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Quality assurance during scale up of HIV testing using rapid tests: the NUMAT experience

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BACKGROUND & IMPLEMENTATION:

In resource-limited and high HIV prevalence areas, rapid tests for HIV remain the most cost-effective tool for diagnosis of HIV infection. These are user friendly, fast, inexpensive, and adequately specific and sensitive; they also don't require sophisticated skills and can be scaled up to peripheral health facilities. However, scaling up HIV testing involves the use of non-laboratory personnel, which brings challenges to quality control. NUMAT—designed with the goal of expanding access to and utilization of quality HIV, tuberculosis (TB), and malaria prevention, treatment, and care services in Northern Uganda—has introduced proficiency testing in its supported laboratories. This is a quality assurance method assessing the capabilities of lab staff by comparing their results with those obtained with the same specimens by reference laboratories or supervisors.

ANALYSIS DESIGN & METHODS:

All laboratories received training, the provision of reference text materials such standard operating procedures (SOPs) and laboratory supplies, and regular support supervision by the District Laboratory Focal Persons and national trainers and supervisors. Among the different methods for testing proficiency, using supervision field visits for monitoring the quality of HIV rapid tests was preferred because it allows for quality checks in all stages of the laboratory techniques and also provides prompt feedback to the peripheral laboratory staff. Reference specimens were prepared following SOPs, which included non-reactive, weakly reactive, and reactive specimens, to test the ability in detecting both positive and negative results. These

specimens were provided to all laboratory sites quarterly to test their procedures in using three different rapid tests: Determine, the screening test, Stat-Pak the confirmation test, and Unigold the tie-breaker. Immediate feedback was given, discussions held, and on-job training conducted where applicable.

RESULTS:

In the first quarter, 49 health units participated and a total of 103 reference panels tested. In the second quarter, 56 health units and 292 panels tested, and in the third quarter 65 health units and 314 panels tested. In the first quarter 40 health units (81.6%) produced results that matched the supervisors. In the second and third quarters all health units (100%) produced results that matched the supervisors'. Adherence to the national testing algorithm and use of SOPs was enhanced. It has to be noted, however, that staff tend to produce good performance under supervision.

CONCLUSIONS & RECOMMENDATIONS:

Scaling up HIV testing in peripheral facilities with no qualified lab personnel is possible, thus improving service coverage. Concerns about quality can be addressed using proficiency testing that proved to be a simple and effective method to offer quality control.

Northern Uganda Malaria, AIDS & Tuberculosis Programme International Conference Participation 2008-2011

2008-2011



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NORTHERN UGANDA MALARIA AIDS TUBERCULOSIS PROGRAMME

Introduction

NUMAT International Conference Participation 2008-2011

To share experiences accrued during program implementation and ensure first-hand availability to best practices from similar settings, NUMAT and JSI have consistently supported the participation of their staff and partners at national, regional, and international conferences. In addition to the visibility granted to the program and its successes, conferences offer an invaluable learning opportunity, useful exposure to other experiences, and a tremendous amount of networking across the scientific community.

Conceiving and writing abstracts that were reviewed by a technical panel also provided a structured way for the NUMAT team to evaluate its work and identify and present relevant lessons worthy of being widely disseminated. Participating actively in many conferences throughout the life of the project has positioned NUMAT as an authoritative actor in comprehensive HIV & AIDS programs in post-conflict settings, by showcasing its overall expertise, innovations, and achievements to a broad and specialized international audience.

This booklet presents the many NUMAT-produced abstracts and posters that were accepted to various conferences around the globe throughout the life of the project.



JSI Research & Training Institute, Inc.

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May 2011 | Florida, USA

The Treatment Support Team: Linking the health facility-based & community-based health care systems in post-conflict Northern Uganda

A. Ocerro, J. Arica, L. Ciccio | NUMAT/JSI

INTRODUCTION:

During the protracted conflict and the recovery period in Northern Uganda, several actors at health facility and community levels provided critical care and support for people living with HIV & AIDS. The community health system was becoming a more workable alternative to community follow-up by the facility-based health worker. However, health care workers were often unaware of the role of community service organizations active in their catchment areas. Clients were only able to benefit from both community and health facility-based health care services through informal linkages. This limited comprehensiveness and equity of care for people with HIV.

DESCRIPTION:

NUMAT supported the formation of the Treatment Support Team (TST), a forum bringing together HIV caregivers from health facilities and communities in the catchment area. The monthly meetings offer opportunity for information sharing on services available at the health facility and in the community. Individual HIV client audit is also carried out, giving opportunity for health workers to update information on loss to follow-up, default, and death amongst clients in the catchment area. Joint client specific strategies are drawn and implemented out of the meetings. As a deliverable, monthly reports are generated and disseminated to district authorities and stakeholders to inform future planning.

LESSONS LEARNED:

The TST has become a forum for resolving challenges in the continuum of care. It is a conduit for forging understanding between the highly expectant community and the heavily burdened health workers manning the ART clinics. The TST has promoted the retention of HIV patients in care.

RECOMMENDATIONS:

The TST should be adopted by the formal health system and harnessed to improve adherence and retention of HIV clients in care. The forum could support follow-up of children with HIV, prevention of mother-to-child transmission of HIV beneficiaries, and patients co-infected with tuberculosis.

Bringing ART services to peripheral level health facilities in Northern Uganda

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INTRODUCTION:

ART has had a major impact on the health of people living with HIV & AIDS in Uganda. However, it has been provided historically only in a few highly-specialized, congested, and difficult-to-access facilities like hospitals. This had the disadvantage that getting transport for patients from rural areas to a hospital was often difficult and prohibitively expensive, meaning many were unable to access ART or to do it regularly. Primary care facilities could deliver ART services nearer to patients' homes, but they often lacked adequate staff, technical capacity, and infrastructure, including timely provision of supplies.

DESCRIPTION:

Northern Uganda is a post-conflict area whose HIV prevalence rate (8.2%) is higher than the national average (6.4%). Starting from 2008, NUMAT assisted selected peripheral health centers to receive government accreditation for ARV provision to address the HIV epidemic and the limited uptake of ART services in the region. This was attained through training of qualified staff in ART management; supplying ARV and other consumables following a regular schedule; organizing a periodic CD4 test outreach system to those facilities; and procuring the necessary equipment, stationery, and furniture for ART provision and records management.

LESSONS LEARNED:

From October 2008 to September 2010, the supported 14 peripheral health facilities in the region have enrolled a total of 1,992 ARV clients, of which 109 were pregnant women and 133 children below 14 years of age. Almost 10,000 CD4 tests were provided to clients accessing those facilities for both clinical assessment prior to ARV enrollment and ARV follow-up. By the end of September 2010, the 12-month cohort that was enrolled registered a treatment retention rate of 87%. Compared with only 4% in the whole country by end of 2009, the program achieved that—by September 2010—17% of all lower facilities in the region offered ARV services, compared with only 4% in the whole country by 2009.

RECOMMENDATIONS:

Our experience demonstrated that ARVs in Northern Uganda can be provided as an additional primary care intervention. Bringing ARV services to peripheral level facilities proved to be an effective method for patients to access HIV services nearer to their homes. As a result, a steady increase was observed in utilization of services, quality of clinical care, adherence to medication, retention in care and, ultimately, in satisfaction of both clinicians and patients.

Involving people living with HIV & AIDS to support their peers for access to improved HIV-related services in Northern Uganda

L. Ciccio, A. Ocerro, J. Arica | NUMAT/JSI

INTRODUCTION:

There are some challenges to providing quality and comprehensive HIV & AIDS services in Northern Uganda. These include, among others, insufficient human resources and a disjointed relationship between health workers and the community they serve. Patients often have to refer themselves to congested facilities where overburdened staff cannot answer to all their demands, concerns, and health issues.

DESCRIPTION:

NUMAT involved people living with HIV & AIDS (PLHIV) volunteers in supporting, mobilizing, and bringing together their fellow PLHIVs in network groups at district and sub-county levels to access information on existing services, sustain advocacy campaigns for critical interventions, and work to challenge stigma and discrimination. Additionally, the program built the capacity of the networks' members to become 'service navigators,' helping their peers in accessing complementary HIV-related services, linking PLHIVs to HIV-related prevention, treatment, care, and support services, including social and legal help and nutritional supplementation.

LESSONS LEARNED:

NUMAT has so far supported the activation and functionality of nine district-based and over 100 sub-county-based PLHIV networks in the region with a membership of nearly 50,000 PLHIVs. More than 200 members of these networks have been trained to provide community home-based care services, promote ART adherence, and mobilize the community to utilize testing services, prevention of HIV vertical transmission, TB detection, and treatment and palliative care services. Furthermore, 60 PLHIVs were trained to deliver Basic Care Package (BCP) commodities in the region and over 5,000 PLHIVs received the BCP kit. The perception of the health workers was positive for the level of commitment of PLHIVs and their help in covering some of the tasks they were supposed to accomplish. PLHIVs themselves found it easier to access, consult, and confide with fellow PLHIVs before being referred to health staff for clinical attention.

RECOMMENDATIONS:

Evidence reveals the positive gains in HIV service provision from the greater involvement of PLHIVs was a result of strengthening both individual PLHIVs and their networks. Ensuring PLHIVs have access to preventive, treatment, and care services must go hand-in-hand with the efforts described above, especially in areas where there is a shortage of human resources for health. PLHIVs have also the potential to be fully integrated in the health system.

6th International AIDS Society Conference on
HIV Pathogenesis, Treatment and Prevention
July 2011 | Rome, Italy

Combining HIV counseling and testing with comprehensively tailored prevention interventions for couples in Northern Uganda

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BACKGROUND:

In Uganda there is a high incidence of HIV among married couples: married persons account for about 65% of new infections, while discordant couples make up 50% of these transmissions. Many couples are afraid of going for HIV testing with their partners because they fear it would lead to accusations of infidelity. Fear of knowing one's status and its consequences are other known behavioral barriers.

METHODS:

Our program reached people in long-term monogamous relationships through couples' conferences, couples' focus group discussions and HCT. Couple-centered interventions aimed at equipping persons in stable relationships with skills and knowledge for negotiating safe sex. Additionally, social norms that are not harmful to women were promoted through couple dialogues. Relevant messages on non-violent conflict resolution and communication were also given; the importance of condoms for dual protection among discordant couples was emphasized and basic facts on HIV risk reduction provided. Couples VCT was offered in most of the couples' conferences.

RESULTS:

In 2010, couples' conferences were held in 6 districts of Northern Uganda. The conferences were attended by 1,379 couples, of which 535 (39%) also tested for HIV. Twenty-five couples were HIV discordant (4.7%), 24 concordant HIV-positive (4.5%), and 486 (90.8%) couples were concordant HIV-negative. All couples were assisted to design risk reduction plans and given appropriate referrals for appropriate HIV-related services.

CONCLUSION:

HIV voluntary counseling and testing for couples could become an important intervention for HIV prevention and also for maintaining good relations between serodiscordant partners. It has already gathered strong institutional support and encouraged a growing number of couples to go for testing. Doing this within the context of couples' conferences adds crucial information to help participants managing the dynamics of their relationships. However, more efforts are needed to increase the number of couples who accept HIV testing.

Uptake of HIV services in combination with malaria prevention & family planning services at antenatal care clinics in Northern Uganda

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BACKGROUND:

HIV services, family planning (FP), and malaria prevention are critical to improving maternal health. However, in several occasions these services are offered separately and many opportunities to better serve eligible women get missed. Our program assessed the uptake of HIV, malaria, and FP services targeting women in rural Northern Uganda attending antenatal care (ANC) clinics.

METHODS:

Two population-based cross-sectional surveys were conducted in 2008 and 2010 respectively using the Lot Quality Assurance Sampling (LQAS) survey methodology. One of the respondents' categories was women who had delivered in the past two years and their uptake of reproductive health services was examined.

RESULTS:

The sample size was 855 women in both surveys. The percentage of women who tested for HIV during ANC increased significantly from 71% in 2008 to 87% in 2010. There was also a significant increase in the proportion of those who received at least two doses of intermittent preventive treatment (IPT) for malaria from 59% in 2008 to 69% in 2010. Those who tested were slightly more likely to have received two or more doses for IPT (OR 1.62). In 2010, 71% reported having slept under a mosquito net throughout their pregnancy, compared with 48% in 2008. Ownership of at least one mosquito net rose from 56% in 2008 to 91% in 2010. On their current usage of FP, 19% of all women interviewed reported using a modern method compared to 13% in 2008.

CONCLUSION:

Overall, HIV testing and broader HIV services seem to have the greatest uptake among reproductive services. However, there is some evidence that in Northern Uganda service uptake is generally on a steady increase and that HIV testing for pregnant women is gradually shifting from the traditional stand-alone intervention towards a more integrated one within the comprehensive maternal health care.

Expanding HIV pediatric care & treatment through community involvement in a district of post-conflict Northern Uganda

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BACKGROUND:

Children have been severely affected by the HIV epidemic in Uganda. New infections among children are estimated at 25,000 annually at the national level and only 8.7% of all patients on ART are children. In Northern Uganda, 110,000 children 0-15 years are estimated to be living with HIV & AIDS. Of those, about 50,000 need treatment but currently only 10,000 are on ART.

METHODS:

Our program is serving these children in Lira district through a layered approach that promotes ownership and sustainable efforts. It engaged a local organization—Samaritan's Purse—to empower the community to expand pediatric HIV services, working closely with the existing community structures, including child protection committees, village health teams, community volunteers, peer educators, and members of people living with HIV & AIDS networks.

RESULTS:

Through the use of these community structures, in a period of three months the program has sensitized 2,200 (960 male and 1240 females) community members on pediatric care. Fifty teachers and 50 pupils were also trained to improve the quality of care and support for HIV-positive children in schools. In addition, three review meetings on pediatric care were held at district level. Following this extensive community sensitization and mobilization, 826 children were identified and referred for HIV testing. Of these, 682 tested negative, 144 (21%) tested positive and 138 were enrolled on care and treatment. Two hundred and forty-five children (119 males and 126 females) were also provided home-based care kits.

