

CERVICAL CANCER

“An NCD We Can Overcome”

2017



Key figures:

- 266,000 women die from cervical cancer each year, 90% of whom come from low-income countries (LMCs) (2012 WHO), even though early detection and treatment of precancerous lesions are effective in reducing disease incidence and related mortality.
- Women present themselves too late to the health centers for proper medical management; As a consequence, the mortality rate associated with this disease remains high.
- 75% of non-communicable diseases (NCDs) deaths are in LMCs in Africa and will account for 40% of the disease burden in 2030.
- The highest incidence of cervical cancer are currently observed in Africa, Latin America and in Caribbean with Age-standardized rate varying between 37 to 75 per 100000
- The management of these chronic diseases will pose a major burden on health systems, resulting in increased costs.
- LMCs make up 85% of the population but only have access to one third of the world's radiotherapy facilities, (about 70% of women with cervical cancer need radiation therapy).
- Over 5 000 radiotherapy machines will be required in LMCs to meet the current demand. 10 000 additional oncologists, 6000 medical physicists, 3000 dosimetrists and 20 000 radiation therapists (International Atomic Energy Agency).
- 8% deaths in Sub Sahara Africa are medically certified.
- Only 5% of global resources are allocated to LMCs, while these countries account for 80% of disability-adjusted life years resulting from cancer.
- This disparity is expected to increase with changes in lifestyles, increasing urbanization, and aging population which will result in doubling the incidence of cancer in Africa over the next five years.
- Health systems will need to be strengthened to enable effective management of cervical cancer (including Human Resources, modernization of the public sector, improvement of the capacity of laboratories, etc.).
- Lessons can be drawn from the experiences of African countries that have initiated efforts to control cervical cancer.
- Similarly the fight against HIV is rich in terms of knowledge, especially since the links with HPV are demonstrated:
 - HIV increases the risk and persistence of HPV and increases the risk of its progression to squamous intraepithelial lesions, precancerous lesions and cervical cancer.
 - Women affected by HIV are 5 times more likely than non-affected women to develop cervical cancer.
 - The prevalence of cervical cancer amongst women living with HIV is 56.6% in Africa. In contrast, risk estimates are between 2 and 4 times higher in HIV infection following HPV infection.
 - These figures show the value of integrating HPV testing into existing HIV services to facilitate access to early screening for cervical cancer and treatment, particularly pre-cancerous lesions (Unaided).

Cervical Cancer in Africa : "An NCD We Can Overcome"

*«This was the theme of the round table that we organized, for the second year, as a side-event to the World Health Assembly.
This publication is the report of the discussions»*

**21 May 2017
Starling Hotel, Geneva**

Therese LETHU
Global Health Objectives

Cervical cancer: an NCD we can overcome

The aims of this meeting are to:

- Understand of what is being done on cervical cancer at the country level
- What are the main opportunities and challenges
- What is the global community doing to scale up action - and what more is required

- Welcome remarks: Therese Lethu, GHO
- Key note address: Luiz Loures, Deputy Executive Director, UNAIDS; Assistant Secretary-General of the United Nations

Scaling up action at country level

Setting of the context: Felicitas Zawaira, Family and Reproductive Health, AFRO, WHO

Chairs:

- ❖ May Abdel-Wahab, Director, Division of Human Health, International Atomic Energy Agency
- ❖ Cherian Varghese, Coordinator, Management of Non Communicable Diseases, WHO

Panel

- Cleopa Mailu, Minister of Health, Kenya
- Isaac Adewole, Minister of Health, Nigeria
- Ummy Mwalimu, Minister of Health, Tanzania
- Bernard Haufiku, Minister of Health, Namibia
- Jabbin Mulwanda, Permanent Secretary, Minister of Health, Zambia
- Theerapol Topanthanont, Director General, Dept of Medical Services, Ministry of Health of Thailand.
- Joseph Leenhouts-Martin, GAVI (Global Alliance for Vaccines and Immunization)
- Marijke Wijnroks, Interim Executive Director, Global Fund
- Miriam Schneidman, Lead Health Specialist, World Bank

Innovation, integration and opportunities

Chairs:

- ❖ Ophira Ginsburg, Director, High Risk Program, New York University School of Medicine
- ❖ Ted Trimble, Director National Cancer Institute for Global Health

Panel

- John-Paul Bogers, The WAKA Programme, Belgium
- Hermann Bussmann, Heidelberg University, Germany
- Julie Torode, Union for International Cancer Control
- Cristina Stefan, President of AORTIC (African Organization for Research and Training in Cancer)

Conclusions and way forward

- Agoudavi Kokou, WHO, Line Kleinebreil, UNFM and Therese Lethu, GHO

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Introduction



Thérèse Lethu

As a side event to the 70th World Health Assembly (WHA), the roundtable discussion on cervical cancer, « *An NCD that we can overcome* », on 21 May 2017 in Geneva, offered to African ministers and permanent secretaries of health and their delegations, an excellent opportunity to exchange experiences, achievements and challenges. Technical and financial partners joined the discussion with a great added value about eliminating cervical cancer as a great public health concern by 2030, in line with the Sustainable **Development Goals** ⁽¹⁾. The success of the meeting was reflected in the high interactivity of the discussions which are highlighted in this report.

Organized by the Global Health Objectives Association (GHO) and the University Numérique Francophone Mondiale (UNFM), this event brought together an audience of health professionals. In this context, Dr. Cherian Varghese, WHO Coordinator, Management of Non-Transmissible Diseases, kicked off the meeting by suggesting that the focus be on policy and specific related issues in response to the following questions:

- **Where are we with the implementation of cervical cancer control policies?**
- **How to optimize the use of existing tools and knowledge to accelerate the fight against this disease? And increase the HPV coverage?**
- **How to encourage as many women as possible to go for early screening and treatment for precancerous lesions including in rural areas?**
- **How can we ensure that cervical cancer is well integrated into the National cancer Control Programs so that women identified with one of the invasive cancers are referred effectively and have access to surgery and radiotherapy services?**

Therefore, the event was designed to formulate concrete answers and practical recommendations to accelerate action against cervical cancer, particularly in Africa. Most of the measures can be done in the immediate future through optimizing the existing resources.

One important message that the event sought to outline from the exchange of experiences was about the collaborative ef-

forts needed to effectively save lives, under conditions that largely remain within our reach. «If we test women under 35 years once in their life, we can reduce the prevalence of cervical cancer by a third,» said **Dr. Varghese**, co-chair of Session 1 alongside **Dr May Abdel-Wahab, Director, Division of Human Health, IAEA** (International Atomic Energy Agency).

This report outlines the messages of the following speakers: Dr Luiz Loures, UNAIDS; Dr Felicitas Zawaira, WHO Africa. Dr May Abdel-Wahab, International Atomic Energy Agency; Dr Cherian Varghese, WHO; Dr Marijke Wijnroks, Global Fund to fight HIV / AIDS, Tuberculosis and Malaria; Miriam Schneidman, World Bank; Dr. Joseph Leenhouts Martin, GAVI (Global Alliance for Vaccines and Immunization); Dr Cristina Stefan, President of AORTIC; Dr Ophira Ginsburg, NY Medical University; Ted Trimble, National Institute of Health; Pr. John-Paul Bogers, The WAKA Program; Dr Hermann Bussmann, Heidelberg University; Dr Julie Torode, Union for the International Cancer Control; Therese lethu, GHO; Dr Line kleinebreil, UNFM; Dr David Nabarro, former Special Adviser to the United Nations Secretary-General; Dr Cleopa Mailu, Minister of Health, Kenya; Prof. Isaac Adewole, Minister of Health, Nigeria; Dr Ummy Mwalimu, Minister of Health, Tanzania; Dr Bernard Hau-fiku, Minister of Health of Namibia; Dr Jabbin Mulwanda, Permanent Secretary of the Ministry of Health of Zambia; Dr Theerapol Topanthanont Director General of the Department of Medical Services of the Ministry of Health of Thailand

The discussions were divided into two sessions, one was more political involving the ministers and representatives of partner organizations while the other was technical with an emphasis on the use of new technologies to boost field results and build capacity of health workers, especially at the local community level. Among the main themes that emerged during the discussions, we outlined the following key points

(1) In 2015 the UN General Assembly accepted a new set of 17 Sustainable Development Goals including ending poverty, achieving gender equality, empowering women & girls by 2030, and reduce by 1/3 premature mortality from NCDs through prevention and treatment and promote mental health and well-being by 2030. (Goal 3.4)



Dr Varghese



Dr May Abdel-Wahab

1. Political leaders reaffirm their commitment

With much conviction, **Professor Isaac Adewole, Nigeria's Minister of Health**, highlighted the importance of cervical cancer control which is high on the agenda of his ministry. A gynecologist himself, Professor Adewole is firmly committed to fighting cervical cancer by equipping his country with the right policy and tools. Accordingly, access to free screening in Nigeria will be extended nationally, including breast and prostate screening for men over 50 years of age. At the same time, the minister intends to help mobilize political support for this strategy, both at the national level with his colleagues, ministers and parliamentarians, and at the regional level, through leading organizations such as the Commonwealth or the African Union.

