NATIONAL HIV AND AIDS RESEARCH AND BEST PRACTICES CONFERENCE

CROSS ROADS HOTEL

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NATIONAL AIDS COMMISSION
P.O. BOX 30622
LILONGWE 3, MALAWI

TEL: (265) 01 770 015
(265) 01 770 022
(265) 01 770 210
FAX: (265) 01 776 249

EMAIL: nac@aidsmalawi.org.mw ;

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TRACK A: HIV PREVENTION: COMMUNICATIONS AND BIO-MEDICAL INTERVENTIONS

This Track looks at research in HIV prevention interventions, experiences and questions of social and bio-medical nature (e.g. HIV testing, prevention of mother to child transmission of HIV) and HIV prevention programs that have demonstrated innovation and impact. The Track also highlights research and program designs relating to community advocacy and social mobilization.

A 1: DISTRICT-WIDE DOOR TO DOOR HTC: CURRENT PROGRAM EXPERIENCES IN ZOMBA DISTRICT. by Dr. Daniel Byamukama1, Prof. Cameron Bowie 2, Mr. Limbani Kalumbi1

1. St Luke's Mission Hospital, 2 Malawi College of Medicine.

Objective

To provide home-based HIV Testing & Counseling (HTC) services which encourage couple counseling and to assess the feasibility and acceptability of such district-wide program in Zomba.

Methodology

St Luke's Mission Hospital and partners developed and implemented a community mobilization plan for home-based HTC. The program implementation involved community mobilization, selection, training and commissioning community resident counselors. The counselors conduct a village mobilization and then move from house to house offering HTC to all consenting adults and exposed children. Those found positive are referred to care providers. The counselors routinely collect data from their clients using standardized forms, and the program conducts various surveys and operational studies for program evaluation.

Results

97.4% of individuals who were home-visited accepted to be tested and counseled between February and November 2008. 28.7% of individuals were counseled and tested as couples. The overall prevalence of HIV infection was found to be 7.7%. Prevalence was significantly high among females (8.8%, p=0.000) compared to males (6.1%). The female/male rate ratio was 1.4 (95% Confidence Interval (CI): 1.37 – 1.51), indicating a 44% higher prevalence in females. Age-specific prevalence was significantly high among the 25 – 49 age group (12.7%, 95% CI: 12.34 – 13.04) in comparison to other age groups; 0 – 14 (3.9%, 95% CI: 3.53 – 4.37), 15 – 24 (3.5%, 95% CI: 3.32 – 3.74) and 50+ (6.0%, 95% CI: 5.52 – 6.41). Among couples 5.8% were concordant positive whereas 4.4% were discordant couples. Gender-specific discordance rate was 2.2% for both males and females.

Conclusions

Preliminary results indicate a satisfactory uptake of home-based HTC services in Zomba. Demand and acceptance remain high. There is increased couple testing and counseling when home visited. This then demonstrate that home-based HTC is acceptable and can increase uptake of couple counseling. However, regular supply of test kits is pivotal to the success of the program.

A 2: OPERATIONS RESEARCH ON MALE CIRCUMCISION SERVICES (MC): INFORMING MC POLICY IN FAMILY PLANNING CLINICS by Chipeta-Khonje, B. Hayes, brendanmhayes@gmail.com

Background

Banja La Mtsogolo (BLM) is a leading provider of sexual and reproductive health services, including MC, in Malawi. Although not originally intended as an HIV prevention service, BLM has seen increased client interest in MC services since the WHO endorsed MC as an HIV prevention strategy in March 2007.

Starting in January 2009, BLM undertook three workshops to standardize the MC services being offered at its clinics. Two of these events took place in Blantyre and one in Lilongwe. These workshops drew a total of 161 men who underwent MC services over 15 days.

Objectives and scope

Operations research was undertaken to assess the demographic profile of men seeking free MC services at BLM MC Workshops. The objective of this exercise was to develop OR tools suitable for BLM clinics and to gather information that could improve MC Service delivery.

Methodology

Intake surveys were administered to all men attending free BLM MC Services at three events in early 2009. A survey detailing past sexual history and HIV prevention related knowledge was administered to a random selection of MC clients.

In addition, client follow-up reviews were conducted and all adverse events were recorded.

Results

The data indicates that there is a surprising level of awareness about the connection between male circumcision and HIV prevention among urban Malawian men despite the lack of official dissemination or sensitization on this topic.

In addition, participants were drawn from a wide range of religious and ethic groups and services were delivered with a low incidence of adverse events (<4%).

Conclusion(s)

It appears that there may be a high level of interest and acceptability among Malawian men for MC services even among those men who would not typically circumcise for traditional and religious reasons.

Recommendation(s)

Our recommendation is to expand the scope of operations research on the topic of MC to best inform a way forward for service provision in Malawi.

A 3: EVALUATING CONDOM USE AMONG SEXUALLY ACTIVE YOUTH (15-24 YEARS) IN MALAWI – 2009 PSI/MALAWI HIV/AIDS PROJECT by Mkandawire Philip, Senior Research Officer

Contact details: Phone: 0999260930/018675946/018677547
Email: pmkandawire@psimalawi.org

Objectives & scope

Project TRaC1 second round study was conducted to monitor trends in condom use and evaluate the impact of PSI/Malawi's HIV prevention interventions. The study also aimed at identifying determinants of behaviors which significantly differentiate condom users and non-users.

Methodology

The sample population included young adults aged 15-24 in all districts of Malawi, except Likoma Islands. The study design was based on a stratified multi-stage cluster sampling approach. The total sample size was 4,175, divided by place of residence (urban and rural) in a ratio of 1 to 4 proportionate to size.

Main findings

The study found that the proportion of youth ever having used a condom increased from 51 % in 2005 to 57% in 2008. Similarly, the study found an increase in consistent condom use with a non-marital partner among youth, rising from 32% in 2005 to 46% in 2008.

Attitudes toward condoms were found to be a critical determinant for condom use among the 15-24 age group. The findings show that youth who think sex with a condom is "good" are more likely to have used a condom the last time they had sex. Furthermore, the study found that self efficacy is a significant differentiator between condom users and non-users. Youth displaying greater self efficacy for condoms are more likely to use a condom compared to their counterparts.

The evaluation results of condom use indicate positive programmatic impact resulting from PSI/Malawi's interventions. Youth aged 15-24 who were more exposed to the intervention were more likely to use condoms than those who were not exposed or those who had low exposure.

Conclusion and recommendation

The significant programmatic conclusion drawn from the study is that positive attitudes and self efficacy play an important role in condom use among 15-24 year olds. Programmatic interventions should continue to focus on reinforcing positive attitudes toward condom use and enhancing target group members' confidence in buying, correctly using and consistently negotiating condom use, and at the same time promoting independent thinking, and enhancing individuals' decision-making capabilities as a means of self efficacy. PSI/Malawi should also continue exposing youth to HIV/AIDS messages.

A 4: SCALING UP HIV-RELATED LABORATORY SERVICES TO SUPPORT PUBLIC HEALTH SYSTEMS IN RESOURCE-POOR SETTINGS by C. Porter (1), R. Mwenda (2), J. Kandulu , A. Demby, S. Hersey, K. Phiri , P. Moyo, G. Henley, P. Makaula cporter@africa-online.net

Background

Over the past 6 years, the Ministry of Health and Howard University implemented an efficient and comprehensive program to support the rapid scale-up of HIV services in Malawi through increased clinical laboratory testing capacity. The planning processes that led to improved laboratory

infrastructure was derived from a National Laboratory Needs Assessment, which characterized the scope of the existing capability and provided guidance on what was needed.

Objectives and Scope

This capacity-building effort to strengthen HIV testing services in Malawi is being achieved by:

- Strengthening the capacity of laboratories and staff through supervision, management, quality assurance programs and in-service training.
- Updating laboratory pre-service training curricula for HIV diagnosis, disease monitoring and opportunistic infections.
- Training tutors and clinical instructors on new HIV curriculum content

Methods

The effort to strengthen HIV testing services in Malawi was accomplished through wide stakeholder involvement, training programs, developing a standardized laboratory science training curriculum and implementing performance standards. Equipment and resources, including refurbishment, were provided to laboratory training institutions and clinical laboratories. High-level managerial and technical staff was employed in clinical and national reference laboratories, and national quality assurance plans were developed.

Results

To date, there are over 100 new graduates from laboratory training programs who are able to perform complex laboratory procedures and more than 80 lab technicians have been provided with knowledge and skills updates. Laboratory testing capacity has increased and quality assurance for HIV WB Rapid Testing, CD4, and PCR has been established. Laboratories have been refurbished to accommodate testing for HIV diagnostics and disease monitoring.

Conclusions

By working to build the instructional capacity, providing training and upgrading laboratory facilities, the foundation has been laid for enhancing HIV/AIDS prevention and treatment throughout Malawi. A strong, well-tended, continuously improved laboratory infrastructure is essential to these efforts.

A 5: IMPLEMENTING A NATIONAL QUALITY ASSURANCE SYSTEM FOR CD4 ENUMERATION by K. Moyo (1), C. Porter (2), B. Chilima (1), R. Mwenda (1), A. Demby (3), S. Hersey (3), B. Angarita (2), G. Henley (2) cporter@africa-online.net

Background

CD4 testing capacity is essential to scaling-up HIV care and treatment services; however, Malawi has primarily relied on WHO staging to initiate people into treatment. Because providing high quality CD4 services is vital to expanding evidence-based medical decision-making, Malawi is now incorporating laboratory testing into its current ART system.

Objectives and Scope

A CD4 national training program for the BD Facscount machines was implemented in March 2007. In addition to the training component, service agreements were purchased for all of the machines, all of the sites were enrolled in the UK National External Quality Assurance Scheme (UKNEQAS) for CD4, and in November 20007 the CD4 Quality Assurance Program was established.

Methods

The CD4 QA program has two components, site assessments and proficiency testing (PT). The site assessment determines whether sites are performing CD4+ T-cell counts according to the required standards.

The UKNEQAS immune monitoring programme provides the PT samples for Malawi's CD4 QA program. Each site received two PT samples per distribution (trial). The labs participated in 7 trials during the reporting period.

Results

Overall, all there was a positive trend in performance on the site assessments among all laboratories. Of the 8 sites, one lab maintained high standards from the start, and 5 laboratories (63%) attained maximum standards. One laboratory fell sharply on the third assessment but improved.

All but one laboratory performed satisfactorily in all 7 PT trials. Most problems were technical due to lack of training or knowledge about the QA procedures or resulted from poor documentation or lack of equipment maintenance.

Conclusions

As the QA program in CD4 continues to scale up, there will be major needs in the areas of trained technical assessors, skilled laboratory technicians, reliable service, and establishing sustainable sample transportation mechanisms for the distribution of PT samples.

A 6: MALE INVOLVEMENT IN PMTCT – LESSONS FROM GOAL MALAWI by

H. Mkwinda-Nyasulu; E. Edward. hesternyasulu@gmail.com

Background

The assessments carried out in GOAL Malawi target areas of Nsanje district revealed that many pregnant and breastfeeding HIV-positive mothers faced physical and emotional abuse, gender-based violence, divorce, and lack of care and support from partners and family members, which presented an obstacle to women's uptake of PMTCT services. A deliberate move was made to approach men in addressing this problem.

Objectives and scope

To strengthen the uptake of PMTCT services through engaging men to accompany their female partners to antenatal health services.

Methodology

GOAL Malawi collaborated with the Health Centre personnel and community leaders to address this problem. The roles assigned: Health workers - to create an environment conducive to men during antenatal clinics; Community leaders – to sensitize the communities about male championship; and GOAL Malawi – to provide the resources and technical support.
The communities were sensitized that every woman should be accompanied by her partner during the first antenatal visit and in cases where the partner is away, the woman should go to the clinic with a letter from the chief.

Results

The reports from participating communities and health centers in Nsanje district revealed that from April 2008 – April 2009:

- The number of antenatal clients being accompanied by spouses ranged between 60% - 85%.
- 102% increase in Couple HTC clients compared to the same period last year.
- Male membership in the PLWHA support groups has increased by 82.5%.
- Increased number of men getting information about PMTCT.

Conclusions

Male involvement is a key to the success of PMTCT and requires multi-sectoral and integrated approach.

Recommendations

There is need to improve the structures at the health centers and activities conducted during antenatal clinics to be male friendly.

A 7: COMMUNITY INVOLVEMENT IN MANAGEMENT OF ANTIRETROVIRAL PATIENTS: EXPERIENCE FROM THE LIGHTHOUSE NDIFE AMODZI PROGRAM, MALAWI by The Lighthouse Group h_tweya@lighthouse.org.mw

Background

Long-term retention in care is a major goal of ART programmes. Patients on ART can benefit from community support. Since 2005, Lighthouse has been building a community-led ART support program called, "Ndife Amodzi" ("We are one") focusing on treatment adherence and improvement of retention.

Methods

Patients select individual community volunteers from pre-arranged photos based on area of residence. The volunteers are contacted at home by the Community Care Supporters (CCS) on their potential patients. Patients are registered through CCSs when a volunteer reports that (s)he has made an initial visit. Volunteers visit patients twice per month and provide basic care. The CCS updates the register monthly with key outcomes as reported by volunteers.

Results

Between November 2005 and December 2008, 3,063 patients were registered in the Ndife Amodzi program. Average annual enrollment was 53, 33, 62 and 158 in 2005, 2006, 2007 and 2008 respectively. Out of those ever recruited, 2,085 (68%) were still in the programme, 106 (3%) transferred out, 407 (13%) were lost to follow-up, 100 (3%) had died, 26 (1%) had be referred to home based care program and there was no report for 339 (11%). The results further show that 1,795 (86%) of Ndife Amodzi clients patients currently in the program are on ART. In quarter four 2008, 96% of Ndife Amodzi clients were visited at least twice in every month by their volunteer.

Conclusions and Recommendations

Ndife Amodzi program is steadily expanding through (a) intensified information campaigns at the ARV clinic (b) involvement of volunteers from other home based care providers to extend the catchment area of the program and (c) fewer drop-outs once enrolled. We recommend that Ndife Amodzi innovation should be incorporated into the national ART program.

A 8: HOUSEHOLD HIV TESTING AND COUNSELING (HTC): EXPERIENCE FROM LIGHTHOUSE by The Lighthouse Group h_tweya@lighthouse.org.mw

Background

Lighthouse is major provider of HIV related services in Malawi. In 2008, its' counselors tested nearly 40,000 clients. However, few young people, children, couples, and those who tested for the first time accessed the service. To address these gaps, Lighthouse decided to provide HTC at households of residents within Lilongwe city.

Methods

Patients from the ART clinic and the home based care program were routinely asked about the HIV status of family members. If unknown and interested to be visited by counselor, consent, contact- and location-information was obtained and an appointment arranged either on Friday or Saturday. During home visit, two counselors provided individual pre- and post- test counseling. Household members who consented were tested using whole blood rapid HIV antibody tests.

Results

Between November 2007 and January 2009, 364 households agreed to be visited.93 (25%) household visits were unsuccessful because the household was either not found or the members were not available. The remaining households had 1,176 members, and of those, 861 (73%) were counseled and tested. 522 (61%) were female and 21% of the females and 11% of males were HIV positive. Overall HIV-prevalence was 16% and varied by age and sex. The proportion of children < 1.5 years, children 1.5 to 14 years and youth (15-24 years) tested were 3%, 49% and 19% and their HIV antibody prevalence was 22%, 6% and 5% respectively. Only 23 couples were tested for HIV, and 4 were discordant. 89% of all clients were tested for the first time and of those, 12% were positive.

Conclusions

Household testing is feasible and reaches different groups of clients. Though we have tested more children and young people compared to our static sites, few couples agreed to be tested. Specific education for couples is need to improved HTC uptake.

A 9: HIV AND AIDS RELATED KNOWLEDGE, ATTITUDES AND PRACTICES AMONG RELIGIOUS LEADERS by Survey commissioned by Malawi Interfaith AIDS Association (MIAA) conducted by Benjamin Kaneka etal. robertngaiyaye@yahoo.com

Background

Considering the dominant role that religion plays in the lives of many Malawians, it is clear that religious communities cannot be ignored in the efforts to deal with HIV and AIDS problems. However, little attention has been given to understanding how the faith community can effectively play a role in the HIV prevention efforts.

Objectives and scope

MIAA commissioned a baseline study assesses the knowledge, attitudes, behaviours and practices of religious leaders on HIV and AIDS. It also explores how religious leaders would apply the Holy Bible and the Holy Qu'ran to prevent further spread of HIV, how religious leaders would openly discuss the HIV and AIDS issues and how they would relate gender concerns into HIV and AIDS programmes.

Methodology

The study used a mixture of qualitative (key informants interviews) and quantitative (questionnaire) data collection tools and techniques. The data was derived from clerics and women, men and youth leaders in 10 districts spread across the country.

Results

Though knowledge on HIV and AIDS was on the whole high, it was noted that some clerics (15percent), still thought that there is some cure for AIDS while 32 percent of the clerics felt that the treatment for AIDS was prayers.
A good proportion of the clerics still believed that the majority of people living with HIV got infected because they were promiscuous which points to a judgmental kind of attitude. Some clerics noted and accepted the fact that mutual faithfulness was not always the practice within their faith community.
It was also noted that some clerics expressed reservations to discuss sex and sexuality issues openly and frankly to young people. However there are a lot of clerics who speak about HIV and AIDS issues from the pulpit. However, it is noted that the topics chosen to be spoken about are of the less sensitive and controversial category.

Conclusion and Recommendations

There is a need to involve clerics in all programmatic interventions on HIV and AIDS targeting the faithful and the communities. However there is need for more capacity building for the clergy to effectively contribute to the HIV and AIDS fight in the areas such as; knowledge on sex and sexuality issues and HIV and AIDS particularly treatment; develop resource materials and guides based on Biblical and Qu'ranic teachings; Clerics who are living with HIV should be encouraged to speak out as ambassadors of hope.