CONCLUSION:

Increasing the detection of HIV-positive children and their access to HIV pediatric care and treatment is possible with the involvement of existing community-based structures, which also contributes to a more sustained community support.

Empowering the community to address the needs of HIV-positive youth in a district of post-conflict Northern Uganda

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BACKGROUND:

HIV-positive youth (15-24 years) are an important, but often underserved population. In Northern Uganda, the 20-year long armed conflict exacerbated the challenges faced by these youth. Our program is serving this specific population through an approach that supports, nurtures, and strengthens these youth whose lives have been dramatically redefined by HIV.

METHODS:

Through engaging a local organization, Health Alert, our program has empowered the community to reach out to HIV-positive youth in four districts in Northern Uganda. In a period of three months, the program sensitized 436 community educators (161 males and 275 females) on the needs of HIV-positive youth in these districts to promote a stigma free environment for them. Through the use of the existing community structures - like Child Protection Committees and Village Health Teams - a mapping of the homes of 125 HIV-positive youth was conducted. These youth were then followed-up at home to monitor family support systems and adherence to treatment, to assess any existing stigma and discrimination, and to conduct adherence counseling and support disclosure.

RESULTS:

Thirty HIV-positive youth were involved in training on treatment literacy knowledge in order to offer peer-to-peer support on adherence, and six youth-centered peer support clubs were formed in schools. A total of 95 caretakers (30 males and 65 females) were trained on home-based management of ART, and finally, community dialogue with 480 (250 males and 230 females) children and caretakers were undertaken. Twenty-one youth (16 males and 5 females) have since been referred for treatment.

CONCLUSION:

The greater involvement of community-based structures is vital to improving access to health services for HIV-positive children. These also promote community ownership and sustainable efforts and help in fighting stigma and discrimination.



The trend in the epidemiological profile of TB retreatment cases in the high HIV-prevalence setting of Northern Uganda

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BACKGROUND:

TB retreatment cases are known to pose a harder challenge to control programs due to their poorer outcome. Additionally, they may suggest a difficult clinical management as in the case of retreatment after defaulting or an underhanded problem of drug resistance, as in the case of true relapse.

INTERVENTION:

Our program assists TB control program activities within Northern Uganda, a region with HIV prevalence 8.2% higher than the national average of 6.4%. We collected and reviewed the periodic reports from all districts from the region from 2008 until 2010 and analyzed the following: time trend of TB retreatment cases and their sex disaggregation; reasons for restarting TB treatment; and outcome of TB retreatment cases of the previous cohorts (those who completed from 2007 to 2009).

RESULTS:

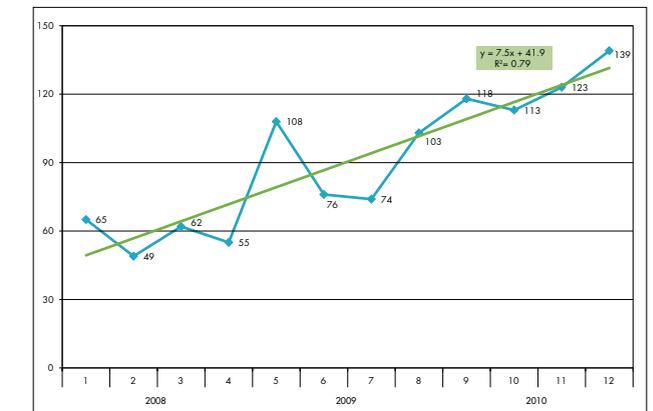
The number of TB retreatment cases increased steadily from 2008, with 231 cases, to 2010, when 493 cases were recorded (see graph). The increase is statistically significant in linear regression analysis ($p < 0.001$). The ratio retreatment cases out of all new TB cases also increased from 1 TB retreatment case every 25 new cases to 1 every 13 new cases. Overall, 54% of all retreatments were relapse/re-infection cases, while defaulters and failure cases contributed to 40% and 6% of retreatment respectively. The sex disaggregation of all retreatment cases (71% male and 29% female) was not found to be different

from the sex disaggregation of overall TB cases occurring in the region. Regarding treatment outcome, death was recorded for 9.7% of all retreatment cases within the three years, while defaulting rate was at 4.9%.

CONCLUSIONS:

In Northern Uganda, TB retreatment cases are on the rise. Special attention should be placed on its pattern, trend, and causes that need to be further analyzed and closely monitored. In the medium term, the increasing number of TB retreatment cases may jeopardize the efforts of the TB control program and the achievement of its targets.

TIME TREND OF SMEAR-POSITIVE TB RETREATMENT CASES IN NORTHERN UGANDA, 2008/10



HIV co-infection prevalence among different TB classification types in Northern Uganda

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BACKGROUND:

HIV prevalence in Northern Uganda is at 8.2%, with males at 7.1% and females at 9%. It is estimated that HIV prevalence among newly registered TB patients is around 50%. However, little is known about any difference in HIV prevalence among sex and across various TB classification types, whose occurrence is also directly influenced by HIV co-infection.

INTERVENTION:

Data for 2010 were collected from all the 11 reporting districts in the region and reviewed. The overall number of cases was broken down by sex and TB classification as main variables of interest. Results were tested for any statistical significance.

RESULTS:

Of the 6,368 cases registered in 2010 in the region who were offered an HIV test, 5,584 (87.7%) accepted being tested, with no significant difference between male (87.2%) and female (88.5%) patients. Overall, the proportion of HIV-positive TB patients was 50.3% (male 48% and female 54.3%). Females were more likely to be found HIV-positive, with an odd ratio of 1.29 (1.15-1.43, $p < 0.0001$). Smear-positive pulmonary TB patients were found co-infected with HIV in 47% of cases, while smear-negative pulmonary and extra-pulmonary cases were found HIV-positive in 53.7% and 55.3%, respectively. The odds ratio of being found HIV-positive was 1.31 (1.17-1.46, $p < 0.0001$) for smear-negative and 1.40 (1.10-1.76, $p < 0.005$) for extra-pulmonary cases.

CONCLUSIONS:

HIV testing acceptance is high among TB patients in Northern Uganda. The HIV prevalence among them is not homogeneous among different disease classification types and is higher in females than in males. This information could be of help in making sure all TB cases receive HIV counseling and testing, especially for those whose disease type is more likely to be associated with HIV co-infection.

ASSOCIATION BETWEEN TB DISEASE CLASSIFICATION TYPE AND HIV SEROSTATUS

CLASSIFICATION TYPE	TESTED FOR HIV	TESTED HIV+	PREVALENCE (%)
New smear-positive	2,738	1,286	47.0%
New smear-negative	2,284	1,227	53.7%
New extra-pulmonary	320	143	55.3%

16th International Conference on AIDS and Sexually Transmitted Infections in Africa (ICASA)
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Providing CD4 count tests to pregnant mothers for a more effective PMTCT intervention in Northern Uganda

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BACKGROUND:

Mother-to-child transmission (MTCT) accounts for more than 90% of all HIV transmission among infants and children under five years in Uganda and more than 20% of all transmission. The recently revised national PMTCT policy recommends more efficacious PMTCT prophylactic regimens that can further reduce the HIV vertical transmission. According to the policy, pregnant women with a CD4 count below 350 (or in WHO stage III/IV) should be initiated on lifelong highly-active antiretroviral treatment (HAART). However, CD4 testing availability is limited and most facilities still rely on clinical staging.

OBJECTIVES:

The objectives were to compare findings from CD4 count and WHO staging among pregnant women and to verify the adoption of revised PMTCT policy guidelines by health workers.

METHODS:

The study sites were in Apac District, Northern Uganda, with a projected 2010 population of about 550,000 people and HIV-prevalence estimated to be 8.2%. Four ART-accredited facilities in the district (one hospital, two health centers grade IV, and one health center grade III) were selected and offered regular provision of CD4 testing for pregnant women. Health workers were encouraged to include CD4 testing for newly identified HIV+ pregnant mothers. Samples were taken fortnightly and brought to an equipped central laboratory, and results delivered to the facilities at the time of the following visit. Clinical records and patients' details that were recorded in a specific CD4 register were collected and verified for accuracy and completeness.

RESULTS:

In the last 15 months, 318 HIV+ mothers were enrolled at the four study facilities but a CD4 test result was available only for 275. Of these, 240 had records of clinical staging and drug regimens prescribed and were included in the analysis. Their median CD4 test result was 418. Of the 154 mothers (64% of all analyzed cases) whose CD4 count was above 350, 146 (95%) were in stage 1 or 2, while of 86 mothers (36% of all analyzed cases) whose CD4 count was below 350, 43 (50%) were in stage 1 or 2. In our experience, the WHO staging for deciding on whether to prescribe HAART demonstrated a high specificity (95%), but a low sensitivity (50%). Of the 73 mothers whose CD4 count was actually below the threshold for receiving HAART, 55 (64%) were actually prescribed it while the remaining 36% received other drug combinations for PMTCT prophylaxis.

CONCLUSION AND RECOMMENDATIONS:

Utilizing a CD4 test for deciding on PMTCT drug regimen is a more reliable approach and helps identify those clients with advanced immunological depletion whose clinical conditions are still well-preserved. In our experience, this happened to involve half of mothers with a low CD4 count. On the other hand, compliance of clinicians to the revised guidelines is particularly low, with a third of eligible mothers not receiving the lifelong HAART they qualify for. CD4 testing for pregnant mothers should be scaled up for a more effective PMTCT intervention. Close supervision of health workers should be instituted to ensure good compliance with agreed algorithms.

Integrating information, education & communication (IEC) interventions with health service delivery camp: an innovative approach for increasing access to HIV & AIDS prevention, care, & treatment in Northern Uganda

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ISSUES:

For most parts of rural Northern Uganda, access to utilization of quality health services is hindered by several factors: lack of and poor health infrastructure, human resource constraint, mismatch of service delivery time, and other socioeconomic factors. HIV prevalence in the region remains higher than the national average and although HIV & AIDS services are available, they are of varied quality and typically restricted to urban settings. Our program has adopted an innovative IEC model integrated into health services outreaches to expand access and utilization of malaria, HIV & AIDS, and TB services in rural areas.

OBJECTIVES:

To increase access to HIV & AIDS prevention, care, and support services through an integrated, informative, and participatory approach.

DESCRIPTION:

The core concept of integrating IEC and behavior change communication with health service outreach is that IEC is most effective when it is participatory and linked with relevant services. With this in mind, integrated IEC and service outreach has been offered through a series of work camps in several health facilities throughout the region. The IEC components were: group discussions on health-related topics targeting young people and adults; personal testimonies from HIV and TB clients; face-to-face health talks on malaria, HIV, and TB; and distribution of printed educational material in local language. All this happened alongside the provision of clinical services. Young boys and girls discussed the process of growing up and the psycho-sexual changes of puberty and adolescence in joint sessions. People living with HIV and TB clients discussed and were informed about issues of adherence, disclosure, positive living, as well as HIV/TB co-infection and treatment. Printed IEC materials focused on prevention, treatment, care, and support including HIV-related stigma and discrimination.

LESSONS LEARNED:

As an ongoing and innovative approach of integrating and linking IEC and immediate service utilization, the integrated IEC and health services camp has been proven to reach large numbers of people within a short period of time. Sample data on integrated IEC activities and HIV/TB service utilization from five sites, where one-day integrated outreach was conducted, have been collected and analyzed. A day camp has reached an average of 498 people with prevention messages and about 354 people with HIV counseling and testing services and related information. A total of 453 people received information on condom use and were able to pick and take condoms with them. Other HIV/TB-related information were provided and linked to actual services such as ART, chronic care, and sputum examination. On average, three new clients are initiated on ART and 13 enrolled on HIV chronic care.

NEXT STEPS:

Comprehensive malaria, HIV & AIDS, and TB service delivery in the region is inadequate and the community is suffering principally for lack of relevant health infrastructure, human resource, and absence of innovative approaches. An effective integrated IEC and health services camp provides a one-stop point for resource-constrained communities to access both relevant information and health interventions.

Scaling up provider-initiated testing and counseling in Northern Uganda

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BACKGROUND:

HIV counseling and testing (HCT) remains the most important intervention in HIV control as it's a strategic entry point to prevention, treatment, care, and support services. New innovations into HCT have evolved, including testing in clinical settings where most infected people go for care. In late 2008, the Uganda national guidelines on HCT changed, shifting from the client-initiated voluntary counseling & testing (VCT) to provider-initiated HIV testing & counseling (PITC).

OBJECTIVES:

The main objective was to assess and interpret the results after 15 months of PITC implementation.

METHODS:

Initial roll-out of PITC focused on three high caseload hospitals, but was later expanded to two more hospitals and eventually to two health centers grade IV (located in districts with no hospitals). In each site, a two-day orientation was conducted for all health workers, followed by a three-day training for selected staff on counseling, rapid testing technique, testing algorithms, supply management, and ordering protocols. Testing was then expanded to all hospital departments, conducted alongside the existing VCT clinic. A monthly coordination meeting at each of the sites was introduced to review results, assess inventory of testing kits, and discuss challenges and successes. Age- and sex-disaggregated results were collected on a monthly basis from both VCT clinics and other facility departments, and then collated and contrasted.

RESULTS:

Between January 2010 and April 2011, the seven facilities counseled and tested 25,785 people under PITC (34% male; 66% female) and 23,004 people under the concurrent VCT (35% male; 65% female). Over 90% of PITC clients were aged above 18 years, compared with 75% of VCT clients. In total, 2,795 (10.8%) and 2,966 (12.9%) clients were detected being HIV-positive under PITC and VCT respectively, with virtually no difference in HIV prevalence between male and female. The HIV prevalence among children under 5 years of age for PITC was 19%, compared with 7% of the VCT setting; while the HIV prevalence among clients aged 5-17 years of age for PITC was 10%, compared with 4% from VCT. The odds ratio to test HIV-positive within PITC was significantly higher for these two groups, at 3.10 (2.32-4.13) and 3.00 (2.41-3.75) respectively. HIV prevalence among clients above 18 years of age for PITC was 11%, compared with 16% from VCT, with an odds ratio of 0.64 (0.61-0.68).