«There was a time when the President of Ghana, Jerry Rawlings, was taking advantage of all the opportunities to talk about HIV / AIDS. We can do the same for cervical cancer», he stated, emphasizing the exceptional political mobilization that has been made against HIV / AIDS and the coordination of diverse actors at all levels». *«We need to ensure that every woman and every healthcare professional is informed that cervical cancer is a disease that can be prevented by vaccination and can be treated with good chances of cure if detected early.»*

«We have the same political will, with equally remarkable steadfastness,» declared **Ummy Mwalimu, Minister of Health of Tanzania**. *«If we put this disease on our agenda as a priority with a corresponding budget we will succeed».* she added. For her part, the minister has also been very committed to convincing other national political actors to relay messages on cervical cancer and has invited parliamentarians and other local elected representatives to encourage their

voters to undergo screening. Minister Mwalimu recalls that her country is among the countries with the highest rates of cervical cancer and probably the first in East Africa with an incidence of **50 per 100,000** and a mortality rate of 32.4 per 100,000 women. *«Cervical cancer is the most common cancer among women, and accounts for one-third of all new cases of cancer admitted to the institute. Our data is not population-based yet, it is provided by health centers and the National Cancer Institute.»*

“We need to ensure that every woman and every healthcare professional is informed that cervical cancer can be prevented and treated”

On the other side of the border, in Kenya, political mobilization is also at the highest level. The **Minister of Health, Mr Cleopa Mailu**, explained how, in the light of the cervical cancer figures in his country, such as the estimated 4,800 new cases detected per year, and high mortality, he was led to recognize the importance of cervical cancer as a priority for action. *«In 2013, we developed a national cervical cancer control strategy and in 2014 we created a National Cancer Institute to be able to provide a tailored response,»* he said. As a result, data collection and quality control have improved with the implementation of the cancer registry.

Zambia is a pioneer in the fight against cervical cancer in Africa with the establishment of appropriate control measures in the early 2000s.

Dr. Jabbin Mulwanda, Permanent Secretary of the Ministry of Health of Zambia, recalled the importance of the disease: 35% of all cases of cancer recorded in the country are related to cervical cancer with over 1,500 new cases per year. *«In February 2017, we launched the cancer control strategy to guide our response in general and to cervical cancer in particular.»* In this context, priority is given to the community level.



Professor Isaac Adewole



Mr Cleopa Mailu



Ummy Mwalimu

2. Community awareness, training of health workers



Dr. Felicitas Zawaira

All speakers noted that **late admission of women** to health centers is a major cause of high mortality. «*This situation reveals the failure of the health systems at all levels,*» said Dr. Varghese.

Therefore, among the appropriate measures, women's awareness has to be improved while strengthening the capacity of the health system. Participants stressed the need to educate local communities about the specificities of cervical cancer as a preventable and curable disease. The goal is to encourage women to go early for screening especially in rural areas.

In this objective, **community health workers must be trained** accordingly. «*They are on the front lines to convince women to go for testing and follow-up,*» said **Dr. Felicitas Zawaira, Director of the Family and Reproductive Health program of WHO regional Office for Africa.**

All speakers stressed the need to train health workers on the specificities of cervical cancer, such as the benefits of early detection and treatment. Many of these professionals, in most countries, do not offer screening or monitoring for this disease. On the one hand, they often underestimate its importance and on the other hand, they have poor knowledge of the services related to cervical cancer's control, prevention and management. As a result, in these countries there are **missing opportunities** to expand access to screening for cervical cancer. «*Every woman should know that prevention of cervical cancer is possible and that treatment is also available.*» said **Dr. David Nabarro, Advisor to the UN Secretary-General,** echoing previous speakers.

The community level is, in most cases, the weakest link of the health system. Thus, efforts must be made at this level, as a matter of priority to improve early detection and medical care to ensure the best conditions for success. Zambia, for example, has created a **new community health counselor profile** to improve the links between the community and the health centers. «*In general, community*

health workers not only pay inadequate attention to cervical cancer, but they take too long to refer the patient to the next level,» said **Dr. Jabbin Mulwanda.**

Women need to be informed of the benefits of screening for themselves as well as of HPV vaccination for their girls. The content of the messages, while taking into account the local socio-cultural factors, must make sure to effectively bring out the gains of vaccination. This communication is sensitive because the expected gains are long-term and the target group should be motivated to use vaccination in the short term. «*This is the whole issue of NDCs as far as communication about risk behaviors is concerned. We must adapt the messages to provoke action,*» observed **Dr. Julie Torode, Deputy CEO of the Union for International Cancer Control.** «*Especially for adolescent girls, who, as Dr. Felicitas Zawaira pointed out, do not come to the health services, we have to find them where they are,*» she explained, citing for example, **the opportunities offered by mobile phones to attract and retain adolescents' attention.**

“Late admission of women is a major cause of high mortality”

Socio-cultural barriers remain major challenges to the success of certain initiatives such as the scaling up of the **self-test approaches.** Participants recognized that women in the community may not know much about their bodies. They are unfamiliar with the use of tampons and may have difficulty understanding what is expected from them. In support of screening self-test strategies, women's awareness campaigns should create the enabling environment to the successful deployment of this method at the national level. With a view to speeding up a scale up, self test strategies could be developed insofar as they make it possible to overcome the shortage of qualified personnel and adapted infrastructures. The use of mobile phones to transfer photos for confirming the diagnosis also demonstrates the value of the digital visualization of the cervix to support educational messages while empowering both women and the health care providers in the community.



Dr. David Nabarro



Dr. Julie Torode

3. Stigma and exclusion: major challenges

For Dr. Luiz Loures, Deputy Executive Director of UNAIDS, Assistant Secretary General of the United Nations, exclusion is the major challenge for advancing the fight against cervical cancer. For him, lessons from the fight against HIV / AIDS, a disease for which exclusion and stigma have been obstacles at the local level to access screening and care, should be learned. «We need to remove the shame that is often associated with cervical cancer. When women are told that this disease is linked to multiple sexual partners, they feel faulty and shameful whereas the disease is linked to the acquisition of HPV instead.» said Professor Isaac Adewole.

“To strengthen the ability of public figures to talk about cervical cancer”.

about cervical cancer, either because they feel responsible for their community, or because they have a close relative who lives with the disease.

Many countries also involve community leaders, such as traditional marriage counselors and traditional healers as is the case in Kenya and Zambia, to name but a few. “Traditional healers could and should play an important role in the fight against cervical cancer, if we could form a coalition altogether, we should be able to share the knowledge”, asserted. Dr

Cristina Stefan, president of the AORTIC (African Organization for Research and Training in Cancer).

In this context, in addition to the training of health workers already mentioned, local opinion leaders should also be encouraged to advocate. Several First Ladies set an example, including from, amongst other countries, Namibia, Zambia, Malawi, Ethiopia and Kenya. The goal is also **to strengthen the ability of public figures to take an open position to talk**

Organizations such as the UICC (Union for International Cancer Control) have a local network of highly experienced societies and associations that can be called upon to support local control programs and specifically address stigma and exclusion. «In addition, we work on enhancing the relations between governments and civil society,» said Dr. Torode.



Dr. Luiz Loures

Organization of African First Ladies Against HIV/AIDS (OAFLA)

Increasingly, First ladies urge women in their country to go for cervical cancer screening.

First Ladies of Africa advocate for effective policies and strategies towards the elimination of HIV and AIDS, including breast and cervical cancer to reduce maternal and child mortality through strategic partnerships and empowerment of women.

In 2002, 37 African first ladies met in Geneva at a meeting facilitated by UNAIDS and the international AIDS Trust. As a result of this historic meeting the organization of African First Ladies against HIV/AIDS was established as a collective voice for Africa's most vulnerable people, women and children infected and affected by the HIV/AIDS pandemic.

Since then, **OAFLA** has transformed itself from a forum of ideas to an institution capable of providing the continent-wide leadership needed to bring about change in peoples' lives. With its permanent secretariat in Addis Ababa, Ethiopia, OAFLA has moved from addressing the



Madam Roman Tesfaye,
First Lady of the Federal Democratic Republic of Ethiopia,
President of OAFLA

symptoms of the HIV/AIDS crisis to women's health, including cervical and breast cancer.