A 10: ACCEPTABILITY AND USE OF CONDOMS AMONG FAITH BASED COMMUNITY by Malawi Interfaith AIDS Association (MIAA) conducted by Jesman Chintsanya, Benjamin Kaneka and George Mandere. robertngaiyaye@yahoo.com

Background

As the country is intensifying its efforts in scaling up prevention interventions, it is recognized that the faith community will play a pivotal role as the agents for change. However the issue of condoms has been a very sensitive and contentious one particularly among the faith community in Malawi. The link between FBOs and acceptability of condom use in Malawi is an area of study that would provide information and guide policy and programs in HIV prevention efforts.

Objectives and scope:

MIAA commissioned the study to assess the acceptability and level of use of condoms for family planning and HIV prevention; to identify barriers and factors that promote condom use and make appropriate recommendations.

Methodology

The study used a mixture of qualitative and quantitative data collection tools and techniques. Focus group discussions and Interviews were conducted in 9 districts.

Results

The overall impression is that the faith community is not particularly in favor of condoms as a method of family planning. The faith community insists that HIV is spreading because of condoms as they encourage people to indulge in promiscuity, the clergy and the faithful appear to undermine the complexity of the HIV and AIDS epidemic. It is worth noting that in spite of protestation about condom use, a significant proportion of 26 percent of the congregants reported to be using condoms. Those who reject condom use for family planning based more on personal dislike and misconceptions about condoms than on religious prohibitions. However, some sections indicated that condoms could only be allowed for the couples of which one of them went for HIV testing and was found to be positive. It was also established from both the clergy and the congregants that it would be stretching the issues too much to expect the clergy to stand in front of the congregation to promote use of condoms.

Conclusion/recommendations

The Faith community continues to be a key player in the fight against HIV and AIDS and there is need for more dialogue between MIAA and NAC to emphasize the importance complementing each other in tackling the HIV and AIDS issues in the country. The faith community should also be capacitated with knowledge, skills and resources in areas such as; abstinence and mutual faithfulness programming, sex and sexuality issues and information sharing.

A 11: STRENGTHENING COMMUNITY RESPONSE TO PREVENT HIV AND AIDS AMONG SUGAR PLANTATION WORKERS AT DWANGWA SUGAR CORPORATION ESTATE IN NKHOTAKOTA DISTRICT by G. Mzembe, U. Chirwa, M. Bwanali, Society for Women and AIDS in Malawi mtiedemann@pactmw.org

Background

Nearly 41% of the sugar plantation workers at Dwangwa Sugar estate are non- established and work on a seasonal basis (DWASCO, 2007). They leave their spouses at their homes away from the estate. As a result, they have temporary sexual partners within the DWASCO compounds and in the surrounding communities, which predisposes them and their partners to HIV infection.

Objectives and scope

Plantation workers have not been adequately reached with HIV and AIDS intervention because they are a mobile community. Utilization of the HIV testing services is still very low among the plantation workers (BSS, 2004 report). According to this report, 11% of the estate workers accessed VCT services 2004. This situation poses a serious problem in the context of the HIV/ AIDS response. The project objectives are; to mobilize communities to utilize available HTC services in five compounds at DWASCO estate and promote behavior change in order to reduce HIV transmission among plantation workers.

Methodology

SWAM's survey report (2007) revealed that many people did not access HTC because of the distance to the service. Focus group discussion and individual interviews showed that people were willing to access HTC services if the services were brought within their compounds. With support from PEPFAR/USAID through Pact Malawi, SWAM has facilitated mobile HTC services in the compounds alongside vigorous community sensitization on the importance of HIV testing.

Results

There is a high demand for mobile HTC services as people want to know their sero-status. Some 60% indicated an intention to use HTC services if established in their compounds and information on importance of HTC is provided. In 2007, 1,544 people (775 men and 796 women) accessed HTC services, while in 2008, 3,230 people (1,487 men and 1,743 women) were tested; this is a 100% increase. DWASCO management is committed to addressing HIV prevention initiatives among its workers by buying test kits when they are not available at Nkhotakota hospital.

Conclusion

Bringing HTC services closer to the communities increases access to the service. Many people came to be tested but were turned back because of time. The project has been well accepted by the community and DWASCO management.

Recommendations

There is need to train more counselors in order for many people access HTC services.

A 12: EVALUATING ABSTINENCE AMONG YOUTH (15-24 YEARS) IN MALAWI: PSI/MALAWI HIV/AIDS SECOND ROUND PROJECT by Velia Manyonga, PSI/Malawi Research Manager ,contact details: Phone: 0888301620/099951488/01874139,
Email: vmanyonga@psimalawi.org

Objectives & scope

PSI/Malawi conducted a second-round Tracking Results Continuously (TRaC) study to monitor trends in primary abstinence and evaluate the impact of Youth Alert's HIV prevention intervention among Malawi youth aged 15-24. The study also aimed at identifying determinants of behavior which significantly differentiate those who had sex and those who did not. The 2008 survey was a follow-up to a 2005 survey.

Methodology

This study design was based on a stratified multi-stage cluster sampling approach. The total sample size for the 2008 study was 4,175, divided by place of residence (urban and rural) in a ratio of 1 to 4 proportionate to size. The results are presented in standard PSI dashboard tables that highlight programming elements related to monitoring, segmentation and evaluation.

Main findings

The 2008 results show that abstinence among all unmarried youth increased significantly from 49% in 2005 to 53% in 2008. Abstinence among rural youth also increased significantly from 49% to 54%. Abstinence levels did not change significantly among urban and secondary school youth. The 2008 results indicate that 45% of those who had ever had sex did not have sex in the past twelve months.

The mean age of first sex did not change significantly between the two rounds (15.9 for 2005 and 16.1 for 2008). Percentage of youth having sex with two or more partners in the past 12 months decreased significantly from 38% to 22%. Not surprisingly, the study found age to be the main determinant in sexual activity; one is likely to have sex if one is older. Social norm, self efficacy and locus of control were also found to be key determinants of abstinence.

Evaluation results show that the Youth Alert! program had a significant impact in reducing the percentage of young people having sex with two or more partners in the past twelve months. Exposure to Youth Alert! correlated with abstinence in general. The results also indicate that high levels of Youth Alert! program exposure had an impact on encouraging unmarried youth to be comfortable in discussing HIV/ADIS and sex with their parents and religious leaders. There is also evidence that exposure to Youth Alert! had a positive impact on encouraging the subjective norm that "you don't need to have sex to be considered a real man."

Conclusion and recommendation

The Youth alert! program should seriously consider segmenting its intervention into age groups of 10-14 and 15-24 for messaging. Results have shown that promotion of abstinence will have the most impact among young people aged 10-14. For 15-24 year old, the Youth Alert! messages should focus more on secondary abstinence, partner reduction and condom use. Youth Alert! programs should also focus on social transactional sex and self efficacy.

A 13: UNDERSTANDING HIV AND AIDS BEHAVIOUR CHANGE INTERVENTIONS AT DISTRICT LEVEL: WHO IS THE TECHNICAL RESOURCE? By Chimbali H. H (Mr.) chimbalih@yahoo.com

Background

Developing HIV and AIDS behavior change interventions requires some guidelines to develop of effective BCC strategies. The transference and application of the 2003 HIV and AIDS BCI strategy has been minimal, evidenced in the less impact and uncoordinated activities by various CBOs and NGOs. A research gap was identified to explore and understand the BCC development process at district level.

Objectives

This research explored the process of designing BCI at district level and identification of who and why one becomes a technical resource for BCI.

Methodology.

Qualitative data collection methodologies of in-depth interviews and focus group discussions with DACs, district health education officers and representatives of CBOs from eight districts were used. Participants were determined by their relevance to the research topic with a theoretical sampling approach.

Results.

Most CBOs inadequately understand BCC which leads to the development of poor quality activities that do not directly address the HIV and AIDS problem. Most CBOs prefer to implement impact mitigation interventions such as HBC and OVC than BCC.

Seeking BCC technical support is erratic, where that expertise is available; and the provision of that support is disjointed. There is no standardized BCC training manual. The DACC lack BCC technical input due to the set guidelines on DACC membership.

Conclusion

There is an incoherent process of developing HIV and AIDS BCC activities which has impacted on the quality of such activities thereby affecting the HIV and AIDS BCC indicators.

Recommendations

Establishing a systematic and standardized transference of BCC technical skill to CBOs through the DAC and DHO. Reviewing DACC membership to include BCC technical expert.
Standard setting on education level for all people to be trained in BCC from the CBOs.

A 14: ASSESSING THE QUALITY OF INFORMATION, EDUCATION AND COMMUNICATION OFFERED TO PATIENTS AFTER MEDICAL CONSULTATION AT THYOLO DISTRICT HOSPITAL

by K. Mbewa1, R. Chidakwan1, S. Vinkhumbo1, O. Pasulani2, M. Massaquoi3

1Ministry of Health and Population, Clinical, Thyolo, Malawi, 2Medecins Sans Frontieres-Belgium, Clinical, Thyolo, Malawi, 3Medecins Sans Frontieres-Belgium, Medical, Blantyre, Malawi

Background

Appropriate information, education and communication about patients´ diagnosis and treatment during medical consultation results in patient's satisfaction to the consultation and less errors in drug administration and therefore good compliance to treatment. Errors in drug administration results in morbidity and mortality (Ramutkowsk and et al, 1999)

Study Objectives

1. To find out what patients were told about diagnosis.
2. To assess what patients were informed and educated about the dispensed drugs.
3. To find out whether patients were satisfied with the services offered or not.

Methods

An academic study conducted at Thyolo District Hospital from January and February 2008, where 60 patients, 7 clinicians and 6 pharmacists were asked questions using a well thought through questionnaires. The subjects were selected using accidental sampling technique.

Results

The findings indicated that 44 (73%) of the patients left the hospital without knowing their diagnosis. 57 (95%) were not told the names of their prescribed drugs while 26 (43.3%) of the patients were not satisfied with the services offered. Importantly, (100% n=90) of the patients expressed interest in knowing their diagnoses and names of the prescribed drugs. It was also found that 57 (95 %) of the patients left the hospital with unanswered questions and that they were not given an opportunity to ask them. Interestingly, clinicians and pharmacists did not adequately offer information and education concerning patients´ illnesses and treatments. This is supported by the 4 (57.1%) for clinicians and 3 (50 %) for pharmacists indicating that they were not satisfied with the quality of IEC.

Conclusions and Recommendation

The findings shows that we have got a huge implication on the quality of care .There is need to put much more emphasis on the quality of health education, information and communication during medical consultation in order to promote the health of patients.

Contact details

Contact Address: Dr. Moses Massaquoi -MSF-Belgium- Malawi Mission, MALAWI, Tel: +265-(0) 1844409 Fax: +265 (0) 1841468 email: msfocb-blantyre-med@brussels.msf.org

A 15: TBAs' INVOLVEMENT IN PMTCT SERVICE DELIVERY IN LILONGWE SEMI-URBAN DISTRICT by C. Kabondo1, C. Zimba1, E. Kamanga1, I. Mofolo1, B. Bulla1, G. Hamela1, I. Hoffman2, F. Martinson,1C. van der Horst2, M. Hosseinipour1

UNC Project, Lilongwe, Malawi1, University of North Carolina, Chapel Hill, United States2

Background

The use of traditional birth attendants (TBAs) is common in the African context. In the setting of high HIV prevalence, many HIV positive women may deliver with TBAs thus preventing an opportunity to enhance the prevention of mother to child transmission (PMTCT) of HIV. A curriculum for TBAs related to PMTCT and including roles of TBA in Malawi was developed. TBAs were trained on PMTCT issues and supervised every month. Currently, TBA's do not dispense PMTCT drugs.

Objective

To examine the benefit of incorporating traditional birth attendants in the PMTCT process

Methodology

Three months after training, focus group discussions with 13 TBAs from the catchment area surrounding Area 18, Area 25 and Kawale health centres was conducted. TBAs were assessed on their willingness, incentives and barriers to participate in PMTCT activities in their communities as trained. Additionally, TBA delivery logs were revised to incorporate PTMCT issues and referral practices.

Results

From March 2008 to January 2009 TBAs provided services to a total of 1,707 women, of whom, 134 (7.9%) women were known to be HIV positive and 65 (48.5%) women received nevirapine for

PMTCT. 28/65 (20.9%) HIV exposed infants took nevirapine. 1,574 (92.2 %) women were referred to health facilities for delivery. TBAs reported improved knowledge on HIV/ AIDS. Frequency of safe deliveries increased due to access to delivery kits. HIV positive women were easy to identify using antenatal cards as evidenced by accurate documentation in TBA logs. Issues hindering success include lack of transport for the delivering mother; lack of sustainable source of income influencing TBAs to continue conducting deliveries and counselling; non-disclosure of status by HIV positive women; inability to determine whether nevirapine is taken or not and inability to tell if referred women reach health facilities or not.

Conclusion

TBAs can supplement efforts to provide PMTCT services in communities if properly trained and supervised. Community sensitization on hospital delivery and to await labour at health facilities is very crucial in the PMTC process. Provision of transport would allow HIV positive women to deliver in health facilities. There is need to devise a proper mechanism to track referrals from TBAs to health facilities.

A 16: COUNSELING FACILITATES WOMEN'S UTILIZATION OF CD4 COUNT TESTING IN LILONGWE, MALAWI by Kate P. Gilles, Emily A. Bobrow, Gloria Hamela, Chifundo Zimba, Innocent Mofolo, Suzanne Maman, Mina Hosseinipour, Irving Hoffman, and Francis Martinson

Background

Initiating antiretroviral treatment (ART) at lower CD4 levels is associated with increased mortality, but individuals frequently wait to seek treatment until advanced disease is present. To increase early enrollment of HIV-positive women in ART programs, prevention of mother-to-child transmission (PMTCT) clinics are implementing regular CD4 count testing up to 18 months postpartum. Successful retention of women has proved challenging.

Objective and Scope

This study examined factors influencing women's utilization of extended CD4 count testing offered through PMTCT clinics.

Methods: The study was conducted in 3 antenatal clinics in Lilongwe, Malawi. In-depth interviews were conducted with 19 HIV-positive pregnant women with CD4 counts <250/mm3, 9 HIV-positive women who received a follow-up CD4 count test, 3 social support persons, 17 nurses and 5 government health officials. Two focus groups were conducted with community leaders.

Results

Accurate and comprehensive counseling and positive interaction with staff emerged as critical factors for service utilization. Women wanted to know their CD4 count and knew there was the possibility of starting ART if it was low, but did not understand the importance of early ART initiation. Disclosure to and support from husbands facilitated women's return to the clinic. Reminders were perceived as helpful but ineffectively employed. Transportation was identified as a possible barrier and proximity to services was valued. Staff identified challenges to tracking women and recommended referrals from various sites.

Conclusions: Counseling should be taken as an opportunity to provide social support, with messages emphasizing the importance of starting ART soon after the CD4 drops below 250.

Recommendations

Clinics should focus on encouraging disclosure to husbands and expanding testing and counseling services to couples, recognizing the emotional and financial support husbands provide. Increased focus should be placed on case management, staff communication and support, and appointment reminders. Follow-up should be offered at multiple service points.

A 17: POSITIVE LIVING OF HIV+ PEOPLE AND THE ASSOCIATED FACTORS IN ZOMBA by Authors: L. Tenthani, C Bowie, D.Byamukama, Erick Kasagila ltenthani@gmail.com

1 College of Medicine; 2 St Luke's Hospital Door to Door Program,

Objective and Scope

HTC is expected to be entry point to services and a tool to adopting risk reduction strategies. As part of the door to door program a survey was conducted to assess the positive living behaviours being adopted by the Zomba population in order to inform the counseling and IEC messages and the baseline data for the program.

Methodology

A cross sectional survey was conducted with 101 participants selected using quota sampling. The participants were of both sexes in age brackets 15-25 and 26-49. Participants were drawn from all eligible adults who were attending support groups, who had known their HIV positive sero-status for at least three months.

Results

The median number of people to have disclosed their HIV positive result to participants is 3(0-158) and 4.5 (0-50) among females and males respectively. Three quarters reported to have disclosed their results with more catholic and females disclosing relative to males (<.05). Among those that did disclose they were more frequently disclosing to relations followed by friends.

Of those who did not disclose their results the mostly stated reason for non disclosure is fear of upsetting the friend or partner followed by fear of disclosing to every one.

The majority 83% attempted to adopt a risk reduction strategy which was not sustained for more than a month.

Conclusions

Although joining a support group is a step towards accepting ones status and hence more likely to disclose, some HIV+ people attending CBOs reported not to have disclosed their status.HIV positive test seem not to result in permanent adoption of risk reduction strategies although attempts are made.HTC programs need to consider challenges faced by clients in the adoption of the expected behaviors.

Further research is recommended to get a clear understanding of what could be done to facilitate disclosure and permanent adoption of risk reduction.

A 18: IMPACT OF THE DREAM HAART-BASED PMTCT PROGRAMME ON MATERNAL MORTALITY, PREGNANCY OUTCOME AND VERTICAL TRANSMISSION by G. Liotta, J. Haswell. M. Maulidi, D. Thole, R. Luhanga, L. Palombi and the DREAM Programme Team

Background

To evaluate pregnancy outcomes and vertical transmission in the DREAM HAART-based PMTCT program

Methods

Files of 1,091 HIV+ pregnant women receiving care in Malawi from 7/2006 to 12/2008 at DREAM centres, and giving birth to 1,038 newborns, were reviewed. Women were offered nevirapine-based HAART at 14 wks (if eligible for own health) or 25 wks gestation until 6 months postpartum. Abortion and stillbirths were defined as foetal death at < or > 32 wks gestation. Prematurity was defined as a live birth before 37 wks of gestation assessed by obstetric evaluation. HIV-1 infection in infants was determined by b-DNA.

