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## A successful TB defaulter control in a war zone with high HIV prevalence

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#### ABSTRACT

War zones in Sub–Saharan Africa represent a challenge for public health projects like TB control programs because planning and communication have been disrupted, doctors and medical workers flied to secure zones. We present a TB control program carried out by an Italian NGO, Italian Association for Solidarity among People (AISPO) in a referral Hospital of North Uganda (Lacor H).

### 1. Introduction

Northern Region in Uganda has suffered from war and population displacement during the last decade. The resulting poverty, socio-economic disruption and collapse of health infrastructure facilitated the spread of HIV and TB. Uganda have been one of the first Sub-Saharan African countries to respond with open and concerted efforts for HIV control using a multisectorial approach and achieved positive results. War zones in Sub-Saharan Africa represent a challenge for public health projects like TB control programs because planning and communication has been disrupted, doctors and medical workers flied to secure zones.

### 2. The TB control programme

We present a TB control program carried out by an Italian NGO, Italian Association for Solidarity among People (AISPO) in a referral Hospital of North Uganda (Lacor H) which is collaborated with Lacor H and the National

TB Program. AISPO has identified TB management as a priority in the frame of a cooperation project co-financed by the Minister of Foreign Affairs.

St Mary's Hospital Lacor is a non-for profit Hospital located in Gulu district, North Uganda where 75% of the household survive on subsistence farming 50% of the population lives in protected rural camps with a lack of proper housing and basic sanitation. Only 30% of population lives within 5 km from dispensaries and sub dispensaries. St Mary's Hospital Lacor TB ward is a 90 beds TB ward with good aeration.

The TB drugs were free of charge provided by the National TB Programme through the district authorities. According to WHO and TB National Program guidelines, 2 ZRH plus 4 RH were provided for children less than 12 y, 2/3 EZRH plus 6 EH for new adult patients and 2 SEZRH, 1 EZRH plus 5 ERH for re—treatments.

The programme was started in July 1998. Table 1 shows the progressive decline of defaulters over years (1997–2000), reaching the recommended WHO rate (<15%) in 1999. Table 2 shows the increase of TB patients during this period.

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## 3. The above mentioned results have been achieved as follows

(1) Staff has been trained and increased in number. After

**Table 1**Default rate lacor H 1997–1998–1999(%).

Year	January	February	March	April	May	June	July	August	September	October	November	December
1997 (46%)	39	33	38	42	42	44	43	69	58	40	46	51
1998(29%)	39	36	53	48	47	36	32	27	14	26	16	17
1999(7%)	6	7	10	10	12	4	9	6	6	6	4	-

**Table 2**Total number of lacor TB patients 1997–1998–1999 (n).

Year	January	February	March	April	May	June	July	August	September	October	November	December
1997 (597)	51	51	55	52	43	43	49	45	73	45	41	49
1998(728)	57 (+11%)	54 (+6%)	51 (-7%)	54 (-3%)	49 (-14%)	27 (-37%)	63 (+28%)	54 (+20%)	81 (+11%)	78 (+73%)	83 (+102%)	81 (+65%)
1999(906)	78 (+36%)	76 (+40%)	80 (+56%)	74 (+37%)	64 (+30%)	68 (+151%)	79 (+25%)	72 (+33%)	91 (+12%)	71 (-9%)	81 (-2%)	73 (-10%)
2000	82 (+5%)	69 (-9%)	68 (-15%)	81 (+9%)	_	_	-	-	-	_	-	-

specific training, a medical officer has been put in charge of TB activities (TB ward, staff education, relationship with the district-national authorities); a junior clinical officer (medical assistant) has joined the senior clinical officer. 4 more nurses and a full time counsellor for HIV have been employed in TB ward in addition to a full time health educator. Routine meetings among staff have been hold weekly in order to implement all the activities and (2) All the TB control activities within Lacor H have been implemented integrally and co-ordinately. Proper and early registration of all TB patients has become a rule. A patient should be registered even if he dies few hours after TB treatment started. Every pulmonary TB patient with positive sputum result should be registered at diagnosis (even before starting treatment). TB patients in other wards were also registered. TB patients coming to Lacor H from other hospital-health centres or districts were registered under the same unit number that he/she got in the last treatment. Proper education was also provided.

TB trials have been completely abolished (only 3 patients in a year had TB treatment interrupted). Hospital doctors have been sensitised about TB priorities (5 meetings about TB have been held as routine morning meetings in a two-year period. Hospital staff has been sensitised as well). Early admission in TB ward for supervision therapy, health education and monitoring of TB drugs side effects have been organised. Isolation of patients in order of infectiousness and establishment of a room for TB investigations of pneumonia patients were implemented. An early, aggressive referral system (to health centres within the district), and transfer out system (to other hospitals out of the district) has been established. Patients are informed that TB drugs

are free of charge all over Uganda and available in many health centres. The list of the referred-transferred patients has been regularly presented to the district authorities (immediately after the referral and 8 months later) in order to know the outcomes. Ambulatory treatment (for the patients living nearby the H) has been performed in order to allow the patients to get treatments without disrupting normal life, spending all their money, or being admitted to hospital far away from their home during the first 2 months intensive phase.

Repetitive sessions in order to make a name list of the defaulters for presenting to district authorities have been performed. Active case searching activities were also performed in H surrounding areas. Health education has been the most important part of the programme. During the first days of admission (when the patients are very sick and realise the importance of treatment) TB talks have been hold. Individual talk on admission and discharge, three to four round talks in small groups and a weekly talk to all the patients have been performed by all the ward staff/CO/MO with the help of a full time health educator.

Food ratios have been distributed to TB patients who came for control during the 6 months intensive phase. World Food Programme has supported this project. High risk defaulting categories have been identified (for examples soldiers and soldiers families, malnourished children who were undergoing nutritional program with much improvement, patients who started TB treatment from wards different from TB ward and who missed proper education, patients who had already defaulted TB treatment in the past, non–Lwo speakers, old patients, un–educated patients, psychotic patients). The above categories have received special

education and care.

Behavioural changes have been introduced. Patients have been greeted friendly and never sent away in spite of the arrival time. Patients have never refused drugs or attention, coming directly to TB ward without passing through OPD.

The security in the district has shown a little improvement (there has been a landmines free period around the hospital from May 98 to Sept 99, but rebel activities have been on (and they have restarted heavily in Dec 99), delaying the introduction of the WHO-supported community based DOTS.

### 4. Conclusion

Focusing efforts and sources on a project with common objectives (as TB control programme in this case) can deliver long-term and productive results, when a NGO works within the national framework and government policies establishing sustainable and proactive relationships. This experience has highlighted ways that a NGO can collaborate constructively with national governments to improve, promote and support activities concerning local primary health care. NGOs usually are apolitical organizations that have a local nonpartisan status, engendering greater acceptance by government and the community. They strive for outcomes

that are sustainable and have been effective in setting up primary health care delivery systems.

Many authors find that a mutually satisfactory and sustained dialogue has become imperative for both NGOs and governments in sharing information on their programs and working together on improving the quality of their development activities.

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