

African Women Awareness of CANcer (AWACAN) Network Quarterly e-Newsletter



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July - September 2021

Since last year, the AWACAN quarterly e-newsletters have been presenting a selection of research articles and publications related to early cancer diagnosis and detection in Africa, as well as relevant news, events and activities. We are delighted to share the third quarterly edition of the newsletter for 2021 (covering the period July – September 2021).

This edition spotlights some of the recent research evidence and news relating to cancer screening and early diagnosis within African contexts. It also features some current training and funding opportunities relevant to our regional context. We hope that insights from these pieces of evidence will help guide our research and other works related to cancer awareness, early diagnosis, treatment and control in our various settings. Previous editions are available on the [AWACAN website](#), as well as published on the Twitter page of the Cancer Research Initiative (CRI) - [@UctCri](#).

Seifu W and Mekonen L. Breast self-examination practice among women in Africa: a systematic review and Meta-analysis. Arch Public Health. 2021 Aug 21;79(1):149. DOI: 10.1186/s13690-021-00671-8.

Country context: Regional

This systematic review with meta-analysis summarized and pooled evidence from 56 studies reporting estimates of breast self-examination (BSE) practice in African countries. The pooled regional prevalence of ever BSE practice in Africa was 44.0% (95% CI: 36.63, 51.50), while that of regular BSE practice was 17.9% (95% CI: 13.36, 22.94). Nationally, the lowest BSE practice prevalence was reported in South Africa 5.3% (95% CI: 2.73, 10.17) and the highest was in Nigeria 100% (95% CI: 98.12, 100.00). Sub-regionally, the prevalence of breast self-examination was highest 58.87% (95% CI: 48.06, 69.27) in West Africa followed by Central Africa 44.87% (95% CI: 32.50, 57.57), North Africa 32.63%(95% CI: 12.09–57.46), East Africa 32.18%(95%CI: 23.74,41.24) and the lowest was in Southern Africa 5.33% (95% CI: 2.73,10.17). Overall, the findings reflect the suboptimal level of BSE practice among women

in Africa. Despite the controversies about the effectiveness of BSE in reducing breast cancer morbidity and mortality, BSE has been considered an important approach for early detection particularly in low- and middle-income countries where access to diagnostic and curative facilities may be limited.

