Nigeria

Overview of TB control system

Nigeria is engaged in reforms to strengthen the primary health care infrastructure, and to build human resource and operational capacity throughout the country. The Federal Ministry of Health supports the 36 autonomous states through its technical and strategic planning functions. However, the planning and implementation of health services, including those for TB, are largely decentralized to the states and the Federal Capital Territory. Following the Abuja Declaration to Stop TB in 2001, which was endorsed by federal and state representatives and other partners, the federal government established a multisectoral committee to mount a concerted response to the worsening TB/HIV epidemic.

Surveillance, planning, operations

Case notifications have been increasing since 1994, but with an unexplained increase above the general trend in 2001. Although there is uncertainty about the true burden of TB in Nigeria, it is clear that smear-positive case detection by the DOTS programme remains low (estimated to be 12% in 2002). Treatment success in the 2001 DOTS cohort was 79%. Eleven percent of patients completed treatment without documented smear conversion, and 12% defaulted. Treatment success under DOTS, like case detection, changed little between 1997 and 2002.

In 2001, Nigeria developed a 2001–5 plan for TB control and established an NICC in 2002. The plan was endorsed in 2002 by the federal MoH and by the NICC, paving the way for expansion of DOTS beyond the 45% of LGAs (350 out of 774) that were implementing DOTS in 2002. As of October 2003, 432 LGAs (55%) were implementing DOTS. Introducing DOTS to all LGAs remains the most significant challenge, complicated by problems of infrastructure, funding, staffing, and political commitment. Nearly all states and LGAs have DOTS expansion plans, but those plans have not, by and large, been implemented. An application to the GFATM (2nd round) was submitted through Nigeria's Country Coordinating Committee (CCM), requesting US$ 9.8 million over the first 2 years. It was approved by the GFATM technical review panel in February 2003. However, the government was unable to satisfactorily answer questions about fund allocation and management, so approval for the grant was withdrawn in August 2003. Despite these setbacks, DOTS was extended to 10 more states during 2003, thereby increasing the number of states implementing DOTS from 26 in 2002 to 36 in 2003 (from 70% to 97%; only Zamfara state is yet to start implementing DOTS).

The major constraint for primary health care, and for the TB control programme, remains the withholding of government funds budgeted at all levels. This results from a low level of political commitment to health, to primary health care (despite being a stated priority of the government), and to TB control. TB control operations are carried out with external funding and national staff, with insufficient resources for operations, and often relying on patient payment for services. Where DOTS is being implemented now, it is due

PROGRESS IN TB CONTROL IN NIGERIA

Indicators

• Treatment success 2001 cohort	79%
• DOTS detection rate, 2002	12%
• NTP budget available, 2003	63%[a]
• Government contribution to NTP budget, including loans, 2003	31%[b]
• Government contribution to total TB control costs, including loans, 2003	55%[b]
• Government health spending used for TB, 2003	8%[b]

Constraints to achieving targets

- Funding gap of at least US$ 4.6 million in 2003
- Insufficient federal and state commitment to, and funds for, primary health care infrastructure including health facilities and staff
- Low staff motivation and insufficient numbers of health workers trained in DOTS
- Weak laboratory network and diagnostic services

Remedial actions needed

- Plan high level advocacy missions to strengthen political commitment
- Mobilise funds from external donors
- Strengthen political support at federal and local levels to increase funding
- Develop TB HR recruitment plan
- Review and strengthen supervision and monitoring plan to boost staff moral
- Incorporate DOTS into pre-service curricula for health workers, laboratory technicians, and medical officers
- Strengthen laboratory services with more equipment, supplies, and improved QA

[a] This includes the budget committed by the government. Taking into account the limited release of funds, 32% of the NTP budget was available.