CONCLUSION AND RECOMMENDATIONS:

In high volume facilities, the PITC approach helps shift the burden of HIV counseling and testing from the main laboratory and VCT clinic to the various departments. This reduces congestion and likely improves quality of service provided. Besides, in our experience, PITC doubled the number of people tested, thus increasing the proportion of people aware of their HIV serostatus; and it more efficiently detected HIV-positive cases, particularly in those age groups whose VCT positivity rates are usually low. Due to its higher efficiency in identifying HIV-positive cases, PITC should be rapidly scaled up to more facilities and become a routine test for patients who access hospitals and health centers.

Estimating the association between tuberculosis treatment outcome & HIV status in the TB/HIV high-prevalence setting of Northern Uganda

H.M. Nassur¹, J.P. Otuba¹, E.R. Ogang², A. Ocero¹, L. Ciccio¹ | ¹NUMAT/JSI, ²National TB and Leprosy Control Program

BACKGROUND:

TB treatment outcome is known to be affected by a number of factors, including age, nutritional status, disease classification, disease category, and HIV status. However, the TB quarterly reporting format adopted by the Uganda TB Control Program does not capture any possible relation between treatment outcome and HIV status, though the information is available from the TB register.

OBJECTIVES:

To assess whether there is any significant relationship between TB treatment outcome and HIV status in a TB/HIV high prevalence setting.

METHODS:

Two districts in Northern Uganda with a high TB caseload were selected. District TB registers were examined and data on treatment outcome tallied against HIV status. The cases examined were all TB case registered between January and March 2010. A tally sheet assisted in recording cases and a summary was compiled. A statistical test was applied to determine significance.

RESULTS:

A total of 519 new and nine retreatment TB cases were reviewed. Of the new cases, 46.9% were HIV-negative, 45.7% HIV-positive and 8.4% did not have their HIV serostatus recorded. Of the retreatment cases, 89% were HIV-positive and 11% HIV-negative. Of the 238 HIV-negative patients, 77 were cured and 125 completed treatment, thus contributing to a treatment success rate (TSR) of 84.8%; while 14 (6%) cases died, eight (3%) defaulted, and 14 (6%) were transferred away. Conversely, of the 237 HIV-positive patients, 27 were cured and 141 completed treatment, thus contributing to a TSR of 70.8%, 29 (12%) of them died, 21 (9%) defaulted, and 19 (8%) were transferred away. The odds ratio (OR) of having death or defaulting as treatment outcome among HIV-positive patients was at 2.6 (1.5-4.5); whereas the OR for successfully completing TB treatment among HIV-negative clients was at 2.3 (1.5-3.6). Among the 168 HIV-positive cases that were successfully treated, 155 (92%) were on cotrimoxazole prophylaxis while 92 (58%) were on highly active antiretroviral treatment (HAART). On the other hand, of the 29 who died, 72% were on CPT and 41% on HAART; and among the 21 defaulters, 48% were on CPT and 14% on HAART. The odds ratio of successfully completing TB treatment among HIV-positives who were on cotrimoxazole prophylaxis was at 6.0 (2.8-12.7); while the OR for successful treatment among the HIV-positive patients on HAART was at 3.6 (1.9-6.6).

CONCLUSION AND RECOMMENDATIONS:

There is an association between TB treatment outcomes and the serostatus of the patients, with a higher proportion of deaths and defaulters among the HIV-positive patients. Additionally, successful TB treatment completion among the HIV-positive cases was also associated with having been enrolled in cotrimoxazole prophylaxis and antiretroviral treatment. There is a need for health workers to monitor co-infected cases more attentively and closely to ensure a successful TB treatment outcome, and to encourage them to increase coverage of cotrimoxazole prophylaxis and HAART enrollment among co-infected TB patients

Providing CD4 cell count tests to hard-to-reach communities in Northern Uganda: cost-effectiveness of an outreach delivery model

A. Oceró¹, S.P. Akena¹, J.P. Otuba¹, L. Cicciò¹ | ¹NUMAT/JSI

BACKGROUND:

Changes in the national ART guidelines have made CD4 testing increasingly essential for ART initiation and clinical follow-up. In Northern Uganda, CD4 testing was limited to a few urban-based referral hospitals offering ART services. This deprived remote populations accessing care at lower level health facilities of quality HIV services. Our program developed an outreach model of CD4 testing that involves blood sample transportation from remote clinics to the centralized laboratories for testing. The model was guided by a tripartite agreement between NUMAT, the contractor that was to perform bleeding and transportation, and the hospital-based static laboratories. Test results were disseminated to the clinics within two weeks. Community volunteers reminded clients to return for care once results arrived and also mobilized clients for follow-up testing. Three years after the CD4 outreach model commenced, an economic analysis determining its effectiveness was performed.

OBJECTIVES:

To evaluate the cost-effectiveness of the outreach delivery model in provision of CD4 tests.

METHODS:

Quantitative data was sourced from a desk review of clinic and laboratory records, program financial records, and contractor invoices. Qualitative data was obtained from in-depth interviews and focus group discussions with health workers and beneficiaries respectively. Seven variables were considered in the analysis. The reach of each model was measured by geographical coverage and service uptake. A cost analysis of each model was determined by average cost effectiveness and the incremental cost effectiveness ratios. Average cost to funder, cost saving to outreach model beneficiary, and client and provider satisfaction for each model were also determined.

RESULTS:

The mean distance of beneficiaries of the outreach model from static laboratory was 65 kilometers. Beneficiaries of the static laboratory lived, on average, 17 kilometers away, with 65.4% dwelling within a 10 kilometer radius. Out of 29,220 eligible clients, 59% had accessed a CD4 test in 12 months from both models combined. However 41% accessed the test through outreach model and only 6% through static model. With static model working optimally, access would be at 16%. Observed (sub-optimal) and expected (optimal) costs per test by static model was U.S. \$30.55 and U.S. \$6.86, respectively. An outreach CD4 test cost U.S. \$13.35 per test. The average cost effectiveness ratio for static model, observed and expected, was U.S. \$3,074.94 and U.S. \$685.60 respectively, while for outreach model was U.S. \$1,334.37. Incremental effectiveness ratio for outreach model relative to static model at suboptimal and optimal was U.S. \$1,132.46 and U.S. \$1,756.21 respectively. U.S. \$20.76 was saved by clients accessing testing by outreach model. Both clients and health workers felt that the outreach model had enhanced the quality of care.

CONCLUSION AND RECOMMENDATIONS:

The outreach model represents an economically attractive alternative to the sub-optimal performing hospital-based laboratories. The cost effectiveness of the outreach model would be reversed if the static laboratory worked optimally. However, this is still offset by the limited reach of the static model. HIV programming for hard-to-reach populations needs to draw advantages of both models to optimize care.

Task shifting for scale-up of HIV care: evaluation of a nurse-centered antiretroviral treatment (ART) clinic in Northern Uganda

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INTRODUCTION:

Shortage of human resources for health, especially higher cadres, is one of the major barriers to achieving universal access to HIV care and treatment. From September 2006, our program embarked on scaling up access to antiretroviral treatment across nine districts of Northern Uganda, using the WHO-recommended public health approach where ARV administration is mainly done by clinical officers and nurses. Extensive support in areas of training, infrastructural improvement, supplies of selected laboratory and clinical equipment, strengthening of supply chain systems, provision of antiretroviral drugs, continuous technical coaching, and CD4 testing using an outreach approach were all given to 31 lower-level health facilities across Northern Uganda. Due to constraints in human resources and difficulties in attracting and retaining health workers in the post-conflict setting of Northern Uganda, some of them were mainly managed by nursing officers.

OBJECTIVES:

To review the effectiveness of ART provision in nurse-managed ART clinics.

METHODS:

A retrospective evaluation of the effectiveness of this task-shifting model for ART service provision using descriptive data was done in Atanga HC III, Namukora HC IV, and Ogur HC IV. Records of patients enrolled in HIV care and treatment from March 2009 to March 2011 were reviewed to assess: (i) compliance with the national guidelines for ART eligibility based on the Ministry of

Health accepted criteria of CD4 cell count less than 350 cells/ μ l or clinical stage III and IV; and (ii) key clinical outcomes, like retention, body weight increase, and CD4 cell count evolution after six, 12, and 24 months of follow-up.

FINDINGS:

A total 2,107 patients were enrolled in chronic care. Of these, 626 (29.7%) were initiated on ART. Of those initiated on ART, 19 (0.9%) did not meet the eligibility criteria for ART initiation. The majority of those initiated had adherence assessed at each clinic visit (86%). Patient retention was 79.7%, 77.1%, and 65.8% for six, 12, and 24 months' cohorts respectively. At 24 months of treatment, 18.4% of the clients were lost to follow up and 7.9% had died. The median CD4 cell count increased from 267 cells/ μ l at baseline to 366 cells/ μ l at 12 months of follow-up. Median weight increased from 50 kg at ART initiation to 53 kg after six months and 54 kg at 12 months. The treatment outcomes at these facilities compared favorably with the average national findings where patient retention was 87%, 84.2%, and 77.6% at six, 12, and 24 months respectively. At 24 months of treatment, 16.6% were lost to follow-up and 5.2% had died. The median CD4 cell count nationwide increased from 161 cells/ μ l at baseline to 330 cells/ μ l at 12 months.

CONCLUSIONS:

These findings suggest that nurses in the absence of clinical officers and doctors can effectively administer ART when given adequate training, mentoring, and technical and logistical support.

Integrating HIV services with poverty reduction programs among fishing communities in post-conflict Northern Uganda

M.S. Odipo¹, B. Adong¹, J. Otim¹, A. Muhereza², L. Cicciò² | ¹NUMAT/World Vision, ²NUMAT/JSI

ISSUES:

Fishing communities in most African communities represent populations at higher risk for HIV infection. This high vulnerability is largely due to the mobile lifestyle among the fishing folk coupled with availability of daily income alongside collateral trades and businesses, including commercial sex. Our program has been working in the 15 districts of Northern Uganda targeting fishing communities with prevention, treatment, care services, and also integrating the Village Saving and Loan Association (VSLA) model for poverty reduction.

OBJECTIVES:

To assess the usefulness of combining medical interventions for HIV prevention with programs for poverty reduction and risk minimization.

DESCRIPTION:

Northern Uganda, with a projected population of about 3 million people, is home to several fishing and landing sites. Our program conducted VSLA trainings and provided technical and logistical support to 87 groups in the 15 districts, specifically targeting the fishing folks and other most-at-risk groups. These trainings were intended to equip the fishing folks with saving skills to empower them economically, hence reducing their risk and vulnerability to HIV while at the same time running HIV prevention treatment and care activities.

LESSONS LEARNED:

Integration of VSLA in prevention work among the fishing communities in the region enhanced fishing folks' economic security and reduced their vulnerability to HIV infection. Preliminary data collected from 13 VSLA groups indicated that from January 2010 to April 2011, members were able to save about 52 million shillings (corresponding to almost U.S. \$25,000). Of this amount, about 28 million were shared by the group members to solve personal needs (feeding, school fees, household requirements, and alternative income generating activities), while about 24 million were held by the groups as cash savings at hand. These same groups had earlier received trainings in the different HIV prevention packages and were serving as home-based care providers, behavior change agents, peer educators, and community animators against gender-based violence. Reportedly, the group members have been able to access HCT as couples, ART for the HIV-positive members, and have been working closely with the established health facility staff.

NEXT STEPS:

HIV & AIDS interventions targeting most-at-risk populations such as the fishing folk can be more effective if they integrate socially appropriate, economically viable, and sustainable poverty reduction programs that empower the community members. VSLA is a savings model that has particularly proven to be effective in self-empowerment among the fishing folk and is therefore highly recommended.

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HIV prevalence among fishing communities in Northern Uganda

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ISSUES:

In several African countries, HIV prevalence rates in fishing communities are higher than the national average prevalence rate for adults. HIV vulnerability seems to originate from several factors, including the mobility of fishermen, the time they spend away from home, their access to daily cash income, and the availability of commercial sex in many fishing sites. NUMAT is a USAID-funded program working in 9 post-conflict districts aiming at preventing HIV infection among the most-at-risk groups.

DESCRIPTION:

The program area, Amolatar district, with a population of about 120,000 people, is home to several fishing and landing sites. NUMAT conducted several HIV counseling and testing (HCT) outreaches specifically targeting the fishing folks, and also compared the available data among HCT clients at the static center serving the fishing communities to the others located elsewhere in the district.

LESSONS LEARNED:

HCT activities conducted during 2009 in both outreaches and the static HCT site located in the district main fishing hub attracted 5,034 people (1,904 M; 3,130 F), of which 727 (14.4%) were found to be HIV-positive with prevalence among males slightly higher than in females (14.8% vs. 13.9%, $p=0.046$). During the same period, HIV prevalence among clients from the remaining HCT district sites was 9.2% in the general population ($p < 0.0001$), with a similar gender-related pattern (9.6% among males and 9% among females).

NEXT STEPS:

Fishing communities are likely to be at a higher risk of HIV infection in Northern Uganda. They may even become a bridge population, linking areas of high and low prevalence across the region. Tailored intervention for HIV prevention and for increasing their awareness of HIV status are therefore recommended.

Assessing quality of antiretroviral therapy data among ART-providing health facilities in Northern Uganda

D. Sera, L. Ciccio, A. Ozero, J. Arica, M. Makumbi | NUMAT/JSI

ISSUES:

Effective monitoring and supervision of health care programs depends on complete, accurate and reliable data between antiretroviral therapy (ART)-providing health care facilities and both the district and Ministry of Health. Having access to good quality data that reflects the processes of care and clinical outcomes is the first step to ensuring delivery of an effective intervention and evaluation of performance in ART units.

