Cervical Cancer Risk Awareness Education, Screening and Tracking System- Experiment: Bungoma CountyKenya

Strathmore University-Kenya and Inter-Cultur-Finland
February 2022



Introduction

- The focus of this experiment is on Cervical Cancer Intervention in Kenya. Cancer as a disease ranks third as a cause of death in Kenya after infectious and cardiovascular diseases.
- The aim of the Experiment;
 - a) Sensitizing and Educating and onboarding young girls and women on the importance of early cervical cancer screening, treatment and case management.
 - b) Implementing mobile and web-based a cervical cancer patient tracking and referral system in a rural setting
 - c) Support the maternal and child (MCH) clinics in public hospitals in rural setting. The MCH clinics regularly conduct cervical screening and treatment clinics the system will help early diagnosis, treatment, follow-up and referral.

The target population are young girls and women based in Bungoma County - over 300



Collaborations/Partnerships

- The main partners supporting the experiment include;
 - a) The Ministry Health -Bungoma County
 - b) Bungoma County Refferal Hospital –MCH and Cervical Cancer Clinic
 - c) Kanduyi, Kimeati, Webuye and Miilo-Health Centers (catchment area)
 - d) Community Health Workers-Bungoma County
 - e) Strathmore University female Students
 - f) Kibabii University female Students



Results and Successes

- The development of a mobile and web-based platform for supporting registration, screening and tracking care and management of the patients
- 2. Training and Capacity Building for the university students, community health workers and the nurses on use of the technology to raise awarness/education on the risks of Cervical Cancer
- 3. Onboarding of over 300 participants for screening of cervical cancer, increasing awarness to the larger communitity
- 4. Early results show the need to scale this experiment at National Level and other African Countries



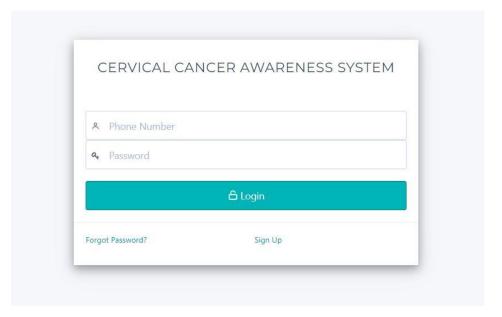
Results and Successes...cont

- 1. During the pilot with 9 participants from Strathmore University
 - The participants age ranged from 19 to 22 years
 - 3 participants knew of people who died of cervical cancer
 - All the participants were aware of cervical cancer while 3 knew about the screening tests
 - Out of the 9 participants, 2 had gone for testing which turned out negative
 - One participant knew of the HPV test and prevention through HPV vaccine
- 2. These statistics shows there is need to conduct more activities to create awareness especially among young girls
- 3. This will increase prevention measures thus reducing morbidity caused by cervical cancer.
- 4. Extended the collaboration with the Ministry to scale and sustain the project beyond the experiment period.



Screenshots of the System





Cervical Cancer Awareness



GENERAL

2 Participants

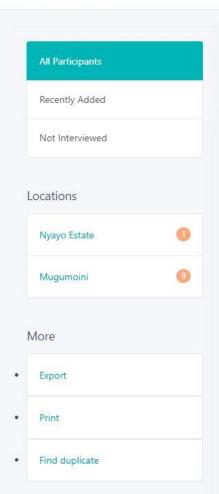
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Д	ALL PARTICIPANTS	Add Participant

Name	Phone	Location	Status	Actions
Mary Kamau	2343	Nyayo Estate	Interviewed Scheduled	• # 1
JUNE MUTHEU	0746317710	Mugumoini	Interviewed Scheduled	●
Velma Okuti	0757078056	Mugumoini	Interviewed Scheduled	●
Sarah Ayen	0794670355	Mugumoini	Interviewed Scheduled	• # •
Salma Mohamed	0790195353	Mugumoini	Interviewed Scheduled	• # •
Yusra Khalid	0719488828	Mugumoini	Interviewed Scheduled	• # •
Juliet Jebiwot	0746771858	Mugumoini	Interviewed Scheduled	> #
Edith Awuor	0743142170	Mugumoini	Interviewed Scheduled	◎ # •
Immaculate Isutsa	0799814330	Mugumoini	Interviewed Scheduled	• # 1
Esther Ngechu	0729733776	Mugumoini	Interviewed Scheduled	● ■ □
Name	Phone	Location	Status	Actions