Results

Maternal mortality was 1.2% and significantly associated with HAART (5.9% if no HAART vs. 0.8 HAART > 90 days before delivery). Abortion and stillbirth were 32.4% (11/34) in women with no HAART vs 5.7% (48/847) in women receiving HAART for >30 days (p< 0.001). Prematurity was strongly associated with short/absent HAART: 50.7% reduction overall (Mantel-Heanszel OR=0.34; CL95%:0.23-0.50) and within each CD4 strata. Baseline Haemoglobin (OR 0.1.45; CL95% 1.97-1.98-0.50) and VL at delivery (OR 1.50; CL95% 1.17-1.90) were strongly associated with prematurity by multivariate analysis. Low birth weight was 9.5% and not associated with HAART duration or CD4 count. A total of 1,012, 772 and 344 completed the one-month, six month and 12 month of follow up respectively. HIV-1 transmission rate at 1, 6 and 12 month of age was 0.6% (6/1,012), 1.0% (8/772) and 0.6% (2/344) respectively. The cumulative transmission rate was 2.2% and the one year HIV-1 free survival was 92.1%. Multivariate analysis demonstrated an association between HAART exposure pre-delivery (OR 0.30 CL95% 0.12-0.79) and baseline viral load (OR 2.55; CL95%: 1.06-6.11) with HIV transmission at 1 month and death. Pre and post delivery HAART are also associated to HIV the 6-month and 12-months transmission and death rate. Mothers with baseline CD4 counts > 350 accounted for about 45% of HIV transmission.

Conclusion

The benefits of HAART during pregnancy for HIV-1 PMTCT are extensive to women with higher CD4 counts. Best results occur with longer duration of treatment

TRACK B: TREATMENT, CARE AND SUPPORT

The Track looks at basic clinical research into diagnosis and treatment of HIV-related infections, clinical course of HIV infection, antiretroviral therapy and all aspects medicine, program-linked studies that inform planning and treatment and care models emerging as good practice

B 1: DISCONTINUATION OF STANDARD FIRST-LINE ANTIRETROVIRAL THERAPY IN A COHORT OF 1434 MALAWIAN CHILDREN by Mark M. Kabue1, W. Chris Buck2, Peter N. Kazembe1, and Mark W. Kline3.

1Baylor College of Medicine-Abbott Fund Children's Clinical Centre of Excellence – Malawi.
2Baylor College of Medicine International Pediatric AIDS Initiative (BIPAI), Houston, Texas – USA.
3Baylor College of Medicine International Pediatric AIDS Initiative (BIPAI), Texas Children's Hospital, Houston, Texas - USA Buck, cbuck@bcm.tmc.edu

Background

First-line antiretroviral therapy (ART) is most often discontinued because of medication toxicities or failure related to resistance and/or poor adherence. The standard first-line ART regimen in Malawi for both adults and children is a fixed-dose tablet containing stavudine/D4T, lamivudine/3TC, and nevirapine/NVP. There is limited information on adverse effects (AEs) and departure from first-line ART in children. A retrospective cohort study was designed to assess discontinuation of first-line ART in a cohort of Malawian children at the Baylor College of Medicine-Abbott Fund Children's Clinical Centre of Excellence, Malawi.

Methods

De-identified electronic medical records of 1434 ART-naïve children enrolled between November 2004 and October 2008 were reviewed. AEs were defined as events reported after ART initiation which were confirmed clinically or with laboratory tests. Discontinuation of standard first-line regimen due to either AEs or immunologic/virologic failure was the primary outcome. Descriptive and analytical statistics were done using STATA.

Results

1434 patients were initiated on ART by October 2008. Mean and median age at ART initiation were 5.0 and 3.1 (0.1 – 18.8) years, respectively. Over a mean follow-up period of 1.3 (0 – 3.8) years, 54 patients (3.8%) discontinued standard first-line regimen; 28 (2.0%) due to AEs and 26 (1.8%) due to failure. Of the 28 with AEs, 17 were related to nevirapine (10 - rash, 5 - Stevens Johnson Syndrome, 2 - hepatitis), and 11 were related to stavudine (5 - pancreatitis, 4 - lactic acidosis, 2 - peripheral neuropathy). Median time to an AE was 2 months (10 days - 28.1 months) and the probability of failure after 1 year on first-line regimen was 2.6% (95% CI, 1.6-4.1).

Conclusions

Adverse effects and first-line treatment failure were uncommon in this review. The Malawian standard first-line ART regimen of 3TC/D4T/NVP had good early efficacy and was well-tolerated in this paediatric population.

Key words: ART, Children/Paediatric, Toxicity, Treatment failure

B 2: RESEARCH ON PLWHA FOOD INTAKE AND NUTRITIONAL ASSESSMENT IN MZIMBA by Nahoko Kuroda, Kanako Tanaka, Yuya Nakamura, Yukari Yasutaka, Tokutaro Iino yukariyasutaka@broadbandmw.com

Background

Health providers' advice to PLWHA according to the Nutrition Guidance which persist 'fortification of Energy, Protein and Vitamin' without evidence based on PLWHA's nutritional intake amounts.

Objectives and scope

To find out about the nutritional deficiency in order to make health providers confident enough to give nutritional support to PLWHA.

Methodology

The subjects from Luwerezi and Embangweni in Mzimba recorded the three-days diet diary in year in March, July, September, December, 2008 and March 2009 to evaluate their daily nutrition with RDA(Recommended Dietary Allowance). A physical monitoring was performed.

Result

85 PLWHAs were studied.
- Average of energy intake (%RDA) was 2,279 kcal(87.9%) throughout the year.
-Average protein intake % of RDA was 109.3%.
- Average rate of animal protein/ total protein intake % of RDA was 7.2%.
-Fat intake % of RDA was 22% in March 2008, 58% in July, 79% in September, 48% in December, and 39% in March 2009.
-Average Vitamin A intake % of RDA was 296.7%.
-51.2% of subjects has gained weight, 15.2% has maintained weight during their assessment periods.

Conclusions

The study has revealed that quantities of energy, protein and Vitamin A were moderately or satisfactory taken. The net protein utilization might be ineffective even though protein intake was sufficient. As that the rate of animal protein was low, thus, it may affect to make the amino acid score low. Fat intake was deficiency level all year around, especially in March.

Recommendations

The results suggest the importance of considerations about amino acid-combination for effective net protein utilization, feasible fat foods and cooking methods to retain nutrients especially for Vitamins. The nutrition monitoring would effectively encourage PLWHAs and retain their weight.

B 3: PSYCHOSOCIAL SUPPORT: IMPACT ASSESSMENT OF TEEN CLUB AT BAYLOR COLLEGE OF MEDICINE CHILDREN'S CENTRE OF EXCELLENCE - MALAWI (COE) by R. Zule-Mbewe, L. Malilo, C. Cox, M.M. Kabue, and P.N. Kazembe. rzule-mbewe@baylor-malawi.org

Background

In the three years the COE has been in existence, over 4,350 patients were enrolled by end of March, 2009, of which 1,935 had been started on antiretroviral therapy (ART) during the same period. The COE has initiatives aimed at providing psychosocial support to its clientele. One such initiative is the Teen club, a clinic day on the third Saturday of each month designed to address both medical and psychosocial needs in an adolescent friendly manner. Teenagers who are between ages 10-18 years and have had full disclosure of their HIV status are eligible to participate in teen club activities. There are approximately 350 adolescents who account for 10% of the COE's patient population.

Issues

Teen club activities include medical consultations, sporting events, health and life skills addressing Positive Living, and discussions to support and improve adherence to ARVs. On average the adherence level to ARVs is at >98% in over 80% of the children. Education materials packaged in entertainment (edutainment) activities have made Teen club very popular. Between Jan – April, 2009 we had about 100-125 signing up for teen club sessions. However, there are 346 teens (10 <18years) who are eligible to be in teen club.

Lessons learnt

Activities to address positive living and improve adherence are well received by adolescents when designed with teen issues in mind. Teen club allows adolescents an opportunity to know and make friends with peers who are also living with HIV forming a network of social support. It is possible to deliver care and treatment in coordination with educational and entertaining activities to help teens live positively and support adherence to ARV therapy.

Way forward

We are committed to continuing social support for adolescents through Teen club, and developing partnerships to ensure sustainability of this important social support group for HIV-infected adolescents.

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B 4: DEFAULTER TRACKING TO IMPROVE RETENTION AND ASCERTAIN PATIENT OUTCOMES OF CHILDREN IN A PAEDIATRIC HIV CARE FACILITY

by Chimwemwe Chitsulo, Mark M. Kabue, Richard Zule-Mbewe, Vincent Chatsika, Constance Chisala, Linda Malilo, Peter N. Kazembe mkabue@baylor-malawi.org

Baylor College of Medicine-Abbott Fund Children's Clinical Centre of Excellence-Malawi (COE)

Background

Retention of children in HIV care is essential for their long term welfare and effectiveness of treatment. A missed appointment is a primary tell-sign of high risk factors that may predispose the child to poor adherence resulting in treatment failure. Accurate patient outcomes inform clinical decision making and service delivery. We designed a study to ascertain the outcomes of a cohort of patients who had defaulted by October 2008.

Methods

A retrospective cohort review of patients enrolled at the COE between October 2004 and April 2008 was conducted. Records of patients who had defaulted (missed appointment >6 months) were identified and caregivers traced through phone or home visits. Defaulter tracking was done from November 2008 to January 2009.

Results

By October 2008, 686 patients (16% of patients ever registered at the COE cumulatively) had defaulted. Fifty-nine percent (331) of patients had been in care less than 1 month; 7% had been in care more than 12 months. Eighty-one percent of defaulters had not been initiated on ART. Twenty-seven percent (187) of defaulters were successfully tracked. The updated outcomes of the 187 patients were: 17% transferred out; 6% died; 5% HIV-negative and 4% brought back to care. By the end of this exercise, the proportion of patients defaulters at the COE decreased from 16%% to 13.9%.

Conclusion

The majority of defaulters had not been initiated on ART and had been in care for less than one month. Inaccurate documentation of patient outcomes led to misclassification of a third of the patients as defaulters. Proactive defaulter tracking leads to improved retention in care and more accurate ascertainment of treatment outcomes.

Recommendations

Improve accuracy and completeness of contact information data recorded in patient files. Establish systems to proactively trace patients defaulting from care in a timely manner.

Key words: paediatric HIV, defaulter tracking, ART Total word count: 295

B 5: AETIOLOGY OF SEVERE PNEUMONIA IN MALAWIAN CHILDREN AND THE IMPACT OF HIV INFECTION by LA Mankhambo1, A Phiri1, S Kaunda1, T Chikaonda1, M Mukaka1, ED Carrol1,4, ME Molyneux1,2, SM Graham1,2,3.

Malawi-Liverpool-Wellcome Trust Programme of Clinical Tropical Research and Department of Paediatrics, University of Malawi College of Medicine, Blantyre, Malawi1, Liverpool School of Tropical Medicine, University of Liverpool, UK2, Centre for International Child Health, University of Melbourne Department of Paediatrics and Murdoch Children's Research Institute, Royal Children's

Hospital, Melbourne, Australia3, Division of Child Health, The University of Liverpool, Institute of Child Health, Royal Liverpool Children's Hospital, Liverpool, UK4.

Background

Pneumonia is the leading cause of childhood deaths throughout the developing world, with the highest case-fatality rates in the sub-Saharan Africa region. Studies from the region of hospitalised children with pneumonia have consistently shown that HIV infection is a significant risk factor for death. Many data suggest that HIV-infected children are also at increased risk of bacterial pneumonia and tuberculosis (TB). In HIV-infected infants, Pneumocystis pneumonia (PcP) is a common cause of death. While necropsy studies of African children suggest that bacterial pneumonia is a major cause of death in HIV-infected children, such studies are not able to identify the common bacterial pathogens causing pneumonia. Therefore more specific data of aetiology are required to inform appropriate antibiotic treatment guidelines and the potential of bacterial vaccines. We aimed to describe the causes of severe pneumonia in Malawian children and to examine the impact of HIV infection on cause and outcome.

Methods

We conducted a prospective descriptive study at Queen Elizabeth Central Hospital (QECH) over a 16-month period. Children between 2 months and 14 years of age with a clinical diagnosis of severe or very severe pneumonia according to WHO criteria were recruited.

Results

We studied 327 children with a clinical diagnosis of severe pneumonia, of whom 54% were males. The median age was 11 months, IQR 5 to 30 months. 135 of 265 children (51%) were HIV-infected. 60 patients had bacterial pneumonia, in whom Streptococcus pneumonia and Salmonella typhimurium were the commonest pathogens isolated in blood. In the same patients S. pneumonia was the most common isolate in lung aspirate samples by polymerase chain reaction (PCR). 16 had a diagnosis of Pneumocystis pneumonia (PcP), in whom 10 had positive nasopharyngeal aspirate (NPA) for Pneumocystis-IF. 6 patients had a diagnosis of pulmonary tuberculosis (PTB) on clinical grounds, one of these patients Mycobacterium tuberculosis was cultured from a NPA specimen. In 246 children, a causative pathogen was not found. 61%, 85% and 71% of the children with bacterial pneumonia, PcP and PTB were HIV infected respectively. In the bacterial pneumonia group, 100% and 67% of the patients with H.influenzae type b and pneumococcal bacteraemia were HIV positive respectively. The overall case-fatality rate was 4% and was significantly higher in known HIV-infected, those under 6 months of age and in those with a diagnosis of PcP.

Conclusions

Malawian HIV-infected children are at increased risk of bacterial pneumonia, PCP and TB. Streptococcus pneumonia is a common cause of bacterial pneumonia in HIV infected children. HIV infection has an impact on clinical course and outcome of pneumonia.

B 6: AN OPERATIONAL AUDIT OF TASK SHIFTING USING EXPERT PATIENTS IN A TERTIARY CARE ART CLINIC IN ZOMBA, MALAWI by Lyson Tenthani,1 Adrienne Chan,1,2 Monique van Lettow,1 Richard Bedell1
1 Dignitas International, Malawi, Zomba 2 University of Toronto,

Background

In 2007 Dignitas International, in partnership with the Ministry of Health, trained a cadre of Expert Patients (EPs) at the Tisungane ARV Clinic at Zomba Central Hospital. EPs were trained, using Ministry of Health curricula if applicable, to assist with clinic tasks including taking vital signs, anthropometry and counseling. In October 2008, an operational audit was conducted to assess the

level of competency of the EPs; and to explore perceptions of patients, formal health staff and the EPs themselves regarding the value and acceptability of the expert patient program (EPP).

Methods

A cross sectional study involved in-depth interviews with all EPs, 1 medical doctor, 3 clinicians, 2 nurses and 20 randomly selected patients to explore perceptions. 81 exit patient interviews were conducted to assess whether essential ART information was conveyed during counseling sessions performed by EPs. 93 vitals signs and anthropometry measures performed by EPS were repeated by a nurse to calculate inter-observer differences..

Results

Formal health staff perceives the EPs' competency to be somewhat inferior but acceptable in the light of a health care worker shortage. The results of the inter-observer analysis suggests > 90% agreement of vitals and anthropometry between EPs and nurses. Over 96% of patients exiting a counseling session reported, without prompting, at least 3 side-effects of ARVs, correct consequences of non-adherence to ARVs and correct actions to be taken on observing a side-effect. Patients accept and value EPs involvement in ART provision and care. EPs appeared to disclose their status to patients less frequently than expected with new patients compared to patients followed longer in the clinic.

Conclusions

EPs appear to add value to the ART services in Zomba Hospital. EPs not only carry out the shifted tasks acceptably thus saving formal health staff time, they also act as living testimonies of patients on ART.

m.vanlettow@dignitasinternational.org

B 7: OUTCOME ASSESSMENT OF DECENTRALISATION OF ANTIRETROVIRAL TREATMENT (ART) PROVISION IN A RURAL DISTRICT OF MALAWI by G Mateyu1, AK Chan1,2, A. Jahn3,4, E.Schouten3, E. Ludzu5, W. Mlotha5, M. Kambanji1, M van Lettow1

1 Dignitas International, Zomba, Malawi; 2 St. Michael's Hospital, Toronto, Canada; 3 Department of HIV and AIDS, Ministry of Health, Lilongwe, Malawi, 4 University of Washington, Seattle USA;
5 Zomba District Health Office, Zomba, Malawi.

Background

In Zomba District (population 670,500) 80% of the population lives in rural areas. Distance from ART services is considered a barrier to uptake and retention. Health care is provided through 1 central hospital and 32 healthcare facilities. In 2004, a specialized HIV clinic was established at Zomba Central Hospital (ZCH). In 2007 the MoH, with the support of Dignitas International, commenced ART

decentralisation at 9 sites. At time of study, ART provision occurred at 16 decentralised sites in the district.

Methods

Mortality and defaulter rates were assessed in patients registered for ART at ZCH between October 2004 and January 2009. ART was prescribed according to national guidelines. All patients initiated ART at ZCH. Stable patients were decentralised to sites closer to their homes after 3 months.

Results

8,092 patients (63% women) were enrolled on ART. Of these, 3,440 (43%) were decentralised for follow up ART care. Of those, 2.9% died, 7.4 % defaulted and 0.1% stopped. Of those not decentralised to a peripheral site, 11.3% died, 15.0% defaulted and 0.4% stopped. In multivariate logistic analysis adjusting for sex, age, clinical stage at initiation and duration of treatment and follow up, lower mortality and lower defaulting were independently associated with being decentralised. The adjusted OR for an independent association were 0.19 (95%C.I. 0.15-0.25) for deaths and 0.48 (95%C.I. 0.40-0.58) for defaulters.

