

Effects of AntiRetroVirals for HIV on African Health Systems, Maternal and Child Health (ARVMAC)

- preliminary observations from Uganda

Dr Lubega Muhamadi

MBchB,MPH (MUK), PhD Student (Makerere University/Karolinska Institute)

Principal Medical Officer/Medical Superintendent

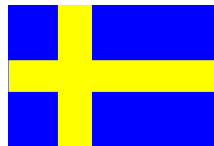
Iganga Hospital, Uganda.

email: dlnmuhamadi@yahoo.co.uk, hospiganga@yahoo.com



ARVMAC consortium

KI/Sweden: coordinator (AM Ekström)
(WPLLeader: Anna Thorson)



CRSN/Burkina Faso (Ali Sie)



IPH/Uganda (WPL: George Pariyo)



European Commission
INCO DEV 6th framework project
2007-2010

IHRDC/Tanzania (WPL: Masanja Honorati)



ITHOEG/Germany (WPL Malabika Sarker)



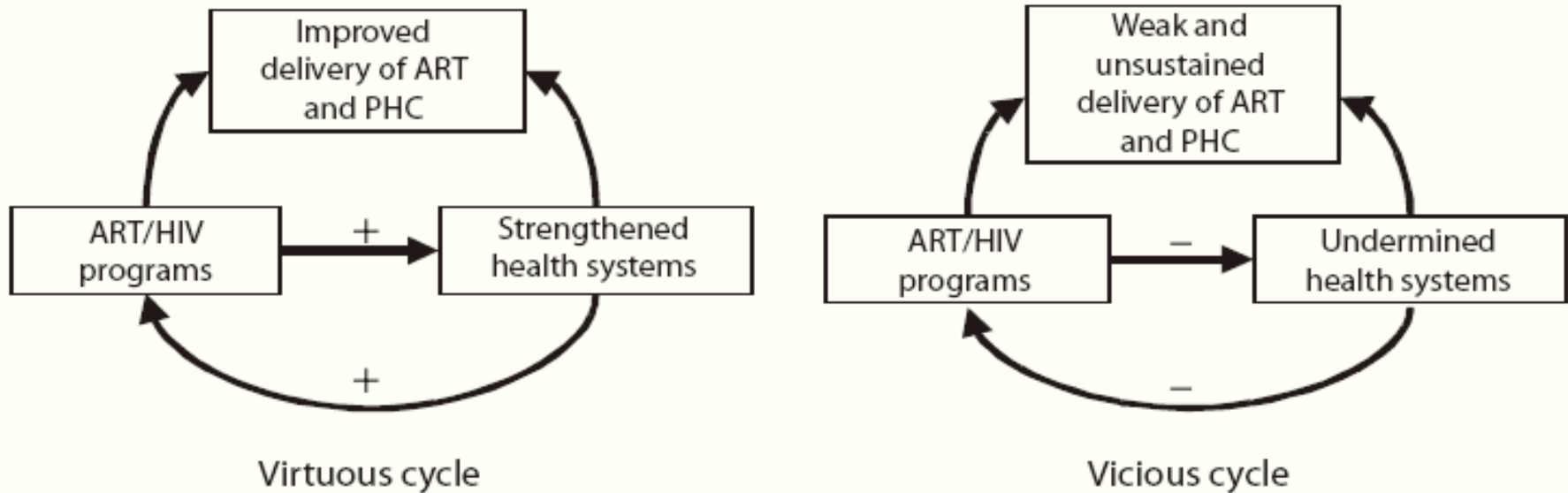
ITM/Belgium (Wim Van Damme)



STI/Switzerland (WPLs Don de Savigny, Kaspar Wyss)



Treatment expansion plans and programs are often implemented without adequate investment in strengthening weak health systems



Note. ART = antiretroviral therapy; PHC = primary health care.

FIGURE 1—The virtuous and vicious cycles of rapid ART expansion.

Strengthening health systems includes promoting reliable access to sustainable high-quality HIV care

The EastAfrican

NEWS

SEPTEMBER 11-17, 2006

6

Ugandans die as ARVs expire in govt stores

Surprisingly, \$2 million has had to be relocated from another programme of the Global Fund to buy new supplies of the expired trimune drug. Special Correspondent ESTHER NAKKAZI reports

Life-prolonging anti-retroviral trimune drugs worth \$700,000 have expired in Uganda's National Medical Stores while thousands of people living with HIV/Aids struggle to stay alive.

Trimune is a first-line regimen drug favoured by the World Health Organisation (WHO) for use in many developing countries.

This new revelation comes in the wake of a recent scandal in the country involving misappropriation of millions of dollars from the Global Fund against HIV/Aids, malaria and tuberculosis.

Uganda is now uncertain as to whether it will qualify for more funding since it has also failed to submit a plan in which the misappropriated monies will be recovered. A judicial commission

cases of corruption and abuse of office in the Ministry of Health in the disbursement of the Global Fund monies and to date no one has been prosecuted.

