INTEGRATING CERVICAL CANCER SCREENING AND CARE WITH OTHER HEALTH SERVICES DELIVERY SYSTEM S THROUGH INNOVATIVE SOLUTIONS

GHF, 4 May 2022

On the 4 of May, in the frame of the Geneva Health Forum, a side event on cervical cancer screening and care integration was held in the Lausanne Hall from 9 AM to 4 PM.
This workshop, following multiple meetings held over 2 years under the umbrella of the GHF, aimed at presenting and exchanging the latest experiences and sharing the new technologies and innovative practices and solutions with the objective of:

- Discussing key recommendations for implementation of integrated cervical cancer screening and care strategies
- Fostering donors' investments in comprehensive gynecological care
- Discuss other possible actions to accelerate efforts towards the elimination of cervical cancer

It was organized in two sessions:
- the morning focusing on integration: policies and politics, fundings and implementation together with models of integration notably in HIV and with FGS (Female Genital Schistosomiasis), community mobilization and concerns about screening older women.
- the afternoon, focusing on innovative solutions around oncomarkers and artificial intelligence (AI).

More than 40 people from international organizations, NGOs, academia, clinical services of private and public sectors, diagnostic and drug industry as well as donors and foundations gathered to listen to emeritus speakers, share experiences, discuss and finally bring home some key messages.
In this document, we try to provide a summary of the main points and bring forwards key recommendations.

1) How to translate WHO recommendations into national strategic plan and guidelines?

POLICY/GUIDELINES/ADVOCACY
Institutional recommendations are there.
With a big effort by WHO different departments and other partners, not only we have now screening and care recommendations that have been recognized as very useful by all participants, but we have also policies fostering integration of screening and care for cervical cancer with other diseases:
- HIV: a major document by UNAIDS summaries WHO recommendations and their application in the context of HIV care. UNAIDS is supporting countries in the process of building new recommendations and there are good examples from some countries (see Tanzania), where the process is quite advanced.
- FGS: there have been meeting in WHO, among people working in the NTD, HIV and CC domains and there is now a consensus about the need of providing FGS screening together with CC care. But for FGS, a neglected disease (NTD), there is much less experience and priority given to integration in national programs. Recommendations are old and do not integrate other diseases, innovation is slower and resources less. People from NTD should be creative to propose ways to work together and show the way.

At the next World Health Assembly, coming soon, countries will be requested to sign the roadmap to tackle Non-Transmissible Diseases (Annex 7), which includes the commitment in fighting cervical cancer. Field actors should watch out to this document as it will be very useful for advocacy at local level.

IMPLEMENTATION/SCALING UP

As presented by Médecins Sans Frontières (MSF), there is not one single solution to advance locally in the implementation of guidelines, the most successful approach seems to be sitting down with the main stakeholders in the country and adapt global guidelines, co-create national protocols and recommendations that fit the local context (see experience in Kirghistan). Up to now, cervical cancer as well as FGS have been too much implemented in isolation; favoring a horizontal approach may help to break the silos of disease specific actions.

Other experiences showed that it may be wise to start small, opportunistically and not trying to be perfect, but to test (pilot) what it is working but this should be done with the *buy-in* of local authorities and a clear plan for scaling up. In fact, it seems that we remain a lot at the level of pilot experiences without a clear commitment to go further.

To note that both CC and FGS are diseases that are little known, not only by the community, but also by health professionals and professional sociaties; It might be useful than to create awareness in the community (women as well as men) about the diseases and what can be done to care for them: to create demand and find help to put pressure on the local decision makers. The community should participate in the discussions on implementation as this will foster their collaboration to advocate and the ownership of the activities. Bottom-up approach has the potential for longer life and participation, in this sense NTD programs have a tradition with community commitment and can help driving the process.

Integration has a cost; this should be considered when planning. Cost for coordination, training and motivation of Human Resources, cost to integrate data collection and Health Information System, supervision and follow up. Who should invest in this coordination? Vertical programs can take the lead and use their experience to advance in other domains.

Donors will probably support this kind of approach and funds are available for implementation of cervical cancer activities, they are mostly under-used for various reasons including the implementation arrangements and gaps in country systems for cancer.

There are still important gaps of knowledge in implementation that deserve to be filled by research. Qualitative studies are missing: acceptance, willingness to buy, preferred procedures, experience of HPV diagnosis and/or cancer diagnosis. There is need also of operational research to evaluate integration and its costs, real effectiveness of different algorithms in treating infection and lesions. We need large cohorts with longer follow up, cost effectiveness study in different contexts as services can differ a lot among them.

In providing care, life course approach should be used as at different ages there are different needs and special concerns:

- vaccination should be part of the plan for young and adolescent girls including those that are HIV+ve
- issues specific to older women with T3 junction zone should be considered in the guidelines. Data are not a lot, but strategies using estrogens or, more practically, single dose intravaginal mesoprostole are very promising. A clinical trial on this will be soon take place.

Following WHO guidelines HPV is the main test for triaging, but the price of the test is still very high, how many countries are ready to invest in such an expensive test?, knowing that visual inspection remains for the moment key for diagnosis of lesions, the test that will be chosen in the algorithm depends a lot by the local context (even within the same country):
- availability of GeneXpert machines for HPV molecular testing
- availability and training of human resources, model of task shifting or task sharing
- population targeted
- possibility to follow up

Once decision is taken, the model should be implemented, evaluated and compared with others: see the importance of having comparable indicators and to describe well the set up.

2)Innovation
- Oncomarkers may offer the possibility to diagnose directly the disease, instead of an infection that more often than not regress on its own. For the moment there are promising molecules:
    - E6/E7 through molecular profiling: high performance with good correlation between the molecular concentrations and the degree of dysplasia. But technology not yet *point-of-care* and requiring a certain lab work.
    - Ab anti L1 HPV16: available through rapid test on finger prick, well established for oro-pharyngeal and anal cancer, but threshold for cervical cancer not yet established.
- Artificial Intelligence will come to help mainly in the diagnosis during visual inspection, that remains an important step in diagnosis of dysplasia and will be even more important if FGS screening should be integrated in the CC activities.
WHO (IARC) is developing a centralized bank of images that could be used by all people developing AI, but the project is not finalized yet and procedures for participation as well as for utilization are not yet established.
AI performances have been validated against VIA VILI in the SmartScope of Perwinkle or against biopsy as in the study ongoing by HUG in collaboration with the EPFL.

Key recommendations:
- While developing new technologies, concerns about time to results and real Point-Of-Care techniques should be preferred.
- Considering the development of Images' Bank for utilization in AI development, there is a need to decide on the standard (type of picture, definition, etc) that should be used to feed the system and the data that should accompany the photo.
- Discussions about property rights and benefit sharing with the women who provide the pictures should be started