DESCRIPTION:

A total of 14 ART-providing health facilities from five districts in Northern Uganda were purposively sampled. ART data from these ART facilities that had served 2,911 active ART clients in 2009 were collected for the month of September 2009. Seven ART data elements for completeness and three for accuracy were surveyed from the relevant ART registers and summary forms.

LESSONS LEARNED:

Out of the 14 facilities, only one had a system of computerized data. Overall, data completeness was 83%, ranging from 43% to 100% for the individual data elements. Completeness across facilities also varied, ranging from 53% to 100%. Data collected at registration were more likely to be complete (95%) than those recorded at follow-up visits (43%). Data accuracy was 21% for the presence of a unique client identification number and 43% for the adequate coding of transfer-in cases. Concordance between the number of newly enrolled clients recorded in the register with the number indicated in the summary report—the third data element chosen as proxy to accuracy—showed acceptable degree of discrepancy ($\pm 5\%$) in six facilities (43%), while the others had a larger discrepancy between their data sources.

NEXT STEPS:

Assessing the quality of ART data through simple, low-cost data quality assessments is feasible and critical in determining the magnitude of the data gaps. It should be conducted on a regular basis to identify weaknesses in data management and take corrective actions.

Engaging & mobilizing uniformed forces for HIV prevention in post-conflict Northern Uganda

D. Sera¹, G. Adiyoo², L. Ciccio¹, M. Makumbi¹ | ¹NUMAT/JSI, ²NUMAT/World Vision

ISSUES:

Military personnel have a well-documented higher risk of exposure to sexually transmitted diseases including HIV. There are several reasons for this: Soldiers are usually posted far from their communities and families; they often have contact with sex workers; and the culture of risk can induce them to unsafe sexual behaviours. Following the 20-year armed conflict, there is a conspicuous presence of military personnel in Northern Uganda. This represented a unique opportunity to provide them with HIV prevention and education messages in a highly disciplined and organized setting.

DESCRIPTION:

NUMAT was put in place to expand access to and utilization of quality HIV & AIDS services among several most-at-risk populations, including uniformed forces and their families, through capacity building, logistical support, and support supervision.

LESSONS LEARNED:

In 2009, NUMAT trained 122 (93 male, 29 female) uniformed forces from existing military barracks as peer educators to reach out to their fellow soldiers with HIV risk reduction messages. These messages included awareness of sexual and gender-based violence, and proper and consistent condom use. The peer educators were able to reach 1,658 (824 male, 834 female) army officers. HIV education was also combined with HIV voluntary counseling and testing from which 1,210 persons (864 male, 346 female) benefited. One of the lessons learned was the limited participation of the wives of the soldiers during the activities that may require a better tailored strategy.

NEXT STEPS:

Reaching out to uniformed soldiers on HIV activities is quite sensitive, and it is crucial to have support from the uniformed team leaders. NUMAT was able to do this through entry meetings with leadership to advocate and plan for the activities. Furthermore, targeted strategies need to be employed to reach out to the wives of uniformed forces.

Challenges in implementation of recommended feeding options among HIV-positive mothers in Northern Uganda

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ISSUES:

Infant feeding is a crucial factor in determining growth and development of a child. However, the risk of HIV transmission during breastfeeding poses a dilemma for infant feeding, particularly in Northern Uganda, a region where the HIV prevalence of 8.2% is higher than the national average. The Ministry of Health's policy document outlines recommendations on infant feeding for HIV-exposed babies. However, little is known about mothers' perceptions and challenges in implementing them.

DESCRIPTION:

NUMAT is a USAID-funded program improving uptake and utilization of prevention of mother-to-child transmission of HIV (PMTCT) services in the region. Among other activities, NUMAT facilitated the creation of family support groups (FSGs) attached to PMTCT facilities. FSGs, among other things, assist HIV-positive mothers in making informed decisions about infant feeding options. NUMAT organized focus group discussions (FGDs) in six health facilities to collect pregnant mothers' experiences about this issue.

LESSONS LEARNED:

45 PMTCT mothers whose babies were older than six months participated. Mothers' knowledge about feeding options was adequate and they recognized the role of the FSG in providing useful information. The majority of those who chose exclusive breast-feeding (EBF) felt it was a better nutritional option for their babies. Some did it for cultural motives and others for financial reasons, but they also mentioned exhaustion and breast sores as challenges. Mothers who chose replacement feeding or mixed feeding reported loss of breast-milk and disease occurrence to have determined their choice. Some discussants reported some pressure from communities and families to choose EBF, while most of them found replacement feeding feasible and acceptable but hardly affordable. Eventually, one third of mothers practiced a mixed feeding approach.

NEXT STEPS:

Despite recommended feeding options, a remarkable proportion of mothers still practices mixed feeding that is associated with higher HIV transmission. Alternative PMTCT strategies should be sought to address this common situation.

Factors associated with prevention of mother-to-child transmission of HIV uptake among pregnant women in a rural district of Northern Uganda

P. Okello, L. Ciccio, A. Oceru | NUMAT/JSI

ISSUES:

Prevention of mother-to-child transmission (PMTCT) of HIV is a major focus of HIV control programs in Uganda, whose national policy for ARV prophylaxis has changed towards more efficacious regimens. Despite the efforts in scaling-up PMTCT, its uptake by pregnant mothers and the follow-up of HIV-positive mothers remains low. Understanding the underlying reasons is important to improve the PMTCT acceptance and service coverage.

DESCRIPTION:

The study was conducted in Oyam, a district in Northern Uganda with a population of about 350,000 people. Data were collected on PMTCT services from all PMTCT-providing units for a 2-year period to establish the level of service utilization. Additionally, 163 women who were pregnant during that same period were selected from seven villages through a multi-stage, random sampling and interviewed to assess factors affecting service uptake.

LESSONS LEARNED:

Records were available for 11,362 mothers from facility registers. HIV testing was provided to 75% of mothers accessing antenatal clinics, of which 5% were found to be HIV-positive. Of these mothers, 24% received the recommended ARV combination regimens for PMTCT, and 15% started on highly active antiretroviral therapy. Out of the 180 exposed infants, 9% received the recommended combination of antiretroviral prophylaxis. Forty-six percent of the 388 HIV-positive mothers delivered at health facilities. Out of the interviewed respondents, 92% reported having attended antenatal care but only 39% had delivered at a health facility. Distance from the nearest facility and financial barriers were found to have a significant association with not delivering at a health unit. On the other hand, acceptance of HIV testing was higher among married women and those with higher education.

NEXT STEPS:

Uptake of the more efficacious PMTCT regimens is insufficient in Oyam district. Successful utilization of PMTCT services would need bringing antenatal and delivery services nearer to people, reducing all financial barriers, and promoting girl child education.

Barriers to accessing & utilization of post-exposure prophylaxis to minimize HIV infection among sexual violence survivors in post-conflict Northern Uganda

R. Kanwagi¹, A. Muhereza², D. Sera², F. Aliba¹, L. Ciccio¹ | ¹NUMAT/World Vision, ²NUMAT/JSI

ISSUES:

Violence against women has severe physical and psychological repercussions. In conflict and post-conflict areas, it is also exacerbated by warring factions and collapse of social networks following population displacements. Gender-based violence (GBV) also contributes to the spread of HIV infection. HIV prevalence in post-conflict Northern Uganda is 8.2% as opposed to the national average of 6.4%, and was found to be higher among females (9%) than males (7.2%). In the region, services for GBV survivors were generally poor and inadequate.

DESCRIPTION:

In 2009, our program trained and supported 920 community-owned resource persons (community animators) in 26% of all sub-counties within nine districts, to create awareness, identify GBV cases, and refer them for relevant services including post-exposure prophylaxis (PEP). The program also supplied 29 antiretroviral therapy (ART) sites for the provision of PEP to sexual violence cases. Training was also provided for health workers from seven health centers on clinical management of sexual violence cases including prevention of pregnancy and HIV. The program also liaised with other actors like the Uganda police, United Nations Population Fund, and the Ministry of Gender to review and provide recommended guidelines as well as conduct advocacy on GBV-related issues.

LESSONS LEARNED:

During 2009, 1,372 GBV cases were reported (of which 321 were rape and defilement) eligible for PEP but only 18 survivors accessed it. Survivors reported distance from health units, unavailability of antiretroviral drugs (ARVs) tagged for PEP for survivors, negative attitudes among health workers, obstruction to services by parents/guardians, and an uncoordinated referral system between the police and health units as the key barriers to access and utilization of PEP.

NEXT STEPS:

As plans to supply health units with ARV supplies are ongoing, it is important to better coordinate services offered to GBV survivors, to build the skills of the police force to manage GBV clients, and to effectively strengthen referral systems.

Integrated camps for HIV-related risk reduction & HIV counseling & testing among young people in post-conflict Northern Uganda

R. Kanwagi¹, D. Sera², M. Odipo¹, L. Ciccio², J. Otim¹ | ¹NUMAT/World Vision, ²NUMAT/JSI

ISSUES:

Of the HIV-positive global population, about half became infected between the ages of 15 and 24 years. Attention is increasingly turning towards young people who are not yet sexually active or who are just embarking on their sexual lives. Sexual debut at a young age puts a person at great risk of contracting HIV infection. In Northern Uganda one fifth of young people have had sex before the age of 15 years. Additionally, only 20% of the youth in Northern Uganda have comprehensive knowledge on HIV transmission and ways of preventing it.

DESCRIPTION:

NUMAT uses media campaigns, peer counseling, life skills training, and other tailored interventions to reach youth with HIV prevention messages. Specifically, the strategy of youth camps was to employ activities like sports, games, and video shows, combined with a package of prevention services including HIV counseling and testing (HCT). This aims at integrating dissemination of HIV risk reduction messages with awareness of HIV serostatus.

LESSONS LEARNED:

In 2009, 16 youth camps run by peer educators and master trainers were conducted with the participation of 3,200 young people (1,952 boys, 1,248 girls). Thirty-five percent of participants were either married or separated and 2% attended with their partners. During the 12 camps where HCT was offered, 417 youth (141 boys, 276 girls) were tested for HIV and 16 tested HIV-positive (3.8%). This is consistent with the regional figure of 3.7% found for the same age group in a countrywide survey.

NEXT STEPS:

Targeting youth is vital for HIV prevention programs. Designing interventions that couple open dialogue, peer support, and educational messages with HCT can be very effective. However, there is need to involve parents in the camps' organization and to encourage participation of girls, as well, to make this approach more successful.

Enhancing health security in sexual unions through HIV counseling & testing among people in long-term monogamous relationships in Northern Uganda

R. Kanwagi¹, D. Sera², M. Opiyo¹, L. Ciccio², J. Otim¹ | ¹NUMAT/World Vision, ²NUMAT/JSI

ISSUES:

The HIV epidemic is a dynamic one whose changing epidemiological pattern needs to be understood in the quest for more effective prevention approaches. Having concurrent sexual relationships is an important driver in HIV transmission. In Uganda, a country with generalized HIV epidemic and HIV prevalence at 6.4%, recent evidence indicated that 43% of new infections occur among people in monogamous relationships. There is a growing need for HIV prevention strategies—including HIV counseling and testing (HCT)—to address couples as a unit of behavior change.

DESCRIPTION:

In 2009, in partnership with the local women and men social groups and faith-based organizations, 53 couples' conferences were organized for people in long-term monogamous relationships to disseminate sexual risk reduction messages. A few conferences also combined HCT coordinated by nearby health facilities. Forty couples' facilitators were trained to conduct the couple sessions on mutual knowledge of HIV status and disclosure, reduction of multiple concurrent partnerships, and mutual fidelity. Social and gender norms which promote mutual respect and open communication about sexuality were also discussed and consistent use of condoms among discordant couples promoted.

LESSONS LEARNED:

The average age of the 5,300 participants was 35 years (31 for females, 39 for males). For those couple conferences where HCT was integrated, 143 couples tested for HIV. The majority of couples (81%) were concordant HIV-negative, 18 were concordant positive (12%), while 10 were discordant negative (7%). Of these 28 couples, only 14 partners had tested before and knew their HIV status.

NEXT STEPS:

In Uganda, a large proportion of new HIV infections occur within stable relationships. A couple-centered approach to HIV prevention, including HCT, would facilitate the adoption of preventive behaviors. Despite positive outcomes, couple-oriented programs have not been implemented on a large scale. Increased attention is required to promote prevention and HCT for couples in stable relationships.

Improving data management through strengthening the Health Management Information System in post-conflict Northern Uganda

D. Sera, M. Omoro, L. Ciccio | NUMAT/JSI

ISSUES:

Accurate and timely data from the Health Management Information System (HMIS) is fundamental for effective feedback to policy makers. However, in Northern Uganda the state of the HMIS was weakened as a result of a prolonged armed conflict that severely affected the whole health system. NUMAT has since endeavored to improve the management of data by strengthening HMIS.

DESCRIPTION:

NUMAT contributed to building the capacity in HMIS of district biostatisticians, record clerks, and health workers in the region. These workers were supervised on data management on a regular basis and encouraged to look critically at all data submitted to them. Office equipment and data tools to facilitate collection, analysis, storage, and timely reporting of HMIS data were provided. Additionally, NUMAT spearheaded the scale-up of the web-enabled HMIS through training, supervision, and provision of internet services. Data sharing and utilization were strengthened through district-led strategic information meetings. NUMAT also organized meetings with health workers from health facilities to discuss challenges in data management and provide ongoing training on the constantly changing HMIS tools.

LESSONS LEARNED:

HMIS personnel in districts of Northern Uganda now have the capacity to properly use the relevant HMIS tools. Routine HMIS meetings are crucial to provide a forum for reviewing service performance and discussing data issues, lessons learned, challenges, and solutions. However, limited manpower at the health facilities to handle data continues to threaten its quality. Furthermore, there are multiple parallel reporting systems that generate competing interests and inefficiencies within the district HMIS office.

NEXT STEPS:

The district HMIS department should receive regular assistance to support health facilities on data issues. Regular data review meetings should also be institutionalized, and the existing health management information systems should be strengthened and widely adopted to minimize the creation of parallel systems.

