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Hospitalisation for TB in the Free State: opinions of health workers and managers

Non-governmental health care providers in the Free State have traditionally provided long-term hospitalisation services for TB patients. This history now appears to have come to a halt. This paper documents the opinions of a purposive selection of public health workers and managers with regard to TB-related hospitalisation. The views and experiences of health workers and managers at the district, provincial and national levels were recorded by means of self-administered questionnaires and personal interviews over the period 2001-2003. In the Free State this period was characterised by a range of intricate problems. Indications are, however, that public district hospitals are capable of dealing with the burden caused by the sequential closure of the former Allanridge Chest and Santoord hospitals.

Hospitalisasie vir tuberkulosebehandeling in die Vrystaat: standpunte van gesondheidswerkers en -bestuurders

Tradisioneel het nieregeringsverskaffers van gesondheidsdienste in die Vrystaat langtermynhospitaaldienste vir tuberkulosepasiënte gelewer. Klaarblyklik het hierdie geskiedenis nou tot 'n einde gekom. Hierdie artikel dokumenteer 'n groep doelmatiggeselekteerde gesondheidswerkers en -bestuurders se standpunte oor hospitalisasie vir tuberkulose. Gedurende die tydperk 2001-2003 is die menings en ervarings van gesondheidswerkers en -bestuurders op distrik, provinsiale en nasionale vlak deur middel van selfgeadministreerde vraelyste en persoonlike onderhoudvoering aangeteken. In die Vrystaat is hierdie periode deur ingewikkelde probleme gekenmerk. Daar is egter aanduidings dat openbare distrikshospitale in staat is om die las op te neem wat deur die opeenvolgende sluiting van die voormalige Allanridge Chest and Santoord hospitale ontstaan het.

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The new South African government is striving to provide a health care system of a quality acceptable to the majority of the people. The country still needs to overcome the "hospi-centricism" of a displaced regime that paid only lip-service to the primary health care (PHC) approach. The new government has adopted a multidimensional approach in order to improve the quality of health care. Among other things, this implies "stabilising the hospital sector" (Dept of Health 1999: 5). Even amid greater emphasis on PHC than ever before, hospitals remain the institutional heart of the South African health care system.

Van Lerberghe *et al* (1997: 800-1) described the emergence of the district hospital in sub-Saharan Africa as a reaction to "blunt critique of the hospital-centred approach". During the 1980s this critique became more selective. As Van Lerberghe notes "while hospitals *per se* are part of the problem, small first-referral or district hospitals are certainly part of the solution". While the clinic or health centre gradually emerged as the mainstream operationalisation of PHC, it was unable to operate properly or to respond to health care needs and demands without backup from a first-referral or district hospital. The PHC movement itself thus put the issue of the first-referral hospital, and its place in the district, on the agenda. Likewise, in South Africa the district hospital figures prominently in the struggle against communicable diseases.

Among the communicable diseases, TB is the most perilous after HIV/AIDS. This article investigates the opinions of health workers and managers on how best to curtail TB through hospitalisation. It presents empirical data generated via the Joint Free State TB Research Project. The views and experiences of health workers and managers at facility, district, provincial and national levels were recorded by means of self-administered questionnaires and personal interviews. While the history of non-state, long-term hospitalisation services for TB in the Free State appears to have come to a halt, the public health workers and managers who participated in this study suggested that public district hospitals are able to deal with the extra burden occasioned by the sequential closure of the Allanridge Chest and Santoord hospitals.

1. Context and research problem

Globally, the institutionalisation of TB patients contributed to a more rapid decline in TB mortality after 1920, although segregation cannot be separated from other possible causes. The historical benefits of TB sanatoria have sometimes been cynically described. Reichman & Hopkins Tanne (2002: 21), for instance, state that despite sanatoria's "draconian demands on a patient's life", they were absolutely ineffective in curing TB: "Whether [TB] patients were treated in a sanatorium or not treated at all, half of them died". Other authors have romanticised the role of sanatoria, sometimes in the genre of fictional sanatorium literature. In the Nobel Prize-winning novel *Der Zauberberg* (*The magic mountain,* 1924), Thomas Mann offers a penetrating insight into the psychology and philosophy of chronic disability, based on a three-week visit to the luxury Wald Sanatorium at Davos. However, the staff and the citizens of Davos were embarrassed by Mann's portrayal of its commercialism and the eccentricity and lack of morality among its doctors.

The public health effect of isolating patients is central to population-level, quantitative histories of TB. Some have proposed that the segregation of TB patients in sanatoria lessened the transmission of infection. The overriding objective was to seek pragmatic solutions to the TB epidemic. Public health obviously has difficulty in addressing the root causes of TB such as poverty, overcrowding, and malnutrition. Institutional segregation was efficacious and politically realistic:

> Segregation in general institutions is the only factor which has varied constantly with the phthisis death rate [...] It must therefore be regarded as having exerted a more powerful influence on the prevention of phthisis than any of the other factors, of which none has varied constantly (Fairchild & Oppenheimer 1988: 1108).