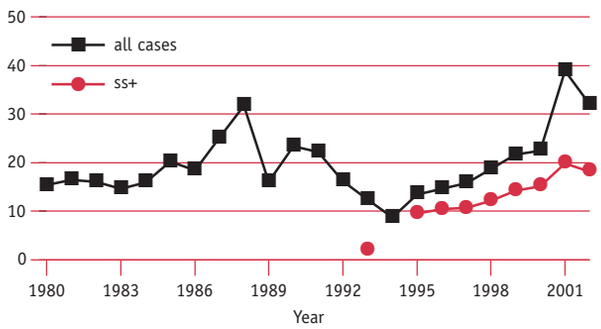
[b] This includes the budget committed by the government and does not take into account the limited release of funds.

NIGERIA

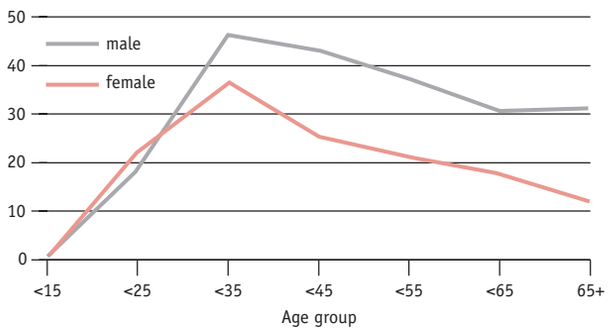
LATEST ESTIMATES[a]		TRENDS	1999	2000	2001	2002
Population	**120 911 192**	DOTS population coverage (%)	45	47	55	55
Global rank (by est. number of cases)	4	Notification rate (all cases/100 000 pop)	22	23	39	32
Incidence (all cases/100 000 pop)	304	Notification rate (new ss+/100 000 pop)	14	15	20	18
Incidence (new ss+/100 000 pop)	132	Detection of all cases (%)	8.8	8.5	14	11
Prevalence (ss+/100 000 pop)	260	Detection of new ss+ cases (%)	13	13	16	14
TB mortality per 100 000 pop	89	DOTS detection of new ss+ (%)	13	13	13	12
% of adult (15-49y) TB cases HIV+	27	DOTS detection of new ss+/coverage(%)	30	28	24	22
% of new cases multi-drug resistant	1.7	DOTS treatment success (new ss+, %)	75	79	79	—

Notification rate (per 100 000 pop)

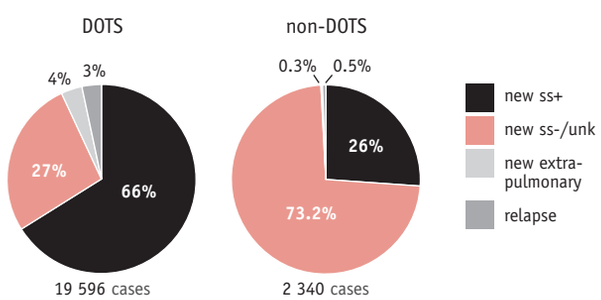
Notification (all cases) = 38 628 in 2002



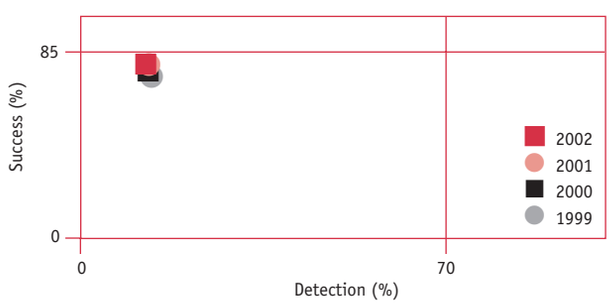
Notification rate by age and sex (new ss+)[b]