Members of the steering committee (2017-2019): The steering committee is composed of eight members representing the four regions within the continent.

- Eastern Region: Republic of Kenya and Federal Democratic Republic of Ethiopia
- Southern Region: Republic of Zambia and Republic of Malawi
- Western Region: Republic of Ghana and Republic of Burkina Faso
- Central Region: Republic of Chad and Central Africa Republic

4. Access: Decentralization and Universal Health Coverage



All speakers underscored access as a key issue. For **Dr. Loures**, this was fundamental, as learnt in a significant way with HIV/AIDS. «We must place the target women at the center of our strategies. No woman should be left behind.» The out-of-pocket contribution by African households is far too cumbersome and constitutes a major handicap to access. In addition, the concentration of health centers for the detection and treatment of cancer in urban areas is another issue.

Women are thus forced to travel long distances, make substantial financial sacrifices and eventually end up on a waiting list. The impact of cancer on the impoverishment of families is obvious. For example, in Kenya the price of chemotherapy can range from \$ 130 to \$ 2,000 per treatment in a country where the Gross Domestic Product per capita is about \$ 2776 (World Bank).

Progress is being made to provide appropriate responses and improve access to the health system, beyond cervical cancer. Implementation of Universal Health Coverage (UHC), is on the political agenda at the highest level. **The integration of a package of care related to cervical cancer with cost effective interventions of controlling the disease, is one major recommendation to extending access.**

This strategy should help cope with inequity which is a major concern for African politicians. «We want to offer free access to screening for cervical cancer, It's in my agenda with a specific budget.» insisted **Prof. Isaac Adewole**. We believe that each health center should be able to provide services such as screening and early management of cervical cancer while effectively managing follow-up by chemotherapy or cryotherapy at another level «. This is all the more important given the other inequalities women have to face as **Dr Nabarro** indicated: "Often, they come later than men when they get sick and are less taken care of immediately than men.»

In order to expand access to prevention and care for the maximum number of wo-

men, decentralization of health services is underway in many countries. For example, in Kenya, four cancer centers have been set up within the private sector over the past decade, complementing the two public sector centers. As these centers are in urban areas, the Ministry has developed a **public-private partnership plan** and strategy to create four regional centers across the country. «**Only 16% of women are screened,**» Minister Mailu said. Thus, as a response, a platform is being set up to accelerate the achievement of Sustainable Development Goals (SDGs) within the framework of the level of primary health care. This initiative should make it possible to galvanize all the energies of local actors, public or private, in order to strengthen activities such as training of community health workers, advocacy, and access to screening, diagnosis and treatment. The creation of such platforms should also help to motivate national and international investors in support of cancer control and care in Africa.

Another example is Tanzania's focus on expanding services, particularly rural screening. With the support of the World Bank, health centers are being planned in rural areas to improve access to screening and treatment. «**We want to ensure that at every second-level health center, screening and treatment services are available.** This is quite possible.» said **Minister Ummu Mwalimu**. To confirm her commitment, the Minister announced that she plans to ensure that **at least one day in every month is devoted to free screening for women.** «This strategy should help increase screening of cervical cancer as we will widely communicate about this free opportunity».

In Zambia, the decentralization of services is also at the heart of political concerns. 62 health centers have integrated VIA (Visual Inspection with Acetic Acid) and cryotherapy/thermocoagulation. This is insufficient to cover the needs of the districts. In terms of treatment, a hospital was established through the IAEA and the World Bank. This center is unique and is based in the capital Lusaka. As part of the decentralization, 10 provincial centers are planned,



Professeur Isaac Adewole



Ummu Mwalimu

including cancer treatment centers, especially dealing with surgeries. Zambia's experience is rich, including lessons from the VIA screening program, and the «see and treat» method, as well as the use of new tools such as mobile phones to improve community mobilization and quality control. As a result, in the past 10 years, 355,000 women have been screened, with more than

60,000 in 2016 alone, «which is a success with regard to our global population of 15 million,» acknowledged **Dr. Mulwanda.**

A remaining major challenge to access, especially for treatment, is generally the lack of adequate equipment and where it exists, maintenance weighs heavily on operating budgets. Lack of

qualified staff, especially surgeons and cancer specialists, is another challenge. To move forward, as it was stressed in the discussions, increasing awareness of African women about cervical cancer's prevention, screening and treatment is a priority, particularly at the community level and within the frame of the decentralized and integrated services.

Thailand: lessons to be learned

Thailand is leading the way among the countries that have achieved significant results

First of all, on behalf of Prof Piyasakol Sakolsatayadorn, Public Health Minister of Thailand, it is my pleasure to be here and have the opportunity to share the Thai experiences in tackling the problem of cervical cancer: An NCD that we can overcome.

Cancer is one of the major killer of Thai population for decades. Cervical cancer is the second leading cancer among Thai women. The incidence rate of cervical cancer in Thailand was 14.1 per 100,000 in 2011. More than 6,400 new cases were found each year, and almost 2,000 cases were died from cervical cancer in 2011.

A number of prevention measures for cervical cancer contrai in Thailand have been implemented since 1990s, starting from primary prevention to secondary and tertiary prevention, and also palliative care.

For primary prevention, a number of prevention activities on health education among teenagers and adults are implemented such as having safe sex behavior for cervical cancer prevention

Although cervical cancer is identified as NCD, it is also caused by sexually acquired infection with certain types of human papillomavirus (HPV). To address this, the Ministry of Public Health plans to start offering the HPV vaccination in 2017 to ail girls in primary school grade 5 to boost their protection against cervical cancer. The National Health Security Office (NHSO) has continued cervical cancer screening test since 2005, and planned to include HPV vaccine into the national list of essential medicines and the UHC benefit package.

For secondary prevention, the National Health Security Office (NHSO) and the Ministry of Public Health have continued cervical cancer screening among targeted populations since 2005. As the target of our cervical cancer screening, women aged 30-60 years would be receive cervical cancer screening,

either pap smear or VIA technique, at least once in every five years. Targeted women can get screened at the primary care unit (PCU) closed to their home with free of charge. Women with abnormal pap smear will be referred to have further investigation by colposcopy in community or provincial hospitals.

The results of cervical cancer screening from 2010 to 2014 showed that around 5.2 million of women were screened by pap smear, and more than 122,413 were screened by VIA. Data from the national household survey in 2014 revealed that 67.4% of Thai women aged 30-60 years were received cervical cancer screening in the past 5 years, in which 54% were from organized screening and 13.4% were from opportunistic screening.

For tertiary prevention, the National Cancer Institute (NCI) of Thailand in collaboration with other professional society performed Clinical Practice Guideline for common cancer in Thailand, and the guidelines were revised regularly.

We provide the standard treatment for cancer for ail citizens under the policy of universal health care coverage (UHC).

With our effort for decades, the incidence of cervical cancer reduced significantly from 23.4 per 100,000 population in 1990 to be 14.1 per 100,000 population in 2011. And cervical cancer has shifted from the first leading cancer among Thai women in 1990 to the second leading cancer in 2011.



Theerapol Topanthon, Director General, Dept of Medical Services, Ministry of Health of Thailand.

5. HPV Vaccinations: scaling up



Vaccination against HPV proved effective in preventing cervical cancer in 70% of cases. The ongoing vaccination programs are yielding good results. The experience shows the importance of the cooperation between sectors, in particular Health and Education. Most of these are carried out through schools and the education system. In addition, actions are planned to reach girls outside the school system.

Such HPV vaccination campaigns have been initiated or planned in various countries. In Tanzania, HPV vaccination is set to be deployed with the support of GAVI, (the Global Alliance for Immunization). The pilot program in the Kilimanjaro region yielded positive results with coverage of 95% of young girls between 6 and 13 years of age. The ultimate aim is to vaccinate 4 million of them. In Kenya, the vaccination program is to be deployed in 2018 through a school-based program, supplemented by other actions to reach out to girls who are not in school. In Zambia, the vaccination program has already involved 55,000 girls between 2013 and 2017 as part of a successful pilot. In Namibia, a vaccination program of 5,000 girls between the ages of 9 and 13 is also planned.



Dr. Bernard Haufiku

Window of opportunities to improve the health of the adolescent girls

Many countries are yet to implement a national HPV vaccination strategy. As a result, the vaccine coverage for HPV is still low in Africa; around 20% in general. To accelerate the scaling-up of these programs, GAVI has decided to focus on **the national level, moving directly to this level**, in lieu of pilot demonstration projects. *«We started with 25 pilot projects with the aim of extending them to the national level, but in reality only 4 were able to reach this level.»* said **Dr. Joseph Leenhouts-Martin of Gavi**. Thanks to this new approach, 40 million girls will be vaccinated by 2020.