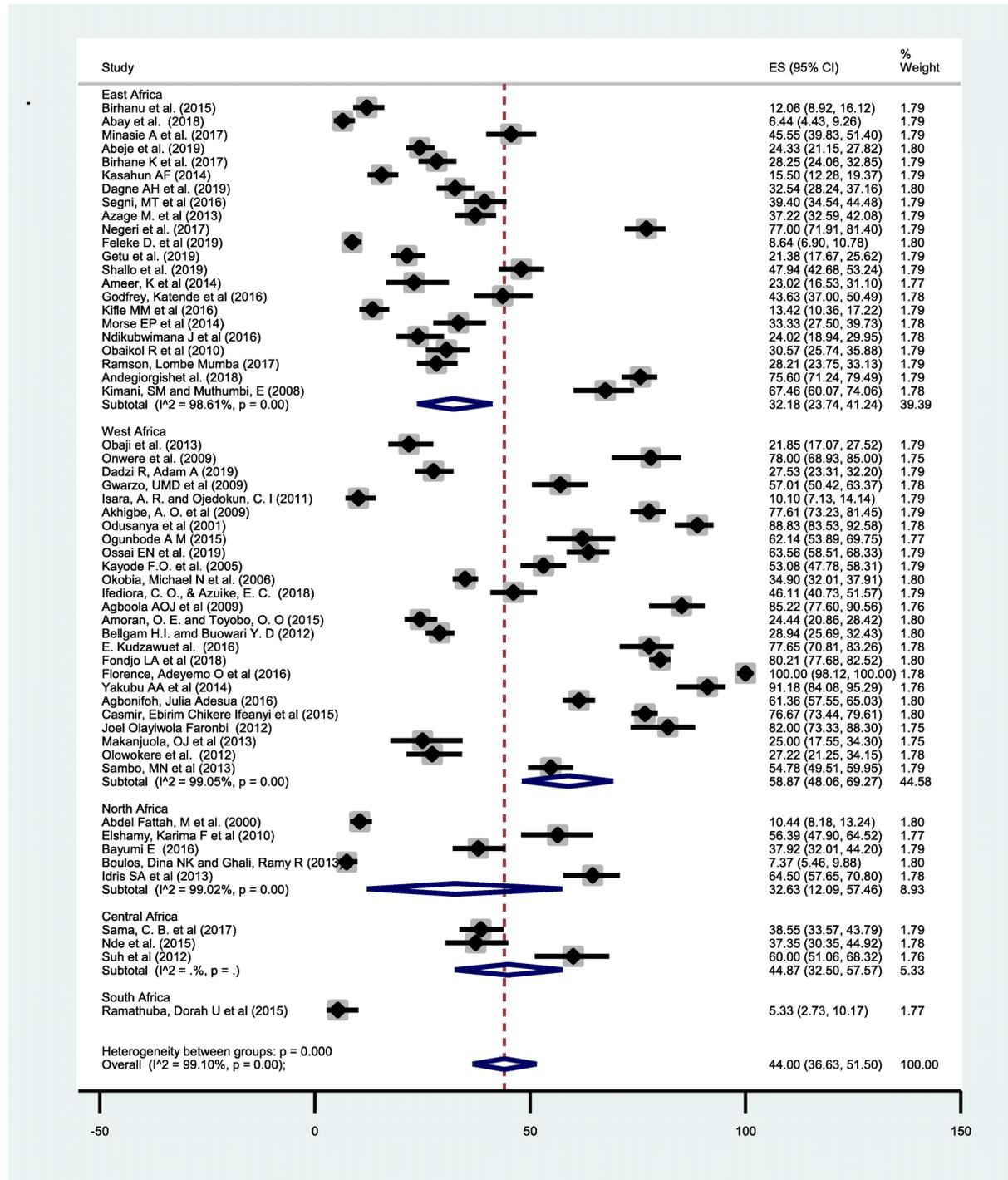


Figure: Forest plot of ever breast self-examination practice in Africa by sub-region

Table: Subgroup analysis of the prevalence of breast self-examination practice in Africa

Subgroup		Number of studies	Prevalence BSE Practice (95% CI)
Sub region	West Africa	25	58.87(48.06, 69.27)
	East Africa	22	32.18 (23.74, 41.24)
	North Africa	5	32.63(12.09, 57.46)
	Central Africa	3	44.87(32.50, 57.57)
	South Africa	1	5.33 (2.73,10.17)
Study participant	Health professional	10	63.33(48.62, 76.88)
	Non health professionals	46	39.81(31.85, 48.06)
Study setting	Institutional based	43	48.39(39.39,57.44)
	Community based	13	29.95(21.53, 39.11)
Publication Period	2000–2005	3	50.50(8.05, 92.48)
	2006–2010	8	61.42(45.28, 76.39)
	2011–2015	22	38.58(27.39, 50.42)
	2016–2020	23	42.34 (30.75, 54.37)
Risk of bias	Low	41	43.20(34.53, 52.08)
	Moderate	11	43.26 (26.29, 61.07)
	High	4	54.30 (42.62,65.75)
Place of residence	Urban	40	48.55(39.20,57.95)
	Rural	12	34.25(23.60, 45.75)
	Mixed	4	28.78(15.04, 44.86)
Total		56	44.0% (36.63, 51.50)

Moodley J et al. Exploring primary care level provider interpretation and management of potential breast and cervical cancer signs and symptoms in South Africa. *ecancer*. 2021; 15: 1298. DOI: 10.3332/ecancer.2021.1298.