Conclusions

Data after 1½ year of decentralisation of ART follow up supports the hypothesis that decentralisation of ART provision decreases defaulter rates. While decreased defaulter rates can be explained by lower transportation costs and proximity to health care, lower mortality is most likely explained by the selection of stable patients for decentralisation. Decentralisation of care to rural health facilities appears a safe and effective way to rapidly scale-up ART services towards the goal of universal coverage in predominantly rural Malawi.

B 8: OUTCOMES OF A DEDICATED HIV POSITIVE HEALTH CARE WORKER CLINIC FOR TREATMENT AND MANAGEMENT AT A CENTRAL HOSPITAL IN MALAWI by Lyson Tenthani1, Adrienne Chan1,2, Moses Kumwenda1, Lucy Gawa1, Martias Joshua3, Sumeet Sodhi 1,2, Monique van Lettow1 m.vanlettow@dignitasinternational.org

1 Dignitas International, Malawi, Zomba 2 University of Toronto, 3 Zomba Central Hospital

Background

With an HIV prevalence of 14%, Malawi has one of the world's lowest densities of physicians and nurses per capita. In January 2007, a novel HIV clinic dedicated to Health Care Workers (HCWs) and their immediate families was created at Zomba Central Hospital, with support from Dignitas International. In July 2008 an operational audit was conducted that compared HCW clinic client characteristics and treatment outcomes against those at the general ART clinic at the hospital.

Methods

A cross sectional retrospective descriptive analysis of patients enrolled up to July 2008 was performed with data routinely collected as per national guidelines.

Results

265 clients were enrolled on ART in the HCW clinic, 6386 in the general ART clinic. The mean age of HCW clinic clients was 37; slightly older compared to the general clinic. The sex ratio was similar in both clinics (females 60%). Significantly more HCW clinic clients were initiated on ART on the basis of CD4 (Stage I or II) compared with the general clinic (33% vs. 22%). Significantly fewer HCW clinic clients defaulted (4.2% vs. 16.2%), and died (4.2% vs. 12.6%) compared to the general clinic. Significantly more side effects were reported in the HCW clinic compared to the general clinic (25.1% vs. 12.8%), resulting in a significant difference in the proportion of clients on alternative first line (18.6% vs. 6.2%) or second line ART (1.5% vs. 0.2%).

Conclusions

Provision of care to HIV infected HCWs is a priority in resource-constrained settings. Outcomes at the HCW clinic appear better compared to the general ART clinic and clients reported more side effects to the first-line stavudine-based regimen. These findings may be explained by improved self-detection of side effects by HCWs or the mandatory presence of a physician as the primary caregiver in the clinic.

B 9: DESCRIPTION OF SIDE EFFECTS OF A STAVUDINE (D4T) BASED FIRST-LINE ART REGIMEN, RATE OF SUBSTITUTION TO ALTERNATIVE FIRST LINE REGIMEN AND IMPACT ON OUTCOMES IN AN ART PROGRAM IN ZOMBA, MALAWI

by AK Chan1,2, Richard Bedell1, E Mwinjiwa1, G Mateyu1, M Joshua3, M van Lettow1 m.vanlettow@dignitasinternational.org

1 Dignitas International, Zomba, Malawi; 2 St. Michael's Hospital, University of Toronto, Canada; 3 Zomba Central Hospital, Ministry of Health, Zomba, Malawi,

Background

ART scale-up in Malawi adopted as first line treatment, fixed dosed combination d4T-3TC-NVP. A d4T based regimen was chosen due to efficacy, cost, and short term toxicity profile. Long term effects of d4T toxicity include irreversible peripheral neuropathy (PN), lipodsytrophy syndrome (LDS) and potentially life-threatening lactic acidosis (LA). Ministry of Health scale-up of ART through Zomba Central Hospital in southern Malawi began in 2004. To date there has been no published long term analysis of the side effects of patients on long-term d4T in Malawi.

Methods

Routine program data was collected and analyzed from ART patient master cards and the ART register for patients registered from October 2004 to end March 2009 in the ART clinic at ZCH.

Results

Of the 9180 patients enrolled on ART, 2220 patients (24.2%) reported ever experiencing one or more side effects. Patients who experienced d4T related side effects as their first reported side effect (19% of the cohort) included those with PN (1662), LDS (43), and LA (64). Median time to first reported development of PN was 4.1 months (range 0 - 58), LDS 29.3 months (range 0 - 70)), and LA 18.9 months (range 0 - 66). Of the patients who ever reported LA, 48 (76%) were substituted to alternative first line at a median time to substitution of 0 months. Of the patients who ever reported PN, 267 (16%) were substituted to alternative first line at a median time from reported onset of PN to substitution of 4.1 months.

Conclusions

Currently, the WHO recommends AZT or TDF to be the preferred NRTI in backbone with 3TC over d4T. In Malawi, the prevalence of long-term d4T associated side effects may be higher than anticipated. The median time to development of PN also appears to be earlier than suggested in the literature. Rates of substitution may not be an accurate reflection of need for substitution due to lack of information on severity of PN and also resource limitation in alternative first line drug supply.

B 10: IMPROVED UPTAKE OF ANTIRETROVIRAL THERAPY (ART) FOLLOWING INTEGRATION OF TB AND HIV SERVICES IN A DISTRICT IN SOUTHERN MALAWI by Adrienne K. Chan,1,2 Joseph Njala,3 Henry Kanyerere4 , M. Joshua5, Monique van Lettow1, m.vanlettow@dignitasinternational.org

1 Dignitas International, Zomba, Malawi; 2 University of Toronto, Toronto, Canada; 3 HIV Unit, Ministry of Health, Malawi, 4 Malawi National Tuberculosis Programme, 5 Zomba Central Hospital

Background

Malawi has a high proportion of TB patients co-infected with HIV (~70%). Malawi's national guidelines support routine HIV testing for all TB patients and recommend that patients who are HIV-infected with active TB or TB within the past two years be eligible for ART initiation. In order to improve ART uptake by co-infected patients, integration of services started in 2007/2008, through a novel TB/HIV Integration Clinic at Zomba Central Hospital (ZCH).

Methods

A specialist antiretroviral (ARV) Clinic was opened at ZCH in October 2004 through partnership with the MoH of Malawi and Dignitas International (an NGO), to serve the 670,500 residents of Zomba district. ZCH is also the district registration site for TB treatment, and enrols over 2000 patients per year. Integration of services began September 2007 through monthly HIV/TB integration days.

Services were fully integrated in April 2008 with the renovation of a daily TB/HIV Integration clinic where all patients registered for TB are tested for HIV and referred for HIV care in the same physical area. MoH TB patient records and ART mastercards from September, 2007- December, 2008 were reviewed to assess uptake of ART and inform programming.

Results

In Quarter 3, 2007, uptake of ART during TB therapy was 10%. End Quarter 1, 2008 just prior to transition from partial to fully integrated services uptake of ART was 14%. In Quarters 3 and 4, 2008, following transition to fully integrated TB/HIV services uptake of ART had increased to 30%.

Conclusions

Integration of TB/HIV services has improved uptake of ART in co-infected patients, however large numbers are still not receiving ART. Currently the national policy in Malawi is to delay initiation of ART until completion of the induction phase of TB treatment at 2 months. In the Malawian context, there is utility in studying if earlier introduction of ART in patients receiving TB treatment at 2 weeks may improve uptake of ART.

B 11: CLINICAL FEATURES AMONGST ART PATIENTS WHO DEVELOP SUSPECTED TB EARLY AFTER INITIATION IN A DISTRICT IN SOUTHERN MALAWI by Richard Bedell1, Adrienne K. Chan1,2, Jean Bourgeois1, Henry Kanyerere3, Erik Schouten4, M. Joshua5, Monique van Lettow1 m.vanlettow@dignitasinternational.org

1Dignitas International, Zomba, Malawi; 2 University of Toronto, Toronto, Canada; 3National TB Program, Ministry of Health, Malawi; 4HIV Unit, Ministry of Health, Malawi, 5Zomba Central Hopsital

Background

Unmasking of previously undiagnosed TB contributes to high early mortality after ART initiation. Clinical characterization of these patients in a low-resource setting such as in Malawi, can be used to inform decisions about routine screening of patients using algorithms and technology that are appropriate to resource-limited health facilities.

Methods

Ministry of Health (MOH) TB program data in Zomba District was extracted on patients registered from April 2008-January 2009. MOH ART mastercard data was extracted from the time of ART cohort inception (October 2004-January 2009). ART patients who developed TB within 3 months of ART initiation were compared with patients who did not develop TB using SPSS.

Results

We evaluated 236 patients (140 female, 96 male) who developed TB while on ART during this period. Median time to development of TB was 5.7 months (IQR 2.3-16.9). 88 developed TB within 3 months of ART initiation. Descriptive data with respect to initial clinical presentation (cohort vs. comparator) demonstrated: chronic fever (3% vs. 3%), chronic diarrhea (3% vs. 6%), history of weight loss (48% vs. 23%), cytopenias (2% vs. 0.5 %), severe bacterial infection (22% vs. 10%), wasting syndrome (29% vs. 19%), prior history of TB within the last two years (4.5% vs. 8.5%). In multivariate logistic analysis low CD4 as reason for initiation, clinical presentation at initiation with weight loss <10% of normal body weight, or recurrent upper respiratory tract infection, or severe bacterial infection, were independently associated with the diagnosis of TB within 3 months of ART initiation.

Conclusions

A large proportion of patients who develop TB after initiation of ART develop it within the first three months due to IRIS. History of weight loss at initial staging, weight loss after initiation of ART, and severe bacterial infection should prompt detailed investigation for occult TB. In the operational context, particular attention to stage II criteria of weight loss <10% and recurrent URTI as cues to investigate for occult disease may prevent TB-IRIS associated complications.

B 12: ONE-YEAR RETROSPECTIVE REVIEW OF A PEDIATRIC PROVIDER INITIATED OPT-OUT HIV TESTING AND COUNSELING (PITC) PILOT PROGRAM AT KAMUZU CENTRAL HOSPITAL (KCH) IN LILONGWE, MALAWI: A TASK-SHIFTING-BASED (TSB) MODEL

by ED McCollum1; GA Preidis2; MM Kabue3; EBM Singogo3; C Mwansambo4; PN Kazembe3; MW Kline1
ericdmccollum@gmail.com

1Baylor International Pediatric AIDS Initiative, 2Baylor College of Medicine, Translational Biology and Molecular Medicine Program, Department of Pediatrics, 3Baylor College of Medicine Children's Foundation-Malawi, 4Kamuzu Central Hospital Pediatric Department, Lilongwe, Malawi

Background

In 2008, Baylor College of Medicine-Children's Centre of Excellence (COE), partnering with Lighthouse and KCH, implemented a TSB PITC program to improve HIV testing and counseling (HTC) and linkages to care of HIV-infected (HIV+) and exposed (HIV-E) children hospitalized at KCH. Due to limited KCH staffing, the model task-shifted HTC to counselors and program flow to patient escorts (PE). PE were introduced 3 months after implementation. Scant literature exists evaluating PITC best-practice models in resource-limited settings.

Objectives and scope

To evaluate the TSB model and PE impact 1 year after implementation.

Methodology

A retrospective review of data from 6,318 children hospitalized January-December 2008 was conducted. Quarter 1 (pre-PE) and quarter 4 (post-PE) data were compared.

Results

Overall, 45.2% of admissions were offered HTC with 97.9% accepting. There was a 3-fold increase in patients offered HTC pre-PE vs post-PE (19.9% to 61.3%, p<0.0001). Overall, 8.5% of children were HIV+, 6.5% were HIV-E, and 85.0% were HIV-uninfected (HIV−). 66.2% of HIV+ and HIV-E children were reviewed in the hospital by a HIV trained clinician, and 62.5% of patients referred to the COE clinic returned for outpatient care. Compared to pre-PE, patients in post-PE were younger (15.9 vs 26.7 months, p<0.0001) and fewer were female (38.2% vs 48.1%, p<0.0001). Post-PE patients were also tested sooner after admission (1 vs 2 days, p<0.0001), and more identified themselves as already HIV+, HIV-E, or HIV− (3.1%, 4.3%, 10.0% vs 0.6%, 0.2%, 3.6% respectively; p<0.0001).

Conclusion(s)

The KCH TSB PITC model offered HTC to an increasingly higher volume of younger patients more quickly while remaining acceptable to patients. Task-shifting to counselors and PE is critical. The increase in patients identifying their HIV-status likely reflects PE effectiveness. Care linkages need strengthening and the male gender bias requires investigation.

Recommendation(s)

The TSB PITC model is scalable to pediatric wards throughout Malawi.

B 13: LOPINAVIR/RITONAVIR (LPV/R) SUPERIOR TO NEVIRAPINE (NVP) IN HAART FOR WOMEN WITH PRIOR SINGLE-DOSE NEVIRAPINE (SDNVP) EXPOSURE: A5208 ("OCTANE") by Mina Hosseinipour, Lameck Chinula, Cecelia Kanyama, Charity Potani, Agnes Moses for the A5208/OCTANE Study Team

Background:

sdNVP, widely used in Malawi, reduces mother to child transmission (MTCT) of HIV, but can lead to NVP-resistant virus. The optimal ART regimen for women exposed to sdNVP is unknown.

Objective and Scope

We sought to determine whether LPV/r or NVP based treatment was more effective in treating women with exposure to single dose NVP.

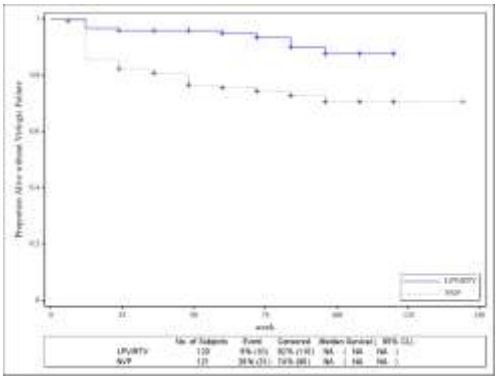
Methods

In 7 African countries, 243 HIV-infected women (10% from Malawi) who had taken intrapartum sdNVP at least 6 months prior to screening and CD4+ < 200 cells/mm3, were randomized to treatment with Truvada (TVD) with either LPV/r BID (n=120) or with NVP BID (n=123). The primary endpoint was time from randomization to death or confirmed virologic failure.

Results

At entry, median was 31 years, CD4+ 139 cells/mm3, HIV-1 RNA 5.15 log10 copies/mL, and time since last sdNVP ingestion 17 months. Median duration of follow-up was 73 weeks. Significantly more women in the NVP arm (31, or 26%) than the LPV/r arm (10, or 8%) reached a primary endpoint

(p=0.0007). Of these, 36 were VF (27 in NVP, 9 in LPV/r arm) and 5 were death without preceding VF (4 in NVP, 1 in LPV/r arm). No deaths were felt to be treatment-related.



The difference between NVP and LPV/r arms appeared to decrease with increasing time between last sdNVP exposure and treatment initiation. Failure in the NVP arm was more common among women with NVP resistance mutations at baseline(73%) than those without (18%). More women (15, 12%) discontinued NVP due to adverse events than LPV/r (1, 1%).

Conclusions

HAART with LPV/r was superior to NVP among women who had previously taken sdNVP.

Recommendations

Where possible, alternatives of sd NVP for PMTCT should be used to prevent suboptimal response to subsequent NVP based treatment.

B 14: PEARLS (ACTG A5175): A MULTINATIONAL STUDY OF DIDANOSINE-EC, EMTRICITABINE AND ATAZANAVIR VS. CO-FORMULATED ZIDOVUDINE / LAMIVUDINE AND EFAVIRENZ FOR INITIAL TREATMENT OF HIV-1 INFECTION by F. Kilembe S. Berendes, V. Kayoyo , C. Kanyama, N. Saukila, Mulinda Nyirenda, N. Carpenetti, J. Eron, J. Kumwenda, M. Hosseinipour10,for the PEARLS study team of the ACTG

Background:

An antiretroviral (ARV) regimen of didanosine-EC (ddI), emtricitabine (FTC) and unboosted atazanavir (ATV) potentially has advantages over commonly used regimens.

Objectives and Scope

To investigate if a once - daily regimen containing two NRTIs + PI (Arm 1B) is not inferior to a twice - daily regimen containing two NRTIs + NNRTI (Arm 1A).

Methods

Phase IV, randomized, open-label, trial in HIV-1-infected, ARV-naïve participants 18 years with CD4 count < 300 mm-3. Participants were randomized to Arms A: co-formulated zidovudine/lamivudine (ZDV/3TC) BID + efavirenz (EFV) QD, B: ddI QD + FTC QD +ATV QD, or C: co-formulated tenofovir/emtricitabine QD + EFV QD. "Failure" was time from randomization to: 1) two HIV-1 RNAs (VL) 1000 c/mL week 16 onward (VF); 2) HIV-1 disease progression (AIDS); or 3) death due to any cause. Enrollment was completed August, 2007. Planned Data/Safety Monitoring Board review on 6-May-2008 recommended Closure of ARM B. We report 99.8% confidence intervals (CI), per stopping guidelines.

Results

1,045 participants (547 men and 498 women) from 8 developing countries (including x from Malawi) and the USA received Arm A and B regimens; 72 weeks median follow-up. Probability of "Failure" in Arm B was 16.2% at 48, and 23.9% at 96 weeks. The relative hazard of Failure (HR) for Arm B versus A was 1.67 (CI 1.02, 2.75). For "Failure" components: VF (HR 1.77; CI 1.04, 3.03), AIDS (HR 3.0; CI 0.61, 14.9), and death (HR 0.99; CI 0.23, 4.26). Gender, age, CD4 count, tuberculosis and AIDS history, location and adherence were independently associated with failure risk in Arm B. Follow-up in Arms A and C is ongoing.

Conclusions

ddI+FTC+ATV had inferior outcome compared to ZDV/3TC+EFV. Study participants currently taking this regimen are switching to alternate ARVs.

Recommendations

ddi+FTC+ ATV is not recommended as initial treatment of HIV.