One main challenge remains **the price of the vaccine**. The participants recognized the need to identify new modalities for the delivery of cheaper services in addition to the cost of vaccines, *«which remains a major bottleneck»* said the Minister of Namibia, **Dr Bernard Haufiku**. In line with this,

the participants acknowledged the importance of GAVI which facilitates country access to HPV vaccines.

The launch of HPV vaccination programs is an opportunity to integrate other adolescent health monitoring programs, such as HIV or nutrition. **«HPV vaccination programs offer a window of opportunities to improve the health of adolescent girls and to create synergies between partners,»** said **Joseph Leenhouts-Martin**. In addition, gradually through Gavi, the international community of Public Health is organizing to allow countries to access HPV vaccines in the best cost efficient and timely manner.

The HPV vaccine was introduced into the national immunization program in six African countries.

«We hope this program will be expanded in all countries as part of integrated health services, including other programs targeting adolescent girls.» said **Dr. Zawaira**. The related pilot study in the six African countries, recommended that each country should establish a cervical cancer-control programme that is properly staffed and funded to develop and monitor scale-up, and integrates **screening into routine primary health care activities in centres, including family planning and antenatal services**.

Advocacy is yet to be widely extended in support of the immunization campaigns, including towards social actors and influential leaders. Families, especially grandparents who play a great role in Africa, could also be included.

Advocacy remains important beyond HPV Vaccination, **screening still being necessary** insofar as the vaccine does not cover all types of HPV responsible for cancer and considering that many women are already affected when they receive the vaccine.

As a result, the introduction of HPV vaccine can provide an important strategic opportunity for improving or establishing cervical cancer screening and treatment programmes, and raising awareness of their purpose and availability.



Dr. Joseph Leenhouts-Martin

6. Innovation: Mobile phones

Substantial progress has been made in recent years in improving the effective implementation of cervical cancer control programs. This ranges from new laboratory equipment, testing and diagnostics, screening methods that provide fast results and do not require sophisticated structures to treatments that do not need a specific supply chain and heavy maintenance. Similarly, for the delivery of vaccines, the monitoring of validity checks, and especially the quality assurance of data and program evaluation, constitute a considerable contribution to the success of the cancer control programmes.

"Innovative solutions will help overcome the challenges already mentioned but we are aware that it takes time as is demonstrated in the case of Zambia. Thus we need to explore ways on how to accelerate access of local stakeholders to those innovative tools and strategies?" recommended Dr Ophira Ginsburg, New York University School of Medicine. In concurrence, Dr. Julie Torode considered this question as a recurring issue: "how to get those innovative approaches into the local communities much quicker?" "We've been talking about this for a long time. It's actually a pleasure to have had this panel discussion today and see that we have progressed in terms of political will. We have identified key factors and recognized that this is an emergency. We are also excited to hear from the Global fund about the motivator for looking at co-infection and co-morbidity. However, how do we move these strategies in a most effective way to make services more widely accessible and successful in saving lives?"

Dr Torode also acknowledged the importance given by the political leaders during the discussions to **the benefits brought about by use of mobile phones in the fight against cervical cancer**. Whether it is community mo-

bilization or information for women through SMS to staff training, diagnosis by sending photos, data collection and monitoring of activities, the mobile phone has proved to be a valuable tool to help extend and improve the quality of programs.

Various examples of the use of mobile phones illustrate these features. For instance, Tanzania has integrated the sending of photos to confirm the diagnosis with teams of experts, and for the quality monitoring in the context of a pilot in the Kilimanjaro region. Zambia, as a pioneer in Africa, has been using mobile phones to im-

prove its reach to rural women and to raise awareness on cervical cancer through the mCervicalcancer initiative. The collection of data has also been made possible on a monthly basis. In Kenya, the SDG platform will be a springboard to promote and facilitate the use of mobile phones in support of cervical cancer control activities. "Looking at mHealth, we've involved a premium mobile phone provider to create credible solutions. We've also been working with our Ministry of Telecommunications to see how we can train the greatest number of people to use mobile phones regardless of how simple their gadgets may be.", said

Dr Elisabeth Ominde Ogaja, County Executive member of Kisumu, Kenya.

This innovative approach using mobile phones to support data collection, monitoring and evaluation of activities is very much

valuable, as many countries still face a crucial lack of quality data, and of population-based cancer registries with accurate notification of cause of death. For example, Namibia does not have such capacities yet, with its data dating back to 5-8 years. «We have a weak cancer registry system, but we have an association that has good expertise,» explained **Minister Bernard Haufiku**, before



Dr. Elisabeth Ominde Ogaja

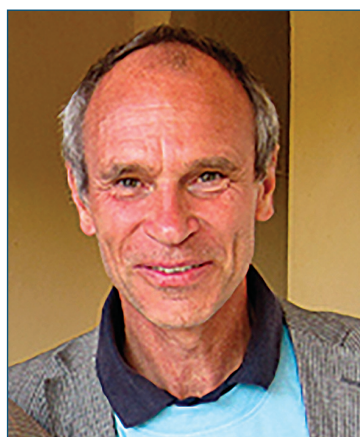


Dr. Jabbin Mulwanda



Dr. Ophira Ginsburg

6. Innovation: Mobile phones



Dr. Hermann Bussmann

announcing the ongoing efforts to integrate these services in his country.

A perfect example of the effectiveness achieved by leveraging new communication technologies to **significantly accelerate and simplify the screening approach** was given by **Dr. Hermann Bussmann** of the University of Heidelberg in Germany. *“Electronic data collection is vital for monitoring, evaluation and quality control as well as to select the best option for the triage of HPV positive women, especially in rural areas. In collaboration with SAP, we developed a cloud-based mobile solution to provide and process information in real time using tablets. The solution was successfully used in Kenya. Digitized information improved screening performances based on the biomarkers developed by the Heidelberg University to determine if a woman infected with HPV is at risk of developing cervical cancer; it assists to bring back at-risk women in need of further management. For screening tests to be effective, projects need high participation rates, as well as a convenient, applicable, and high-quality strategy directly at the community level. We are now setting up a study in Ethiopia with entire communities, where we offer home-based, assisted self-sampling, which are performed by community workers. Tests are sent to the centers and results are delivered back to the patient. For this we definitely need such new communication technologies, particularly mobile phones and tablets, in order to be able to optimize information flow and patient retention.”*

Scale up mobile health programs

In Dr Bussmann’s view, some of the success factors relating to the use of mobile digital devices together with a Cloud-based platform are that the data can be collected in a systematic way approaching all eligible women, offering women-friendly collection systems, and using the data for monitoring and evaluation of the screening activities. *“From there, we can improve and roll out. We can start very small, with a single community where you can campaign, from door to door, invite every women eligible, offer tests to these women and then easily scale up. A powerful system that is globally accessible and collects the data and connects all necessary parts*

of the screening process is essential for success.

«Especially in resource-limited countries, the contribution of mobile telephones to improve specific functionalities is very promising, including e-learning, to build capacity.» Dr. May Abdel Wahab of the IAEA confirmed the value of these new communication technologies. As for social media, much can be done through these networks to get the message across all levels including supporting political mobilization and engagement of partners.

«Countries are able to initiate such projects to the extent that they do not require heavy investments. We can build their capabilities and help them achieve the connectivity required by involving all stakeholders particularly the telecommunications industry”, continued Dr. Torode.

«The important thing is to work together, too often we work in silos,» said Dr. Line Kleinebreil, vice president of UNFM who

is involved as a consultant to WHO and IUT to implement the program **«Be Healthy Be Mobile»**⁽²⁾ aimed at supporting prevention programs in countries such as Senegal for diabetes and cervical cancer in Burkina Faso. She was optimistic and convinced that it is doable. **«We need to move to another level of scale with these mobile health programs.»**

«Join our efforts to accelerate the fight against maternal mortality in Africa,» Dr. Veronique Thouvenot called out as she co-founded the **ZeroMothersDie** program⁽³⁾.