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GENERAL Dashboard	Interview Participant					
্ Participants	PARTICIPANT DETAILS					
Schedules	g First Name			A Last Name		
SETTINGS						
Permissions	& Phone Number			Date of Birth:	11/29/2021 X	
Q Users						
O Messages	Select County Select Subc		Select Subcounty		Select Village	
	Next of Kin		& Next of Kin Phone		Select Relationship	
	SCREENING QUESTIONS					
	Have you ever had a cervical examination?			When did you have yo	our last cervical examination?	
	○ Yes	○ No		11/29/2021 🗶 🗀		
	Have you ever heard of cervical cancer?				who has died of cervical cancer?	
	○ Yes	O No		○ Yes	○ No	

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9	Users
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How many women do you know who died of cervical cancer? Do you know what the human papillomavirus is?		Have you ever heard of the human papillomavirus? O Yes No							
		Have you heard of a vaccine to prevent human papillomavirus or cervical cancer?							
○ Yes	○ No	○ Yes	○ No						
Have you ever heard of a cervical cancer screening?		Do you know what a cervical cancer screening is for?							
○ Yes	O No	○ Yes	○ No						
Have you had a cervical cancer screening?		Why haven't you ever had a cervical cancer screening?							
○ Yes	O No	Select Reason							
When was the last time you had a cervical cancer screening? 11/29/2021 X What was the result of your screening?		What type of examination did you have to see if you have cervical cancer? Select Type Did you receive treatment from your last screening?							
							O Yes	○ No	
					As a result of your screening, did you have other examinations done?		Did you have a follow-up visit for treatment?		
○ Yes	○ No	○ Yes	○ No						
Did you complete the recommended follow-up from your screening results?		What is the reason you did not receive treatment from your last screening result?							
○ Yes	O No	Select Reason							

GENERAL

2 Participants

⇔ Schedules

SETTINGS

Permissions

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Messages

Interview Participant

PARTICIPANT DETAILS

Name: Mary Kamau

Appointment Date: 2021-12-17

Facility: BCRH

Date of Birth: 2005-02-16

Home Address: Nyayo Estate

Next of Kin: John Kamau, (Spouse)

Next of Kin's Phone Number: 49375

SCREENING QUESTIONS

Gynecologic Exam

Knowledge and Awareness

Screening

Have you had a cervical cancer screening? Yes

Why haven't you ever had a cervical cancer screening?

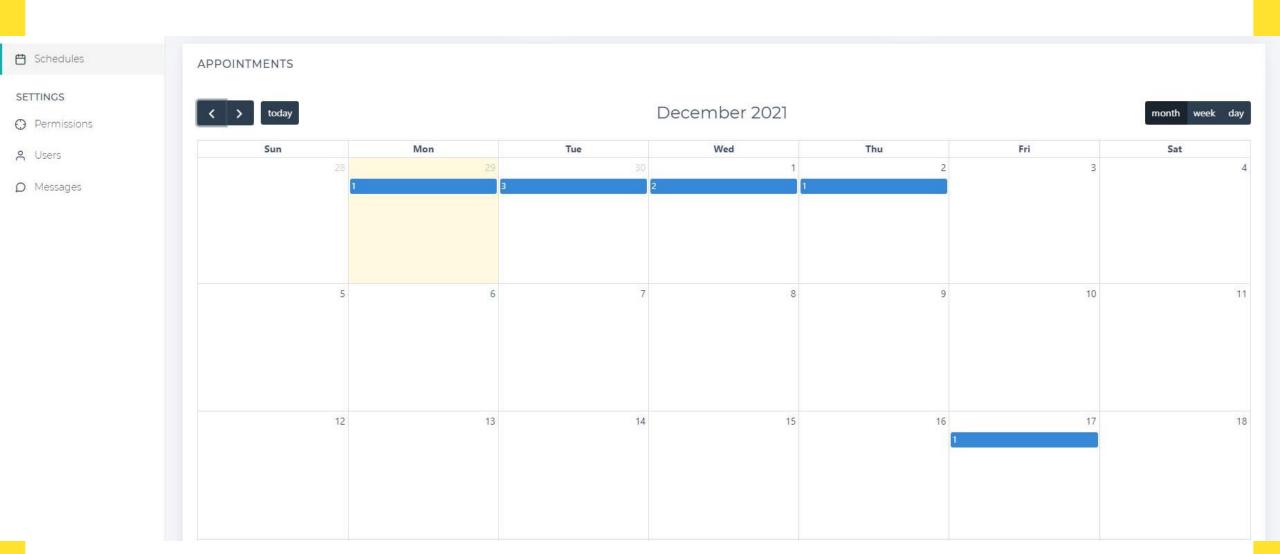
When was the last time you had a cervical cancer screening? 2021-10-12