Innovative CD4 lymphocyte testing for rural communities in Northern Uganda

A. Ocerò, L. Ciccìò, D. Sera, M. Makumbi | NUMAT/JSI

ISSUES:

Determination of CD4 cell count is essential for assessing antiretroviral therapy (ART) eligibility as well as for monitoring the response to therapy. NUMAT is a USAID-funded program working in nine post-conflict districts improving antiretroviral access to returning populations. NUMAT targeted 28 lower level rural facilities to improve ART services, including provision of CD4 cell count.

DESCRIPTION:

Previously, CD4 testing was accessible at few urban ART centers, where CD4 machines were often run down due to lack of consumables, poor maintenance, and limited power supply. Lower level health facilities were initiating ART on the basis of clinical assessment. This constrained ART scaleup for pregnant women and children. NUMAT designed a CD4 testing outreach model, outsourcing it to a medical logistics company. CD4 test quotas were offered to ART facilities based on their workload, with priority given according to age, pregnancy, and ART history. Facilities were visited bi-monthly to take blood from preselected clients and transport their samples to certified laboratories. Individual results were given at next visit.

LESSONS LEARNED:

In 2008 and 2009, clients receiving care at 28 rural ART centers who accessed a CD4 test were 4,900 and 11,860 respectively. In 2009, 2,647 clients initiated ART, representing a 69% increase in recruitment, and 87% were initiated after a CD4 test. The proportion of children accessing ART increased from 6% to 13% of all new clients. There was a 252% increase in the number of pregnant women assessing highly active antiretroviral therapy (HAART). Lower level ART centers were better utilized promoting the decongestion of larger centers. The outreach model facilitated easier access to clients in remote areas. Outsourcing relieved NUMAT of the management burden allowing better supervision.

NEXT STEPS:

Outsourcing CD4 testing offers advantages and allows equitable allocation of limited resources for a quality ART service. It should be critically evaluated and further promoted.

HIV prevention among young people in nursing & teaching colleges in Northern Uganda

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ISSUES:

Young people in higher education training institutions have been inadequately reached with HIV preventive interventions in Northern Uganda, yet they are known to be exposed to risky sexual behaviors like transactional and cross generational sex. There is hardly any institution-based program for young people to equip them with necessary knowledge and skills to increase their risk perception. Evidence showed that in Northern Uganda, 9.6% of females aged 10-24 years had sex with a man 10 years older, and 54% of all unmarried people in the same age group have already had their sexual debut.

DESCRIPTION:

A rapid needs assessment was conducted in six nursing and teaching colleges to identify the HIV-related information that could target students. In close collaboration with these institutions welfare departments, our program designed peer-focused interventions to reach students with messages on sexual risk reduction and HIV counseling and testing (HCT) services. This involved: holding advocacy meetings with institution heads, participatory selection and training of young people as peer educators, creation of peer education clubs, institutionalization of activities to disseminate HIV prevention messages, and HCT outreaches within the institution.

LESSONS LEARNED:

In total, 180 peer educators from six institutions were trained as peer educators and conducted 20 life planning skills sessions to inform and educate their peers. In total, 234 students (134 F, 100 M) have accessed HIV counseling and testing through school-based camps and 11 (4.7%) were found to be HIV-positive.

NEXT STEPS:

Effective HIV interventions targeting youth need an integrated and comprehensive approach, including youth-friendly services. Preventive messages must be accompanied with HCT to increase one's risk perception. To ensure sustainability of such an approach, peer educators should be supported to establish institutional youth clubs as vehicles for HIV activities.

Utilization of HIV-related services by members of people living with HIV networks in Northern Uganda

D. Sera, L. Ciccio, F. Rwekikomo, A. Oceru, M. Makumbi | NUMAT/JSI

ISSUES:

In Northern Uganda an estimated 120,000 individuals are HIV-positive but only 15% are on antiretroviral therapy (ART). Complementary interventions are therefore needed to help people living with HIV (PLHIV) prevent the occurrence of opportunistic infections and live a healthy life. PLHIV-related interventions that are widely recommended are cotrimoxazole prophylaxis therapy (CPT), HIV testing of the discordant partner and children, tuberculosis (TB) screening, and family planning. In Northern Uganda, access to these services is often hindered by distance, lack of information, stigma, and drug stockouts.

DESCRIPTION:

In Northern Uganda, most PLHIV are members of local networks that provide peer support and psychological care, basic information on positive living, and assist them in accessing care through linkage to facilities and follow-up. Our program conducted a small-scale survey to determine the utilization of essential services among members of PLHIV networks.

LESSONS LEARNED:

Participants included 101 adult PLHIV (80 female, 21 male). Despite the median walking distance from the nearest facility being 96 minutes, 89 (88%) reported having attended the HIV clinic in the last three months, where 62 (70%) were clinically screened for TB. Ninety participants were regularly taking CPT. Of all respondents, 66 (65%) had disclosed their serostatus to their partners and 49 (49%) to their children. Of the 66 who disclosed, 52 (79%) of their spouses had also been tested for HIV. Approximately 51% of all children eligible for HIV testing living in the respondents' households had also been tested. Only 29 participants (29%) reported using any family planning method.

NEXT STEPS:

Increasing utilization of HIV-related health services among PLHIV is possible even in rural settings. Involving PLHIV themselves can be effective, especially if they are organized in local associations and groups whose membership can be beneficial for mutual help, positive living, and referral for services that improve their quality of life.

Community-based education services: an innovative approach to address human resource shortage in post-conflict Northern Uganda

W. Oloya, D. Sera, L. Ciccio, M. Makumbi | NUMAT/JSI

ISSUES:

Shortage of health staff has repercussions on the quality of health service delivery, particularly in resource-constrained countries. In Uganda only 53% of approved health worker positions are filled, and even then there are huge urban/rural disparities. Doctor-patient ratio stands at 1:20,000 against World Health Organization (WHO) recommendation of 1:439. Northern Uganda districts in particular have failed to attract health workers of all cadres, especially medical officers.

DESCRIPTION:

Our program collaborated with two public universities in implementing community-based education services (COBES), an innovative model of responding to the shortage of health workers in Northern Uganda. A phased approach was used. Initially, marketing the benefits of the strategy with local authorities as a solution to addressing staff shortages took place. Once consensus was built, the next phase was training of the students' tutors and supervisors on the principles and objectives of the model. Tutors were drawn from the same health facilities while supervisors were students' lecturers. Finally, students were deployed in selected health units.

LESSONS LEARNED:

From 2008 to date, 112 medical students were deployed in four different phases at seven health facilities in Northern Uganda. Five health units registered an increase of more than 30% in outpatients' attendance during student placement. In one health unit, community mobilisation made by the students themselves more than doubled uptake of HIV testing among pregnant mothers attending antenatal care. Half of the participating students expressed interest in undertaking their internship and work within the region upon graduation.

NEXT STEPS:

The strategic partnership between local governments, health training institutions, and nongovernmental organizations is a good example of a public/private partnership model for responding to human resources for health shortages in rural communities. The model has not only created a bond between students and their communities but also raised the interest of students to work in rural communities, thus providing a promising long-term solution to staff shortage.

Retention of HIV-positive patients in antiretroviral therapy programs in post-conflict Northern Uganda

A. Oceró, K. Mugisha, L. Ciccìò, M. Makumbi, R. Muwanika, E. Ssemafumu | NUMAT/JSI, Management Sciences for Health

BACKGROUND:

NUMAT—a USAID-funded program—is working to improve access and quality of antiretroviral therapy (ART) services in a post-conflict region where internally displaced people's (IDP) camps are being evacuated as people resettle in their villages. The program set out to determine the retention of patients started on antiretroviral therapy at supported ART clinics documenting the magnitude of loss to follow-up in this setting and main factors for program managers to appropriately address.

METHODS:

Qualitative and quantitative methods were used to generate information at 17 ART sites in Northern Uganda. A total of 1,032 ART clinic charts and 17 pharmacy logbooks were reviewed. Seventeen key informants were interviewed and 22 focus group discussions were conducted with clients. Those identified as lost-to-follow-up were traced to their homes. Data was analyzed with the aid of STATA version 10. Cox proportional hazards modeling and Kaplan Meier survival analyses were performed.

RESULTS:

The overall retention was 51.1%. Loss-to-follow-up was highest during the first six months of ART initiation (52.9%), 22.2% at 12 months, and 24.8% at 24 months. Changing ART combination had a 1.6-fold increased hazard of loss-to-follow-up ($p < 0.001$). Residing at distances more than 11-15 km away from the clinic had a 1.6-fold increased hazard of loss-to-follow-up ($p = 0.023$). Body weight of 45 kg or more at ART initiation had a 1.28-fold increased risk of loss-to-follow-up ($p = 0.024$). Married couples had a 1.32-fold increased hazard of loss-to-follow-up ($p = 0.042$). Reasons offered for attrition included relocation, death, lack of finances for transport, and antiretroviral (ARV) drug stockouts.

CONCLUSIONS:

Stockouts, poverty, and distance from health units are impeding retention in ART programs. Strategies that will expand ART access to hard-to-reach returning populations should be adopted. Programs should strengthen ARV drug supply chain management and community-based follow-up.

Innovative strategies in improving coordination of HIV response by local governments in post-conflict Northern Uganda

D. Sera, L. Ciccìò, W. Oloya | NUMAT/JSI

ISSUES:

Over the past decade, there has been tremendous effort in Uganda to decentralize government functions to the district and sub-county levels, including local response to the HIV pandemic. This effort was particularly challenging in Northern Uganda where conflict and population displacement made planning and implementation difficult. Effective coordination of HIV responses was a daunting task for district leadership and yet vital to ensuring the existence of effective systems.

DESCRIPTION:

Closing the gap between health systems and communities and integrating HIV interventions in the districts was an overarching pillar for NUMAT, a 5-year USAID/PEPFAR-funded project. NUMAT believed that this would provide a sustainable strategy to address issues of coordination and better access to quality health care services in a unique environment.

LESSONS LEARNED:

NUMAT worked with the Uganda AIDS Commission to operationalise national HIV coordination guidelines in its project districts. District and sub-county-based AIDS committees and task forces were strengthened through capacity building and logistical support. Four out of nine districts completed the process of developing HIV strategic plans in accordance to the national guidelines. Similar support was also provided to health unit management committees and civil society organizations to ensure their functionality. Nonetheless, NUMAT experienced a challenge of meeting the high expectations of the communities and local governments given the enormous rehabilitation and development needs caused by the 20-year conflict.

NEXT STEPS:

There is now a functional HIV planning body in each district and hence better coordination of HIV services. All districts have been able to incorporate HIV into broader social development strategies and budgets. The project's success has been achieved mainly through working within the existing government framework, structures, and systems.

Scaling up home-based care services in post-conflict Northern Uganda

D. Sera, L. Ciccio, M. Makumbi, F. Rwekikomo | NUMAT/JSI

ISSUES:

With more than 120,000 people in Northern Uganda estimated to be HIV-positive, the importance of ensuring that quality home-based care (HBC) reaches the community is paramount. HBC can also contribute to enhancing antiretroviral therapy (ART) adherence and monitoring for any drug adverse effects. In Northern Uganda the number of organizations providing HBC was very low compared to the need. Scaling up HBC services was then one of the priorities of NUMAT, a 5-year USAID/PEPFAR-funded program.

DESCRIPTION:

NUMAT has been expanding HBC through capacity building of home visitors, logistical and technical support, and regular supervision. This model of care focuses on the patient through the provision of physical, social, psychological, emotional, and spiritual care, in addition to basic medical care and referral. Many of these home visitors are themselves people living with HIV (PLHIV).

LESSONS LEARNED:

NUMAT has trained 1,110 home visitors who have expanded HBC services to 68% of sub-counties covered in the region. In 2009, 111,858 total home visits have been conducted resulting in 51,470 PLHIV reached with the services. NUMAT has also provided technical support and supervision to home visitors during quarterly review meetings. Home visitors have received logistical support, which included home-based care kits, register books, gum boots, and T-shirts. There have been some challenges: The transition from camps to homes and satellite camps has led to high dropout of home visitors. Some of them opted to work elsewhere after being trained, which created a service gap. Similarly, some PLHIV relocated to different communities losing contact with their home visitors.

NEXT STEPS:

The project's success in scaling up HBC services is a result of training volunteers who work within existing government structures. Involving service beneficiaries such as people living with HIV also contributed to the success.

Attitudes & perceptions of health workers in antiretroviral therapy units towards changes of data management system in Northern Uganda

D. Sera, L. Ciccio, J. Arica, A. Ocerro | NUMAT/JSI

ISSUES:

The quest for improved HIV data is critical for all programs providing HIV services. Effective data management depends on availability of data collection tools, adequate capacity to collect quality data, and ability to use them. In Uganda, the antiretroviral therapy (ART) data management and reporting system has evolved to measure more indicators, thus increasing the paperwork of health workers. Following the recent review, NUMAT, a 5-year USAID/PEPFAR-funded project dedicated to improving the use of strategic information, conducted an assessment to determine the utilization and acceptability of the new ART data tools.

DESCRIPTION:

A structured interview with the in-charge of the ART unit at 15 health facilities purposively sampled was conducted to establish the availability and utilization of the new tools and the health workers' perception on the recent change.

LESSONS LEARNED:

The average number of qualified staff in the facilities was 4.7. A record clerk was available in eight of them (57%). Orientation on new ART data tools involved staff from 12 facilities (86%) and half of them had subsequently received supervision on ART data management. The entire set of tools was available in 12 facilities (86%), but used only in six (43%). The remaining facilities preferred to use the old ART data tools. Instructions on use of the tools were found in eight (54%) facilities. The majority of staff interviewed was satisfied with the orientation course received and believed the new tools are more complex to compile but also more comprehensive in capturing relevant ART clients' information.

NEXT STEPS:

For future changes in the ART data management system, it is critical to consider views and experiences of health workers, who are the end users. Tools and guidelines should be made available and the training should be tailored to meet the specific needs of participants.