This initiative is geared towards reaching the 20% of rural women who do not have mobile phones and offers this tool with free communication services with their health center. *«We must take advantage of all the opportunities offered by existing health programs to integrate maternity health and cervical cancer screening.»*

(2) «Be Healthy Be Mobile” This Initiative is designed to scale-up mobile technology to promote NCD prevention & treatment, including mHealth projects, primarily SMS- mAwareness, mTraining, mBehavioural Change, mSurveillance, mTreatment, mDisease management and mScreening

(3) <http://www.zeromothersdie.org/>



Dr. Line Kleinebreil



Dr. Véronique Thouvenot

7. Innovative approaches: Integrated services

Innovative approaches to integrating cervical cancer into existing HIV / AIDS, reproductive health and gender programs are very promising. «Women affected by HIV / AIDS have a higher rate of cervical cancer. HIV has given an epidemic dimension to cervical cancer» recalled **Dr. Loures**.

Zambia has taken advantage of this new approach to include cervical cancer in a grant by the Global Fund Against AIDS, Tuberculosis and Malaria to Zambia, using a balance of \$ 625,000. A study by the CCPZ (Cervical Cancer Prevention Program of Zambia), found that in 2005, 1/5 of women searching for care at the University Teaching Hospital in Lusaka had cervical cancer. «Integrating the HPV test into existing points of care will allow us to extend access to screening for cervical cancer, making it more effective and specific,» confirmed **Dr. Mulwanda**.

In this country, this Global Fund allocation should not only increase access to screening for women living with HIV in 25 health centers, but also provide mentorship for health workers in these centers.

The experience of Zambia has paved the way forward. The Global Fund now encourages partners to use the balances of their funds for countries to accelerate the integration of cervical cancer prevention programs, particularly the integration of HPV vaccination in their upcoming funding cycles. «We are committed in this direction with our new policy of co-infection and co-morbidity,» said **Dr. Marijke Wijnroks, Interim Executive Director of the GFATM**.

Countries are therefore encouraged to use the next Global Fund allocations to develop an integrated response to cervical cancer and health system strengthening. Members of the CCM (Country Coordinating Mechanism) will play a key role at the local level for integrating cervical cancer into country

ongoing or future requests for funding. CCMs include representatives of every sector involved in the response to the diseases at the country level.

«We have a lot of hope with this new integration approach to boost the scaling up of our cervical cancer control program,» said **Minister Ummy Mwali-mu**. «If we integrate HPV testing into HIV services, we will be able to reach more women.» In Tanzania more women than men are HIV-infected, 6.3% vs. 3.8%, as is the case in countries within the region.

Among the innovative and promising approaches, the experience of the **State of Tamil Nadu in India** is interesting. «We have coupled health system reform with an expansion of medical coverage to secure cervical cancer funding as an integral part of the essential care package,» explained **Dr. Miriam Schneidman, Chief Health Officer of the World Bank**.

Another best practice is provided by Botswana. «With the support of the European Union of \$ 20 million, facilities for HPV vaccination program have been funded.» As a result, the **Ministry of Finance has decided to fund the scaling up of the program at the national level,»** said **Dr. Schneidman**.

Innovative funding approaches, including integrated strategies and universal health coverage, are increasingly needed to scale up cervical cancer control. Public private partnerships also offer promising opportunities that “we should explore further”, as suggested by some participants.

Funding is a huge challenge. For instance, regarding radiotherapy alone, about \$ 97 million was required to enable full access in the LMCs in 2015 (The Lancet Oncology). About 22% of the 54 African countries have no access to any form of anti-cancer therapies, including surgical, oncology, chemotherapy and radiation.



Dr. Marijke Wijnroks



Dr. Miriam Schneidman



8. Building capacities



The lack of skilled personnel is another major obstacle to the implementation of effective cancer control programmes at the country level. Additionally, there is a drastic shortage of accessible, up-to-date knowledge and quality training programmes for comprehensive cancer control.

In response to this urgent need, partners will have to increasingly invest in support of strengthening health systems. Integrated approaches through major technical and financial partners, as mentioned, should be effective in moving forward capacity building related to cervical cancer control. The Global fund in Zambia is showing the way in this regard.



Dr. Cristina Stefan

New opportunities for developing capacities are also provided by the extensive use of the new communication technologies as participants underlined many examples of the beneficial utilization of mobile phones. In addition, those new tools can help improve the **training of health workers and building capacity** in general. That way, they provide complementary services to collecting essential data and evidence

for policy-makers, planners, health professionals and researchers to help them better understand the burden of cancer and improve screening and treatment options. From her over 10 years of experience of training African health professionals through the UNFM and the RAFT (Reseau Africain francophone de Tele-medicine), **Dr. Kleinebreil** confirmed the relevance of this approach. *«In line with this, we can train the greatest number of health workers across countries in a cost effective and within a limited timeframe.»*

E-Learning platforms are available in many countries to leverage local training networks and infrastructure in a gainful way. As an example, the PACT (Programme of Action for Cancer Therapy), through the IAEA and partners, developed the VUCCnet (Virtual University for Cancer Control), in 2010. Over 500 African health professionals have benefitted from this innovative training

strategy. This is inclusive of community health workers to specialized staff in tertiary health care, particularly radiotherapy, alongside surgery and chemotherapy.

Other partners are also playing an essential role in providing related training and complementing programmes offered through local or international education and training institutions. During the round table, representatives from two such partners, the UICC (Union for International Cancer Control) a network of over 1000 organizations in more than 150 countries, and the AORTIC (the African Organization for Research and Teaching in Cancer) expressed their commitment to this issue.

According to **Dr Cristina Stefan**, President of AORTIC, new modalities for developing local capacities should be experimented: *“such as mentorship programs with young leaders who are very creative and with whom we could partner to get effective answers to the questions we are still looking for. There are many people, extremely experienced and skilled, who should be able to mentor younger ones. We could also look for new ways of partnerships, particularly with the private sector which is very important. Public and private sector alliances, NGOs, international organizations, Universities and experts are all crucially essential in strengthening local competences.”*

In addition, Dr. Stefan considered that exchanges of experiences are key to building capacities. *“I think it is imperative for all of us to share our successes so we can learn from one another. Situations differ from country to country, but some principles remain the same”.* To demonstrate such common situations at the regional level, **Minister Isaac Adewole** mentioned *“the inter-country study designed to look for common challenges between Nigeria, Ghana and South Africa, which showed that the late presentation of women was a mutual major concern.”*

This kind of cooperation is promising as more and more African coun-



Dr. Line Kleinebreil

tries understand the necessity of South-South and regional cooperation and partnerships. This is the will of the SADC (Southern African Development Community) whose member countries were mostly represented at the roundtable.

During the discussions, one of the best practices that came out, particularly from Zambia, was the positive impact of the **task delegation** that expands the role of nurses and community health workers and integrates them into the provision of selective cervical cancer services, including advocacy and outreach activities.

Given their human and financial limited resources, African countries also need specific training and tools to launch priority cancer control activities. They can use for example, the IMPACT Review tool for assessing the most effective interventions for building realistic plans and sustainable cancer control capacity. Tools can also facilitate information sharing and training. **Dr. Ted Trimble, Director of the US National Institute of Health, Global Health Center**, co-chair of the 2nd session, invited participants to use the ECHO program as a proven tool. *"This web based approach that we're trying to build with project Echo was originally developed to train rural practitioners taking care of patients with Hepatitis. This is an excellent model for sharing information among health care practitioners. It can be used in cancer too as a good model to develop a kind of global community of practice. So this is a great opportunity to learn from one another in that respect."*

Lastly, capacity building for an effective national Cancer Control Program includes **a range of activities, from control planning, cancer information, prevention, early detection, diagnosis and treatment, and palliative care**. For his part, **Prof John-Paul Bogers, Coordinator of the WAKA program**, emphasized the crucial need for improving quality control through stren-

gthening human resources and local laboratories facilities *"The University of Antwerp began a collaboration with the University of Limpopo, in South Africa, in 2008, to look at HPV screening. The Flemish government has sponsored projects in Kenya, Uganda, Tanzania and South Africa. The Waka program was launched to coordinate all the HPV aspects of these programs"*

Cooperation at regional level

Thus, the WAKA program is a multi-country network with ten sub-Saharan African countries, where the main areas of interests are capacity building and laboratory facilities. *"To have good data, we not only need enhanced capacity, but we also need good labs. Accordingly, we set up a regional network and started building human resources, particularly for pathologists PhD students. We created a **reference lab in South Africa for HPV testing**, through a private-public partnership to serve the Waka program but we had **to set up labs in every country** to enable patients to access diagnostic systems.*

*We also looked into **self-sampling**. In addition, we are interested in supporting cancer registries for insuring good decision making along with capacity building. That's why I fight for high quality labs, teaching and providing quality assurance which is what WAKA programme is about."*

Upgrade laboratories' facilities

Prof Bogers's experience is all the more interesting as he is also focusing on the working conditions of qualified staff aimed towards motivating them to remain in their countries, particularly for the PHD Students *"as they are those who can lead the next generation"*.