In the new scandal, *The EastAfrican* has established that the expired drugs were purchased through the Global Fund, the Geneva-based multilateral health initiative. A well-placed source told *The EastAfrican* that surprisingly, \$2 million has had to be relocated from another programme of the Global Fund to buy new supplies of the expired drug.

This has provoked anti-HIV/Aids activists who are incensed that much needed life-prolonging drugs can go to waste when out of an estimated 150,000 infected people who need ARVs, only

receiving them.

"It is an unfortunate situation," said Beatrice Were of ActionAid International, Uganda, who is also a prominent HIV-positive activist. "We would rather hear there are no ARVs, than to learn that they have been let to expire in a warehouse in the midst of such desperate need. This just goes to show the inefficiencies in the procurement and distribution of ARVs in the country and exposes the incompetence of our health system. She added, "There is no excuse for this and we need to review the system. Whenever we complained of drugs shortages Health Minister Steven Malingha calls us alarmists. He should now explain to the country how such a thing happened," she said.

However, David Bagonza, acting managing director of the National Medical Stores said, "As part of logistical problems, some kind of wastage cannot be avoided. The warehouses hold drugs worth Ush45 billion (\$24.5 million) of limited shelf life at any one time. That drugs will expire is inevitable."

He said a meeting was



Ugandans die as ARVs expire in govt stores, Esther Nakkazi, *The East African* magazine, Sep. 11-17, 2006

Some of the antiretroviral used in the first-line regime against HIV/Aids Picture: Anthony Kamau

week between the Stores' board and the Ministry of Health. Uganda recently had an on first-line of treatment of ARVs shortages.

ARVMAC Study Rationale

- Antiretroviral scale-up is the largest vertical health intervention ever
 - Weak coordination between ART providers and lack of integration into existing health services
 - ART and PMTCT saves thousands of lives, still only a minority has access to ART
 - Lack of evidence-based strategies
 - Unknown effects on overall morbidity & mortality and on health care quality for vulnerable populations especially the poor, women and children



ARVMAC project design and aims

We will

- ...use a cohort design to analyse health policy, services and outcomes in 3 demographic surveillance systems (~300,000: vital, morbidity, migration data) in Tanzania, Burkina Faso and Uganda
- ... identify the bottlenecks for scaling-up, sustaining and integrating large-scale ART with maternal and child health care
- ... suggest appropriate approaches for provision of accessible, affordable and equitable HIV and maternal and child health care
- ...disseminate these cross-country comparisons to policymakers and health providers
- ...contribute to capacity building: training of fieldworkers, data managers, senior researchers, field coordinators, DSS core infrastructure and ~ 15 PhD candidates in 7 countries

Preliminary observations from Uganda-Iganga district hospital

Hospital capacity

- Iganga district hospital is located in eastern Uganda
- Constructed in 1968 to provide care for 250,000
- Currently serves 1.5 million people
- Initially 100 bed capacity but currently 166 beds

Departments/clinics:

- Nutrition, Palliative care ,Psychiatry, Diabetics, ENT, ophthalmology, Physiotherapy, Orthopedic, X-ray, Laboratory, MCH, STI and ART
- Dental, OPD, TB, Male & Female & Pediatrics & Maternity ward, major & minor operating theatre, Social work and counseling, Public health, Pharmacy, Personnel, Records and support staff section

Iganga district hospital, Uganda

Staff available

■ Medical Officers	7
■ Scientific and Administrative Staff	10
■ Allied Health workers (Paramedics)	30
■ Nursing Officers	24
■ Nurses	27
■ Midwives	21
■ Nursing Assistants	17
Total	136
HW : population ratio (136/1.5 m)	1:11,000
Midwife workload /day	6 clients (2hrs per client =12 hrs per day)

Iganga district hospital performance indicators 2007

	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL
ANC	1042	935	936	769	935	883	1025	1000	8298	1035	946	828	18632
FAMILY PLANNING	83	40	92	64	55	87	58	68	95	71	70	203	986
IMMUNIZATION	698	616	542	695	750	783	802	600	1108	617	668	706	8585
LABORATORY TESTS	2810	2342	2505	2851	3157	1402	3199	2946	2167	2259	2843	1814	30295
MATERNITY													
ADMISSIONS	433	424	429	371	471	466	490	473	481	463	464	447	5412
DELIVERIES	247	318	320	275	341	351	378	308	400	374	353	345	4010
LIVE BIRTHS	230	289	293	251	319	338	361	287	371	352	326	322	3739
STILL BIRTHS	17	29	27	24	22	13	17	21	29	22	27	23	271
REFERRAL IN	41	58	71	46	84	74	84	63	71	84	82	103	861
REFERRAL OUT	5	1	3	0	1	5	2	6	1	0	2	3	29
MATERNAL DEATH	3	2	4	4	1	2	2	1	1	2	2	4	28
NND	4	3	9	5	8	11	5	5	10	11	8	6	85
ABORTION	23	15	16	19	17	14	13	14	8	14	11	18	182
CEASERIAN SECTION	84	90	78	59	85	79	67	64	84	81	93	69	933
ALL WARDS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	TOTAL
ADMISSIONS	1564	1333	1378	1252	1428	1571	1670	1470	1384	1524	1535	1410	17519
DISCHARGES	1287	1207	1195	999	1179	1301	1516	1218	1088	1291	1219	1163	14663
DEATHS	52	41	52	46	38	38	53	40	45	46	44	40	535
RUNAWAY	105	65	84	88	103	113	97	86	72	109	69	93	1084

