

**‘REVERSE INTEGRATION’ IN LEPROSY:  
LESSONS FROM MKAR, NIGERIA**

Fidelis T. Iyor\*

**ABSTRACT**

*Integration of leprosy control into general health services (GHS) has gained much wider acceptance. Integration policies and efforts have usually been directed towards taking leprosy services to general health services. “Reverse integration” means bringing other health care services into existing leprosy services. This paper discusses the process of reverse integration in a missionary hospital in Nigeria with the attendant advantages. These include; accessibility of specialised services; affordability of specialised services; extended application of expert knowledge and skills; reduction in cost of training workers for leprosy work; integration of persons affected by leprosy; comprehensive health care for leprosy patients; additional sources of funds; effective utilisation of personnel and facilities; springboard for other programmes; and interest of government functionaries and philanthropists. Reverse integration will help to showcase the contribution of leprosy programmes to general health services.*

**INTRODUCTION**

The implementation of multi drug therapy (MDT) since mid-eighties has been highly effective in curing patients and reducing prevalence of leprosy. Presently, the global prevalence of leprosy is less than 1 case per 10,000 people (1). The social picture of leprosy has also changed (2), and the stigma attached to leprosy has diminished considerably (3). This change in perspective provides an opportunity to create new strategies, focus and perspective that continue to help and support people with leprosy (4). One of the most widely accepted strategies is ‘integration.’

## **CONCEPT OF INTEGRATION**

Since the implementation of multi drug therapy (MDT), the integration of leprosy control into general health services (GHS) has gained much wider acceptance (2). 'Integration' means that leprosy control activities become the responsibility of the general health services. World Health Organisation (WHO) has accepted the principle of integrating leprosy control into general health services wherever possible, whilst at the same time, underlining the importance of maintaining a vertical specialised element at various levels of the programme, for supervision, referral facilities, drug supply and financing (5). In Nigeria also, one of the strategies of the National Tuberculosis and Leprosy Control Programme (NTBLCP) is to integrate the tuberculosis and leprosy (TBL) services into the general health services (6). In some endemic countries leprosy control programmes are still vertical from the National to the operational level, with specialised staff and clinics, which are separated from other health services. The reported limitations of this type of service are insufficient coverage, lack of comprehensive and continuous health care, insufficient use of resources, stigma and dependency on donors (7). Integration should be a gradual and slow process. At the same time it has some negative aspects, the quality of care may deteriorate, records and reports will be affected, there will be more re-cycling, and leprosy workers may relax if they feel that someone else is dealing with the problem (8). Integration policies and efforts have usually been directed towards taking leprosy services to general health services and not bringing general health services into leprosy control. "Reverse integration", means bringing other health care services into existing leprosy services. Reverse integration of eye care into leprosy services has been reported at Mangu, Nigeria, with a number of advantages (9). The advantages were accessibility, affordability, and availability of services among others.

## **INTEGRATION PROCESS AT MKAR**

Mkar is a West African village, in the middle belt of Nigeria. Located about 100km east of Makurdi, the Benue State capital, it is the headquarters of an indigenous missionary organisation, 'Nongu Kristu u ken Sudan hen Tiv' (NKST). The NKST mission is one of the leading providers of health services in Tivland.

The leprosy control activities at Mkar started with the establishment of a leprosarium in 1930 by the Dutch Reformed Church Mission (DRCM) of South Africa. The leprosarium was

called Benue Leprosy settlement (BLS), Mkar. Health workers were engaged to take care of the needs of the inmates. The team of health workers was later enlarged to include a doctor and a physiotherapist. With the involvement of the doctor and physiotherapist, other minor cases needing orthopaedic surgery and physiotherapy started patronising the settlement. For a long time, the nearest facility with orthopaedic and physiotherapy services was National orthopaedic Hospital, Kano, about 1200km from the centre. The settlement became known as Benue Leprosy Settlement and Rehabilitation Hospital (BLS&RH), Mkar. The orthopaedic work gained popularity and the physiotherapy department became and remains the most viable within its vicinity. Thus cases of stroke, fractures, poliomyelitis, cerebral palsy, spinal cord injuries, arthritis etc. began to frequent the hospital. The proprietorship of the hospital changed to the Sudan United Mission–Christian Reformed Church (SUM-CRC) of America from 1957 to 1985. In 1985, the hospital was handed over to NKST and in 1994 was renamed as NKST Leprosy and Rehabilitation Hospital, Mkar. The NKST leprosy control, in addition to the hospital, had nineteen MDT clinics and existed alongside the Benue State TBL Control Programme. The existence of two control programmes in Benue State was an anomaly within the structure of NTBLCP. There was therefore a gradual integration of the NKST MDT clinics into the various Local Government MDT clinics. This process was completed in 1998. The hospital then took its rightful place as the referral hospital for the Benue State TBL Control programme. With complete integration of other services, the hospital was in 1999 renamed NKST Rehabilitation Hospital, Mkar. It has 114 beds and leprosy now forms only 30% of the cases seen in the hospital. Clients come from within 300-km radius around the hospital and beyond.

#### **ADVANTAGES OF REVERSE INTEGRATION**

With complete integration of orthopaedic and rehabilitation services in the hospital, the following advantages are noticed.