Country context: South Africa

This study aimed to explore primary health care (PHC) providers' interpretation and management of potential breast and cervical cancer signs and symptoms in South Africa. It

involved in-depth interviews incorporating the use of vignettes to capture aspects of provider breast and cervical symptom interpretation, reasoning, actions and challenges. Twenty-four PHC providers were interviewed across 12 urban and 12 rural settings. Four main themes relating to clinical assessment and reasoning; referral and feedback challenges; awareness of breast and cervical cancer policy guidelines and training and education needs emerged. Cancer was considered as a potential diagnosis by the majority of the providers. PHC providers also considered the possibility of infectious causes for both breast and cervical vignettes indicating they would ask questions around HIV status or the use of anti-retroviral therapy. They considered ruling out sexually transmitted infections and sexual assault when assessing patients with cervical symptoms. Providers raised issues around cumbersome appointment systems and lack of feedback from referral centres, as well as the need for provider and patient education and training to improve timely diagnosis of breast and cervical cancer. However, most providers were unaware of current breast or cervical cancer policy guidelines. These findings illustrate the complex nature of clinical assessment of breast and cervical cancer signs and symptoms at the PHC level. The authors recommend the provision of context-relevant training and support for PHC providers, and improving referral and feedback systems, to improve timely diagnosis of women with symptomatic breast and cervical cancer.

Okedo-Alex IN et al. Does Spousal Engagement Improve Cervical Cancer Screening Discussions and Uptake? Lessons from a Before-After Study in a Rural Nigerian Community. *J Health Care Poor Underserved*. 2021;32(3):1566-1583. DOI: 10.1353/hpu.2021.

Country context: Nigeria

This study evaluated the extent of spousal involvement and the effect of a community-based spousal engagement intervention on cervical cancer screening-related discussions and uptake among men in a rural community in Nigeria. The spousal engagement intervention involved advocacy to men groups, awareness creation, and monthly meeting-based announcements/reminders about screening. Self-reported cervical cancer screening-related inter-spousal discussions and the uptake of screening services were assessed before intervention (baseline) and three months post-intervention. At baseline, respondents generally had poor spousal involvement. Post-intervention, inter-spousal discussion on screening increased from 17.2% to 46.9% ($p= 0.001$). There was however no significant increase in screening uptake post-intervention. Poor knowledge of cervical cancer, perceived costs of screening, low risk perception and fear of screening-related outcomes such as injury to the reproductive tract resulting in infertility were identified as barriers to screening uptake. It is therefore important that interventions aimed at improving cervical cancer screening uptake through spousal engagement take into account and address such individual, structural and context factors to optimize implementation outcomes and effectiveness.

Effah K et al. Raising Funds Through Social Media to Subsidise Cervical Cancer Screening with HPV Testing in Rural Ghana-The Battor Experience. J Health Care Poor Underserved. 2021;32(3):1136-1144. DOI: 10.1353/hpu.2021.0118.

Country context: Ghana

This paper describes the outcomes of an intervention aimed at reducing the cost of cervical cancer screening in a rural community in Ghana, by absorbing the initial cost of setting up a screening centre. Crowdfunding was done through WhatsApp and mobile money transfer. The fundraising administrator sent messages to friends, family, former schoolmates and professional colleagues requesting contributions towards the setting up of a low-cost rapid-batch diagnostic test for high-risk HPV DNA detection (careHPV by Qiagen) system. Individuals pledged amounts ranging from \$2.6 to \$3,769.2 (median = \$25.6). Over four months, \$15,153 was raised to purchase the initial equipment for an HPV-based cervical cancer screening programme. Findings suggest that crowdfunding is possible through a combination of informal and formal social media-based approaches in low-resource settings.

Mbulawa ZZA et al. Effect of Human Papillomavirus (HPV) Education Intervention on HPV Knowledge and Awareness Among High School Learners in Eastern Cape Province of South Africa. J Cancer Educ. 2021 Sep 28. DOI: 10.1007/s13187-021-02090-3.

Country context: South Africa

The authors assessed HPV infection, associated risks and knowledge level among learners attending high schools in the Eastern Cape Province of South Africa. The intervention included knowledge pre-assessment, education through structured lecture, and post-education assessment. The lecture and education materials were delivered via PowerPoint presentations lasting about 60 minutes and other materials such as banners. Communication was mainly in the local language (IsiXhosa) with minimal English, followed by a question and answer time. Self-administered questionnaires were used in both pre- and post-intervention assessments. A total of 2652 learners (54% female and 46% male) participated in the study, with median age of 18 years (IQR: 16-19). Pre-intervention, only 4.08% of learners ever heard about HPV and 3.31% about HPV vaccination. Only 9.36% and 9.34% knew that HPV infection is sexually transmitted and associated with cervical cancer development, respectively. Post-intervention, knowledge about HPV among learners increased significantly. Female high school learners were 66% more likely to acquire HPV knowledge than males (OR, 1.66; 95% CI, 1.40-1.97; $p < 0.0001$). This study lends support to existing evidence on the practicality and effectiveness of educational interventions for increasing knowledge on HPV-associated diseases in low-resource settings with a high burden of cervical cancer.