Iganga district hospital, Uganda

ARV related services available

- Mandatory counselling and optional testing
- Prevention of mother to child transmission (PMTCT)
- Pre-antiretroviral care
- Antiretroviral care
- Psychosocial support
- Home-based care



Iganga district hospital, Uganda

MCH services available

- Routine ANC, health education, pre-test counselling, bleeding and HIV-testing, IPT, drug dispensing, post-test counselling
- Infant feeding counselling, PMTCT, psycho-social support
- Immunisation, maternity services & delivery, post-natal care
- School health, adolescent reproductive health, family planning



Iganga district hospital, Uganda

ARV effects on MCH care

- Human resources for Health
- Infrastructure
- Drugs and supplies
- Overall quality of care
- Strengths and opportunities
- Challenges



ARV scale-up effects on MCH at Iganga district hospital

Human resources for health

- Lower health worker : population ratio (1/10,000 in total)
- Staff are few and have other general and inpatient demands to attend to
- ART has overstretched the workload particularly for MCH

- In addition to basic ANC, midwives must do mandatory counselling and optional testing and post-test counselling for all mothers who come for ANC

- Hence long lines, long waiting time and overworked staff

- Lower efficiency also in immunisation, family planning, school health & other adolescent reproductive services

- Lab services stretched since every mother that opts for VCT must get same-day results

ARV scale-up effects on MCH at Iganga district hospital

Infrastructure

- No new structures raised to cater for increase in clientele and clinics added by the ART programmes
 - Overcrowding and lack of privacy
 - Sometimes space for other clinics has to be rationed to ART especially on clinic days to cater for the large clientele
- the parent clinic has to close to accommodate ART some days



ARV scale-up effects on MCH at Iganga district hospital

Drugs and Supplies

- High demand and yet there has been no significant increments in funds for health care
- For example: very high demand for cotrimoxazole among HIV infected
- Demand for other supplies has risen; syringes and needles for bleeding mothers, cotton, gauze, laboratory reagents, and test kits
- Stock-outs are inevitable

ARV scale-up effects on MCH at Iganga district hospital

Overall quality of care

- Overall quality of services has been affected by the desire to integrate and improve maternal health services with ART
- Endless long lines for drugs, long waiting time, lack of sufficient drugs and supplies, few and exhausted staff are characteristic
- Others are; overcrowding, lack of privacy, allocative inefficiency for the little space and other resources available



ARV scale-up effects on MCH at Iganga district hospital

Strengths and opportunities

- National Health Policy and National strategic plan → establishment of a national network of access units; HC II, III, IV
- All levels should offer ART care integrated with MCH → more access
- Government policy: VCT to be offered at least at HCIII (serving 40,000 pop).
- Efforts underway to ensure that every HC IV (100,000 pop) offers comprehensive HIV/AIDS care. Currently >40% of HC IV accredited
- Commitment from government to improve staffing levels to 80%
- Ministry of Health calls for integration of ART into comprehensive PHC
- Several coordinated organisations involved in community HIV/ AIDS work and in reduction of maternal and infant mortality

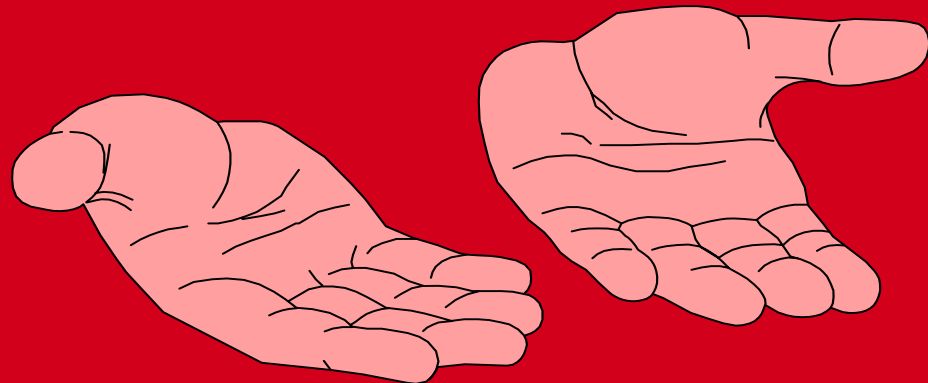
ARV scale-up effects on MCH at Iganga district hospital

Challenges

- How can we minimise ART effects on MCH care given the limited resources?
- How can we motivate staff to cope with the added workload and deliver good quality of care?
- How can we improve the quality of MCH and ART services offered when we do not have enough personnel, supplies and other resources?



Thank you for your attention



Any questions or comments?