41st Union World Conference on Lung Health November 2010 | Berlin, Germany

Improving the coordination & performance of tuberculosis & HIV interventions in Northern Uganda

L. Ciccio, E. Tumusherure, A. Ozero, M. Makumbi, D. Sera | NUMAT/JSI

BACKGROUND & CHALLENGES TO IMPLEMENTATION:

Integrating HIV activities is a challenge for Tuberculosis (TB) programs. Before 2006, TB and HIV in Uganda were vertically managed by two distinct programs with different funding sources, different staff operating in detached departments, a different schedule of drug order and procurement, and different recording systems. Relationships between the two programs started in 2006 with dissemination of policy documents by the Ministry of Health recommending avenues for collaboration. NUMAT operates in nine districts of Northern Uganda, a region whose HIV prevalence of 8.2% is higher than the national average.

INTERVENTION OR RESPONSE:

NUMAT worked with the nine districts and the TB regional office through multiple interventions, including: Training of health workers in TB/HIV collaborative activities; improved availability of TB drugs, reagents, HIV test kits and other supplies at diagnostic centers; integrated support supervision; technical assistance to conduct quarterly review meetings on TB/HIV; and dissemination of educational messages to local leaders and the general public. TB/HIV performance for the Northern Region from 2006 to 2009 was assessed using the existing reporting system.

RESULTS & LESSONS LEARNED:

HIV parameters were included in the TB cohort reporting and HIV information added to the TB registers. The proportion of TB patients tested for HIV steadily increased from 43% in 2006, to 67% in 2009. The percentage of co-infected HIV/TB patients stabilized around 50%. No information was recorded on cotrimoxazole prophylaxis therapy (CPT) and antiretroviral treatment (ART) for the co-infected patients in 2006. In 2009, 84% of co-infected patients were put on CPT and 21% on ART.

CONCLUSIONS & KEY RECOMMENDATIONS:

A shift from a vertical approach to an integrated collaboration is possible. However, gaps remain and continuing support is needed to sustain achievements in the long-term.

Improving the laboratory diagnosis of tuberculosis through proficiency testing in Northern Uganda

L. Ciccio, M. Pedun, D. Sera, A. Ocerro | NUMAT/JSI

BACKGROUND & CHALLENGES TO IMPLEMENTATION:

In low-income countries with high tuberculosis (TB) prevalence, sputum smear microscopy using the Ziehl-Neelsen (ZN) technique remains the most cost-effective tool for diagnosing patients with infectious TB. Maintaining a high standard of sputum smear microscopy technique is an indispensable component to attaining an effective TB control program. NUMAT is a USAID-funded program working in nine post-conflict districts that supports laboratory services through building capacities of laboratory personnel, among others.

INTERVENTION OR RESPONSE:

NUMAT contracted supervisors from the Ministry of Health to conduct quarterly technical support supervision in all laboratory units the program assists within the nine districts. So far, five supervision rounds were conducted in the last 18 months. When supervision visits are conducted, proficiency tests are performed and results assessed on the spot. Immediate feedback is also given to lab personnel.

RESULTS & LESSONS LEARNED:

From July 2008 to December 2009, the number of participating lab units increased from 36 to 68, with additional lower level facilities being included in the exercise. The proportion of proficiency tests whose results were in agreement with the supervisors' findings increased also from 93% to 98%. Of the specimens that were read incorrectly, 72% were false-negative results and 28% false-positive. For smear-positive specimens, the proportion of grading agreement increased from 71% to 92%. The proportion of units achieving a 100% specimen agreement increased from 64% to 79%.

CONCLUSIONS & KEY RECOMMENDATIONS:

Smear microscopy remains the most cost-effective method of diagnosing pulmonary TB suspects. Conducting proficiency tests is one of the most feasible and effective methods to monitor the technical ability of laboratory staff in proper identification of TB.

Adherence to national guidelines in the diagnosis of sputum-negative tuberculosis

J.P. Otuba, L. Ciccio, A. Ocerro, M. Makumbi | NUMAT/JSI

BACKGROUND & CHALLENGES TO IMPLEMENTATION:

The HIV epidemic has increased the occurrence of smear-negative pulmonary tuberculosis. This poses a serious challenge, since HIV changes the clinical presentation of tuberculosis (TB), making diagnosis more difficult. It is estimated that in Uganda around 50% of all TB patients are HIV co-infected. In Gulu district, located in Northern Uganda where the HIV prevalence of 8.2% is higher than the national average, TB accounts for 30% mortality in patients with sputum negative TB. This study assessed adherence to national standardized guidelines for diagnosis of sputum negative TB.

INTERVENTION OR RESPONSE:

A retrospective analysis of patient records from hospital TB registers and in-patient case notes was conducted to verify whether clinicians followed the recommended diagnostic algorithm. The algorithm included i) a two-week history of cough, ii) no response to a course of broad spectrum antibiotics, iii) two negative sputum smears for acid-fast bacilli, and iv) a chest radiograph with abnormalities consistent with TB.

RESULTS & LESSONS LEARNED:

From a cohort of 370 patients diagnosed and treated for tuberculosis in 2008 in Gulu regional referral hospital, 154 patients (42%) were found to be smear-negative. All 154 patients had chronic cough (≥ 2 weeks), 147 patients (96%) had received a two week broad spectrum antibiotic, 39 (25%) had at least two sputum smears done and 117 (76%) had a chest radiograph done. Only 22 out of 154 patients (14%) had all the four diagnostic criteria met. Additionally, 29 (32%) of the 92 patients who tested for HIV were found to be HIV-positive.

CONCLUSIONS & KEY RECOMMENDATIONS:

The standardized sputum-negative TB diagnostic algorithm was sub-optimally used with overreliance on chest radiography. These guidelines remain crucial in resource limited settings and refresher training, mentoring and supportive supervision of health workers is necessary to minimize over diagnosis of sputum negative TB.

American Public Health Association (APHA) Conference
November 2010 | Denver, USA

Prevalence & response to sexual & gender-based violence among people living with HIV in Lira District, Uganda

A. Cerino, L. Ciccio, D. Sera | NUMAT/JSI

BACKGROUND:

Sexual and gender-based violence (SGBV) is violence directed at a person on the basis of gender and/or sex. It is realized that SGBV is still a global health, economic, development, and human rights violation problem. SGBV has a very strong interrelationship with HIV infection.

METHOD:

This was a cross-sectional study to assess the prevalence and response to SGBV among people living with HIV (PLHIV) and specifically to determine the prevalence of SGBV among them, to identify the types of SGBV they suffer, to assess the victim responses to SGBV, and the capacity of the health care providers to manage SGBV cases among PLHIV. A total of 334 PLHIV from four different facilities providing HIV services were interviewed. The main outcomes being measured were the presence of SGBV cases among the PLHIV and response to SGBV occurrence by the PLHIV. The independent variables were age, sex, education, marital status, occupation, religion, discordance, disclosure, capacity of health care providers, and availability of SGBV clinical management guidelines by the Ministry of Health (MOH). Descriptive analysis of the data collected was done and associations between variables assessed using cross-tabulation and p-values of chi squares to test for statistical significance.

RESULTS:

SGBV prevalence among PLHIV in Lira was found to be 47.3% compared to the 40% national prevalence assessed in 2007. Women were found to be more affected (77.6%) than men (22.4%). The interviewed PLHIV reported to be abused in several ways: Emotionally (62%), physically (55%), and sexually (8.7%). The SGBV victims commonly reported the abuse to clan leaders, relatives, and elders, with very few cases being reported to the police for legal action (5%). Quite a big number of SGBV cases are not reported at all (57.6%). Few SGBV victims seek medical treatment (4%). The health care providers are offering SGBV-related services but they lacked specific training in clinical management of SGBV according to the MOH guidelines and they do not use the SGBV reporting tools designed by the MOH.

CONCLUSIONS:

The prevalence of sexual and gender-based violence in Northern Uganda is high among people living with HIV with most victims being female and the majority being emotionally and physically abused. There is need for community sensitization and education on the dangers and consequences of SGBV, law enforcement, and training of health workers on clinical management of SGBV.

HIV/AIDS Implementers' Meeting June 2009 | Windhoek, Namibia

Quality assurance during scale up of HIV testing using rapid tests: the NUMAT experience

M. Pedun, E. Ssemafumu | NUMAT/JSI

BACKGROUND & IMPLEMENTATION:

In resource-limited and high HIV prevalence areas, rapid tests for HIV remain the most cost-effective tool for diagnosis of HIV infection. These are user friendly, fast, inexpensive, and adequately specific and sensitive; they also don't require sophisticated skills and can be scaled up to peripheral health facilities. However, scaling up HIV testing involves the use of non-laboratory personnel, which brings challenges to quality control. NUMAT—designed with the goal of expanding access to and utilization of quality HIV, tuberculosis (TB), and malaria prevention, treatment, and care services in Northern Uganda—has introduced proficiency testing in its supported laboratories. This is a quality assurance method assessing the capabilities of lab staff by comparing their results with those obtained with the same specimens by reference laboratories or supervisors.

ANALYSIS DESIGN & METHODS:

All laboratories received training, the provision of reference text materials such standard operating procedures (SOPs) and laboratory supplies, and regular support supervision by the District Laboratory Focal Persons and national trainers and supervisors. Among the different methods for testing proficiency, using supervision field visits for monitoring the quality of HIV rapid tests was preferred because it allows for quality checks in all stages of the laboratory techniques and also provides prompt feedback to the peripheral laboratory staff. Reference specimens were prepared following SOPs, which included non-reactive, weakly reactive, and reactive specimens, to test the ability in detecting both positive and negative results. These

specimens were provided to all laboratory sites quarterly to test their procedures in using three different rapid tests: Determine, the screening test, Stat-Pak the confirmation test, and Unigold the tie-breaker. Immediate feedback was given, discussions held, and on-job training conducted where applicable.

RESULTS:

In the first quarter, 49 health units participated and a total of 103 reference panels tested. In the second quarter, 56 health units and 292 panels tested, and in the third quarter 65 health units and 314 panels tested. In the first quarter 40 health units (81.6%) produced results that matched the supervisors. In the second and third quarters all health units (100%) produced results that matched the supervisors'. Adherence to the national testing algorithm and use of SOPs was enhanced. It has to be noted, however, that staff tend to produce good performance under supervision.

CONCLUSIONS & RECCOMENDATIONS:

Scaling up HIV testing in peripheral facilities with no qualified lab personnel is possible, thus improving service coverage. Concerns about quality can be addressed using proficiency testing that proved to be a simple and effective method to offer quality control.

Regional AIDS Training Network Conference—
HIV Training and Capacity Building Trends and Challenges
June 2009 | Kigali, Rwanda

An evaluation study on the relevance & effectiveness of training activities in Northern Uganda

L. Ciccio, M. Makumbi, D. Sera | NUMAT/JSI

BACKGROUND:

In-service training is required for quality health service delivery, particularly in a human resource constrained setting. However, detailed evaluation of its effectiveness is rarely performed because the improved theoretical knowledge demonstrated by trainees during the training is commonly used as a proxy indicator of effectiveness. This study focused on a trained health workforce in Northern Uganda. The retention of specifically trained staff 12-15 months after attending training was examined, as was the relevance and usefulness as perceived by the health workers.

METHODS:

The cross-sectional descriptive study used a structured questionnaire to interview 104 health workers (mainly paramedics) who received training from NUMAT during the period July 2007 to February 2008. This questionnaire investigated, among other things, staff qualification; other training events attended during the period of study; workplace at the time of training and current workplace; relevance of the training vis-à-vis the routine duties being accomplished in the actual workplace; subjective perception of the usefulness of the training for the tasks currently performed using a Likert scale; and exposure to any coaching or mentoring that followed the training.

RESULTS:

Of the 104 interviewed health workers, 71% were still working at their original worksite; of the remaining, majority had moved to another health facility within the same district. Follow-up and coaching after training was not common (reported by 40% of respondents). Finally, 25% of respondents said they attended a similar training course organized by other agencies.

DISCUSSION:

Selection of participants is paramount for the success and effectiveness of training courses. Coordination among different organizations, including the Ministry of Health, is also crucial. District transfer policies should take into account specialized tasks and abilities of health workers in order get the best value out of in-service training. Regular follow-up is instrumental in both identifying gaps in the training and offering technical guidance to health workers when the skills they acquired are not yet consolidated. Close and regular follow-up should be formalized in all training events.

CONCLUSIONS:

All programs with a substantial training component should conduct a periodic methodical evaluation of the training.

5th IAS Conference on HIV Pathogenesis,
Treatment and Prevention
July 2009 | Cape Town, South Africa

Completeness & timeliness of HMIS data in post-conflict setting

D. Sera, L. Ciccio | NUMAT/JSI

BACKGROUND & IMPLEMENTATION APPROACH:

Complete, accurate, and timely data are useful in monitoring and evaluating health programs. In Uganda, the Health Management Information System (HMIS) focal person's office plays a critical role in aggregating data from the lower level health facilities and sending it to Ministry of Health. One of the objectives of NUMAT is to improve availability and use of strategic information through strengthening HMIS

ANALYSIS DESIGN & METHODS:

An assessment was conducted in all nine NUMAT-supported districts of the North Central Region to measure the completeness and timeliness of the data from the health facilities. To determine the completeness of the HMIS reporting, key informant interviews were carried out with the HMIS focal persons, and observation techniques of the HMIS forms and databases to identify possible gaps revealing incompleteness of the data, were done. Timeliness was calculated using the number of days from the date of submission of the report from the due date (that is 14 days after the end of the month).

RESULTS:

Completeness averaged at 80% while timeliness was 85%. Factors affecting timeliness and completeness of the data included the use of technology for data management. Data collection methods were paper-based, which caused errors during computer data entry. Completed forms were usually entered into Epi-Info, Excel, and Access in batches. Virtually all the districts did not have any internet access. At the health sub-district level, only 10% of the hospitals had computers for data management. All HMIS focal persons mentioned the lack of transport and basic stationary like the data collection tools and registers, geographical distance, and inaccessibility as factors affecting data completeness and timeliness.