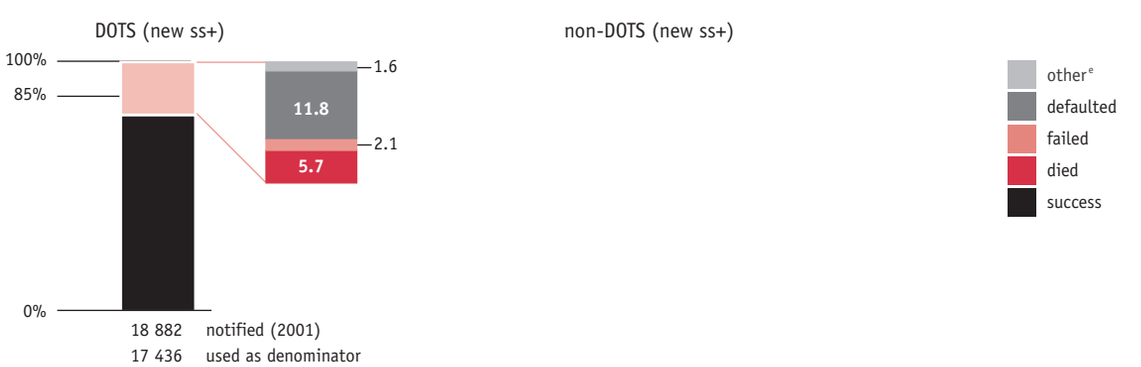
Case types notified[c]



DOTS progress towards targets[d]



Treatment outcomes[c]



Notes

ss+ Indicates smear-positive; ss-, smear-negative; pop, population; unk, unknown.

[a] See Methods for data sources.

[b] The sum of cases notified by age and sex is less than the number of new smear-positive cases notified for some countries.

[c] Non-DOTS is blank for countries which are 100% DOTS, or where no non-DOTS data were reported.

[d] DOTS progress towards targets: DOTS detection rate for given year, DOTS success rate for cohort registered in previous year.

[e] "Other" includes transfer out and not evaluated, still on treatment, and other unknown.

largely to the support of NGOs and donors, and the importance of partners in implementing DOTS cannot be overstated. Increased state ownership (and budget allocation) for TB control will be required if DOTS is to be expanded, and this objective has been captured in the strategic plan.

Laboratory facilities in primary health centres are in generally poor condition, lacking equipment and reagents for sputum smear microscopy. By October 2003, only 477 of the planned 615 microscopy centres were in operation. Efforts to improve diagnosis included the development of a QA programme, the updating and distribution of AFB microscopy guidelines, and supervision of peripheral laboratory activities by the national and state laboratory scientists. There remains a shortage of laboratory technicians. National and zonal reference laboratories are planned when funds become available.

Activities to improve treatment outcomes included the formation of an IEC committee, the provision of better transport to improve the capacity of LGA supervisors, and financial incentives for staff who are involved in locating absentee patients (at risk of defaulting). The network of treatment centres has been increased from 1605 to 2233. The introduction of community-based DOTS has been postponed until DOTS has been firmly established in all health facilities.

PHC clinics are staffed mainly by nurses, community health officers, and community health workers. There is an adequate number of government health workers to meet the need, with the exception of laboratory technicians. Three new zonal NPOs were recruited through WHO for the north-west, north-east and south-west zones. They are responsible for technical coordination of TB control activities in the states within each zone. The population per physician in the public PHC system varies from 1 : 160 000 to 1 : 400 000. Although the TB programme trains supervisors and key staff, very few general PHC and hospital staff have been trained in integrated TB control activities. The number of private and NGO hospitals delivering DOTS services could, with adequate funds, increase from 20 to 57 facilities, the target set for 2003. Staff capacity was strengthened using experienced facilitators at the national TBL training centre. The manual and guidelines for training general health workers and doctors about DOTS has been finalized, printed, and distributed. Education on DOTS is now being incorporated into pre-service curricula for health workers, and into the medical school curriculum at the University of Lagos.

Monitoring and supervision have been hampered by a federal embargo on new appointments. The central unit had sufficient funds to purchase new 4WD vehicles enabling supervisory visits that involve travel over difficult terrain. There are plans to expand the reporting network to include hospitals (including those in academic settings), police, prisons, and the army.