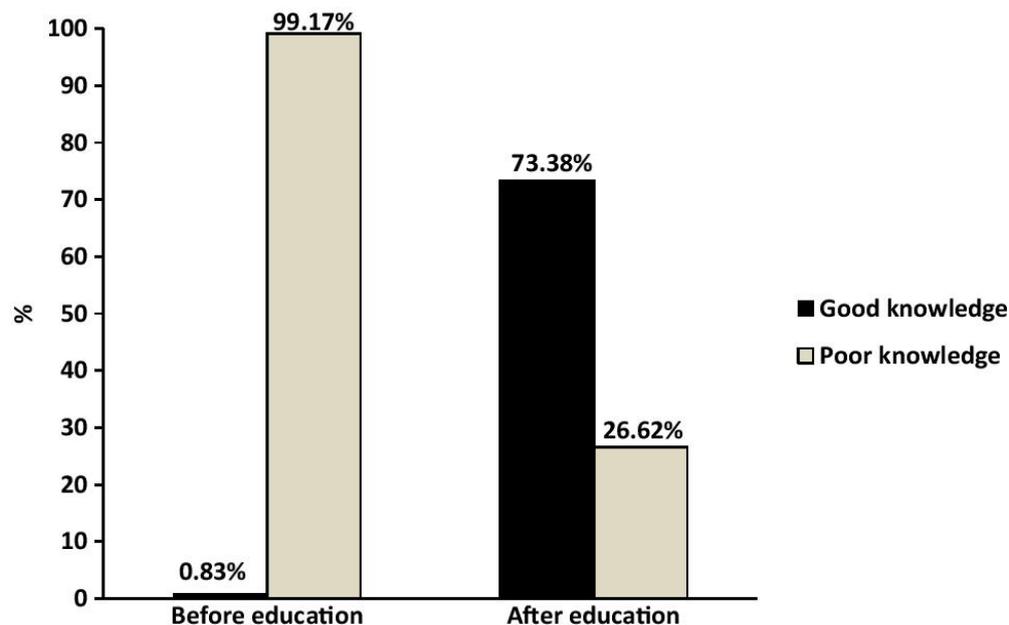


Figure: Participants' HPV knowledge before and after intervention

Upcoming events

The 13th AORTIC International Conference on Cancer in Africa

The conference will take place virtually from 5 to 10 November 2021, bringing together multidisciplinary specialists from the global cancer community to reduce the impact of cancer in Africa. The African Organisation for Research and Training in Cancer (AORTIC) is an Africa-based organisation with members throughout Africa and the international cancer community. Our objectives are to support, integrate, and facilitate evidence-based interventions and innovative programmes towards the prevention and control of cancer in Africa.

See the [AORTIC website](#) for more information about the conference and abstract submission.

Training and funding opportunities

Training: The African Cancer STARS Training program, funded by NCI grant D43-CA260640. This program provides mentored training for Principal Investigators and Project Managers who are developing cancer research careers in Sub-Saharan Africa.

Deadline: 4 February 2022, see more details on the programme's [website](#):

Training: Free e-learning module on COVID-19 & Cancer Screening offered by International Agency for Research on Cancer (IARC).

More details on the module and how to enrol can be found [here](#).

Fund title: Advanced Development of Informatics Technologies for Cancer Research and Management (U24 Clinical Trial Optional)

Funding amount: \$600,000 direct costs per year for up to 5 years

Deadline: 17 November 2021 (17:00 SAST)

Link: Available [here](#)

Fund title: Early-Stage Development of Informatics Technologies for Cancer Research and Management (U01 Clinical Trial Optional)

Funding amount: \$300,000 direct costs per year for up to 3 years

Deadline: 17 November 2021 (17:00 SAST)

Link: Available [here](#)