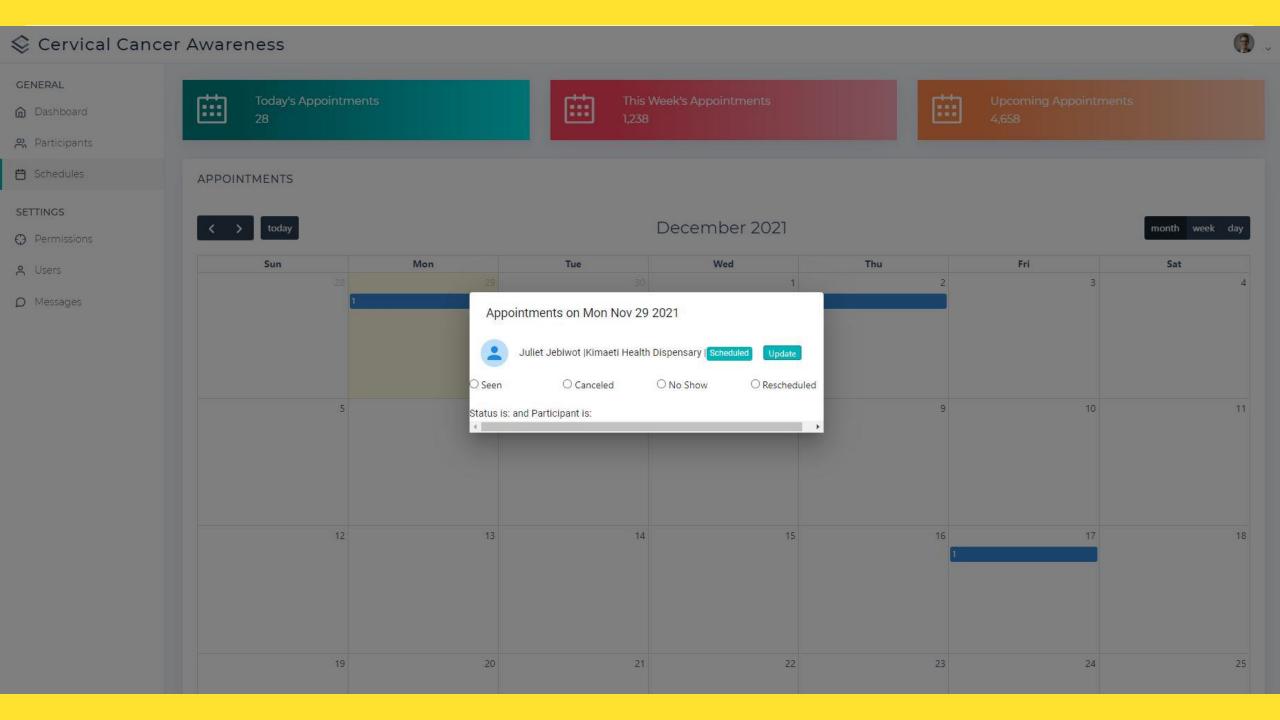
What type of examination did you have to see if you have cervical cancer? HPV test

What was the result of your screening negative

Did you receive treatment from your last screening?

As a result of your screening, did you have other examinations done?





Challenges and Modifications during Implementation

- 1. The need for collaboration with partners and all the stakeholder in an active participatory methodology.
- 2. The importance to local owernship especially the Ministry of Health and the Facilities
- 3. The use of local well-known community health workers and students who are aware on the local cultural norms .
- 4. The use of offline storage of the data to address the challenge of poor Internet connectivity in rural communities.
- 5. Building in -country technical capacity in the cutting edge technologies needed to support scaling and long term sustainability.



Principles for Digital Development

- 1. For the experiment all the Principles apply. We have used an Active Participatory Metholodology for the Design and Implementation.
- 2. This methodology emphasises the focus on the user in the design process, participation of the stakeholders in ownership and long sustainability.
- 3. We are also implementation the systems for easy intergartion with other systems for scaling.
- 4. The source code for the system will be released as open source.



Thank You

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