This is why the Waka programme is helping laboratories facilities to be upgraded through partnerships. This is again, an area where integrated services, especially incorporation of HPV detection into HIV services, should provide an effective response with the support of new partners.



Dr. Ted Trimble



Pr. John-Paul Bogers



Dr. Cristina Stefan

9. Moving forward

A major message that emerged from the discussions is the limited awareness of the importance of access to health for African women, particularly in rural areas. These women face numerous obstacles such as socio-cultural, financial, geographical and other factors which results in their late presentation to health centers, thus leading to high mortality rates. **Mrs Soko Tulipoka Director of Nursing Services**, Ministry of Health, of Malawi welcomed the positive outcomes of the event. *"This present panel discussion confirmed that we have the data and the political will to move forward. Silence has put a lot of weight on cervical cancer for a long time, while efforts were being focused on HIV and infectious diseases".*



Mrs Soko Tulipoka

Faced with this common situation in Africa, the speakers stressed the importance of taking advantage of all the opportunities to sensitize women and community leaders on the appropriateness of early detection in order to timely treat precancerous lesions and reduce mortality. Beyond raising awareness, **there is the need to take advantage of existing programs that address women, to integrate HPV testing in local services such as HIV Aids services, gender or reproductive health programs.**

These new approaches to integrating cervical cancer into existing services are very promising. On the one hand, they will make it possible to extend access to screening to a greater number of women, starting with those already affected by HIV, who are the most vulnerable to HIV/AIDS co-infection. On the other hand, they are likely to develop new synergies with new partners via a pooling of resources for a better cost effectiveness of the implemented or ongoing actions.

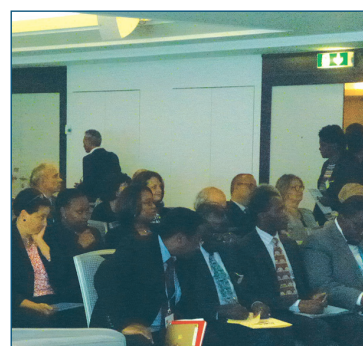
Tangible results are therefore expected from this integration strategy supported by partners present at the roundtable, such as the WHO, UNAIDS, the World Bank, UICC and the GFATM. Primarily, this new direction should be a turning point in the fight against cervical cancer. Not only

does it open new doors to facilitate access to additional funding for countries, but it will also enable the scaling up of control programs under optimal efficiency. **The new procedure developed by GAVI, to accelerate vaccination campaigns at the national level will also contribute to the scaling up of comprehensive cervical cancer control programmes.**

The extension of the UHC is also at the heart of these new operational approaches. Experience shows the value of integrating a cervical cancer care package to make access easier for as many people as possible. Much remains to be done to enhance UHC to the level of efficiency required. However countries such as Thailand are leading the way. In addition, the Indian state of Tamil Nadu shows that it is also valuable to link health system reforms to an expansion of medical coverage. This option has proved to be effective in securing funding for cervical cancer control as an integral part of the essential care package.

Human resources are a major challenge, both qualitatively and quantitatively. In the immediate future, increased effort is needed from countries to invest more resources to strengthening the capacity of the health system. For example, the training of health personnel on the specificities of cervical cancer should be organized quickly within the framework of the access policy. It goes hand in hand with efforts to **decentralize health services in several countries, facilitating the integration of screening and management of precancerous lesions at the district and provincial levels.** Participants acknowledged the benefits brought about by the use of new technologies, such as mobile phones in the fight against cervical cancer. They also outlined the need for moving these strategies in a most effective way to make services more widely accessible and successful in saving lives.

Developed countries have been able to significantly reduce the mortality associated with this disease and its incidence rate. In contrast, the situation re-



garding women in LMCs is one of deep injustice. Thus, greater attention should be paid to bridge the great divide in cervical cancer involving the international health community. **Dr. Julie Torode** suggested that we provide some thoughts about this issue, «Are we certain that the international community is focusing on the right priorities?» she asked while **Dr. Luiz Loures** followed by stating: «We must advocate for more responsibility at the national level, but this should be done without reducing international solidarity.»

Just as the fight against HIV/AIDS 15 to 20 years ago, which required an exceptional mobilization of the actors involved, the fight against cervical cancer should benefit from similar dynamics. «The international community has demonstrated how millions of lives can be saved by mobilizing financial resources, delegating tasks, negotiating drug prices and diagnoses.» For **Dr. Luiz Loures**, this experience can be applied to the fight against cervical cancer.

In this context, the need to increase col-

laboration between all stakeholders in the fight against cervical cancer is becoming more acute today. The United Nations set an example by launching **the United Nations Joint Global Program on Cervical Cancer** in late 2016.

The Joint Program aims to foster collaboration and coordination among stakeholders and facilitate the optimal use of existing resources.

Since we have the political will and the tools, we can achieve our goals

«Let us work together in an organized and coordinated manner at the national, global and regional levels to eliminate cervical cancer as a public health problem.»

Dr Agoudavi Kokou, Coordinator of the Joint Program with WHO shared the participants' confidence in the future. «Since the tools are available, we can accelerate action by helping countries to develop a well-established national cervical cancer control program with high government commitment and equitable access of women to screening and treatment services as well as HPV vaccination for girls. With determination and commitment, we can achieve this in twenty years.»



Dr Agoudavi Kokou



Dr. Luiz Loures

The United Nations Global Cervical Cancer Programme End cervical cancer: prevent, treat, care

To build on what exists and enhance progress, 7 UN agencies under the United Nations Task Force on NCDs have established a new 5-year Joint Programme to prevent and control cervical cancer.

The Joint Programme will provide global leadership as well as technical assistance to support governments and their partners build and sustain high-quality national comprehensive cervical cancer control programmes with women accessing services equitably. Now more than ever before, there is the political will, the national and international partnerships, and the technical tools needed to put an end to women dying of cervical cancer.

The Joint Programme will build on the

world's collective endeavours so that in a generation, death from cervical cancer ceases to be a public health issue: bringing together our joint efforts in taking new technologies to scale, reducing the costs of vaccines, and using innovative approaches to ensure women are accessing services.

The Joint Programme will work with global and national partners, initially in 6 low- and middle-income countries to ensure each participating country has a functioning and sustainable high quality national cervical cancer control programme in place at the end of the 5 years.

The vision of the Joint Programme is the elimination of cervical cancer as a public health concern across the world

Biographies



Dr Julie Torode is Deputy CEO and Director of Advocacy and Networks for the Union for International Cancer Control. With a PhD in Chemistry from

the University of Liverpool and postgraduate work in Education, Julie entered the health arena and field of oncology through leading clinical trials work across phases 1-IV, with a particular focus on breast and gynaecologic cancer while, also nurturing an ongoing interest in cancer prevention.



Dr Hermann Bussmann heads the ETiCS (Emerging Technologies in Cervical Cancer Screening), Department of Applied Tumor Biology, Institute of Pathology,

University of Heidelberg, Germany. Dr. Bussmann received his MD and specialization in Pediatrics from the University of Heidelberg, his MPH from the Harvard School of Public Health, Boston and his PhD from the Radboud University, Nijmegen. He also holds the Diploma of Royal College of Obstetricians and Gynecologists, London. Dr Bussmann has over 25 years of experience as clinician, clinical researcher, mentor and teacher in Africa.



Dr John-Paul Bogers is medical director responsible for histopathology and molecular pathology of Algemeen Medisch Laboratorium in

Antwerp, Belgium, and Professor of Histology and Cell Biology at the University. He is specialized in anatomic pathology. He got his PhD in 1996. In 2000, he was appointed to lecture histology and histopathology. He graduated as master in public health (Liverpool, 2013). In 2004 he started an independent research group with specific emphasis on diseases related to infections with HPV and cancer. He is project leader of the Flemish government initiatives in Limpopo (South-Africa) WAKA HPV Program.

Miriam Schneidman, Lead Health Specialist Health, Nutrition and Population Global Practice, World Bank. She has



more than 35 years of experience working on health and human development issues in the Africa and Latin America and Caribbean Regions of the World Bank. Miriam was extensively involved in the World Bank's Multi-Country HIV/AIDS Program for Africa (MAP), leading the roll-out of AIDS treatment programs, brokering partnerships, and managing several operations. She has also led a unique regional project in East Africa to strengthen diagnostic and surveillance systems and organized a South-South Knowledge Exchange to support countries in East and Southern Africa to share experiences in cancer care and control. In addition, she worked on family planning, reproductive health, and demographic issues. She holds degrees in Economics from the University of Maryland and in Public Health from The Johns Hopkins University.



