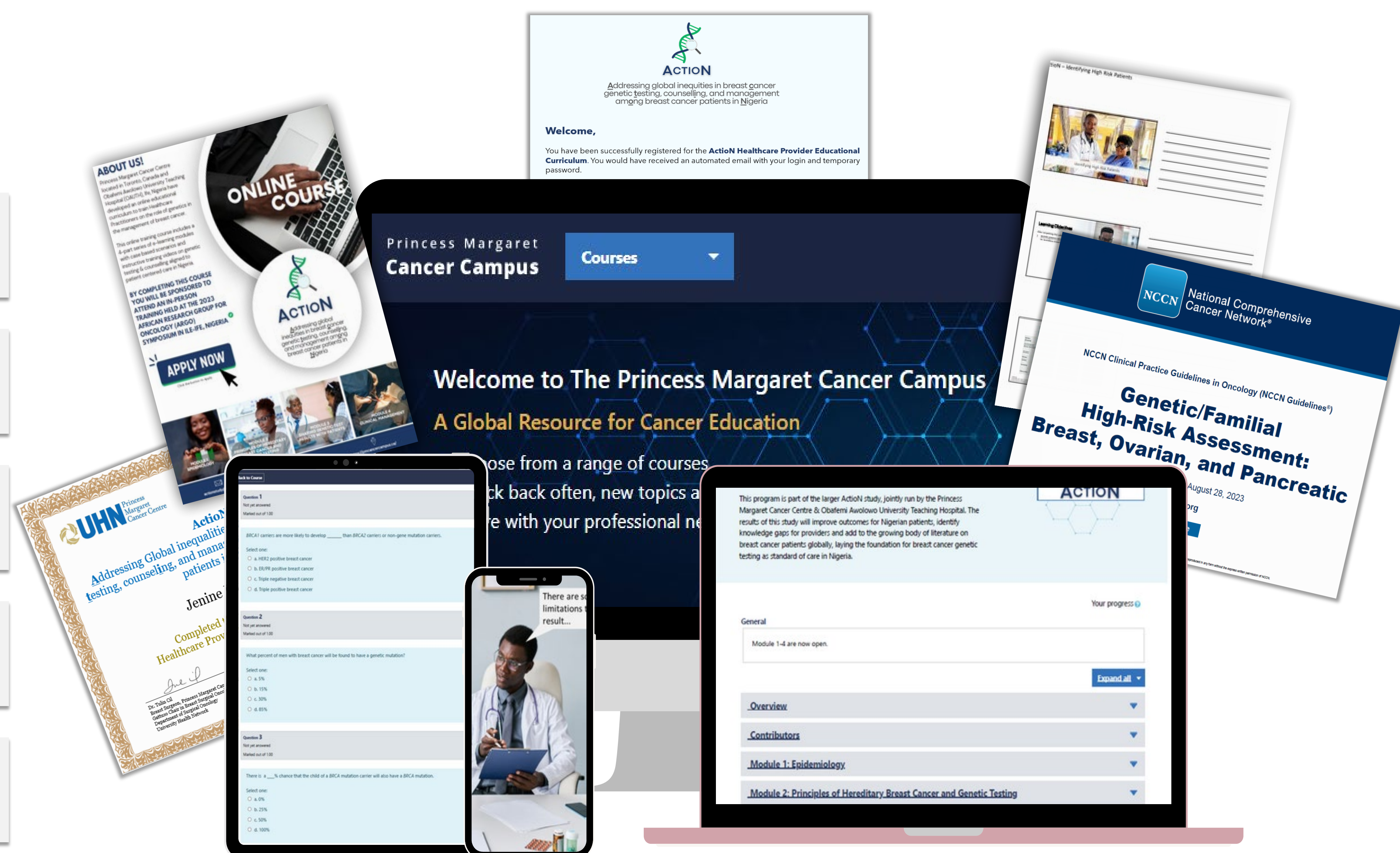
Objective

To develop a hereditary breast cancer education program for healthcare providers (HCPs) in Nepal

Methods

Curriculum Design

- Module 1:** Breast Cancer Epidemiology
- Module 2:** Principles of Hereditary Breast Cancer & Genetic Testing
- Module 3:** Genetic counselling & Patient Care
- Module 4:** Analysis and interpretation of cell-free DNA results
- Module 5:** Clinical management



Evaluation

Pre-Training Knowledge assessment (baseline)

Intervention HCP Training Curriculum

Post-training Knowledge Assessment (Immediate)

Knowledge Retention Assessment 6-Month Follow-Up

Delivery

Asynchronous
Princess Margaret Cancer Campus – globally accessible, open-access platform

Synchronous
Live webinar sessions for interactive discussion and case review

ACTION COURSE HEREDITARY BREAST CANCER

The primary target for this training would be HCPs including general surgeons, breast surgical oncologists, medical oncologists, oncology nurses and breast radiologists

Impact & Sustainability

- Currently, there are no separate cadre of clinical geneticists and genetic counsellors in Nepal, this course will build capacity in clinicians to provide BC genetic counselling services
- The curriculum aims to be scalable and adaptable, with online modules remaining accessible to future training cohorts
- The completion of this study will drive targeted health systems change, shape policy discussions, and encourage the inclusion of genetic testing within national guidelines in Nepal**

References

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- F.O. Wuraola, J. Ramruthan et al., Development and evaluation of an online curriculum for breast cancer genetic testing & counselling for Nigerian healthcare providers. *BREASTANBUL Conference 2024*; October 10-12, 2024; Istanbul, Türkiye. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*. 2024;15(Suppl 1):1-150.



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