B 15: USING AMPHOTERICIN B FOR THE MANAGEMENT OF CRYPTOCOCCAL MENINGITIS IN A RESOURSE-LIMITED SETTING: THE ROLE OF A PRINTED DAILY ASSESSMENT FORM by A Jackson1, 2, D. Namarika1,2, J. Phulusa1,2, M. Chikasema1,2, C. Kenyemba2, D. Henke2, R. Hogenschurz1, M. Hosseinipour2

Institute(s):
1Kamuzu Central Hospital, Department of Medicine, Lilongwe, Malawi, 2UNC Project, Lilongwe, Malawi

Background

Cryptococcal meningitis (CCM) is a major cause of HIV-related mortality in Malawi, accounting for almost 40% of meningitis cases. It carries a mortality approaching 50% at 10 weeks. Until recently oral fluconazole has been the main pharmacotherapy for CCM. Amphotericin B (AMB) is available but has been underused due to perceived difficulties with toxicity and administration.

Objectives and scope

To improve treatment of CCM by using AMB for the first week of treatment.
To improve patient care by using a printed daily assessment form.

Methodology

Our protocol involves 1-week AMB (1mg/kg/day) followed by 1200 mg/day oral fluconazole. We use a printed CCM Management Form which is attached to the patients' notes. The form is filled in daily and reminds the clinician to assess 1) AMB administration, 2) intravenous fluid/potassium administration, 3) LP requirement, 4) blood monitoring requirement. CSF pressures and blood results are recorded on the form.

Ward files and laboratory records were analysed retrospectively for outcomes and adverse events.

Results

The CCM management form was made available from Jan 29th, 2009. To date (April 21st) 35 CCM cases (49% male) have been treated in Kamuzu Central Hospital. No adverse events resulted in early discontinuation of AMB. Significant hypokalaemia was seen in 5 (14%). There have been 5 in-hospital deaths (17%). Outcome data for 6 patients were missing.

Initial implementation difficulties involved low staff awareness of the forms, missing of scheduled blood draws and omission of supplemental potassium doses. This has improved with ongoing education.

Conclusions and recommendations

Administration of AMB for 1 week is feasible at central hospital level in Malawi with the aid of a printed management form. This simple measure may improve the delivery of medical care to a vulnerable group. An ongoing register will assess the effect that this will have on mortality and morbidity.

B 16 ADDITION OF 7 DAYS OF ZIDOVUDINE (ZDV) PLUS LAMIVUDINE (3TC) TO PERIPARTUM SINGLE-DOSE NEVIRAPINE (SDNVP) IS EFFECTIVE IN REDUCING NEVIRAPINE RESISTANCE AT 2 AND 6 WEEKS POSTPARTUM IN HIV-INFECTED MOTHERS IN LILONGWE, MALAWI by Sherry L. Farr, Julie A. E. Nelson, Thokozani J. Ngombe, Angela D. M. Kashuba, Charles Chasela, Athena P. Kourtis, Dumbani Kayira, Jeffrey A. Johnson, Gerald Tegha, Jeffrey Wiener, Charlie Van der Horst and the UNC Project BAN Study Team

Objectives and Scope

We assessed whether the addition of zidovudine and lamivudine (ZDV+3TC) for 7 days postpartum (pp) to sdNVP at labor decreases development of NVP-resistant virus in maternal plasma and breast milk (BM).

Methods

We analysed plasma from 132 HIV-infected pregnant women who received sdNVP at labor and ZDV+3TC for 7 days pp, 66 women (control) were followed antenatally to 6 weeks pp who received sdNVP at labor. Plasma and Breast milk specimens were tested for genotypic resistance to NVP, while sensitive real-time PCR to detect minority level NVPR mutations at 6 weeks pp. NVP concentration was measured by HPLC/UV or MS to 10ng/mL LLQ. Wilcoxon rank-sum and Pearson chi-square test was used to compare HIV-1 viral loads and frequency of NVP, ZDV and 3TC resistance mutations and NVP concentrations between groups.

Results

At delivery NVP plasma concentrations were detected in 89% sdNVP/ZDV+3TC and 93% sdNVP groups ($p=0.39$), 46% and 82% at 2 weeks pp ($p<0.0001$), and 5% and 5% ($p=0.80$) at 6 weeks pp. At 2 weeks, 2% (1/54) receiving sdNVP/ZDV+3TC and 67% (30/45) receiving sdNVP had NVPR ($p<0.0001$). At 6 weeks pp, NVPR was found in 8% (10/123) of women receiving sdNVP/ZDV+3TC and 52% (34/66) of those receiving sdNVP ($p<0.0001$). The common mutations

were K103N (n=28; 11 bulk detectable, 17 minority level) and Y181C (n=22; 9 bulk detectable, 13 minority level). Of women with detectable VL in BM, 0/4 in the sdNVP/ZDV+3TC group and 3/3 in the sdNVP group showed NVPR. No ZDV or 3TC resistance mutations were detected.

Conclusions

The addition of 7 days of ZDV+3TC to sdNVP at labor significantly reduced viral resistance to NVP at 2 and 6 weeks postpartum.

Recommendations

There is need to reinforce addition of 7 day tail of ZDV + 3TC to sdNVP already underway in most PMTCT programs.

B 17: THE EFFECT OF THE ART SCALE-UP ON ADMISSIONS TO KAMUZU CENTRAL HOSPITAL AND LIGHTHOUSE HIV CLINIC IN LILONGWE, MALAWI by Emily Roemer1, Dan C. Namarika2, 3, Sam Phiri4, Irving Hoffman1, William C. Miller1, Leela Aertker3, Rose Banda4, Hannock Tweya4, Jeff Rafter5, Francis Martinson1, 3, and Mina C. Hosseinipour1,3

1UNC School of Medicine, Chapel Hill, NC, US, 2Kamuzu Central Hospital, Lilongwe, Malawi, 3UNC Project, Lilongwe, Malawi, 4Lighthouse Clinic, Lilongwe, Malawi, 5Baobab Health Partnership, Lilongwe, Malawi

Background

The Malawi ART program has expanded ART coverage to 43% of those in need with over 200,000 Malawians ever started on ART.

Objective and Scope

This study evaluates the impact of ART on the spectrum of admissions to two health facilities in Lilongwe, Malawi: (1) adult medical ward of Kamuzu Central Hospital (KCH) and (2) day ward of Lighthouse Clinic (LH).

Methods

Records of patients presenting to KCH from July 2005 to December 2007 or LH from April 2005 to December 2007 were evaluated. Diagnoses were grouped into categories: HIV-related, non HIV-related, ART toxicity, and unknown. Each patient could have more than 1 diagnosis. Pearson chi-squared test was performed to determine if diagnoses changed significantly over time.

Results

8126 patients from KCH and 3020 from LH were included in the analysis. Admissions at LH declined over 50% from 2005 to 2007. There was also a significant shift away from HIV-related admissions

(47% to 41%) in favor of ART toxicities (7% to 12%) ($p < 0.001$). At KCH, HIV-related admissions trended downwards (34% to 31%) while ART toxicities remained constant (1%) ($p = 0.109$). Infectious diseases comprised the burden of illnesses at both locations. The most frequent reasons for admission were malaria (28%), lower respiratory tract infections (14%), and gastrointestinal problems (9%) at KCH and gastrointestinal problems (10%), HIV-associated malignancies (10%), and lower respiratory tract infections (10%) at LH.

Conclusions

The rapid scale-up of ART has impacted the spectrum of diagnoses of patients in Malawi. HIV-related admissions trended downward as ART coverage increased. With universal access to ART at Lighthouse, the trend was significant; however current ART coverage levels were unable to significantly modify the trends at the tertiary KCH.

Recommendations

Continued ART roll-out towards universal access to ART is essential to reduce HIV related admissions.

B 18: SAFETY AND EFFECTIVENESS OF VAGINAL MICROBICIDES, BUFFERGEL AND PRO 2000 GEL FOR THE PREVENTION OF HIV INFECTION IN WOMEN by T Tembo, F Martinson, B Makanani, L Chinula, T Mvalo, C Nkhoma, M Ndovie, M Hosseinipour, N Kumwenda, I Hoffman, T Taha.

Background

Female initiated HIV prevention methods are a high priority.

Objective

This study assessed the safety and effectiveness of 2 microbicides—BufferGel and 0.5% PRO 2000/5 gel—to prevent HIV transmission.

Methods

A phase II/IIB, four-arm, randomized, placebo-controlled trial was conducted in Malawi, South Africa, Zambia, Zimbabwe, and the US. The 3 study gel arms were double-blinded, while the no gel arm was open label. The study participants were followed monthly for pregnancy, safety assessments, and study product resupply; and quarterly to assess gel and condom use and HIV infection. The primary analysis compared HIV incidence in each active gel arm compared to each control arm.

Results

We randomized 3099 women and followed them for an average of 20.4 months (retention rate 93.6%). There were no statistically significant differences in adverse events. Adherence to gel use was 81%. Condom use was 72% in gel arms and 81% in no gel arm ($p < 0.05$). 0.5% PRO 2000/5 Gel was most effective among women who reported low condom use and high gel adherence.

Intention-to-treat analysis	HIV Events [woman-years]	Incidence per 100 woman-years	Hazards Ratio vs Placebo	Hazards Ratio vs No Gel

0.5% PRO 2000/5 Gel	36 [1332]	2.70	0.7 (0.5 to 1.1), p = 0.10	0.7 (0.4 to 1.0), p = 0.06
BufferGel	54 [1304]	4.14	1.1 (0.8 to 1.6), p = 0.63	1.1 (0.7 to 1.6), p = 0.78
Placebo Gel	51 [1305]	3.91		
No Gel	53 [1318]	4.02		
Overall	194 [5258]	3.69		

Conclusions

Women in the 0.5% PRO 2000/5 Gel arm had a 30% lower rate of HIV acquisition compared to controls, although not statistically significant. BufferGel did not alter the risk of HIV infection. Both products were safe.

Recommendations

Vaginal gel may prevent HIV infection, more research is needed to determine the effectiveness of PRO 2000

B 19: ANTIRETROVIRAL TREATMENT INITIATION AND INCREASED SURVIVAL OF HIV INFECTED INFANTS TRACED FROM PREVENTION OF MOTHER TO CHILD TRANSMISSION (PMTCT) FACILITIES TO PEDIATRIC HIV CARE: HIGHLIGHTING THE NEED FOR PROGRAM COORDINATION IN LILONGWE, MALAWI by M. Braun, M.M. Kabue, L. Aertker, M. Chirwa, I. Mofolo, I. Hoffman, M. Hosseinipour, P.N. Kazembe, C. Van der Horst, M.W. Kline

Objective

To identify delays in diagnosis and care initiation of HIV positive infants identified in antenatal clinics (ANC) and at Kamuzu Central Hospital in Lilongwe, Malawi, and to outline the successes and challenges of program linkage as well as clinical outcomes of infants successfully referred to HIV care.

Methodology

Using several electronic and paper-based sources of infant HIV test results, we compiled a comprehensive list of HIV positive infants and linked the PMTCT maternal data, infant testing data and pediatric HIV clinical outcomes for each infant.

Results

Since June 2006 PMTCT programs in 4 Lilongwe ANCs have identified 7033 positive women. During this same time, 5168 infants were HIV tested, with 704 (14%) positive results. 235 infants (33%) were linked to their maternal ANC data, and 168 (24 percent) were traced to care. Mean age at diagnosis was 5.2 months, and 83.3% enrolled at less than 12 months old. Mean time from diagnosis to clinic enrollment varied significantly between inpatient and outpatient referrals (-0.204 vs. 2.11 months, p-value < 0.001). 93 infants (55.4%) initiated ART; 72% from out-patient referrals. Mean age at ART initiation was 8 months for out-patient referrals and 13 months for in-patient referrals (p<0.001). Time on ART was significantly related to survival, p-value = 0.01. Children initiating ART had 6.6 times greater odds of survival than those who did not initiate ART (OR= 6.6, 95 percent CI= 3.3–13.2, p-value < 0.001).

Conclusions

Despite increases in PMTCT and pediatric HIV services, HIV infected infants remain unidentified or do not receive ART services. Increased survival of infants initiating ART highlights the need for early diagnosis in outpatient clinics and effective referral to pediatric ART clinics.

Recommendations

A common patient identification number, mother-infant identification linkage, and regular correspondence between PMTCT, infant testing, and pediatric ART services would improve pediatric HIV identification and care initiation.

B 20: LIPID CHANGES AMONG PATIENTS ON STANDARD SECONDLINE ANTIRETROVIRAL TREATMENT AT LIGHTHOUSE by Moses 1, D Mzinganjira1, R. Weigel 2, C. Kanyama1 , G. Dickie1 , L. Brown1 , S. Phiri 2, M. Hosseinipour1

University of North Carolina Project, Lilongwe, Malawi 1; Lighthouse Trust, Lilongwe, Malawi2.

Introduction

The Protease inhibitors (PI) class of antiretrovirals is associated with metabolic abnormalities including hypercholestrolemia and hypertriglyceridemia. With the use of PI in the second line antiretroviral regimen, hyperlipidemias require attention.

Objectives

To assess the status of cholesterol (mg/dl) and triglyceride (mg/dl) levels in patients receiving PI therapy, at Light house, Lilongwe,to identify clinical sequalae, develop and implement an appropriate treatment strategy in line with National Cholesterol Education Program Guidelines (NCEP).

Methods

Prospective observational cohort study analysis of patients initiating PI-based second line treatment at Light house clinic in Lilongwe (sub-study of SAFEST 2). Serum triglycerides and total cholesterol were measured at baseline (pre-PI treatment) and quarterly thereafter until month 12.

Results

77 patients were included. At baseline, the mean CD4 count, viral load, cholesterol and triglycerides were 125.5 cells/mm3 , 25,600 copies/ml 159.3mg/dl and 155.5mg/dl, respectively. Two patients had grade3 triglycerides and one patient had grade 3 cholesterol at baseline. For the patients who remained in care at 12 months there was a 22% increase in triglycerides and 8.5% increase of cholesterol from baseline. The median changes for cholesterol and triglycerides were 11.5 and 27 mg/dl, respectively. At 12 months, 3 patients had grade 3 cholesterol and 2 patients had grade 3 triglycerides. Two patients received medical treatment. No cases of ischemic heart disease or pancreatitis were reported.

Conclusion

PI treatment increases serum lipids. However, diet and exercise modification was sufficient to control hyperlipidemia for the majority of the patients.

Recommendations

Lipid monitoring should be part of routine care especially for patients on PI, scheduled primarily at baseline, repeated, thereafter if indicated on clinical assessment.

B 21: THE EFFECT OF METRONIDAZOLE ON THE RETURN RATE AMONG PATIENTS TREATED FOR URETHRAL DISCHARGE AT KAMUZU CENTRAL HOSPITAL, LILONGWE, MALAWI

by Naomi Nyirenda1, Gift Kamanga1, Lillian Brown1, 2, Clement Mapanje1, Robert Jafali1, Nkhafwire Mkandawire1 Francis Martinson1, , David Chilongozi1, Marcia M Hobbs2, Myron S Cohen2, Irving Hoffman1, 2

Affiliation: 1University of North Carolina Project, Lilongwe, Malawi
2University of North Carolina at Chapel Hill

Background

Treatment of sexually transmitted infections using the syndromic management approach is cost-effective in settings with limited resources. In Malawi, urethritis is a major syndrome among male STI clinic attendees. The initial standard treatment for urethritis in Malawi used to be a single dose Gentamycin 240mg intramusculary and Doxycycline 100mg twice a day for seven days. This treatment mostly treats gonococal and Chlamydia. A study in the same setting demonstrated the prevalence of 20% for Trichomonas vaginalis in males, causing persistent symptoms of urethritis.

Scope

In 2007 the national treatment guidelines changed to add metronidazole 2 grams stat to the standard treatment of urethritis. We present the findings of a review of this treatment.

Methods

All clinic visits between 1 January 2006 and 31 December 2008 to the Kamuzu Central Hospital STI Unit were entered into a database capturing demographics, symptoms, syndromic diagnosis, and treatment. We looked at the number and percentage of patients returning with persistent symptoms amongst patients treated with gentamycin and doxycline and those treated with gentamycin, doxycline and metronidazole. Persistent symptoms included dysuria and/or discharge within 5-30 days of the initial diagnosis of urethral discharge.

Results

A total of 28,574 clinic visits were recorded, including 9,925 males. 2845 (29%) were diagnosed with the syndrome urethral discharge and the majority were treated with gentamycin and doxycline alone (n=1395, 49%), or gentamyicin, doxycline and metronidazole (n=1152, 40.5%). Overall return rate was higher among those treated with gentamycin and doxycycline alone compared to gentamycin, doxycline and metronidazole (19.1% vs. 14.2%, p=0.001).Continued symptoms were also higher

among those treated with gentamycin and doxycline alone compared to those treated with gentamycin, doxycline and metronidazole (7.8% vs. 5.0%, p=0.005).

Conclusions

The addition of metronidazole to patients with urethritis reduced the overall return rate by about 25% and appears to reduce persistent symptoms by about one-third.

Recommendation

All stakeholders involved in STI treatment in Malawi and similar settings should consider adding metronidazole in treating urethritis.

B 22: RENAL INSUFFICIENCY IN HIV-POSITIVE, ART-NAÏVE INDIVIDUALS IN LILONGWE, MALAWI by A. Akinkuotu, L. Chinula, A.Moses, L. Aertker, V. Kayoyo, C. Potani, C. Kanyama, M. Zgambo and M. Hosseinipour

Background

About 14 % of individuals aged 15-44 years in Malawi are HIV-positive. The current first-line antiretroviral (ART) regimen consists of stavudine, lamivudine and nevirapine. Due to long-term toxicity of stavudine, the Malawian government is considering changing first line treatment to a tenofovir (TDF)-based regimen. Due to potential nephrotoxicity of TDF and exclusion for creatinine clearance (CrCl) <50 ml/min, implementation could be prohibitive if routine baseline CrCl screening were required at all ART centers.