Dr Cherian Varghese is WHO coordinator of NCD management. He holds a medical degree with postgraduate qualification in radiation oncology from India,

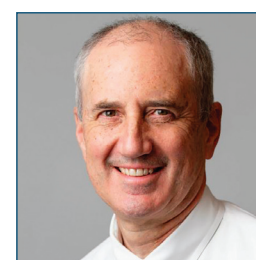
where he also has training in health and hospital management. He has a Master of Philosophy (Cambridge, UK), and a Ph.D. (Tampere, Finland). He worked in clinical oncology and epidemiology in Trivandrum, India, for ten years and as research fellow at the University of Leeds, UK, for 2 years. He joined the WHO country office for India in 2001 as cluster focal point for social change and NCDs, and moved to the WHO Regional Office for the Western Pacific as Senior Medical Officer for NCDs in 2007 and then joined the WHO Department for Management of NCDs. He leads the area of integrated NCD management and is working on models of NCD management for populations at a district level.



GFATM as the Chief of Staff in July 2013.

Dr. Marijke Wijnroks is the interim Executive Director of the Global Fund to fight AIDS, Tuberculosis and Malaria. She joined the

She had a broad responsibility and a particular focus on gender and human rights and on engaging with all partners involved in global health. Prior Marijke was Ambassador for HIV/AIDS and Sexual and Reproductive Health and Rights, and also Deputy Director of the Social Development Department, in the Ministry of Foreign Affairs in the Netherlands. In that position she has overseen policy and strategy development in areas related to HIV and AIDS, sexual and reproductive health and rights, gender, education and civil society. She has a medical degree from Maastricht University (Netherlands) and a degree in tropical health and medicine from the Institute for Tropical Medicine in Antwerp (Belgium).



Dr. Ted Trimble is the director of the Center for Global Health created in 2011 under the National Cancer Institute (NCI). Prior, he was head of NCI's

Gynecologic Cancer Therapeutics where he spearheaded the development of national and international cancer research strategy for the treatment of cervical, ovarian, and endometrial cancers. He was also Head of NCI's Quality of Cancer Care Therapeutics, Clinical Investigation Branch, Cancer Therapy Evaluation Program, Division of Cancer Treatment and Diagnosis. He led the planning committees for NIH Consensus Conferences on ovarian and cervical cancers and also coordinated NCI Clinical Announcements (chemoradiation for cervical cancer, 1999, and intraperitoneal chemotherapy for ovarian cancer, 2008). Dr. Trimble graduated from Harvard College and the Johns Hopkins University of School of Medicine, then trained in obstetrics/gynecology in various leading universities.



Dr Ophira Ginsburg, Director, High risk program, Department of Population Health, NYU School of Medicine, New York, is a medical

oncologist with expertise in cancer epidemiology, prevention and screening. Prior, she joined the WHO Department for Management of NCDs in 2015 as a Medical Officer for cancer control. She is a fellow of the Royal College of Physicians and Surgeons (Canada) and a Scientist at Women's College Hospital

and Research Institute. She has been an advisor to the National Institute for Cancer Control of Viet Nam, a member of the Technical Advisory Committee of the Global Task Force on Expanded Access to Cancer Care and Control in Developing Countries, and a member of the UICC's Global Task Force on Radiotherapy for Cancer Control. She has developed an innovative programme of population intervention research, education, and policy initiatives in cancer disparities and global cancer control.



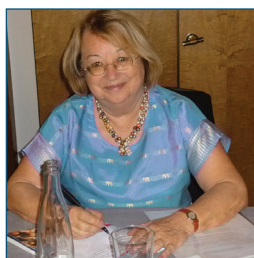
Dr. Luiz Loures joined UNAIDS in 1996 and was appointed Deputy Executive Director of the UNAIDS Program Branch and Under-Secretary-General of the United Nations

in January 2013. He coordinates UNAIDS efforts to consolidate and coordinate efforts to end the AIDS epidemic by 2030. Dr. Loures holds a medical degree and has nearly 30 years of experience in the AIDS response. Its commitment has expanded from the provision of medical care to people living with HIV in the early stages of the epidemic to its dynamic involvement in the development of a global political framework today. In 2006, Dr. Loures was responsible for the development of the universal access to antiretroviral therapy program for people living with HIV in Brazil. He holds a Master's degree in Public Health from the University of Berkeley (US).



Dr. Felicitas Zawaira is the Director of the Family and Reproductive Health Cluster, WHO regional office for Africa.. Felicitas worked as Director of Maternal and

Child health for 7 years in the Ministry of Health in Zimbabwe. Dr. Zawaira joined WHO in 1998, working in the country office in Zimbabwe and thereafter in the Regional Office in the areas of HIV and Women's Health. She has served as Head of WHO Country offices in various countries. She holds a Bachelor of Science degree in Biochemistry and an MD in Medicine and Surgery from the University of Zimbabwe; a Masters in Maternal and Child Health from the University of London and a diploma in Management Methods for International Health from the University of Boston, Massachusetts. Dr. Zawaira is a Member of the Institute of Child Health, London.



Dr Line Kleinebreil is Vice President of the 'Université Numérique Francophone Mondiale' (UNFM), and she is a consultant for eSanté diabetes programs in French-speaking Africa. Clinical practitioner, Line has worked in various hospitals of Public Assistance. She has, among other things, managed the telemedicine service from 2005 to 2010 of the European Hospital Georges Pompidou. Today, it is continuing its commitment to the use of new technologies with UNFM to provide distance education to developing countries, particularly for chronic diseases and diabetes. She is also a Consultant for the "Be He @ lthy, Be Mobile" Program, resulting from a collaboration between the World Health Organization and the International Telecommunication Union.



Dr Cristina Stefan is the president elect of AORTIC (African Organization for Research and Teaching in Cancer). She holds also the position of president of the African Medical Research and Innovation Institute and director of African Pediatric and Adolescent Oncology Group. She is an associate professor at Walter Sisulu University in Umtata, South Africa, research director at International Prevention Research Institute, a member of Academy of Science and a Fellow of the Royal Society of South Africa. She is also a Member of the Organization of Women in Science for the Developing World. In 2016 she was awarded the title of the most influential woman in business and government in South Africa and Southern Africa. Dr Stefan is involved in international networking. She continues to advocate for the promotion of cancer registration and national cancer control plans in Africa and contributes to the educational, research and policy cancer activities on the continent.



Dr May Abdel Wahab is Director of the Division of Human Health of the Internatiola Atomic Energy Agency in Vienna. The objective of this Division is to support Member States' fight against

cancer, cardiovascular diseases and malnutrition and other diseases using nuclear and nuclear-related techniques. This is accomplished through support of cancer radiotherapy treatment and diagnostic imaging projects, as well as support of nutrition centres and human resource development. Additional activities include the development of guidelines; databases; providing a quality assurance framework and review missions; as well as technical, advisory and dosimetry laboratory services; including educational and research initiatives.



Thesere Lethu is a global health specialist with more than 25 years of experience with organizations such as the Global Business Coalition (GBC), the French Investor Council in Africa and WHO. She also founded a public health journal, Africa Medicine and Health, of which she was editor-in-chief for about 13 years. Thérèse's expertise at the intersection of international advocacy, North South and South South exchanges and cooperation is now being used to develop local platforms of services for women's health, with a particular focus on cervical cancer. She is a great advocate for the use of new communication technologies and new approaches to co-infections and co-morbidities, such as HIV-HPV and HPV SRH (Sexual Reproductive Health), while improving social impact and access to information and prevention of local communities, including innovative cross-sectoral partnerships.



Joseph Leenhouts-Martin is the Head, Strategic Innovation - Resource Mobilisation, Private Sector Partnerships, Gavi, the Vaccine Alliance.

Joseph led the development and alignment of global resource mobilisation and private sector engagement strategies while developing innovative solutions to enhance Gavi's private sector and sovereign donor engagement. He co-manages Gavi's INFUSE initiative aimed at identifying, adapting, resourcing and scaling-up proven innovations in immunisation delivery. He also leads Global Expert Services cluster providing strategic and partnership development advisory services to broader department.