Ever since the early 1980s, health policy-making all over the world has been taking place in resource-thin, contracting environments. In Jamaica, for example, instead of trying to develop methods for rationing health care in order to plan for contraction, policy-makers reacted to economic constraints by making "administrative adjustments" such as the closure of hospitals (Walt 2000: 207). Before turning to Free State health workers' and managers' opinions on the closure of specialist TB hospitals, it is useful briefly to survey the development of such hospitals in South Africa (Table 1).

Table 1: History of hospitalisation for TB in South Africa, 1870-1986

Year	Event
1870-1900	Hundreds of European "consumptive" migrants settled in the desiccated inland regions of South Africa. The threat that these imported cases of TB represented for the native-born populations of the colony was not recognised. South Africa was marketed as a health resort for consumptives in Europe. Advertising proclaimed the beneficial effects of the climate on consumptive invalids as well as the best means of reaching those placed (eg the Union Steamship Company).
1907-1920	The first accommodation specifically for TB patients (32 beds) as provided in the City Infectious Disease Hospital in Cape Town. It remained the only such accommodation available in the Union of South Africa.
1924	The few resources allocated by the state and local authorities to TB treatment and prevention were mainly at the disposal of whites. The first public sanatorium to be constructed was the Nelspoort Sanatorium close to Beaufort West. It was a South African version of the prototype, with its typical geographical isolation and self-containment, power from its own station and a local food supply from farming. Starting with 65 resident patients, the sanatorium was maintained by the state. Patients were subjected to graduated activity in the fresh air and received APT and courses of calcium or sanocrysen injections.
1924-1939a	Half of the 112 beds available for TB treatment in South Africa were allocated to whites. Since local authorities would squabble over who was responsible for the treatment of particular cases even where beds were available, black TB patients found it difficult to obtain in-patient treatment
1947a	The South African National Tuberculosis Association (SANTA) was formed. The government requested SANTA to establish settlements for "convalescent" patients on the basis of a pound-for-pound contribution towards capital costs and the payment of a daily patient tariff. Soon after their founding these settlements were obliged to admit acute patients. The intention was for the first 35 of these centres to serve for ten years. However, most continued to operate at least until the 1990s, with ongoing upgrading.
1957	There were nearly three times as many black cases per available TB bed, as there were whites. The Nationalist state tripled the number of beds available to blacks between 1952 and 1957. However, this remained inadequate and a massive backlog of patients requiring hospitalisation developed.

Table 1: History of hospitalisation for TB in South Africa, 1870-1986 (continued)

Year	Event
1950s	Due to the lack of hospital accommodation for black TB patients, the state began treating them on an out-patient basis. This was largely a failure because serious cases still needed to commence treatment within a hospital. Also, local authorities were unable to keep track of the large number of cases, let alone actually visit them. Contact tracing was inefficient or non-existent. Even with the government's offer to cover seven-eights of the cost, municipalities were not willing to fund rations for black patients on treatment.
1955	Geographical differences in expenditure on TB beds and staff developed. Johannesburg, with twice the population, had only 300 TB beds and one TB officer compared to 2 000 beds and 18 TB officers in Durban.
1980-1986	The Brown Commission of Inquiry into Health Services estimated that only 25% of TB out-patients nationwide were being effectively treated and that 38% of all TB hospital patients were relapse cases. The head of SANTA conceded that TB treatment had largely been a failure.

Sources: Compiled from Metcalf (1991); Packard (1992); Rosenthal (1982); SANTA (2003).

The history of hospitalisation for TB in the Free State began in earnest in 1953 with the opening of the (SANTA) Santoord Hospital, also known as the Claudius Brink TB Centre. Located 20 kilometers north of Thaba Nchu, this private not-for-profit facility was closed in 2002. In 1979 the Allanridge Chest Hospital, located in Allanridge, north of Welkom, commenced service. Lifecare Group Holdings operated this hospital on a private for-profit basis until its termination in 1999.