Objective

To determine the prevalence of renal insufficiency (RI) among HIV positive, ART naïve individuals

Methodology

We reviewed baseline characteristics of all adult HIV-positive, ART naïve patients screened for participation in HIV clinical treatment trials in Lilongwe, Malawi from 1/2005 to 12/2008. Creatinine clearance (CrCl) was defined using the Cockroft-Gault equation. We defined renal insufficiency as mild (60-89ml/min), moderate (59-30 ml /min) and severe (<30ml/min).

Results

Of the 377 patients reviewed, 356 patients had recorded creatinine values. Patients were mostly female (78 %) with a median age of 30 years (range 18-68). The median CD4 count was 199.5 (range 1-1285). WHO staging of the patients was I (41 %), II (15 %), III (42 %), and IV (2 %). 236 of 356 patients (66 %) had RI: 205(87 %) mild, 30(13 %) moderate and 1(<1 %) severe. Most patients (343, 96.4 %) had CrCl ≥ 50ml/min. Among patients eligible for ART (WHO stage III, IV or CD4 <250) n equals 174, the prevalence with RI: 145 (84.3 %) mild, 26 (15.1 %) moderate and 1(<1 %) severe. The only factor associated with renal insufficiency was lower body mass index (p-value <0.0001).

Conclusion

Moderate to severe RI is uncommon in HIV positive ART-naïve patients in Malawi thus, few patients would be excluded from TDF-based ART.

Recommendation

Targeted baseline renal screening of low BMI patients could allow a feasible roll-out of TDF-based regimen

B 23: CLINICAL, IMMUNOLOGICAL AND VIROLOGICAL OUTCOMES OF SECOND LINE TREATMENT IN MALAWI by Mina Hosseinipour*1,2, J Kumwenda3, L Brown2, R Weigel4, D Mzinganjira1, B Mhango3, S Phiri4, and J van Oosterhout3,5

1Univ of North Carolina Project, Lilongwe, Malawi; 2Univ of North Carolina at Chapel Hill, US; 3Univ of Malawi Coll of Med, Blantyre; 4Lighthouse Trust, Lilongwe, Malawi; and 5Malawi-Liverpool Wellcome Trust, Coll of Med, Blantyre, Malawi

Background

The Malawi ART program uses clinical and at times, immunological monitoring to identify ART failure. Disease progression may occur before switching to second line ART.

Objective and Scope

We report the outcomes of patients initiated on second line ART.
Methods: Patients meeting WHO immunologic or clinical criteria for ART failure at Lighthouse and QECH were evaluated for virological failure (HIVRNA>400 copies), and if confirmed, initiated on 2nd line ART (ZDV/3TC/TDF/Lopinavir/ritonavir). Clients were seen monthly and CD4, HIVRNA, and safety laboratories were performed quarterly. We performed logistic regression modeling to determine factors associated with mortality, mortality/new HIV illnesses, and viral suppression at 12 months.

Results

109 patients met criteria for ART failure and had HIVRNA>400 copies. 101 patients initiated 2nd line treatment, 5 patients died prior to initiation, and 3 declined switching treatment. Baseline characteristics of the cohort were 43.3% male, median CD4, HIV1-RNA was 65 cells/mm3 and 54939 copies/ml. After 12 months, there were 10 additional deaths and 3 patients defaulted. Among survivors, the proportion with HIVRNA <400 copies at 6 and 12 months was 76.7% and 85.2%, respectively, with a mean increase in CD4 count of 99 and 142 cells/mm3. Grade 3/4 toxicities included: Anemia(9); creatinine elevation (3); and glucose intolerance(3). ZDV and TDF were discontinued for toxicity in 7 and 5 cases, respectively. Meeting WHO criteria for clinical failure (OR=3.47; 95% CI 1.14-10.59) was a risk factor for death. Risk factors for death/morbidity also include a CD4 count <50 cells/mm3 (OR=2.55; 95% CI 1.10-5.98), Hb<10 mg/dl (OR=3.78; 95%CI 1.35-10.57), and BMI<18.5 (OR=3.04, 95%CI 1.17-7.89).

Conclusions

Clinical and immunologic monitoring for ART failure is associated with early mortality and morbidity. Second line treatment was associated with good immunologic and virologic outcomes among survivors at 12 months.

Recommendations

Earlier identification of ART failure is required to minimize early mortality.

B 24: A RANDOMIZED CONTROLLED TRIAL OF HIGH DOSE FLUCONAZOLE WITH OR WITHOUT FLUCYTOSINE FOR HIV-ASSOCIATED CRYPTOCOCCAL MENINGITIS IN MALAWI by A Jackson1, J. Nussbaum1, D. Namarika1,2, J. Phulusa1, J. Kenala1, C. Kenyemba1, J. Jarvis3, M. Hosseinipour1, C. van der Horst4, T. Harrison3
1UNC Project, Lilongwe, Malawi, 2Kamuzu Central Hospital, Lilongwe, Malawi, 3St George's University of London, London, United Kingdom, 4University of North Carolina, Chapel Hill, United States

Background

Cryptococcal meningitis (CCM) is a major cause of HIV-associated morbidity and mortality in Malawi. Improved oral treatment regimens are needed as IV amphotericin B therapy is not feasible in most centres. Fluconazole (FLU) 1200 mg/d is more rapidly fungicidal than 800 mg/d, but mortality remains high.

Objectives and scope

To examine the effect of adding oral flucytosine (FC) to FLU 1200 mg/d for the induction treatment of cryptococcal meningitis.

Methodology

Between February and December 2008, 44 HIV-seropositive, antiretroviral-naive patients with a first-episode of CCM were randomized to receive FLU 1200 mg/day or FLU 1200 mg/day + FC 100 mg/kg/day for 14 days. Both groups then received fluconazole 800 mg/day. Patients were followed as inpatients for 2 weeks and as outpatients until week 10.

The primary endpoint was the rate of clearance of infection from CSF, or early fungicidal activity (EFA), derived from quantitative CSF cultures on Days 1, 3, 7, 14. Secondary endpoints related to safety/mortality through 10 weeks.

Results

41 patients (39% abnormal mental status (GCS< 15)) were analysed (3 withdrawn due to exclusion criteria). Baseline characteristics (mental status, cryptococcal CSF CFU, CSF opening pressure, CD4 count, and HIV VL) were similar between arms. EFA for the combination arm was significantly higher than for fluconazole alone: -0.28 +/- 0.17 log CFU/day versus -0.11 +/- 0.09 log CFU/day ($p < 0.001$). The combination arm had fewer deaths at 2 weeks (2/21, 10% versus 7/20, 37%, $p=0.06$) and 10 weeks (9/21, 43% versus 11/20 58%, $p=0.5$). The combination arm had more neutropenic

episodes (5 versus 1, grade III or IV within 2 weeks (p=0.2)), but no increase in infection-related adverse events.

Conclusions and Recommendations

The results suggest that optimal oral treatment for CCM is high dose fluconazole (1200 mg/d) with flucytosine. Efforts are needed to increase flucytosine availability in Africa.

B 25: CAUSES OF EARLY MORTALITY AMONG INDIVIDUALS STARTING ANTI-RETROVIRAL THERAPY IN KARONGA DISTRICT- NORTHERN MALAWI: ART COHORT STUDY by Mr Charles Mwafulirwa, Karonga Prevention Study, Box 46 Chilumba

Background

The Malawi ART program has been a major success by delivering complex therapy to large numbers of individuals which has resulted in significant reduction in HIV/AIDS associated mortality. Despite this achievement an unacceptable proportion of HIV infected patients still die within three months of initiation of ART. In order to better target interventions there is urgent need to determine factors underlying this early mortality. An opportunity arose within the KPS to establish a cohort of HIV positive individuals and follow them in order to understand the determinants of death, co-infections (clinical failure) and virological failure while on ART in a rural Malawian population.

Methods

Consenting individuals from the demographic surveillance area attending Chilumba Rural Hopital (CRH) for staging are invited to participate in this study. These are evaluated for eligibility to start ART through clinical assessment (WHO staging) and laboratory investigations including CD4 counts. Those individuals eligible to start ART are followed up in the treatment arm and the ones not eligible at this initial visit are included in the non treatment arm. Scheduled follow-up procedures include clinical assessment every three months and CD4 counts (and viral load) six monthly. Each time a cohort participant has an acute clinical episode, investigations (clinical and laboratory), are performed by KPS staff.

Results

A total of 260 individuals have been recruited into the study. Of these 56% are female. Females are younger (mean age 37 yrs vs 44 yrs for males). At the baseline assessment 164 (63.1%) were started on ART. Of these 111 qualified on the basis of WHO stage and the remaining 53 on the basis of CD4 count. Ninety-six were in the non-treatment arm and of these 17 have subsequently been started on ART bringing to 181 subjects ever started on therapy. To date there have been 11 deaths (10 in the treatment arm). Causes of death include TB (3), KS (1), pneumonia (1), cryptococcal meningitis (1), dehydration (1), septicaemia (1), varicella (1) and 2 not yet known.

Discussion

Even at this early stage interesting patterns are emerging. Mycobacterium tuberculosis, Streptococcal pneumonia and cryptococcus neoformas seem to be important co-infections associated with HIV in this population. These will require novel interventions to be offered as a package with ART delivery. Up to 20% (53) of this cohort would have been deemed unsuitable for ART if WHO stage alone had

been used for assessment. As technology improves and alternative CD4 counting methods (appropriate for resource poor settings) become more widely available the programme will need to consider this as part of an individual's assessment for ART.

Way forward

As the cohort expands and more events accrue we plan to conduct further analyses. Analyses on a bigger data set will determine whether the patterns observed are valid. We also plan (through a separate study) to compare outcomes from this cohort to those observed in other ART clinics within Karonga district.

B 26: THE ART PROGRAM SCALE-UP AND ACCESS CHANGES: A COMPLETE NATIONAL CENSUS OF ART PATIENTS IN MALAWI 2004-2008 by Lyson Tenthani, Andreas Jahn, Joseph Njala, Simon Makombe, Eustice Mhango, Mwai Makoka, Erik Schouten, James Mpunga, Kelita Kamoto, eschouten@basicsmw.org

Background

By end 2008, the Malawi national ART programme managed 147,500 patients on ART. Details of ART patients have been consistently recorded using standard patient treatment cards and clinic registers. Quarterly monitoring data included patient characteristics, clinical stage at ART initiation, current follow-up outcomes and cohort survival analysis at 12, 24 and 36 months after ART initiation. These aggregated data have allowed reliable program management, but individual-level records are needed for detailed analysis of access and outcomes over time.

Methods

Digital photographs of all ART clinic registers were taken between April and September 2008. Individual records for all patients ever registered were entered into a database.

Results

Cumulatively, 159,060 patients were initiated on ART; 39% of ART initiations were male and 61% were female. New ART initiations increased from 7,895 in 2004 to 53,126 in 2007. In 2004, median age at ART initiation was 39 for men and 34 for women. From 2004 to 2007 the proportion of people aged 15-29 years increased from 11.3% to 14.2% in men and from 26.4% to 31.8% in women. The proportion of patients initiating ART in WHO clinical stage 4 declined from 26.2% in 2004 to 16.0% in 2007 while the proportion starting in stage 1 or 2 on the basis of a CD4 count <250 cells/mm3 increased from 8.7% in 2005 to 17.5% in 2007 (X2 p <0.0001). Significantly more males started ART in WHO stage 4 throughout 2004-2007 and this association did not change over time (OR males/females = 0.72 [95%CI: 0.70-0.74], test for homogeneity of OR's p=0.58).

Conclusions

- Access to ART has increased massively and by the end of 2008, 50% of those in need for treatment were on ART.
- ART initiations among younger people increased disproportionately and may be a sign of improved access.
- The age distribution is consistent with age- and sex-specific distribution of AIDS in the population, suggesting a proportional access between men and women.
- Although there is a clear trend that people access ART services earlier, men continue to present in significantly more advanced stages

B 27: ASSESSING HIV DRUG RESISTANCE IN THE MALAWI ART PROGRAM by N. Wadonda-Kabondo1, G. Bello1, K. Moyo1, K. Kamoto2, A. Harris2, J. van Oosterhout3, M. Mossaqui4, R.W. Weigel5, E. Limbambala6, L. Kanyenda1, B. Chilima1, D. Bennett6

Background

Malawi started scaling up the National ART program in June 2004 using a generic fixed-dose combination provided free of charge to eligible patients. Due to lifelong treatment and high HIV mutation rate in the presence of drug selective pressure, development of some HIV drug resistance is inevitable, but its emergence can be minimized if ART sites function well. The objective of the survey was to assess the emergence of HIVDR in Malawi.

Methods

A total of 596 patients who had initiated treatment 12-15 months prior were selected at four sites: Mzuzu (143 patients), Lighthouse (148 patients), QECH (145 patients), Thyolo (160 patients). Plasma samples were prepared from residual blood from the CD4 counts. Samples were tested for viral load based on PCR amplification of a 155 base pair sequencing. Those with >1000 copies/ml were genotyped to monitor ARV Drug Resistance using Pol gene sequencing. Study outcomes were viral suppression, potential drug resistance and actual drug resistance as defined by the World Health Organization.

Results

The proportion of clients that were alive and on treatment, dead, transferred out, or lost to follow-up were the following, respectively: 62%, 8%, 10%, and 20% for Mzuzu; 44%, 16%, 20%, 20% for Lighthouse; 65%, 12%, 9% and 14% for QECH; and 41%, 9%, 42% and 8% for Thyolo. For Mzuzu, Lighthouse, QECH and Thyolo, viral suppression was estimated at 63.2%, 49.5%, 83.0%, and 65.8%, potential drug resistance was 23.9%, 34.0%, 19.0% and 18.4%, and actual resistance was 4.3%, 2.1%, 2.9% and 2.6% respectively.

Conclusions

There is no evidence of serious drug resistance having yet to emerge from the Malawian ART program (<5%). However, the potential for drug resistance was identified in all sites due to high default rate, and three of the four sites did not achieve the recommended level for viral suppression.

B 28: USING HIV DRUG RESISTANCE MONITORING SYSTEMS TO INCREASING QUALITY OF ART SERVICES IN MALAWI by Nellie Wadonda , Kundai Moyo, Sara Hersey, George Bello, Erik Shouten, Richard Banda, Eddie Limbambala , and Ben Chilima

Background

More than 200,000 people have ever been initiated on ART in Malawi, primarily using WHO staging criteria. Emerging ART drug resistance is being closely monitored, particularly with the dearth of laboratory-based patient monitoring in the country. Malawi has adopted WHO guidelines on drug resistance surveillance including monitoring transmitted resistance through threshold surveys that are integrated into PMTCT routine services. The threshold surveys rely on residual blood in order to minimize selection bias, however the lack of quality CD4 testing in the country has rendered it difficult to identify eligible participants.

Methods

In 2006, the Malawi Ministry of Health implemented the first threshold survey in the capital city of Lilongwe using residual blood from CD4 counts in three PMTCT sites. A second threshold survey was conducted in Lilongwe in 2008, and the survey was extended to include two additional government PMTCT facilities in Blantyre City.

During the initial assessment in Blantyre, no sites qualified for participation either due to small patient numbers or because CD4 testing was not routinely conducted for all positive clients. In order to implement the surveillance, a specimen transportation system was created so CD4 testing of eligible PMTCT clients could be conducted at a central facility. A courier system was established to transport positive specimens to the central hospital laboratory for CD4 testing, with the local government providing the motorbikes and staff. The Ministry of Health trained and supervised the staff in sample collection and provided fuel for transporting the samples.

Results

The CD4 transportation and testing system was evaluated at the mid-point of the threshold survey and was found to be working effectively. Previously, PMTCT clients eligible for CD4 testing were referred from health centers to the central laboratory, resulting in a high loss to follow-up. Under the new system, the sites reported a significant increase in the number of women who were determined eligible for ART initiation, indicating the threshold survey courier system strengthened overall quality of services at the facilities.

Conclusions

The HIV drug resistance threshold survey provided an opportunity to strengthen ART services at locations that did not previously have ready access to CD4 testing. The courier system was developed with minimal resources and under the endorsement of local health officials. In particular, using

motorbikes in areas with limited courier services proved to be effective and inexpensive. The courier system increased ART accessibility, patient retention, the number of patients identified and initiated onto ART, and specimen quality for drug resistance monitoring. Due to its success, the threshold survey CD4 system will be incorporated into Blantyre City's annual plans to provide CD4 testing as a routine service at PMTCT sites in 2009.

TRACK C: IMPACT MITIGATION: SOCIAL, ECONOMIC AND PSYCHO-SOCIAL

This Track highlights areas of scientific investigation into social, economic and cultural dimensions of the epidemic and its impacts and cases of programs and interventions that address these challenges with high impacts and benefits to the target groups.

C 1 NETWORK OF TEACHER EDUCATORS RESPONDING TO AIDS (NTERA) by Dr. S. MACJESSIE MBEWE & J. CHAZEMA **jchilasa2005@yahoo.co.uk**

Background

The primary purpose of NTERA is to create an ethical, supporting and caring environment in education institutions through helping teachers and teacher educators respond to AIDS in a human way (umunthu) so that teaching and learning can take place in an atmosphere of openness, love, and care. The more teachers and teacher educators become supportive and caring, the less the spread and effects of HIV&AIDS in the education sector. As teacher educators, we realize that the HIV&AIDS pandemic has paralyzed our education institutions and if left unchecked, it will destroy the whole education system, hence disabling the whole human society since education is a hub for social development. We therefore feel that, as teacher educators, we are well positioned to respond to the pandemic more effectively because we have a multiplier effect. The network aims at assisting teacher educators to respond to the pandemic beyond simply bringing awareness and prevention of HIV&AIDS but to bring in a new perspective that gives HIV&AIDS a human face.

