GOOD PRACTICE IN CERVICAL CANCER SCREENING AND TREATMENT, THE CASE OF SOUTH WEST SHOA ZONE, ETHIOPIA

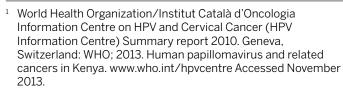


Doctors with Africa

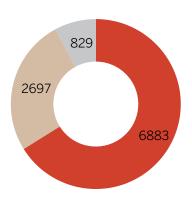


THE PROJECT

Cervical cancer is the 4th most common cancer among women worldwide, with an estimated 530,000 new cases and 270,000 deaths yearly (Globocan 2012). Around 86% of cervical cancer cases occur in developing countries of which the highest incidence is in eastern, western and southern African countries. The mortality and morbidity of cervical cancer could be reduced through effective screening and treatment programs^{1,2}. Doctors with Africa CUAMM, in partnership with Oromia Health Bureau and Federal Ministry of Health of Ethiopia (FMoH), with financial support from PRRR and BMSF, implemented a three years project (2015-2018) supporting the start-up of cervical cancer screening and treatment services in four districts of South West Shoa Zone of Oromia region, namely: Goro, Wonchi, Wolisso Rural and Wolisso Urban districts.



Jemal A. Bray F. Center M M. Ferlay J. Ward E. Forman D. Global cancer statistics. CA Cancer J Clin. 2011:61:69-90



- Screened at HC
- Screened at Wolisso St. Luke Catholic Hospital
- Screened during campaigns

Graph 1. Total screening by site

RESULTS

From April 2015 to April 2018 one referral hospital (St. Luke Catholic Hospital in Wolisso) and 10 Health Centres (HC) screened a total of 10,409 women using Visual Inspection with Acetic Acid method (VIA). Among all women screened 5% were VIA positive, of these more than 95% received treatment through Cryotherapy, using the single visit approach. When considering the site where the screening was conducted, the majority of women received the service at health centre level (66.12%). Looking at the average number of women screened per facility instead, Wolisso St. Luke Catholic Hospital screened the highest number (2697 in Wolisso Hospital versus 688 on average per each HC). A significant number of women was screened during mass mobilization campaigns.

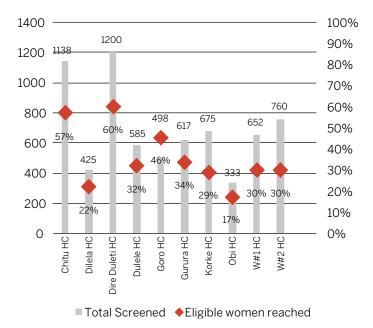
The dimension of the result achieved can be better understood if we compare data on a yearly basis. In 2016/17 fiscal year (2009 EC) a total of 52,000 women were screened for cervical cancer nationwide, out of whom 13,463 (25.9%) were screened in Oromia region. In the same period, of the total women screened in Oromia region, 4,891 (36.3%) were from the 11 facilities supported by the project. This means that almost 1 in 10 women screened in Ethiopia was screened in the supported facilities of South West Shoa zone, or considering the regional level approximately 1 in 3 women among all screened in Oromia region.

The 10 HCs screened a total of 6,883 women in a period of 22 months (July 2016 to April 2017), which is 35.1% percent of the eligible women (30 to 49 years



of age) in their catchment area. The target set by the "National Cancer Control Plan of Ethiopia 2016-2020" is to screen at least 80% of the eligible population in a period of 5 years. The result produced by the project shows that the target is achievable, nonetheless it requires an intense effort and specific measures in order to reach the desired uptake of the screening service.

Hospitals play a pivotal role in the provision of cervical cancer screening and treatment services. In 2016/17



Graph 2. # of screening and % coverage of eligible women in the 10 supported HCs (July 2016-April 2017)

(2009 E.C.) a total of 2,682 women were screened in 45 hospitals of Oromia region, out of whom 852 (32%) were from Wolisso St. Luke Catholic Hospital alone. Zonal and referral hospitals, which have high volume of contacts, provide opportunities for screening of the general population that shouldn't be missed. In particular the mechanism of internal referral, when properly planned and regularly implemented, may sharply increase access to preventive and screening services.



Graph 3. 1 in 10 women screened for cervical cancer in Ethiopia in 2009 E.C. was from South West Shoa Zone, the project catchment area.

WHAT MADE THE DIFFERENCE?

A combination of different actions produced the outstanding achievement of the project. Of the utmost importance was the close collaboration with local health authorities, which ensured long term sustainability. The strong commitment of healthcare workers also contributed to the result of especially the best performing facilities.

INTERNAL REFERRAL SYSTEM IN ST. LUKE CATHOLIC HOSPITAL

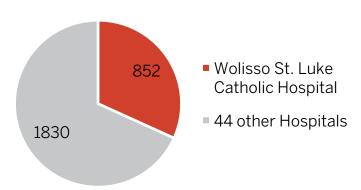
Established in 2000 G.C., St. Luke Catholic Hospital (SLCH) is the zonal referral hospital in South West Shoa Zone, Oromia Region. With the support of Doctors with Africa CUAMM, in 2015 the free cervical cancer screening and treatment service was started, including LEEP service for the treatment of more invasive precancerous lesions. A screening room was arranged, hosted in the outpatient department, and the screening is conducted by two dedicated trained nurses, with the support of a gynaecologist whenever a second opinion is required. Clients were normally accessing the service autonomously, while the dedicated nurses used to engage eligible women in the waiting areas of the hospital during idle time to offer the screening.

