

Breast cancer early diagnosis detection of breast cancer through education of primary healthcare providers in Côte D'Ivoire.

N'Da Marcelin Homian, Darya Aleksandrovna Kizub, Brigitte AkaMiezan, Kouame Justin N'dah, Asmaho Danielle épouse Traore, Catherine Duggan; CHU Treichville, Abidjan, Côte d'Ivoire; Division of Cancer Medicine, University of Texas MD Anderson Cancer Center, Houston, TX; Université Grenoble Alpes, Paris, France; Université Alassane Ouattara Bouaké, Abidjan, Côte d'Ivoire; University Teaching Hospital Bouake (CHU de Bouake), Bouake, Côte d'Ivoire; Fred Hutchinson Cancer Center, Seattle, WA

Background: In Côte d'Ivoire, > 70% of women with breast cancer present with stage III/IV disease. To improve early detection, we designed and implemented an educational curriculum (EC; the *Breast Health Program*) for primary healthcare providers (PCPs). **Methods:** We performed in-depth interviews with key stakeholders to identify barriers and facilitators of breast cancer early detection. Interviews were audio-recorded, transcribed, double-coded and analyzed via thematic analysis. The EC was designed based on interview results and implemented during a one-day educational session for PCPs. Participating PCPs completed pre- and post-session surveys to assess knowledge. Data were analyzed using Fisher's exact test. All p-values were two-sided. **Results:** Eighteen stakeholders participated in the interviews: 7 (39%) physicians, 5 (28%) medical students, 3 nurses, 2 cancer survivors, and 1 midwife. Identified barriers to early detection included: lack of awareness-raising campaigns to encourage earlier presentation (50%), need for patient follow-up and support after presentation to primary healthcare centers (50%), financial barriers (39%), delays due to lack of coordination in diagnosis and treatment (22%), and lack of mammography and biopsy capacity outside of the private sector (11%). Based on the interviews, the following topics were included in the EC: breast cancer and benign breast disease diagnosis and treatment, patient communication/support, clinical breast exam (CBE), symptom management, and financial navigation to assist patients access diagnosis. A total of 36 PCPs from five healthcare centers attended the educational session: 75% were female; the mean age was 41.3 years (SD 7.2); Nine (28%) were physicians, 6 (17%) nurses, 18 (50%) midwives; the median years of work experience was 7 years (range 3-32). At baseline, 18 (50%) PCPs felt qualified to evaluate patients with breast complaints; 10 (28%) did not, vs. 32 (89%) and 2 (6%) respectively at follow-up ($\chi^2 = 8.75$ p = 0.003). 15 (42%) providers felt qualified to help patients overcome barriers to diagnosis, and eleven (31%) felt unqualified/neutral at baseline, vs. 31 (86%) and 4 (11%) respectively at follow-up ($\chi^2 = 7.67$, p = 0.006). There were no statistically significant differences between baseline-follow-up in feeling qualified to perform CBE (27 (75%) vs. 32 (89%)) or ability to refer patients for diagnostic workup (29 (81%) vs. 34 (94%)). **Conclusions:** We identified multiple barriers to early breast cancer detection in Côte d'Ivoire. The EC was effective in improving confidence among PCPs and evaluation of breast complaints and addressing barriers to cancer diagnosis. There were no differences in feeling qualified to perform CBE or ability to refer patients to diagnostic workup, which were high at baseline. Future work includes expanding the program reach and evaluating impact on time to diagnosis. Research Sponsor: Coalition for Implementation Research In Global Oncology (CIRGO).