Objectives & scope

a) establish HIV&AIDS support groups in education institutions
b) build capacity in practicing teachers and student teachers for HIV&AIDS education
c) review how teacher education curricula mainstream HIV&AIDS issues
d) network to integrate HIV&AIDS issues in teacher education curricula
e) conduct action research with schools for best practices to deal with issues of gender, human rights and so on in the context of HIV&AIDS
f) bring out the human face of HIV/AIDS in education institutions in order to deal with issues of stigma and discrimination
g) network to share experiences, knowledge, strategies, problems solutions and best practices about HIV&AIDS through the alumni workspace in the GC 21
h) help to break the silence about HIV&AIDS in education institutions
i) provide, and act as a think tank in MoE (providing guidance on matters of HIV&AIDS to MoE and Colleges).

Methodology

a) NTERA member living positively providing motivational talks on breaking the silence
b) Used films
c) Used participatory teaching methods
d) Used orphan care giver as resource
e) Used medical doctor as a resource
f) Used trained lecturers as a resource
g) follow-ups on training participants
h) experiences sharing on Global Campus (gc) 21
i) motivational talks on breaking the silence by people living positively
j) action research with schools.

Results

a) Developed NTERA HIV&AIDS curriculum
b) Teachers have intergrated HIV and AIDS messages in their teaching
c) Teachers have developed support groups eg at Kasungu TTC
d) Trained teacher educators and student teachers in HIV&AIDS education
   - 21 TTC lecturers (11 from Kasungu and 10 from St Joseph TTCs)
   - 30 fourthth year Chancellor College education students
e) Follow-ups on NTERA trainined participants
f) Continuous experience sharing on Global Campus (gc) 21 with other NTERA members from South Africa, Namibia, Tanzania, Malawi, Zambia
g) Established NTERA institutional committees in all six government TTCs
h) Established NTERA for students at Chancellor College (launched) and Domasi College of Education
i) Conducted action research with schools for HIV/AIDS best practices

Concusion

The networking initiative therefore has a tremendous potential of mitigating the problem of HIV&AIDS in the education sector and evaluations have shown positive impact.

Way forward

a. continue strengthening NTERA institutional committees in TTCs
b. train more TTC lecturers (extend to private TTCs) and student teachers
c. identify common methodologies used in teaching about HIV&AIDS and share them through the alumni workspace in the GC 21
d. develop a proposal to identify the problems of gender and HIV&AIDS in the education institutions and make recommendations for support and best practices
e. launch NTERA for students at Domasi College of Education.
f. conduct NTERA curriculum review
g. convene a meeting to share NTERA experiences with other stakeholders
h. officially register NTERA.

C 2: OLDER ADULTS' EXPERIENCES OF HIV/AIDS INFECTION AND AGEING by
E Freeman1 E.Freeman@lse.ac.uk

Background

Increasing attention is being given to the impact of the HIV/AIDS epidemic on older adults. In Malawi and throughout sub-Saharan Africa, older adults play a considerable role in caring for young people infected and affected by the epidemic. Less attention has been given to the social, economic and psycho-social experiences of older adults infected with HIV.

Objectives and scope

This study furthers understanding of the ways HIV/AIDS impacts older adults in Malawi, by exploring their personal experiences of HIV infection and related illnesses and the interplay between these experiences and experiences of ageing.

Methodology

Repeat in-depth interviews with HIV positive (n=18) and HIV negative (n=18) individuals aged over 50 years living in rural Southern Malawi are currently being conducted. Reflecting the study's grounded theory approach, thematic analysis of recorded, transcribed and translated data collected is ongoing. Major themes emerging from the data will be presented.

Results

Initial analyses indicate that although some older adults are able to successfully manage their infection with access to ARVs, others associate their infection and HIV-related illnesses with a loss of economic productivity that is seen as exaggerating age-related decline in strength and productivity. Respondents associate this decline with a decline in social status and their ability to support themselves and their families.

Conclusion: Older adults' experiences of HIV infection and illness differ from those of younger adults, involving a different set of social, economic and psychosocial consequences.

Recommendations

There is a clear need for further research into the HIV/AIDS related experiences of older adults in Malawi. Current findings indicate the need for appropriate inclusion of older adults in HIV and AIDS programmes and interventions.

C 3: BEYOND MEDICAL TREATMENT: LESSONS IN PMTCT SUPPORT FROM NKHOMA HOSPITAL by P. Makono (Mr.), G. Chikowi (Mrs.), E. de Jonge (Dr.)
Church of Central Africa Presbyterian (CCAP), Nkhoma Synod Health Department
Box 48, Nkhoma, Lilongwe, Malawi
mtiedemann@pactmw.org

Background

Nkhoma Hospital of the CCAP Nkhoma Synod initially used antenatal clinics to provide PMTCT services such as counseling, testing, and nevirapine treatment – yet most women eligible for PMTCT services would not return for their second visit. A 2004 Malawi Demographic and Health Survey confirmed that this phenomenon was widespread. Nkhoma public health staff were eager to find a way to increase PMTCT adherence.

Objectives and Scope

The public health team launched a PMTCT support group for Nkhoma Hospital after studying and visiting other support groups to see if they contributed to PMTCT adherence. Using its hospital information system, Nkhoma monitored changes in service uptake, turnout consistency, and access to PMTCT services, which are supported in part by PEPFAR/USAID through Pact Malawi. Two indicators were tracked: the number of HIV+ women who returned for antenatal care visits and the number who took nevirapine.

Results

The number of clients in the support group has increased by 233% since the program began. With clients sharing positive impressions of the program with their communities, women visiting the clinic are now more willing to begin a nevirapine regimen immediately. The percentage of women who test positive at Nkhoma and immediately start nevirapine has increased from 50% to 90%, while participation of male partners in the PMTCT program has increased from 10% of eligible clients to 35%.

Conclusions

For PMTCT services to be successful, they must go beyond the medical realm of tests and medications to provide clients with psychosocial support. With this support, clients are more committed to accessing the medical component of PMTCT services. PMTCT support groups also provide health personnel with an easy method to follow up with clients and monitor progress.

Recommendations

Health facilities offering PMTCT services should establish support groups based on careful planning and in consultation with beneficiaries on the best mode of activity implementation.

C 4: COST ANALYSIS OF ARV CARE PROGRAMME REACHING UNIVERSAL ACCESS IN THYOLO, MALAWI by Guillaume Jouquet, Marielle Bemelmans, Moses Massaquoi, Line Arnould, Ariane Bauernfeind, Béatrice Mwagomba, Rony Zachariah, Mit Philips.

Médecins Sans Frontières, Rue Dupré 94, 1090 Brussels.
District Health office Thyolo, Malawi

Background

In a MoH-MSF supported HIV/AIDS programme in a high prevalence (21%) rural district Thyolo in Malawi, universal access was reached with 11,520 patients ever started of which 79% are alive on ART at the end of 2007.
Scale up was possible through extensive reorganisation of care, including decentralisation to health centres, community involvement, simplification, standardisation and task shifting. This cost analysis looks at additional recurrent costs required for HIV/AIDS care, including ART, complementary to existing district health services.

Method

A retrospective cost analysis of operational expenses for the entire HIV care programme was done over a period of 3 years (2005-2007), expressed as costs per number of active patients on ART. Data collection was based on MoH and MSF management tools. Figures for 2007, the year of reaching universal access, are presented.

Results

The average annual recurrent costs for direct care per patient on ART was $237. The major part related to drugs with $158 for ARVs (67%) and other essential drugs (14%). Costs linked to consultation (13%) included mainly staff salaries ($19) and other running costs ($10). Laboratory costs accounted for only 6%.

Discussion/ conclusion

In this programme, the average annual costs per patient on ART are mainly determined by the costs of drugs. Further price reductions could have a major impact on overall costs.
The human resource shortages and a high patient:staff ratio in Malawi leads to disproportional low personnel costs.
In this high prevalence district with a population of 600.000, the average annual cost for achieving universal access to ART is $3.2 per inhabitant. The current national health expenditure per capita is $13.2 per year while the cost of the essential health package was estimated at $17.4 per inhabitant per year (2004). Universal access to ART was reached for an additional $2.5 per capita, well within the estimated minimal basic health package costs (WHO).

Contact Address: Dr. Moses Massaquoi - MSF-Belgium- Malawi Mission, MALAWI, Tel: +265-(0)1844409 Fax: +265 (0) 1841468 Email:msfocb-blantyre-med@brussels.msf.org

C 5: MAINSTREAMING HIV&AIDS AND GENDER WITHIN LIVELIHOOD ENHANCEMENT PROGRAMMING IN THE COMMUNITIES OF LILONGWE, DOWA, NTCHISI AND KASUNGU by Magombo C, Lwanda F, Black K, Ngalawa P, Ng'ombe T and Mvula M (Care Malawi, P/Bag A89, Lilongwe)

Background

Care International in Malawi has been, operating in Malawi since 1998 in the Districts of Lilongwe, Salima, Kasungu, Dowa and Ntchisi Focusing on Food security, Education, Economic Empowerment, Health and HIV/AIDS & Gender crosscutting
CARE Malawi through SMIHLE, I-Life, Ndife Amodzi, ICON and Tiphunzitsane projects has been strengthening the delivery of food security services while mainstreaming HIV/AIDS and gender in Communities of Lilongwe and Dowa.
CARE Malawi aims at complimenting the efforts of the government (MDGs 1, 3 and 6) and other civil society organizations in supporting a number of livelihood security activities that responds to the HIV/AIDS pandemic and addresses gender inequalities.

The Projects have been implemented since 2005 and evaluations were done to assess the impacts in the targeted communities. The projects targets were PLWHAs, chronically ill people, youth, men and women in the communities. More studies are being done in the area of livelihoods and HIV&AIDS to measure impact of the interventions

Objectives and scope

To assess the impact of HIV&AIDS and livelihood CARE Malawi project in the communities of Dowa, Lilongwe, Kasungu and Salima

Care Malawi has been enhancing people's livelihood security to spread the successful models for alleviating poverty and improving livelihood and food security in the communities while mainstreaming HIV and AIDS

The assessment aimed at documenting best practices and share to other communities for replication

Methodology

Building the capacity of Community based organizations and Village umbrella committees in the area of HIV&AIDS, gender, human rights and food security
Targeting home based care, orphan groups, PLWA, chronically ill, single parents whose spouses died in the promotion of nutritional gardens and care and support. Priority was given to such groups who are categorized as vulnerable as per targeting criteria. For instance, seeds were given to vulnerable households as a priority. These are households caring for orphans, chronically ill, PLWA and the elderly. Strengthening VUCs, CBOs, PLWHA support groups and youth groups to manage food security activities such as agriculture and food marketing that mainstream HIV/AIDS and gender.

Linking PLWHAs and CBOs to access services from existing local service providers such as MAICC for counseling, HIV testing, nutritional education and condom distribution. Through MAICC PLWHAs are linked to clinic and hospitals for ART

Orientation on Agriculture and Seed Multiplication Model in the communities aiming at promoting food security and help in mitigating the impact of HIV and AIDS. Linking beneficiaries to markets for them to sell their produce at a good price

Introduction of Village Saving &Loans social fund to enhance rural incomes where the model comprises of share fund as well as social fund which assists household to cushion them during economic shocks. The savings are expected to be used for buying agricultural inputs, collateral to access loans through other micro-finance institutions that provide credit, and meet their household consumption needs.

The following interventions were implemented:

Formulation of the VS&L committees.

Training them so that their skills are enhanced for them to better train others. The specialists are local trainers voted democratically at the village level
Training and technical support for the VS&L groups

Empowering girls in schools to make sure that they excel in education and have information on gender, human rights, HIV and AIDS

Mainstreaming Village saving &Loans and other project interventions among those affected by HIV/AIDS or chronically ill. For instance, SMIHLE introduced and mainstreamed VS&L model to PLWA group called Mchotsankhawa

Provide technical support to home-based care providers and groups that assist the households through care and support. VUC was involved in farming the gardens for the vulnerable households, the chronically ill and elderly households.
Promotion of cash transfers to chronically ill people in the community to enable them buy and access different types of food groups as opposed to hand outs which only provide carbohydrates.

Support CBOs including PLWHA groups in health and nutrition education, utilization of foods, encouraging people to go for HIV testing and Counselling and positive living and herbal remedies

Establishing Linkages between CSOs, CBOs, Government and the private sector for the smooth implementation of services

Results:

Improved knowledge and understanding of the relationship between gender, HIV/AIDS and food security

Strengthened CBOs in management of food security activities that mainstream HIV/AIDS and gender: Achieved through capacity building efforts, specifically targeting partners, including CBOs; HIV/AIDS mainstreaming (through access to improved livelihoods and capacities); agriculture and marketing; village savings and loans.
It was observed that most households use the VS&L fund for caring the sick (illnesses), funerals and related household calamities.
Strengthened service delivery within the communities due to the establishment of Linkages between CSOs, CBOs, Government and the private sector and utilization of established linkages to decentralized government structures; interaction with food security and HIV/AIDS networks

Increased community participation in addressing HIV and AIDS and food security issues in the communities

Improved living standards of community people through the achievement of food security, culture of saving and accessing HIV and AIDS care and support services through the community structures

Livelihoods enhancement among PLWHA groups in the communities
Adoption of successful models and practices to other stakeholders (notably MOAI, DAs and CSOs)
Reduced element of exclusion in community activity participation and reduction of stigma and discrimination towards people with HIV and AIDS
Reduction of gender gaps in the community

Conclusion(s)

Community capacity building is a key element in promoting community active participation on HIV and AIDS, gender and food security initiatives
Communities should be empowered to realize their potential and be in a position to address the problems they face on day to day basis using the most available community support and initiatives

Village savings and loans has proved to provide support to community people in times of need and unforeseeable circumstances such as sickness therefore this model should be encouraged in the communities.

There is need to promote cash transfers targeting the chronically ill as opposed to providing handouts in a form of maize which only provide carbohydrates

TRACK D: ORGANIZATION DEVELOPMENT AND CAPACITY BUILDING

The Track focuses on research-based lessons on effective organizational set up and development support initiatives, organization of responses and issues of capacity to respond effectively at all levels. It also seeks to draw lessons on the best models and designs as well as strategies for capacity development support..

D 1: SEXUAL ASSAULT REPORT FROM KAMUZU CENTRAL HOSPITAL – EFFECT OF STAKEHOLDERS COORDINATION by D. Kwaitana1, C. Mapanje1, C. Massa1, P. Mmodzi1, N. Bonongwe1, H. Milonde2, S Lijenje2, P Njawiri3, G. Kamanga1, C. Mwalwanda2, F. Martinson1, T Meguid2

Affiliation:
1UNC Project-Lilongwe, Malawi
2Kamuzu Central Hospital, Lilongwe, Malawi
3Malawi Police Service, Lilongwe

Background

Sexual assault is a painful reality in our communities. The true burden is unknown as those reporting to relevant authorities may be just a tip of the iceberg. Clinical services, police, judiciary and communities have not coordinated their handling of sexual assualt. This resulted in victims not getting proper attention and care. Internal coordination at health facilities was also inefficient as a complete package of health services to sexual assault victims was not offered.

Objectives and Scope

Sexually assaulted victims need psychosocial and legal assistance. They also need medical treatment for sexually transmitted infections, HIV testing and counselling, post-exposure prophylaxis for HIV, emergency contraception, and ongoing counselling. Our experience shows that good coordination of services makes a positive difference in service uptake.

Methods

Since October 2007 health institutions, police, judiciary and human rights bodies within Lilongwe City Catchment Area collaborated to address the sexual assault coordination issues. During quarterly meetings challenges experienced by all stake-holders were shared, the way forward discussed, and feed back to colleagues given. This stimulated use of National Sexual Assault Guidelines in health clinics. We compared data for one year before instituting these coordination meetings and one year after these coordination meetings.

Results

One year post coordination meetings from October 2007 to October 2008, 134 victims were reported, 84 (62.7%) were tested for HIV and 80 (95.2%) with HIV non reactive results received post exposure prophylaxis. In the preceding year (October 2006 to September 2007) 78 victims were seen and the only 14 (17.9%) that received HIV testing were non reactive and 6 (42.9%) received post exposure prophylaxis for HIV.

Conclusion

Stakeholders meetings are important in stimulating increase of uptake of services through use of existing guidelines and policies.

Recommendation

We recommend multi-sectoral collaboration as an engine for importance of sexual assault management.

D 2: ORGANIZATIONAL DEVELOPMENT FOR INCREASED IMPACT AND SUSTAINABILITY OF HIV/AIDS CIVIL SOCIETY ORGANIZATIONS (CSOs) IN MALAWI by P. Phoso, A. Pollock, M. Tiedemann, M. Reeves mtiedemann@pactmw.org

Background

As a key pillar of its PEPFAR/USAID-supported Community REACH Program, Pact Malawi engages Malawian HIV/AIDS CSOs in a comprehensive organizational development (OD) process to strengthen their core capacities to enhance effectiveness and sustainability.

Objectives and scope

To improve HIV/AIDS service delivery quality and promote beneficiary-driven services
To promote organizational sustainability
To cascade organizations' increased capacity to CBOs and formal/informal groups with which they work

Methodology

Representatives of five Pact Malawi partners adapted Pact's Organizational Capacity Assessment (OCA) tool, which Pact's local OD service provider, CABUNGO, then conducted with each partner. By contributing input from the beginning, partners developed a sense of ownership in the process.

The OCAs include a participatory self-scoring session and a follow-up session, at which results are presented and participants engage in action planning.

Based on OCA findings, each partner developed an institutional strengthening plan (ISP) – a workplan for accessing mentoring visits, priority targeted interventions and group capacity building events. Pact Malawi will track partners' ISP progress over the duration of their sub-agreements.