LIMITATIONS & CHALLENGES:

Not all the HMIS focal persons were available on the day of the survey.

CONCLUSIONS & RECOMMENDATIONS:

In order to improve on the completeness, accuracy, and timeliness of patient data, investments have to be made in advocating to stakeholders on the importance of data and supporting resources, including infrastructure like health information systems technology.

Using small scale surveys to monitor knowledge & behavior on HIV among youth in Northern Uganda

L. Ciccio, D. Sera | NUMAT/JSI

BACKGROUND:

Periodic evaluations are necessary to measure the performance of HIV-related services. However, the data generated from the facility-based Health Management Information System are often insufficient, while large-scale surveys are usually not feasible due to financial and time constraints. With that regard, NUMAT employed the Lot Quality Assurance Sampling (LQAS) survey methodology to assess HIV-related indicators in the nine districts where it operates. The LQAS is a rapid, cost-effective tool well suited to measure progress on indicators at both district and regional levels and also to provide population-based information otherwise not attainable.

METHODS:

The survey took place in November 2008 in all nine districts of the region and results compared with a similar survey conducted in 2006 in the same area. Indicators pertinent to NUMAT HIV-related interventions and also consistent with those of countrywide surveys for comparison were selected. This poster highlights findings on respondents within the age group between 15-24 years (the youth).

RESULTS:

Respondents who participated in the 2006 and 2008 surveys were 914 (173 male, 741 female) and 1,781 (657 male, 1,124 female), respectively. There was a significant increase from 32% (30% male, 33% female) to 64% (54% male, 69% female) in the proportion that had ever taken an HIV test. Those who knew where to get tested increased from 73% (77% male, 72%

female) to 86% (84% male, 86% female). Of all respondents, 51% (54% male, 49% female) mentioned all three major ways to prevent HIV transmission in 2008 compared with 45% (48% male, 44% female) in 2006, and 49% (45% male, 51% female) knew the three modalities of mother-to-child transmission compared with 35% (39% male, 35% female) in 2006. Ninety-three percent (95% male, 93% female) reported that they would be willing to care for an HIV-infected family member compared with 88% (86% male, 89% female) in 2006.

LIMITATIONS:

As with all cross-sectional surveys, response bias was a concern as respondents might have reported on their own behaviour or experiences incorrectly based on a perceived desirability of responses rather than actual knowledge or practices.

CONCLUSIONS:

Quick, simple, and low-cost small-scale surveys such as the LQAS can be utilized for monitoring performance-related indicators. They complement the existing output-related, facility-based data, thus contributing to a better evaluation of interventions.

Retention of patients on antiretroviral drugs at clinics at three levels of care in post-conflict Northern Uganda

A. Ocer, S. Pengpid, E. Ssemafumu | NUMAT/JSI

INTRODUCTION:

Northern Uganda is finally at peace after a 20-year war. The majority of the internally displaced population are returning home. The HIV prevalence in the region is 8.4%, higher than the country average of 6.4%. HIV programs mainly run by NGOs in the emergency setting are now reverting to the government under the decentralized health service delivery system. Retention and loss to follow-up at antiretroviral therapy (ART) clinics at the government run health facilities is as yet poorly understood. The capacity of regional referral hospital, district hospital, and health center IV, under the decentralized health care system, to initiate and retain patients on ART in this post-conflict setting was evaluated.

METHODOLOGY:

A retrospective review of 402 patient clinic cards, ART registers, and pharmacy records at a regional referral hospital, a district hospital, and a health center IV was undertaken. Retention rates 3, 6, 12, and 24 months after initiation on antiretroviral therapy were determined. Statistical (Bivariate) analysis was carried out to determine predictors for loss to follow-up from demographic and clinical characteristics captured in the patient clinic records.

RESULTS:

Overall retention in ART programs was 56.5%. The district hospital retained most patients (73.1%), followed by the regional referral hospital (53.7%). The health center IV retained the least number of patients (36.6%). The majority of patients were lost to follow-up after three completed months and least after 24

completed months. Patients accessing ART at the district hospital were five times more likely to remain in care (OR 0.21 95% CI 0.08, 0.50) and those at the regional hospital two times more likely (OR 0.48 95% CI 0.22, 1.07) as compared to those at health center IV. Loss to follow-up was 16 times more likely to occur in the bedridden functional status (OR16.3 95% CI2.0, 132.2) and three times more likely in the ambulant patient (OR2.72 95% CI1.14, 6.45) compared to those able to work. In this study, age, sex, occupation, weight, WHO clinical stage, and CD4 lymphocyte count were not predictive of retention on the ART program.

CONCLUSION:

Providing high quality ART services is feasible in the post-conflict setting. This is illustrated by the high retention rate at the district hospital HIV clinic. This was made possible through task shifting, training, and mentoring of lower cadre health workers and collaborating with community based-organizations that support the continuum of care. To effectively benefit from government run HIV programs, there is a need to amend HIV treatment policy guidelines and adopt strategies that promote earlier initiation onto highly active ART (HAART) at lower level points of care. This will ensure that patients are started on HAART before they are too ill and in need of more specialized medical care.

6th European Congress on Tropical Medicine and
International Health & the 1st Mediterranean Conference
on Migration and Travel Health
September 2009 | Verona, Italy

Awareness of HIV serostatus among pregnant women in Northern Uganda: a cross-sectional assessment

L. Ciccio, D. Sera | NUMAT/JSI

Awareness of one's HIV serostatus is crucial for an effective expansion of prevention of mother-to-child transmission of HIV (PMTCT) programs. This is the necessary pre-condition for enrolment into effective prophylaxis regimens to protect the baby from infection and for referral towards further clinical assessment and care, including antiretroviral therapy. Health facilities in Uganda are expected to provide specific PMTCT data routinely in order to facilitate an evaluation of the service performance.

However, these data are often irregular and incomplete with a difficult estimate of the target population eligible for PMTCT intervention. NUMAT adopted the rapid and cost-effective lot quality assurance sampling (LQAS) survey technique to measure PMTCT-related indicators. Randomly selected women of reproductive age (15–44 years) that had given birth in the two years prior to the survey were interviewed. A structured questionnaire was used to examine ANC-related services they had attended during their pregnancy. The survey was conducted in all nine districts of the Central Northern Region of Uganda. 93% of the 793 respondents had attended antenatal care at least once during their last pregnancy, but only 66% eventually were aware of their HIV serostatus. A number of missed sequential steps made this possible. Although trained midwives are deployed in most antenatal clinics and provider-initiated HIV testing is recommended, 181 interviewed mothers (23%) were not counseled on HIV related issues and an additional 28 were not offered to be tested. Some 27 more declined to be tested and despite availability of rapid testing methods, 34

of those tested did not receive their test result. Ultimately, those who reported having disclosed their result to the partner were 483 (61% of all respondents). Interestingly, only 414 (52%) of all mothers could mention the three ways of mother-to-child transmission of HIV.

Even with better availability of PMTCT services through extensive training of health workers and supply of HIV tests, many opportunities for providing the whole range of this service to pregnant mothers in Northern Uganda are still missed. There is a need to tackle all related factors, possibly starting from a detailed understanding of why such opportunities get missed, and a more scrupulous implementation of existing PMTCT policy documents and guidelines.

Integration of tuberculosis & HIV interventions in Northern Uganda

L. Ciccio, E. Tumusherure, D. Sera | NUMAT/JSI

One of the biggest challenges for tuberculosis (TB) control programs has been integrating HIV activities. Before 2006, TB and HIV in Uganda were managed by two distinct vertical programs implemented with different funding sources, by different staff operating in detached departments, with a different schedule of drug orders and different recording systems. A relationship between the two programs started in 2006 with dissemination of policy documents by the Ministry of Health recommending avenues for collaboration.

NUMAT operates in nine districts of Northern Uganda, a region whose HIV prevalence of 8.2% is higher than the national average. NUMAT worked with the nine districts and the TB control program regional office through multiple interventions including: Extensive training of health workers in TB/HIV collaborative activities; improved availability of TB drugs, reagents, HIV test kits and other supplies at the treatment sites; comprehensive and integrated support supervision; technical assistance to conduct quarterly review meetings on TB/HIV performance; and dissemination of educational messages to the local leaders and the general public.

TB/HIV information from the Northern Region for 2006, 2007, and 2008 was assessed using the existing reporting system. HIV parameters were included in the customary cohort reporting of the TB program and HIV-related information added to the TB registers and TB patient cards. The proportion of TB patients tested for HIV steadily increased with gradual institution of provider-initiated HIV counseling and testing: from 43% in 2006 to 50% in 2007, and to 59% in 2008. The percentage of co-infected HIV/TB patients was 46%, 50%, and 54% in the three years, respectively. No information was recorded on cotrimoxazole prophylaxis for the co-infected patients in 2006 and 2007. During 2008, 79% of co-infected patients were put on cotrimoxazole while 18% were on antiretroviral therapy. Cases of sputum negative pulmonary TB and extra-pulmonary commonly associated with HIV infection accounted for 41% of new cases in 2006, 46% in 2007, and 42% in 2008. The rate of death during TB treatment remained between 5% and 5.7%.

A shift from a vertical approach to a more integrated collaboration is possible. However, continuing technical assistance to control program institutions, health facilities and field workers is necessary to sustain the achievements in the long-term.



American Public Health Association (APHA) Conference
November 2009 | Philadelphia, USA

Scaling up of early infant diagnosis in conflict-affected Northern Uganda

E. Kansiime, F. Kagwire, E. Ssemafumu, M. Makumbi, C. Kiyaga | NUMAT/JSI

ISSUES:

Early HIV diagnosis of babies born to HIV-positive mothers remains the entry point into any HIV care service and is crucial for their prognosis, since initiation into treatment prior to 12 weeks of age can reduce mortality up to 75% for HIV-positive babies. Current available technologies allow early infant diagnosis (EID) as early as six weeks of life.

DESCRIPTION:

To scale up EID and early linkage to care, NUMAT trained staff in health units where HIV-exposed babies are likely to be. Training included identification of cases, blood collection, sample storage, packaging, and transportation. Consumables were provided to the facilities after training. EID was made an integral part of mother-baby pair follow-up.

LESSONS LEARNED:

By December 2008, a total of 448 health workers from 59 health facilities were trained on EID. From June to December 2008, out of the expected HIV-exposed 5,250 babies the 42% (2,192 babies with a median age of three months) were tested for HIV using the DNA-PCR method. Of those, 327 (14.9%) were found to be positive. All the HIV-positive babies were referred for HIV care and the mothers of negative babies counseled on infant and young child feeding and need for repeating the test after cessation of breastfeeding.

NEXT STEPS:

Scale up of EID is possible even in resource constrained settings. Scaling up of PMTCT needs to be integrated with EID and pediatric HIV care.

Following-up HIV-positive mothers & linking them to HIV care services: the family support group model

E. Kansiime, F. Kagwire, E. Ssemafumu, A. Muhereza, M. Makumbi | NUMAT/JSI

ISSUES:

It is essential for identified HIV-positive pregnant mothers to be closely followed up for an effective implementation of the prevention of mother-to-child transmission of HIV (PMTCT). Though antenatal care attendance is high and offers an opportunity for it, few pregnant mothers deliver in health facilities or report for post-natal care. Additionally, HIV-positive mothers face challenges like stigma, failure to disclose, and lack of psychosocial support that negatively impact their acceptability of PMTCT prophylaxis.

DESCRIPTION:

To address the above, NUMAT supported the concept of family support groups (FSG). These are peer groups where HIV-positive mothers—together with their partners—meet regularly to share experiences and offer each other psychosocial support, under the supervision of health workers or volunteers from community-based organizations (CBOs). Several issues are addressed like serostatus disclosure, adherence, and infant diagnosis and feeding. FSG membership lasts 18 months, after which mothers are linked with HIV chronic care programs.

LESSONS LEARNED:

In the past two years, NUMAT has established 46 FSGs and trained 100 facilitators in FSG implementation. As a result, 600 mothers and 100 male partners benefited and were linked to HIV care and support including ongoing counseling. In addition, 200 children had their blood taken and tested for HIV at an early stage.

RECOMMENDATIONS:

FSGs have helped mothers to overcome stigma and increase disclosure and adherence, as well as accessing HIV comprehensive care, including HIV counseling and testing services to family members and early infant diagnosis. Involvement of CBOs, especially in mobilization, plays a very significant role.

Access to & uptake of prevention of mother-to-child transmission of HIV services by pregnant women in Northern Uganda: a cross-sectional assessment

L. Ciccio, D. Sera, M. Makumbi | NUMAT/JSI

BACKGROUND:

Considerable efforts have been made to introduce and expand programs to prevent mother-to-child transmission (PMTCT) of HIV. Specific PMTCT indicators showing how service coverage is progressing are vital for both service providers and public health officials. Health facilities are expected to provide data routinely; however, these are often irregular and incomplete with target populations difficult to estimate. In addressing the above, NUMAT employed the lot quality assurance sampling (LQAS) method as a rapid, cost-effective tool to measure coverage of PMTCT-related indicators.

METHODS:

Using the LQAS technique, randomly-selected women of reproductive age that had given birth in the two years prior to the survey were interviewed about antenatal care (ANC)-related services they had attended. The survey was conducted in all nine districts of the Central Northern Region of Uganda.

RESULTS:

Out of 793 respondents, 737 (93%) had attended antenatal care at least once during their last pregnancy. Of those who attended, HIV counseling was provided for 612 (83%) of them, 584 (79%) were offered a HIV test and 557 were tested for HIV (76%). Those who received their HIV test result were 523 (71% of ANC attendees) and those reporting having disclosed their result to the partner were 483 (92% of those aware of their HIV serostatus).

RECOMMENDATIONS:

Monitoring the trend in PMTCT service utilization is crucial to assessing its performance. Standard indicators can be measured using a simple small-scale survey like the LQAS, providing information not otherwise available by routine, facility-based health information systems.