Acronymes

AORTIC	African Organization for Research and Training in Cancer
APHRC.....	Cold Knife Conization
EVA System	Enhanced Visual Assessment
GAVI.....	Global Alliance for Vaccines and Immunization
GHO.....	Global Health Objectives
GFATM.....	Global Fund against Aids, Tuberculosis and Malaria
HIV	Human Immunodeficiency Virus
HPV	Human Papillomavirus
HUG	Hospital University of Geneva
IARC.....	International Agency for Research on Cancer
ICT.....	Information and Communication Technology
UNIATF	United Nations Interagency Task Force
IEC.....	Information, education and communication
ITU.....	International Telecom Union
Leep	Loop Electrosurgical Excision Procedure
LMCs.....	Low and middle-income countries
mHealth	Mobile Health
MOH	Ministry of Health
NIH.....	National Institutes of Health
NCD	Non Communicable Diseases
NGO	Non Governmental Organization
OIF	International Organization of the Francophonie
PATH	Program for Appropriate Technology
PEPFAR.....	The U.S. President's Emergency Plan for AIDS Relief
SMS.....	Short Message Service
STI	Sexual Transmitted Infection
TB.....	Tuberculosis
UICC.....	Union for International Cancer Control
UHC	Universal Health Coverage
UNICEF	United Nations Children Fund
UNAIDS	Joint United Nations Program on HIV/AIDS
UNFM	Université Numérique Francophone Mondiale
UNFPA.....	United Nations Population Fund
UNDP	United Nations Development Fund
USNCI	Us National Cancer Institute
VIA.....	Visual Inspection with Acetic Acid
VILI	Visual Inspection with Lugol's Iodine
WHO.....	World Health Organization

Conclusion

The relevance of the chosen theme “Cervical cancer: an NCD that can be overcome” was deeply reflected in the testimonies and comments of the speakers and participants. Fundamentally, the fight against this disease is now on the top agenda of political leaders which is critical in creating an enabling environment to mobilize partners at the country level. Essentially, all ministers confirmed their commitment to fight cervical cancer as a matter of priority.

This strategy is crucial to eliminate cervical cancer as a major public health problem by 2030, in line with the SDGs. It is particularly evident in the case of this disease; as tools, expertise and policies to achieve this goal already exist.

Similar to the 2016 roundtable, we summarized the discussions in the form of a magazine in order to facilitate reading, highlight key messages and allow for wider dissemination which includes a French version. «To combine efforts, we will continue bringing all stakeholders’ together, public and private, political leaders, technical and financial partners. On this occasion, answers given by the field experiments show an encouraging development and promising perspectives, based on a great diversity of ongoing initiatives” said Thérèse Lethu. The questions posed in the opening of the meeting were indeed relevant.

Unanimously, participants recognized cervical cancer as a NCD that can be overcome so long as political will and collaboration between all partners exists. The meeting showed that this enabling environment is under construction, in a very promising way with “our participants being ready to bring in their pieces to the puzzle.”

Organizers



Global Health Objectives (GHO)

is a Geneva based NGO dedicated to creating an enabling environment for improving women’s health, especially cervical cancer, regardless of the existing socioeconomic and cultural factors (age, education, income, place of living/country...). The association engages in information sharing, training and studies towards empowering target groups, including health professionals and political leaders, and supporting necessary cultural changes. Fundamentally, GHO facilitates exchanges of experiences on NCD prevention and public private partnerships and promotes the use of new Information Communication Technologies (ICTs).

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The UNFM (Université Numérique Francophone Mondiale)

disseminates quality education in low-income settings through the extensive use of the Internet and of the new ICTs. The training programs are field oriented targeted at health care workers and are mostly delivered by experts from the recipient countries, in partnership with the International Organization of the Francophonie. The main focus includes NCDs, mother and children health, health crisis among others.

The UNFM co-organized the first Master Course Francophone of the Union for International Cancer Control during the World Cancer Congress in October 2016, in Paris.

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We would like to thank the Hologic Humancare’s team who aided in the publication and dissemination of this report through an unconditional grant. As a leading global healthcare and diagnostics fund, Humancare supports persons of greatest needs in low income settings, through various activities, including training and empowerment of local health professionals. Humancare collaborates with leading medical experts to develop and improve programs that will expand knowledge and skills of local professionals. In line with this, the WAKA HPV program benefits from Hologic Humancare’s support in extending local research capacities and creating a dynamic referral center as well as an active regional research network.

Some leading Partners

AORTIC: The African Organization for Research and Training in Cancer, created in 1983 by African cancer care workers and scientists, is dedicated to build capacity for cancer advocacy, research and training in Africa. President **Cristina Stefan** <http://www.aortic-africa.org>

CCA. Cervical Cancer Action is a global partnership founded in 2007 to reduce cervical cancer in LMCs. In 2015, the CCA launched a global five-year initiative call "Taking Cervical Cancer Prevention" to expand HPV vaccination, screening and treatment of cervical precancer, especially in LMCs. <http://www.cervicalcanceraction.org>

ETICSS: Emerging Technologies in Cervical Cancer Screening is a non-profit organization founded in 2014 with the support of the Department of Applied Tumor Biology of the Heidelberg University Hospital and the German Cancer Research Center. <http://www.eticcs.or>

GAVI: The Global Alliance for Vaccines and Immunization, created in 2000, is an international coalition of partners, including governments, international organizations such as the United Nations Children's Fund, the WHO and the World Bank; philanthropic institutions, such as the Bill and Melinda Gates Children's Vaccine Program and the Rockefeller Foundation; the private sector, represented by the International Federation of Pharmaceutical Manufacturers Associations; and research and public health institutions. Chief Executive Officer: **Dr. Seth Berkley**. <http://www.gavi.org/>

GFATM : The Global Fund Against AIDS, Tuberculosis and Malaria, founded in 2002, is a financing institution to support countries against the three diseases. The Global Fund is a partnership between governments, civil society, the private sector and people affected by the diseases. It raises and invests nearly US\$4 billion a year to fund programs run by local experts. Interim Executive Director **Marijke Wijnroks**. <https://www.theglobalfund.org>.

IAEA: The International Atomic Energy Agency assists its Member States in using nuclear science and technology for peaceful purposes and facilitates the transfer of such technology and knowledge in a sustainable manner to Member States. Director General: **Yukiya Amano**. <https://www.iaea.org/>

NIH The National Institutes of Health is the nation's medical research agency as a part of the U.S. Department of Health and Human Services. The NIH is made up of 27 Institutes and Centers with specific research agenda. The Center for Global Health, created in 2011, helps reduce the global burden of cancer in collaboration with NCI divisions to support cancer control planning, build capacity, and support cancer research networks in LMCs. The NIH Director is **Francis S. Collins**. <http://www.nih.gov>.

PATH promotes innovative solutions in LMCs through cross-sector partnerships, specific tools and strategies at scale, including Digital Health Solutions. PATH's focuses on women's health, bringing screening, treatment and HPV vaccines through a close collaboration with GAVI. President and CEO **Steve Davis**. www.path.org/

PRRR, Pink Ribbon Red Ribbon, an independent affiliate of the George W. Bush Institute, is a global partnership of various actors dedicated to reduce deaths from cervical and breast cancers by 25% in some LMCs. Acting CEO **Gary Edson**. <http://pinkribbonredribbon.org/>

UICC: The Union for International Cancer Control is an increasing membership base of over 1000 organisations in 160 countries, with the world's major cancer societies, ministries of health and patient groups, including influential policy makers, researchers and experts in cancer prevention and control. CEO: **Cary Adams** <http://www.uicc.org/>

UNAIDS: The Joint United Nations Programme on HIV/ AIDs is a joint venture of 11 UN organizations against AIDS, including civil society, governments, the private sector, global institutions and people living with HIV. The UNAIDS 2016-2021 Strategy is aligned to the Sustainable Development Goals over the next 15 years, including ending the AIDS epidemic and reducing cervical cancer mortality by 2030. Executive director: **Michel Sidibé**. <http://www.unaids.org/>

UNIATF: The United Nations Inter-Agency Task Force on the Prevention and Control of NCDs was created in 2013 by the Secretary General and placed under the leadership of WHO to coordinate the activities of the UN System to support the commitments of the Heads of State in the 2011 Political Declaration on NCDs. <http://www.who.int/nmh/ncd-task-force/en>

UNITAID: supports improved access to health products for people with advanced HIV disease, those co-infected with HIV and hepatitis, as well as HPV. Founded in 2006 UNITAID addresses leading causes of death among people living with HIV in LMCs. This includes cancer related diseases through innovative approaches and partnerships to prevent, treat and diagnose. Executive Director **Lelio Marmora**. <http://www.unitaid.org>

WHO: The World Health Organization's primary role is to build a healthier future for all working through 6 regional offices and over 150 countries, in collaboration with governments and partners. The WHO regional office for Africa, based in Brazzaville, Congo, provides support to its 47 country offices. Regional Director: **Dr Matshidiso Rebecca Moeti** <http://www.afro.who.int/>