Results

Reports from partners and quality assurance surveys demonstrate qualitative impacts of the OD process. Partners are instituting new policies and procedures (e.g., human resources policies, HIV workplace policies), fostering increased awareness of governance and strategic issues among members and the board, and developing advocacy plans.

Conclusion(s)

As a result of the participatory interventions and comprehensive support from Pact Malawi and CABUNGO, partners are now implementing organizational changes for increased effectiveness

TRACK E: PARTNERSHIP, NETWORKING AND COORDINATION

In this Track attention is on forms of partnerships, mechanisms for networking and coordination emerging at various levels to guide and facilitate responses and what lessons can be learnt to accomplish mechanisms that ensure inclusiveness and drive a truly coordinated multi-sector response

E 1: NETWORKING AS A STRATEGY TO M AXIMIZE LONG-TERM CAPACITY BUILDING IMPACT by E. Mongelli,K. Musimwa, A. Pollock, M. Tiedemann, M. Reeves mtiedemann@pactmw.org

Background

Pact Malawi's PEPFAR/USAID-supported Community REACH Program builds the capacity of Malawian CSOs that implement programs in HIV/AIDS prevention, care and support.

To ensure that the impact of its capacity building extends beyond the grant period, Pact fosters collaboration networks among its 25 partner organizations.

Objectives and scope

1. To provide partners with access to the financial resources and quality technical expertise they need to deliver high-quality programming

2. To expand Malawi's civil society response to HIV/AIDS by building the capacity of Malawian organizations and increasing their capacity to provide and sustain HIV/AIDS services

Methodology

Pact's Organizational Network Analysis (ONA) methodology helps in visualizing, monitoring and understanding networking patterns among organizations. During an ONA, participants complete a survey on the frequency of information or resource exchange with other organizations. Results are analyzed by a software program that generates network maps.

Pact conducts ONAs with partners at baseline, mid-term, and end of grant.

Results

Pact Malawi's partner network density increased from 19% to 44% over one year. The network maps revealed that the number of two-way relationships dramatically increased. Technical area networks also grew, especially HBC.

At a review meeting, partners offered examples of collaboration: one partner helped to mobilize people for another's HTC program. A District hospital shared M&E forms with another hospital. Three CSOs trained a set of facilitators who would then serve all three groups – a cost-effective way of maximizing resources.

Conclusion(s)

Networking among organizations is a mechanism for leveraging resources, preventing duplication, and improving knowledge management.

PROGRAMME FOR THE HIV AND AIDS RESEARCH AND BEST PRACTICES DISSEMINATION CONFERENCE

"Utilizing Research Evidence to Strengthen HIV Prevention"

2nd - 3rd JULY 2009

Cross Roads Hotel, Lilongwe

JULY 2 THURSDAY

08:30-10:00 OFFICIAL OPENING CEREMONY

Welcome Remarks by the Director of Ceremonies, Mr. Francis Thawani, Public Relations Officer, NAC,

Remarks by Dr Biziwick Mwale, Executive Director, National AIDS Commission

Remarks by Dr. Mary Shawa, Secretary for Nutrition, HIV and AIDS

Official Opening by Arch Bishop Benard Malango, Chairman of the Board of Commissioners, National AIDS Commission

GROUP PHOTOGRAPH AND TEA

Thursday 2nd July 2009

10:30– 12:30 BREAKAWAY SESSIONS

SAPITWA 1 HALL Chairperson: Mr. Phillip Moses

A1 District-wide door to door HTC: current program experiences in Zomba district by Dr. Daniel Byamukama, Prof. Cameron Bowie, and Mr. Limbani Kalumbi

A4 Scaling up HIV-related laboratory services to support public health systems in resource-poor settings by C. Porter ,R. Mwenda , J. Kandulu , A. Demby , S. Hersey ,K. Phiri , P. Moyo , G. Henley , P. Makaula

A5 Implementing a national quality assurance system for CD4 enumeration by K. Moyo (1), C. Porter (2), B. Chilima, R. Mwenda , A. Demby , S. Hersey, B. Angarita , G. Henley

A6 Male involvement in PMTCT – Lessons from GOAL Malawi by H. Mkwinda-Nyasulu; E. Edward.

AUDITORIUM Chairperson: Dr Francis Martinson

B1 Discontinuation of standard first-line antiretroviral therapy in a cohort of 1434 Malawian children by Mark M. Kabue, W. Chris Buck, Peter N. Kazembe, and Mark W. Kline.

B2 Research on PLWHA food intake and nutritional assessment in Mzimba By Nahoko Kuroda, Kanako Tanaka, Yuya Nakamura, Yukari Yasutaka, Tokutaro Iino

B3 Psychosocial Support: Impact assessment of Teen Club at Baylor College of Medicine Children's Centre of Excellence - Malawi (COE) by R. Zule-Mbewe, L. Malilo, C. Cox, M.M. Kabue, and P.N. Kazembe.

B4 Defaulter tracking to improve retention and ascertain patient outcomes of children in a paediatric HIV care facility by Chimwemwe Chitsulo, Mark M. Kabue, Richard Zule-Mbewe, Vincent Chatsika, Constance Chisala, Linda Malilo, Peter N. Kazembe

BAMBOOS HALL Chairperson: Prof Chrissie Kaponda

C1 Network of teacher educators responding to AIDS (NTERA) by Dr. S. Macjessie mbewe & J. Chazema

C2 Older adults' experiences of HIV/AIDS infection and ageing by E Freeman

C3 Beyond medical treatment: lessons in PMTCT support from Nkhoma hospital by P. Makono (Mr.), G. Chikowi (Mrs.), E. de Jonge (Dr.)

C4 Cost analysis of ARV care programme reaching universal access in Thyolo, Malawi by Guillaume Jouquet, Marielle Bemelmans, Moses Massaquoi, Line Arnould, Ariane Bauernfeind, Béatrice Mwagomba, Rony Zachariah, Mit Philips.

SAPITWA 2 Chairperson: Dr Tiwonge Loga

DEF1 Sexual assault report from Kamuzu central hospital – effect of stakeholders coordination by D. Kwaitana, C. Mapanje, C. Massa, P. Mmodzi, N. Bonongwe, H. Milonde, S Lijenje, P Njawiri, G. Kamanga, C. Mwalwanda, F. Martinson, T Meguid

DEF2 Organizational development for increased impact and sustainability of HIV/AIDS civil society organizations (CSOs) in Malawi by P. Phoso, A. Pollock, M. Tiedemann, M. Reeves

DEF3 Networking as a strategy to maximize long-term capacity building impact by E. Mongelli,K. Musimwa, A. Pollock, M. Tiedemann, M. Reeves

C5 Mainstreaming hiv&aids and gender withinlivelihood enhancement programming in the communities of Lilongwe, Dowa, Ntchisi and Kasungu by Magombo C, Lwanda F, Black K, Ngalawa P, Ng'ombe T and Mvula M

12:30 – 2:00

L U N C H

2:00 – 3:30

SAPITWA 1 HALL Chairperson Mr. Mathews Chatuluka

A7 Community involvement in management of antiretroviral patients: experience from the lighthouse ndife amodzi program, Malawi by the lighthouse group

A8 Household HIV Testing and Counseling (HTC): experience from lighthouse by the lighthouse group

A9 HIV and AIDS related knowledge, attitudes and practices among religious leaders by Malawi interfaith aids association (MIAA) Benjamin Kaneka et.al.

AUDITORIUM Chairperson: Mr. Dr Sam Phiri

B13 Lopinavir/Ritonavir (LPV/r) Superior to Nevirapine (NVP) in HAART for Women With Prior Single-Dose Nevirapine (sdNVP) Exposure: A5208 ("OCTANE") by Mina Hosseinipour, Lameck Chinula, Cecelia Kanyama, Charity Potani,

B6 An operational audit of task shifting using expert patients in a tertiary care art clinic in Zomba, Malawi by Lyson Tenthani, Adrienne Chan, Monique van Lettow, Richard Bedel

B7 Outcome assessment of decentralisation of antiretroviral treatment (art) provision in a rural district of Malawi by G Mateyu, AK Chan, A. Jahn, E.Schouten, E. Ludzu, W. Mlotha, M. Kambanji, M van Lettow

BAMBOOS HALL Chairperson: Dr Johnston Kumwenda

B20 Lipid changes among patients on standard secondline antiretroviral treatment at lighthouse by Moses, D Mzinganjira, R. Weigel, C. Kanyama, G. Dickie, L. Brown1, S. Phiri, and M. Hosseinipour

B21 The effect of metronidazole on the return rate among patients treated for urethral discharge at Kamuzu central hospital, Lilongwe, Malawi by Naomi Nyirenda, Gift Kamanga, Lillian Brown1, Clement Mapanje, Robert Jafali, Nkhafwire Mkandawire Francis Martinson, David Chilongozi, Marcia M Hobbs, Myron S Cohen, Irving Hoffman

B22 Renal insufficiency in HIV-positive, art-naïve individuals in Lilongwe, Malawi by A. Akinkuotu, L. Chinula, A.Moses, L. Aertker, V. Kayoyo, C. Potani, C. Kanyama, M. Zgambo and M. Hosseinipour

SAPITWA 2 Chairperson: Dr. Baggrey Ngwira

B23 Clinical, Immunological and Virological Outcomes of Second line Treatment in Malawi by Mina Hosseinipour, J Kumwenda, L Brown, R Weigel, D Mzinganjira, B Mhango, S Phiri, and J van Oosterhout

B24 A randomized controlled trial of high dose fluconazole with or without flucytosine for HIV-associated cryptococcal meningitis in Malawi by A Jackson, J. Nussbaum, D. Namarika, J. Phulusa, J. Kenala1, C. Kenyemba, J. Jarvis, M. Hosseinipour, C. van der Horst, T. Harrison

B16 Addition of 7 days of zidovudine (ZDV) plus lamivudine (3tc) to peripartum single-dose nevirapine (SDNVP) is effective in reducing nevirapine resistance at 2 and 6 weeks postpartum in HIV-infected mothers in Lilongwe, Malawi by Sherry L. Farr, Julie A. E. Nelson, Thokozani J. Ngombe, Angela D. M. Kashuba, Charles Chasela, Athena P. Kourtis, Dumbani Kayira, Jeffrey A. Johnson, Gerald Tegha, Jeffrey Wiener, Charlie Van der Horst and the UNC Project BAN Study Team

3:30 – 4: 00

T E A B R E A K

4:00 – 5:00

SAPITWA 1 HALL Chairperson: Mr. Mathews Chatuluka

A11 Strengthening community response to prevent HIV and AIDS among sugar plantation workers at Dwangwa Sugar Corporation Estate in Nkhotakota district by G. Mzembe, U. Chirwa, M. Bwanali

A12 Evaluating abstinence among youth (15-24 years) in Malawi: PSI/Malawi HIV/AIDS second round Project by Velia Manyonga, PSI/Malawi research manager

AUDITORIUM Chairperson: Dr Sam Phiri

B8 Outcomes of a dedicated HIV positive health care worker clinic for treatment and management at a central hospital in Malawi By Lyson Tenthani, Adrienne Chan, Moses Kumwenda, Lucy Gawa, Martias Joshua, Sumeet Sodhi , Monique van Lettow

B9 Description of side effects of a Stavudine (d4t) based first-line ART regimen, rate of substitution to alternative first line regimen and impact on outcomes in an ART program in Zomba, Malawi by AK Chan, Richard Bedell, E Mwinjiwa, G Mateyu, M Joshua, M van Lettow

B10 Improved uptake of antiretroviral therapy (ART) following integration of TB and HIV services in a district in southern Malawi by Adrienne K. Chan, Joseph Njala, Henry Kanyerere , M. Joshua, Monique van Lettow

FRIDAY 3RD JULY 2009

08:30 – 10:00

SAPITWA HALL Chairperson: Dr Newton Kumwenda

A 2 Operations research on male circumcision services (MC): Informing MC policy in family planning clinics by Chipeta-Khonje, B. Hayes,

A3 Evaluating condom use among sexually active youth (15-24 years) in Malawi – 2009 PSI/Malawi HIV/AIDS project by Mkandawire Philip

A10 Acceptability and use of condoms among faith based community: survey commissioned by Malawi interfaith aids association (MIAA) conducted by Jesman Chintsanya, Benjamin Kaneka and George Mandere.

10:00 – 10:30

T E A B R E A K

10:30 – 12:30

SAPITWA HALL Chair Reverend MacDonald Sembereka

A13 Understanding HIV and AIDS behaviour change interventions at district level: who is the technical resource? By Chimbali, H (Mr.)

A14 Assessing the quality of information, education and communication offered to patients after medical consultation at Thyolo district hospital by K. Mbewa, R. Chidakwan, S. Vinkhumbo, O. Pasulani, and M. Massaquoi

A15 TBAs' involvement in PMTCT service delivery in Lilongwe semi-urban district by C. Kabondo, C. Zimba, E. Kamanga, I. Mofolo, B. Bulla, G. Hamela, I. Hoffman, F. Martinson,1c. Van der Horst, M. Hosseinipour

A16 Counseling facilitates women's utilization of CD4 count testing in Lilongwe, Malawi by Kate P. Gilles, Emily A. Bobrow, Gloria Hamela, Chifundo Zimba, Innocent Mofolo, Suzanne Maman, Mina Hosseinipour, Irving Hoffman, and Francis Martinson

AUDITORIUM Chairperson: Dr Frank Chimbwandira

B12 One-year retrospective review of a pediatric provider initiated opt-out HIV Testing and Counseling (PITC) pilot program at Kamuzu central hospital (KCH) in Lilongwe, Malawi: a task-shifting-based (TSB) model by ED McCollum; GA Preidis; MM Kabue; EBM Singogo; C Mwansambo; PN Kazembe; MW Kline

B14 Pearls (actg a5175): a multinational study of didanosine-ec, Emtricitabine and atazanavir vs. Co-formulated zidovudine/lamivudine and efavirenz for initial treatment ofHIV-1 Infection by F. Kilembe S. Berendes, V. Kayoyo , C. Kanyama, N. Saukila, Mulinda Nyirenda, N. Carpenetti, J. Eron, J. Kumwenda, M. Hosseinipour

B15 Using amphotericin b for the management of cryptococcal meningitis in a resource-limited setting: The role of a printed daily assessment form by A Jackson1, D. Namarika, J. Phulusa, M. Chikasema, C. Kenyemba, D. Henke, R. Hogenschurz, M. Hosseinipour

B5 Aetiology of severe pneumonia in Malawian children and the impact of HIV infection by LA Mankhambo, A Phiri1, S Kaunda, T Chikaonda, M Mukaka, ED Carrol, ME Molyneux, SM Graham.

BAMBOOS HALL Chairperson: Ms Sarah Hersey

B26 The ART Program scale-up and access changes: A complete national census of ART patients in Malawi 2004-2008 by Lyson Tenthani, Andreas Jahn, Joseph Njala, Simon Makombe, Eustice Mhango, Mwai Makoka, Erik Schouten, James Mpunga, Kelita Kamoto

B27 Using HIV drug resistance monitoring systems to increasing quality of ART services in Malawi by Nellie Wadonda , Kundai Moyo, Sara Hersey, George Bello, Erik Shouten, Richard Banda, Eddie Limbambala , and Ben Chilima

B28 Assessing HIV Drug resistance in the Malawi ART program by N. Wadonda-Kabondo, G. Bello, K. Moyo, K. Kamoto, A. Harris, J. van Oosterhout, M. Mossaqui, R.W. Weigel, E. Limbambala, L. Kanyenda, B. Chilima, D. Bennett

12:30 – 2:00

L U N C H

2:00 – 4:00

SAPITWA HALL Chairperson: Mrs. Glory Mkandawire

B11 Clinical features amongst ART patients who develop suspected TB early after initiation in a district in southern Malawi by Richard Bedell, Adrienne K. Chan, Jean Bourgeois, Henry Kanyerere, Erik Schouten, M. Joshua, Monique van Lettow

A17 Positive living of HIV+ people and the associated factors in zomba by l. Tenthani1, C Bowie, D.Byamukama, Erick Kasagila

A18 Impact of the DREAM HAART-based PMTCT Programme on Maternal Mortality, Pregnancy Outcome and Vertical Transmission by Magombo C, Lwanda F, Black K, Ngalawa P, Ng'ombe T and Mvula M

AUDITORIUM Chairperson: Dr Ben Chilima

B25 Causes of early mortality among individuals starting Anti-retroviral Therapy in Karonga District- Northern Malawi: ART cohort study by Mr. Charles Mwafulirwa

B17 The Effect of the ART Scale-Up on Admissions to Kamuzu Central Hospital and Lighthouse HIV Clinic in Lilongwe, Malawi by Emily Roemer, Dan C. Namarika, Sam Phiri, Irving Hoffman, William C. Miller, Leela Aertker, Rose Banda, Hannock Tweya, Jeff Rafter, Francis Martinson, and Mina C. Hosseinipour

B18 Safety and Effectiveness of Vaginal Microbicides, BufferGel and PRO 2000 Gel for the Prevention of HIV Infection in Women by T Tembo, F Martinson, B Makanani, L Chinula, T Mvalo, C Nkhoma, M Ndovie, M Hosseinipour, N Kumwenda, I Hoffman, T Taha.

B19 Antiretroviral Treatment Initiation and Increased Survival of HIV Infected Infants Traced from Prevention of Mother to Child Transmission (PMTCT) Facilities to Pediatric HIV Care: Highlighting the Need for Program Coordination in Lilongwe, Malawi by M. Braun, M.M. Kabue, L. Aertker, M. Chirwa, I. Mofolo, I. Hoffman, M. Hosseinipour, P.N. Kazembe, C. Van der Horst, M.W. Kline

4:10 - 4:30 P.M

CLOSING BY SECRETARY FOR NUTRITION HIV AND AIDS DR MARY SHAWA

REFRESHMENTS AND DEPARTURE