HIV prevention among commercial sex workers in a post-conflict setting

B. Adong, L. Ciccio, D. Sera | NUMAT/JSI

ISSUES:

Commercial sex workers (CSW) are vulnerable to HIV transmission for many reasons, like large numbers of sexual partners, high rates of sexually transmitted infections (STI), and their inconsistent use of condoms. Targeting them with specific HIV prevention interventions is crucial even in generalized epidemics, as is the case in Uganda. NUMAT endeavored to address this problem in Northern Uganda, where, as a result of the two-decade war, many girls and women have resorted to sex work to earn a living.

DESCRIPTION:

With the assistance of local organizations, police, and social welfare offices, the program has approached and engaged CSW in HIV prevention dialogue, using a peer-based intervention, where volunteering behavior change agents were trained to deliver prevention messages and distribute condoms to their peers. An HIV counseling and testing outreach was eventually conducted following an explicit demand by the CSW.

LESSONS LEARNED:

Out of 50 CSW who tested (median age 23 years, range 17-28), 13 (26%) were found to be HIV-positive and subsequently referred for follow-up and further HIV-related care to nearby antiretroviral therapy-providing health facilities.

NEXT STEPS:

Although CSW usually operate covertly and are often elusive to any attempt in approaching them, preventive interventions are possible and can be successful if they are peer-based. Voluntary counseling and testing is a feasible preventive option that can raise awareness of one's HIV status, give guidance on protecting behaviors, or direct for further care.

Gender-based violence and HIV: engaging communities to combat the problem in Northern Uganda

F. Aliba | NUMAT/World Vision

ISSUES:

Gender-based violence (GBV) is a strong contributing factor to rising HIV transmission rates; a majority of survivors of GBV are women and girls because of the underlying gender inequality that puts them at a disadvantage. NUMAT undertakes a strategy of tackling gender inequality and is helping communities to address the link between HIV transmission and GBV by increasing awareness and strengthening services.

DESCRIPTION:

In nine districts in Northern Uganda, communities identify "animators" who are trained to educate communities on GBV prevention and how to refer cases for medical, psychosocial, and legal support. Focus group discussions are conducted at various levels to assess people's knowledge, attitudes, and practices with results indicating that women and girls remain vulnerable to GBV and the need to strengthen services to prevent and respond to GBV.

LESSONS LEARNED:

NUMAT has so far reached 61,012 people by engaging some as trainers and animators, holding leaders' workshops, promoting group discussions, drama, and dialogues. The most common factor identified by this community to contribute to GBV is alcohol abuse. The most common forms of GBV reported to community animators were domestic violence (108 cases) and defilement (48 cases). The majority of them were referred for relevant services.

RECOMMENDATIONS:

GBV issues are usually treated as a private matter regardless of their connection with HIV. People engaged in SGBV activities, however, tend to open up. General gender issues should also be considered in the community, as well, for a more effective prevention of GBV.

HIV/AIDS Implementers' Meeting June 2008 | Kampala, Uganda

Mobilizing faith-based organizations to respond to HIV prevention & confront stigma & discrimination

L. Atim, S. Ajedra, J. Otim | NUMAT/World Vision

CHALLENGES TO IMPLEMENTATION:

NUMAT is working with faith-based organizations as one of its strategies to combat stigma and discrimination in Northern Uganda. Faith-based organizations (FBOs) are the most sustainable institutions in reaching out to people living with and affected by HIV, however, they are often left out by most interventions and organizations. Most religious leaders struggle with upholding “the ideal”—what the scriptures say about morality—while dealing with the realities of HIV within their congregations and communities. There are various ways of transmitting HIV, however, most faith leaders mainly link infection with promiscuous sexual behavior. This usually leads to inappropriate stigmatizing attitudes towards people living with HIV (PLHIV) and their families.

INTERVENTION OR RESPONSE:

To effectively engage faith-based leaders and promote community ownership of the interventions, NUMAT held consultative meetings with FBOs. It was evident that most religious leaders associated HIV with sexual immorality and did not recognize their own risk. To date, more than 234 leaders have been sensitized and acknowledge their role as key players in advocating against stigma and discrimination. Subsequent to the meetings, 232 leaders were trained in “Channels of Hope” (COH) methodology, which enhances positive attitudes towards PLHIV, and empowers them with in-depth knowledge to encourage them to use their influential position and resources to break stigma and discrimination, and promote HIV prevention, care, and support. These leaders have mobilized

their congregations to form congregational HIV task teams, which are comprised of 5-6 people per congregation who have been trained to plan and implement activities ranging from prevention for youth to home-based care for PLHIV. To ensure sustainability, NUMAT has trained a team of 21 facilitators to facilitate workshops for religious leaders in the nine districts.

RESULTS & LESSONS LEARNED:

Faith-based leaders have the willingness to respond to HIV but need tailored programs such as “Channels of Hope,” which deal with what the scriptures say about morality vs. the realities of HIV, to effectively respond to the needs within their communities. After a COH workshop, one religious leader noted that “According to Isaiah 10:16, I had believed that people who are HIV-positive were great sinners, but now I understand that HIV can infect anybody if we do not protect ourselves against it.” Faith-based leaders are the custodians of culture and morality and they are the most sustainable institutions compared to all others. Empowering them would ensure continuous and sustainable interventions.

KEY RECOMMENDATIONS:

HIV programming should exploit the strategic place of faith-based leaders in communities to respond to stigma and discrimination.

Challenges to service delivery for people living with HIV in a post-conflict & resource-limited area: the case of Northern Uganda

Rwekikomo, E. Ssemafumu, G. Akena | NUMAT/JSI

CHALLENGES TO IMPLEMENTATION:

There are challenges to accessing quality and comprehensive HIV, tuberculosis (TB), and malaria prevention care and treatment services in Northern Uganda, a post-conflict area. Some of these challenges include not having a clear understanding of the issues facing people living with HIV (PLHIV), and endemic shortages of basic care, support services, and social infrastructure for PLHIV living in this region.

INTERVENTION:

NUMAT seeks to increase access to and utilization of malaria, HIV, and TB services in nine districts. This involves supporting mobilization and bringing together the PLHIV at district and sub county-levels to access appropriate information, treatment, care and support services, increase advocacy campaigns for critical services, and work to challenge stigma and discrimination. NUMAT seeks to build the capacity of the PLHIV network groups' members to serve as service navigators of the malaria, HIV, and TB prevention, treatment, care, and support services to fill the gaps created by the conflict. These networks/groups have been supported to create linkages connecting PLHIVs to direct HIV and wrap-around services.

RESULTS:

Ten district and 45 sub-county PLHIV networks are supported by NUMAT. 64 members of the PLHIV networks were trained in community home-based care service provision and 85 PLHIV from seven districts were trained as network support agents (NSAs). The NSAs have played a positive role in promoting antiretroviral therapy adherence and in the mobilization of community members to utilize HIV counseling and testing, prevention of mother-to-child transmission of HIV, TB, and palliative care services. 60 PLHIV were trained as basic care package (BCP) peer trainers, increasing the uptake of BCP commodities in the region. The PLHIV service navigators have become strong and active members of the care and support network through referrals for HIV & AIDS services in the districts with more than 1,600 referrals for access to wrap-around services in one year.

RECOMMENDATIONS:

The contributions of PLHIV service navigators reveal the potential role the PLHIV networks can play in the provision of HIV services. PLHIV can be providers rather than passive receivers of HIV and TB services. There is a need to strengthen PLHIV networks in HIV, AIDS, and TB service delivery in the post-conflict district communities of Northern Uganda where there is a large shortage of human resources for health.



XVII International AIDS Conference
August 2008 | Mexico City, Mexico

Gaps in data management: survey of health units in post-conflict Northern Uganda

D. Sera, M. Makumbi | NUMAT/JSI

BACKGROUND:

NUMAT is a USAID-funded program implemented in nine conflict-affected districts of Northern Uganda. Part of NUMAT's mandate includes building the capacity of the districts to plan and implement an effective response to the HIV, tuberculosis, and malaria epidemics. This includes supporting the design of monitoring and evaluation (M&E) systems to assist in planning, monitoring, and evaluation of HIV services. The study objective is to identify gaps in data management in a post-conflict situation.

METHODS:

An M&E capacity assessment was conducted. Respondents from the district health offices and selected health units were purposively sampled and key informant and group interviews were done with health facility in-charges, Health Management Information System (HMIS) focal persons, and records assistants. The main outcome measures are the extent to which health facility data was routinely recorded, how they were recorded and evaluated, and to whom they were made available.

RESULTS:

Data registers at the public facilities were found to be incomplete in 98% of the sampled units, while 45% expressed that they rarely submitted data in a timely manner to the district headquarters. About 60% of the record clerks and health workers were not familiar with the indicator definitions and data is often entered incorrectly. The decongestion of internally displaced persons (IDP) camps has also led to challenges of tracking clients for follow-up support. Only 43% of the data management positions are currently filled and the turnover among this category of staff is high.

CONCLUSIONS:

Post-conflict situations present specific challenges for M&E, hence:

- » The design of effective M&E systems should put in consideration the design variations in the way in which health data are defined, recorded, and analyzed, as this affects the quality, completeness, and availability of this information.
- » Urgent priority needs to be given to investing in infrastructure and human resources, including the training of service providers in health data management.

Piloting of community-based family support groups for HIV-positive women & their families in post-conflict Northern Uganda

F. Kagwire¹, E. Kansiime¹, M. Odipo¹, E. Ssemafumu¹, G. Otira², M. Makumbi¹ | ¹NUMAT/JSI, ²ROAF

ISSUES:

Access to a continuum of HIV care, including a prevention of mother-to-child transmission of HIV (PMTCT) package, by women enrolled in PMTCT programs in post-conflict Northern Uganda has remained a challenge due to their confinement in internally displaced persons (IDPs) camps and stigma associated with HIV. To overcome these challenges, facility-based family support groups (FSGs) for HIV-positive women, their male partners, children, and other family members were established. Since August 2007, 15 groups were established in nine districts supported by NUMAT. However, less than 20% of PMTCT clients were enrolled, mainly due to long distances to health facilities where FSG activities are conducted.

DESCRIPTION:

To ensure provision of comprehensive HIV care, NUMAT collaborated and supported Rwot Ogwok Ayaru Foundation (ROAF), a community-based organization (CBO) in Kitgum district, to pilot community-based FSG in four sub-counties of Lamwo County. More than 120 mothers have been enrolled with 20+% male partners, and more than 64 mother-baby pairs are followed up monthly. Community leaders partake in mobilisation of members. The groups are run by trained community volunteers and selected group leaders with technical oversight from district focal persons and NUMAT. Group meetings are held twice a month to discuss topics ranging from HIV serostatus disclosure and stigma to antiretroviral therapy.

LESSONS LEARNED:

The groups have helped mothers overcome stigma and access a continuum of care at nearby health facilities through referrals. The collaboration between NUMAT and CBOs has improved mobilization and enrolment of clients into FSGs.

NEXT STEPS:

The challenges of stigma and access to PMTCT interventions in post-conflict communities with IDPs can be overcome through establishment and facilitation of community-based FSGs through collaboration with CBOs.

Involvement of people living with HIV in the provision of HIV counseling & testing services to the internally displaced people of Northern Uganda

E. Kansiime¹, F. Kagwire¹, E. Ssemafumu¹, T. Takenzire², M. Makumbi¹ | ¹NUMAT/JSI, ²NGEN+

ISSUES:

As a result of conflict in Northern Uganda lasting 20 years, where people have been confined in internally displaced persons (IDP) camps, there has been a breakdown of health services. This has resulted in increased risk of HIV infection through rape, poverty, and commercial sex, leading to a high HIV prevalence for females at 9.1%, compared to the national level of 6.5%. While there is a problem of access to services, the biggest challenge remains access to HIV counseling and testing (HCT), which is an entry point into HIV care services, in addition to low staffing levels.

DESCRIPTION:

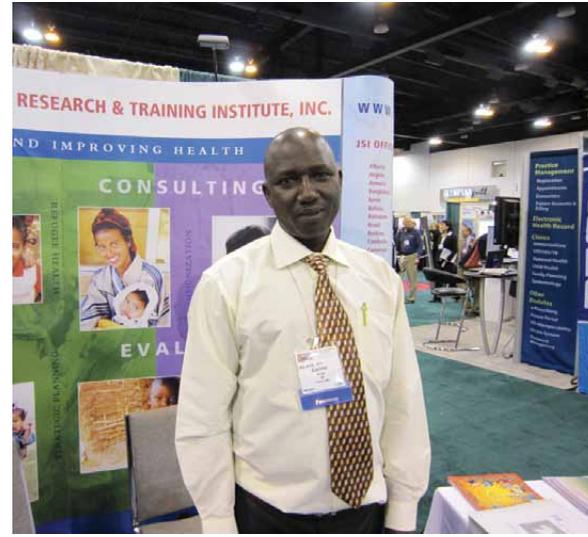
To overcome these challenges, NUMAT collaborated with the National Guidance and Empowerment Network of People Living with HIV (NGEN+), a partner NGO, to implement HCT outreaches in IDP camps in Amuru district. Planning meetings were held involving district leadership, NUMAT, NGEN+, and camp leaders to agree on roles and responsibilities. HCT outreaches were conducted with NGEN+ providing overall coordination and counselors, NUMAT provided funding, testing kits, and technical oversight, while the district provided counselors and laboratory support. A total of 1,182 (62.8% females) were counseled, tested, and received results in nine IDP camps. The HIV prevalence among males and females was 7.67% and 9.8%, respectively, with an average prevalence of 8.5% compared to 6.5% nationally. Individuals who tested HIV-positive were linked to hospitals for HIV care, while those who were HIV-negative were educated on HIV prevention and linked to post-test clubs.

LESSONS LEARNED:

Camp leaders played a crucial role in mobilization of IDPs for HIV testing. PLHIV organizations, given capacity, can contribute greatly to HIV service delivery.

NEXT STEPS:

NUMAT will continue to partner with existing organizations to improve on access to HCT and other services. Other HIV programs need to consider HCT outreaches to IDP camps so as to increase access to continuum of care.





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