##### **Accessibility of specialised services**

Orthopaedic, physiotherapy, prosthetic/orthotic and other rehabilitation services have become accessible to the rural populace in a familiar environment, rather than the strange and intimidating environment of the cities where these services are usually located.

### **Affordability of specialised services**

The simplicity of methods in leprosy care has been adapted for use in other areas of care. Most of the devices and appliances are fabricated in the workshops. These have greatly reduced the cost of services to the patients to levels affordable by them.

### **Extended application of expert knowledge and skills**

The expert knowledge and skills acquired for leprosy work are extended and applied to other ailments. Surgical techniques for reconstructing hands and feet in leprosy have been used in reconstructing hands and feet injured in road traffic accidents and other nerve injuries. Clinicians have used knowledge and skills of dealing with neuropathic limbs in leprosy to manage diabetic complications.

### **Reduction in cost of training workers for leprosy work**

Reverse integration provides opportunity for many health workers to receive training in leprosy at reduced or no cost. Training is done on routine ward rounds, and clinical meetings. When seminars and workshops are organised, they are conducted within working hours and are attended as part of staff duty without need for compensation. The most beneficial aspect of the training is the interaction with persons affected by leprosy. Health workers who have worked with the hospital in any capacity leave with knowledge, skills and a better attitude on leprosy at no extra cost. Such staff would be most helpful when leprosy is integrated into their work elsewhere.

### **Integration of persons affected by leprosy**

When other people come to use and share facilities with leprosy patients in an environment that seemingly belongs to leprosy, it changes their attitude and reduces the stigma associated with the disease. Those people who have shared life with the patients are more willing to accept them as members of the community with equal rights.

### **Comprehensive health care for leprosy patients**

With the availability of other services in the hospital, leprosy patients benefit from other treatments that are not usually within the ambits of leprosy care. Procedures such as appendicectomy, hydrocelectomy, etc, have been performed on leprosy patients free of charge.

### **Additional sources of funds**

Leprosy services are free to the patients. Even though international donors support some of the work in the hospital, staff salaries and other running costs have to be generated from other sources to ensure sustainability of even the leprosy services. Other patients attending the hospital provide this additional source of funding.

### **Effective utilisation of personnel and facilities**

With the decline of leprosy cases, the staff that received special training in leprosy management are likely to become redundant. This will result in under utilisation of personnel and facilities. Reverse integration has enabled assignment of additional roles to these specially trained categories of staff.

### **Springboard for other programmes**

The leprosy activities in the hospital provided a springboard for other programmes to take off without hitches. The orientation in home visits and self-care in leprosy provided an initial working format for the Community Based Rehabilitation (CBR) programme. The monthly field visits to MDT clinics provided an understanding towards the need for an orthopaedic outreach programme. Both the CBR and orthopaedic outreach programmes are now big and independent programmes, which emanated from the hospital and have received international support.

### **Interest of Government functionaries and other key figures**

The services provided at the hospital have attracted government functionaries and other key figures in the society to the centre. Such interest has enabled policy makers and philanthropists to make a first hand assessment of disabling conditions (leprosy inclusive) and rehabilitation needs.

## **PROBLEMS OF INTEGRATION AT MKAR**

### **Maintenance of a leprosy ward**

Despite the integration of other services in the hospital, a separate ward is still maintained for leprosy cases. This is ideal for management of the complications that could arise from the disease but it does not address stigmatising issues, like willingness to share a room or bed

with a leprosy patient by the other patients. Other patients perceive the separate ward as isolation due to the infectiousness of the disease.

### **Loss of pride among persons affected by leprosy**

Integration of other services into the hospital attracts patients and workers from all strata of society. The display of wealth and flamboyance by wealthy members of the society sometimes results in loss of pride among the leprosy patients, who feel inferior. The shift in locus of attention could be demoralising to many of them.

### **Less attention to needs of leprosy patients**

Leprosy now forms only 30% of the workload in the hospital and the pressure from other cases occupy the minds and attention of workers so that less thought is given to the people affected by leprosy.

## **CONCLUSION**

Without doubt, integration is the only answer for the smooth future management of leprosy control (8). Efforts should not only be directed towards integrating leprosy services into general health services. Services should also be integrated into existing leprosy programmes. Empty MDT clinics could become primary health centres and leprosy hospitals could take on specialist services in dermatology, orthopaedics or rehabilitation. CBR projects can be integrated into self-care groups. Fighting stigma in HIV/AIDS could be an offshoot of the leprosy control experience. The experience at Mkar gives a strong support to reverse integration. Reverse integration can help to showcase the contribution of leprosy programmes to general health services.

\*NKST Rehabilitation Hospital, Mkar  
P.M.B. 193, Gboko, Benue State, Nigeria  
e-mail: iyor2@yahoo.co.uk

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from AIFO**

Amici di Raoul Follereau (AIFO) has developed on-line self learning courses on community based rehabilitation (CBR), based on knowledge and experiences from different countries in Asia, Africa and South America where AIFO supports CBR programmes. These courses and other resources can be freely accessed at [www.aifo.it/english/resources/online/online.htm](http://www.aifo.it/english/resources/online/online.htm)

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