In October 2017, a spot analysis of OPD data showed that 3 out of 10 hospital visitors were women aged 30-49, that is within the eligible age group. Many women of the same age group visit SLCH every day for different medical services, but the clinical staff was unable to refer potential clients to the cervical cancer screening service due to unclear procedures.

Consultative meetings were held with clinicians, they were oriented to identify and link all eligible women who came to the hospital for any kind of service to the screening service by using internal referral slips. Internal referrals were mainly received from OPD, Maternity ward, MCH, TB and HIV departments.

In the months of August and September 2017, 38% of women screened for cervical cancer at SLCH were referred from within the hospital (see Graph 5). This share increased to 84% in the two months after the establishment of an institutionalized internal referral pathway, with a total number of clients accessing the service that grew by 134% comparing the two months prior the intervention and two months after the implementation of the new mechanism.



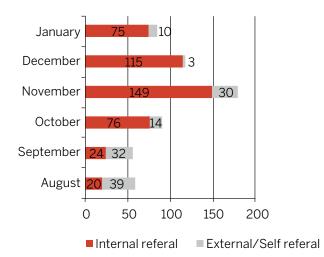


Graph 4. Women screened at Wolisso St. Luke Catholic Hospital and 44 other Hospitals of Oromia region in 2009 E.C.

The main ingredients to be looked at are:

- Training of health care workers (basic and refresher trainings) in number sufficient to fill eventual gaps due to staff turnover;
- Quality assurance visits, integrated in the regular supportive supervision schedule;
- Review meetings with the facilities assessing their performances against a clearly defined target, and giving recognition to the best performing;
- Awareness creation activities leveraging the existing structures like Health Extension Workers and Health Development Army, but including also messages through media and in public gatherings (markets, social events, etc.);
- Static service provision paired with outreach activities to bring the service closer to clients;
- Enhanced and institutionalized internal referral linkage within facilities.

Preventive programs like the one dedicated to cervical cancer need to grow from the pilot stage to routine practice as part of a body of preventive actions targeting Non Communicable Diseases. These services shall be fully integrated into the existing health system and delivered at the level the closest to clients.



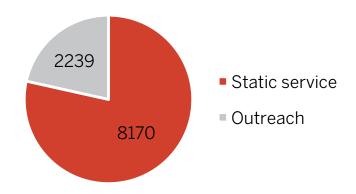
Graph 5. Distribution of clients by provenance in St. Luke Catholic Hospital

This will require additional dedicated financial resources, besides the commitment of policy makers and health authorities to make cervical cancer screening and other preventive services for NCDs an indispensable component of the package of basic health services.

OUTREACH ACTIVITIES AND MASS CAMPAIGNS

Geographical barriers play a role in hindering access to health services, even more when considering preventive services that are not perceived as important or necessary by the community. Women living far from the few selected health facilities where the cervical cancer screening is provided are unlikely to be screened. To overcome the barrier, bringing the service closer to the user, a first approach was the organization of mass screening campaigns, which were playing the twofold function of increasing awareness and getting eligible clients screened. The strategy later focused on outreach screening campaigns conducted at Health Post level, using existing structures. Trained HC's or Hospital's staff would move out with the equipment (a smaller gas cylinder for cryotherapy was provided to facilitate transport) and screen clients mobilized from the community by Health Extension Workers on their regular activity, and by Health Development Army members. The role of HEWs and HDAs extends before and after the single outreach campaigns, they conduct regular health promotion activities through home to home visits and different public gathering events.

The contribution of campaigns and outreach at HP level stood at more than 20% of total women screened during the project (see Graph 6), demonstrating the relevance of this approach.



Graph 6. VIA screening



ESTIMATED COST OF CONSUMABLES FOR VIA/CRYOTHERAPY SERVICE DELIVERY AT HEALTH CENTER LEVEL

Sr. No	Items	Unit	Qt	Unit price (ETB)	Total cost for 1 year (ETB)	Cost per woman (ETB)	Comments (Assumption: an average of 40 clients per month/HC)
1	Cylinder gas (CO2) refill	Each	1	633	633	16	Cylinders will be refilled once a year (40 women treated per cylinder)
2	Sanitary pad (EVE modes)	Вох	1.5	300	450	12.50	1 modes*3 cryo treated clients*12 month (1 box = 24 modes)
3	Acetic Acid 3-5 % of 1 litter (American garden)	BTL	16	115	1,840	3.83	1 bottel will serve 30 clients (1 bot*10 HC)
4	Surgical glove (Box of 50 pair)	Вох	10	250	2,500	5.00	480 pair (1 pair*40 client*12 month)
5	Disposable clean glove of 50	Вох	10	75	750	1.50	480 pairs (1 pair*40 client*12 mont)
6	Alcohol 70 % of 1 litter	BTL	12	25	300	0.63	1 bottle*12 month
7	Bleach 5 % of 1 litter	BTL	96	25	2,400	5.00	8 bleach*12 month
8	Absorbent cotton 100 gram	Pack	24	10	240	0.50	2 roll*12 month
9	Applicator stick (sealed)	Pack	12	50	600	1.25	1 pack*12 months
10	Gauze Surgical 90cmx100m	Roll	2	500	1,000	2.08	2 roll*1 year
11	Liquid Soap for hand wash	Bottle	12	30	360	0.75	1 BTL*12 month
12	Detergent (omo) of 5 kilo	Pack	12	50	600	1.25	1 pack*12 months
13	Glycerin of 1 litter	Bottle	2	120	240	0.50	2 BTL*1 year
			Total cost for 1 year 11,913		11,913		
			Cost o	f single VIA	screening	17.29	
			Cost of single VIA + Cryotherapy				