Title: MAPPING OF CERVICAL CANCER SCREENING ACTIVITIES AND EQUIPMENT IN COUNTY HEALTH FACILITIES IN KENYA

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Introduction/Background

- Cervical cancer is preventable through vaccination and screening and curable if detected early & managed effectively.
- Worldwide, its incidence is highest in SSA particularly in Eastern Africa. In Kenya, it is 2nd overall both in incidence (11%, 5,250) and mortality (10%, 3,266) and the leading cause of cancer morbidity among women (GLOBOCAN, 2018).
- Organized screening programs have led to a decline in morbidity/mortality from cervical cancer in developed countries but in Kenya, however, the screening coverage remains low at 16% for eligible women (STEPS, 2015).
Introduction/Background

- Since 2016, WHO call to eliminate cervical cancer.
- The WHO DG call to action for a coordinated effort (expand partnerships) to eliminate cervical cancer embedded within strong health systems - 19th May 2018.
- The Kenyan Constitution provides a legal framework for a comprehensive approach to health service delivery.
- The Kenya Health Policy recognizes the importance of health technologies and medical devices in disease prevention, diagnosis, treatment, rehabilitation and improvement of quality of life in a health system - (World Health Assembly) 60.29, 2007
Introduction/Background

Policy Environment – All disease areas

1. Area of focus
   - Care seeking
     ✓ Improve care-seeking behavior in the community

2. Approach
   - Diagnosis & Case Management
     ✓ Strengthen provider practice

3. Approach
   - Commodity/Equipment Availability
     ✓ Secure quality, affordable commodities & medical equipment (Policy)
We conducted a survey in April 2018 in 34 facilities across 30 counties in Kenya (1 National referral, two level 4 and level 5 facilities) in collaboration with METU team at MOH.

The aim was to determine the status of cervical cancer screening services and assess screening equipment infrastructure.

There was need to understand availability/status/usage of equipment which had been supplied by GOK and partners under the Kenya Cervical Cancer Prevention and Control Program 2011-2015.

**Methodology**
Methodology - Scope

- The number of select cancer equipment available and their respective functionality
  - Assess functionality and operability
  - Record years of operation, manufacturer, model and country of origin
- Establish the availability of consumables/supplies related to screening
- Establish existence of operational and maintenance plans
  - Audit of available documentation (records of past and future maintenance schedules)
- To determine type of services and number of patients accessing the screening services (screening rate)
- To establish key challenges in service delivery for screening.
Methodology

- Onsite digital data was collected using a pre-tested interviewer-administered structured questionnaire installed in mobile devices.
- Key informant interviews were also conducted to understand key challenges
- Specifically, the availability/utility of screening services and equipment including, functionality, usage/access and maintenance of cryotherapy, Loop Electrosurgical Excision Procedure (LEEP) and colposcopes was assessed.
Methodology

- No ethical approval was sought as we did not use any patient-specific data.
- The tablets used had user-specific passwords.
- Approval from county administration was sought prior and during the visit.
- Facility in-charges were either directly involved in the survey or appointed a representative.
- Data was entered on MS Excel and analyzed.
Results/Findings

A total of 34 facilities, distributed across 30 counties, were assessed.
Results/Findings

...in the survey, the availability and functionality of the cancer equipment was tracked. It is somewhat worrying that the maintenance plans are not adequate or do not exist.
Results/Findings

- Of the 34 facilities, most (30) had cryotherapy machines, 16 had colposcopies and 15 had LEEP.
- Most (84%) had no maintenance contracts or schedules in place. Most equipment had been acquired from 2012.
- All facilities conducted VIA/VILI but only 18 facilities were providing same day “screen and treat” services. 14 facilities offered pap smear services (3 had onsite labs, 3 referred to NRH, 8 sent to private labs)
- All facilities except one had monthly data although 80% of screening was conducted in 11/34 (30%) of these facilities.
Service delivery: ~30% (11/34) of the facilities screened for cervical cancer

Number of women screened for cervical cancer on a monthly basis
Results/Findings

Supplies availability: With the exception of a few accessories, medical supplies/consumables are adequately available in facilities

Number of facilities with supplies
Lack of trained personnel and supplies is consistent in all facilities. See feedback below

Staff shortage only 1 trained staff.

More nurses need training in VIA/VILI and cryotherapy. The training for the 3 trained in cryotherapy and VIA/VILI has been on the job training. No nurse is trained to do pap smears. The room used for cryotherapy is small.

No trained personal to offer the full screening services, no testing tools, no cancer treatment offered, the community has stigma/cultural belief (they don't expose their genitals to the opposite sex or to younger medical personnel).

Inadequate space, human resources, client financial constraints.

Lack of supplies. Outreaches, trainings, staff motivation.

No trained personnel, no supplies, no awareness.
Results/Findings - Challenges

- Lack of community awareness, financial constraints
- Stigma and cultural issues - a taboo
- Staff shortage, lack of trained HR capacity and its retention
- Lack of supply of key consumables e.g. pap smear kits and frequent stockouts
- Lack of a room/space for screening facility e.g. Garissa, cryo not in use, Bungoma- LEEP in box, no space

- For majority (80%) of the facilities, the turnaround time for cytology and pap smear results was more than eight days and majority outsourced this service.
Conclusions/Recommendations

- Equipment placement - indirect costs (space, maintenance, training, HR, integration, etc) and other factors be considered-equipment available but some not in use, only 4 with schedules.
- Improve procurement & supply chain for consumables
- Aim to introduce same day ‘screen and treat” strategy in facilities offering VIA/VILI-only 18/34 providing service.
- Explore the possibility of PPPs to improve pap smear /HPV services-57% of 14 offering papsmear outsourced in private lab
- Organized screening programs with defined clear targets -70% screening coverage of eligible women in 10 years.
...the Iceberg theory best explains why it is important to look at medical equipment in totality.

Direct Costs
- Purchasing costs
- Installation costs

Indirect Costs
- Maintenance
- Training
- HR costs
- Integration
- Technology upgrade
- Material (spare parts)

...in the context of medical equipment, it can only mean adhering to a robust health technology management system.
Conclusions/Recommendations

✓ Urgent need to improve cervical cancer screening services in primary care across Kenya to respond to the WHO call to action to **eradicate cervical cancer by 2030**

✓ **Structured** cervical cancer screening programs with clear targets/ **community mobilization for catchment population** integrated within the health facilities need to be put in place

✓ Regular **monitoring and evaluation** be conducted to assess progress and refocus efforts.

✓ Cervical cancer **prioritization and budgetary allocation** to raise community awareness, build HR capacity through regular trainings, purchasing of necessary medical supplies, equipment maintenance and PPPs/improve histopathology infrastructure.

✓ County biomedical engineers need to be more involved in installation and ongoing **preventive maintenance** of cancer screening equipment.
Conclusion/Recommendation

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