Scaling-Up Cervical Cancer Screening and Treatment in Sub-Saharan Africa: Perspectives From Local **Health Policymakers**

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In September 2022, we published in the JCO Global Oncology the results of a pilot project on cervical cancer screening using the screen-and-treat approach within the existing primary health care services in sub-Saharan Africa (the CARE4Afrique project). The project was led by the International Agency for Research on Cancer (IARC-WHO) and supported by the Lalla Salma Foundation for Cancer Prevention and Treatment (LSF). The article presented the findings of three countries (Benin, Côte d'Ivoire, and Senegal) although since the publication, a fourth country (Cameroon) was included in the project. We reported that opportunistic screening using visual inspection with acetic acid (VIA) and immediate treatment of eligible precancerous lesions with thermal ablation was feasible and acceptable with minimal side effects. The CARE4Afrique project was completed in 2021, and we wanted to learn from the local decisionmakers whether the lessons learnt from the pilot project had improved cervical cancer screening in their country. In January 2023, we conducted in-depth interviews of representatives of the Ministry of Health (MoH; health officers and clinicians) of the four countries to understand the challenges they faced during the project implementation. We also inquired whether they were considering or have already scaled up screening and treatment at the primary health centers in the light of the results of the pilot project. Finally, we asked whether they were considering the use of human papillomavirus (HPV)-DNA as a primary screening test, as recently recommended by the WHO.2

In regard to challenges during the pilot phase, the four countries were unanimous. They all recognized that they were lacking a national cancer screening program and associated core elements including (1) leadership and governance finance, (2) service delivery systems, and (3) information systems and quality assurance. They mentioned difficulties related to health center organization (integration of screening services in the daily work; systematization of screening services with a dedicated room for privacy at the primary health center; availability of consumables such as acid acetic, speculum, and cotton swab; availability of a colposcope at the district hospital; referral mechanisms between the different health care levels; and attrition of women referred for colposcopy at the secondary/tertiary hospital and at the follow-up visit in women treated for precancerous lesions) and human resources (involvement and commitment of the health providers and acceptability to increase the workload without motivational incentives; training of the health providers on VIA and thermal ablation and training of the gynecologists on colposcopy; and organization of regular supervision visits by the MoH at the primary health centers), and probably, the greatest challenge was the financial aspect and the sustainability of such a program if screening services, diagnosis (colposcopy, biopsy, etc), and treatment should be provided for free and if health provider incentives should be given.

On the other hand, all countries reported that VIA screening and treatment of precancerous lesions by thermal ablation were well accepted by women although the screen-and-treat approach was often difficult to implement as many women needed to get their spouse or relative's approval for getting treated. In addition, patients reported the lack of acceptability by the spouse to suspend sexual intercourse for 30-45 days after ablative or excisional treatment.

Two countries (Senegal and Benin) are already scaling up the cervical cancer screening activities after the pilot project. In Senegal, in 2022, MoH addressed a circular to district medical officers to Accepted May 22, 2023 Published July 13, 2023

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integrate cervical cancer screening in the routine activities of health facilities and to ensure follow-up. Already 73 units of VIA screening and thermal ablation are in place in all the regions, and additional units should be created to cover all the countries. MoH is planning an opportunistic, financially secured VIAbased screening program, offering VIA to eligible women at least once in their lifetime, during the first visit to a prenatal counseling. Regular training and refresher sessions on VIA and thermal ablation are organized for health providers. A specific health information system on the screening activity has recently been implemented and is hosted by the MoH. In Benin, after the pilot project was completed, cervical cancer screening services remained within the five primary health centers of the CARE4Afrique project, in the capital city Cotonou. In addition, Benin launched screening activities in four health centers of the Northern Region (Parakou City) and is starting to organize VIAbased screening activities in the Central Region, thanks to the strong support of the First Lady Foundation: Fondation Claudine Talon.³ As for Côte d'Ivoire, the participating primary health centers suspended the cervical cancer screening services after the project completion, mainly because of financial constraints and lack of providers' motivation.

It should be noted that Senegal is piloting the feasibility of an HPV-based screening program in four primary health facilities in Dakar, in collaboration with international organizations. Côte d'Ivoire, through the Scale Up Cervical Cancer Elimination with Secondary Prevention Strategy project (SUCCESS), is aiming at strengthening secondary prevention of cervical cancer in women living with HIV (WLHIV), with an HPV-based screening and treatment of precancerous lesions by thermal ablation. This large project is funded by Expertise France, Johns Hopkins Program for International Education in Gynecology and Obstetrics, and Union for International Cancer Control.4 In addition, Cameroon will soon launch a

large study on the feasibility and acceptability of HPV-based screening in WLHIV from the West region (OPTITRI project).5 The findings of these projects will guide the three countries on the relevance to switch from a VIA-based to an HPV-based screening program.

At the completion of the pilot project, the four countries agreed that VIA screening was well accepted by the population and by health professionals, and therefore, efforts should be made to screen 80% of eligible women to reach the WHO goal of cervical cancer elimination in 2030.6 However, without integration of all the core elements of an organized cancer screening program, it will be difficult to reach this target and measure it. Therefore, they agreed that to be successful, a program should be established by the MoH, with an allocated budget. On the basis of its extensive experience on cancer control, the LSF emphasized on the importance of raising awareness among the population and on lobbying the population and the health institutions through partnership and community participation to remove cultural barriers and improve early detection.7 The LSF also stressed the importance of organizing continuous training of health providers as a prerequisite (because of staff reassignment, promotion, turnover), as well as implementing a monitoring and evaluation program and defining key performance indicators for their program.

In conclusion, in sub-Saharan Africa where cervical cancer remains the first cause of cancer death in women and HPV vaccination coverage is low, integration of screening and treatment in a pragmatic way has shown to be feasible. Two countries within the CARE4Afrique project are on their way to scale up the services in a sustainable approach.

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REFERENCES

- Selmouni F, Sauvaget C, Dangbemey DP, et al: Lessons learnt from pilot cervical cancer screening and treatment programmes integrated to routine primary health care services in Benin, Côte d'Ivoire, and Senegal. JCO Glob Oncol 10.1200/G0.22.00051, 2022
- 2. World Health Organization: WHO Guideline for Screening and Treatment of Cervical Pre-cancer Lesions for Cervical Cancer Prevention (ed 2). Geneva, Switzerland, World Health Organization, 2021 3. Fondation Claudine Talon: Lutte contre le cancer du col de l'utérus. https://fondationclaudinetalon.org/index.php/lutte-cancer-col-uterus/
- 4. Expertise France: Scaling up cervical cancer prevention in Côte d'Ivoire, Burkina Faso, Guatemala and the Philippines. https://www.expertisefrance.fr/en/actualite?id=785200
- 5. Centre Population et Développement: Faisabilité et acceptabilité du dépistage du cancer du col par test HPV chez des femmes infectées par le VIH dans le district de la Mifi et de Dschang: Une recherche formative pré-interventionnelle (OptiTri). https://www.ceped.org/fr/Projets/Projets-Axe-1/article/faisabilite-et-acceptabilite-du
- 6. World Health Organization: Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem. Geneva, Switzerland, World Health Organization, 2020
- 7. Broutet N, Jeronimo J, Kumar S, et al: Implementation research to accelerate scale-up of national screen and treat strategies towards the elimination of cervical cancer. Prev Med 155:106906, 2022