The national HIV-infection rate among adult TB patients was estimated to be 27% in 2002, based on HIV infection rates among all adults. There is a surveillance system to measure HIV infection directly among TB patients, which should provide better estimates in future. There are national and provincial TB/HIV coordinating bodies, and meetings between TB and HIV staff have taken place to intensify collaboration, resulting in the development of a joint concept paper. Some collaborative activities were implemented in 6 of 774 districts during 2003. There are plans to involve the NTP in delivery of ART by 2004.

The private sector largely com-

Budget estimates, existing funding, and budget gaps for fiscal year 2003, US$ millions

	REQUIRED FUNDING	EXPECTED FUNDING				FUNDING GAP
		GOVERNMENT	LOANS	GRANTS	OTHER	
NTP budget						
Drugs	2.6	1.4	—	1.2	—	—
Dedicated staff working exclusively for TB control	1.8	1.7	—	—	—	0.1
New activities to raise case detection and cure rates	5.7	0.4	—	2.0	—	3.3
Buildings, equipment, vehicles	2.4	0.4	—	0.8	—	1.2
All other line items	0.1	—	—	0.1	—	—
TOTAL NTP BUDGET	**12.6**	**3.9**	**—**	**4.1**	**—**	**4.6**
Costs not covered by NTP budget [a]						
Hospital stay	1.7	1.7	—	—	—	—
Clinic visits for DOT and monitoring	4.7	4.7	—	—	—	—
TOTAL COSTS NOT COVERED BY NTP BUDGET	**6.4**	**6.4**	**—**	**—**	**—**	**—**
TOTAL TB CONTROL COSTS	**19.0**	**10.3**	**—**	**4.1**	**—**	**4.6**

— Indicates zero; NA, not available

[a] WHO estimates, data not provided by the NTP

prises faith-based institutions, nursing homes, registered private practitioners, pharmacists, and traditional healers. A framework for PPM activities was developed during a workshop held in 2003, with plans to involve the private sector beginning in 1 site in each of 6 provinces.

The University of Nigeria teaching hospital in Enugu has applied to the GLC for treatment of MDR-TB, but the TB programme would have to be strengthened, and a further drug resistance survey caried out, before a DOTS-Plus project could begin.

Partnerships

DOTS is largely delivered through NGOs, with public sector expansion of DOTS aiming to strengthen the network of NGOs and to increase access through public sector facilities. Overall technical guidance for the country is led by the government in collaboration with partners including WHO and NGOs. Most of the partners supporting TB activities were initially leprosy NGOs that have recently started to diversify. However, they do not have enough capacity to support the planned DOTS expansion. Twenty-seven of the 37 states are receiving funding as follows: GLRA has been financially and technically supporting DOTS implementation in 272 LGAs in 14 states. TB drug procurement is organized by GLRA in these states. The NLR is involved in 100 LGAs in 4 states. The Damien Foundation has been fully supporting TB control in 2 states. DFID is funding DOTS implementation in 1 state, within the framework of a project developing PHC services. The IUATLD is providing technical assistance and covering some training costs in Lagos state. CIDA's donation through WHO has allowed for DOTS expansion into 6 additional states. The GDF provided drugs for 33 000 patients in 2002, plus buffer stock for 1 year.

Budgets and expenditures

The NTP budget for the fiscal year 2003 (from 1 January) was US$ 12.6 million. The NTP estimated that they would treat 50 000 patients during this period, implying a budget per patient of US$ 252. However, the drug budget, at US$ 2.6 million, included the procurement of a buffer stock, so the actual cost per patient may have been lower. The government contribution was estimated at US$ 3.9 million. However, no disbursement of federal funds occurred and limited information on state budgets was available. US$ 4.1 million was provided through grants. In January 2003, Nigeria was awarded a grant from the GFATM for TB control activities. This grant was later retracted. A gap of US$ 4.6 million was reported.

Costs associated with TB control that were not funded from the NTP budget amounted to an estimated US$ 6.4 million, of which US$ 1.7 million was for hospital admissions during treatment and US$ 4.7 million was for clinic visits during treatment. These data imply total TB control costs of US$ 19 million per year, and US$ 380 per patient.