In 1966, before the closure of these hospitals, the Centre for Health Systems Research & Development set out to determine the cost-effectiveness, efficiency and quality of non-governmental (NGO) and private institutional care for TB in the Free State, in comparison with that of the public sector. This study took cognisance of the broader health care framework of contracting-out. The "Contracting-out" study identified and assessed alternative ways of treating TB patients in need of institutional care (Van Zyl *et al* 1996). It was found that, albeit inappropriate for almost half of the patients hospitalised, Lifecare and

SANTA rendered good value-for-money hospital services at Allanridge and Thaba Nchu. Nevertheless, the total contract cost per patient day compared somewhat unfavourably with the marginal cost per patient day for intramural care rendered by the Free State Department of Health itself. Also, since many of the patients were not ill enough to require hospitalisation, the major cost-saving potential lay in a shift from intramural to ambulatory care. This would apply especially to those patients with uncomplicated primary TB infection (roughly 50%). A reduction in the length of stay of the remaining half of the patients (eg cases of non-compliance, re-infection and complications) was also envisaged.

The "Contracting-out" study found that the agreements between the contractors and the Free State Department of Health were vague, poorly specified and in need of urgent review. The contractors enjoyed financial security by means of a "fee-for-service-per-patient-day" agreement, while the Department of Health controlled the number of patient days. This resulted in considerable fluctuation in monthly income for the contractors. The study reflected negatively on the ability of the Free

The isolated Santoord Hospital, 2001

Photo: Christo Heunis

State Department of Health to direct the non-state hospital services it was financing. It also argued that hospitalisation at isolated institutions far from their homes had adverse social effects on patients.

Therefore, the study recommended that criteria for hospitalisation and discharge needed to be implemented in order to effectuate the move from institutional to ambulatory care. This, however, would necessitate dramatic improvement of TB services at the PHC level as well as re-orientation of health-work professionals towards ambulatory care for TB patients. The study did not recommend that the Allanridge Chest Hospital and the Santoord Hospital should be closed down but rather that revised contractual relationships should be established based on alternative "decentralised" models including the provision of ambulatory care for TB patients. However, as was noted above, the Free State Department of Health did close the Allanridge Chest Hospital and the Santoord Hospital in 1999 and 2002 respectively.

In the Free State the role of the former NGO and private TB hospitals has now been taken over by public district hospitals. A facility to provide specialised care for multi-drug-resistant TB (MDRTB), *i e* an MDR unit, has also been established at the Dr J S Moroka Hospital in Thaba Nchu. In an attempt to gauge the correctness of the policy decision to do away with contracted TB hospital care, this study posed the question of how health workers and managers in the front line of the struggle against TB perceived the decisions and experienced the subsequent changes.

2. Methodology

A descriptive, exploratory research design was followed. Subscribing to the conviction that using both quantitative and qualitative measures "more effectively zero[es] in on the meaning of a piece of evidence" (Baker 1994: 284), this study utilised self-administered questionnaires and face-to-face interviewing as data-gathering methods. Interviews were conducted during November 2001, *i e* before the closure of the last contractor hospital, and again during October-November 2003.

As a method, data collection of personal interviewing has an advantage over self-administered questionnaires: more complex questions can be asked and the interviewer can probe to clarify answers (Neuman

2000: 273). Interviewing was thus used to determine the opinions of health managers and workers at various levels of public administration. Once their voluntary, informed consent had been obtained, Leedy & Ormrod's (2001) guidelines on conducting productive interviews were followed: finding a suitable location, establishing rapport, focusing on the actual rather than on the hypothetical, not putting words in people's mouths, recording responses verbatim, and being mindful that interviewees' responses should be treated as perceptions rather than facts. The objective of each interview was to create an event in which the interviewer would encourage the interviewee to articulate interests or experiences freely (Lindlof 1995: 163). The interviews were unstructured, non-directive and in-depth. Questions were tailored to specific management levels, interest was shown in the responses, elaboration was encouraged and leads offered by respondents were followed. The respondents largely determined the content. In November 2001, interviews were carried out with district TB co-ordinators in the three study areas of the Joint Free State TB Research Project, *i e* Welkom/Thabong, Phuthaditjhaba and Thaba Nchu, and with the provincial TB co-ordinator. In all these cases follow-up interviews were conducted approximately two years later in October-November 2003. At the national level, interviews with officials of the Inpatient Care Team took place in October 2003.

The International Union Against Tuberculosis and Lung Disease (IUATLD) endorses the self-administered questionnaire as a legitimate means of gathering data (Enarson *et al* 2001: 73). This method was used to gather data simultaneously and cost-effectively from the research feedback workshops of the Joint Free State TB Research Project. Six such workshops took place in May 2002: one in each of the health districts of the Northern Free State,[1] Lejweleputswa,[2] Motheo[3] and Xhariep,[4] and two in the district of Thabo Mofutsanyane.[5] In total, 144 workshop participants completed the questionnaire under controlled conditions. The use of open-ended questions was motivated by

1 Sasolburg, 14 May (n=35).
2 Welkom, 27 May (n=24).
3 Bloemfontein, 29 May (n=20).
4 Trompsburg, 30 May (n=25).
5 Bethlehem, 22 May (n=17) and Phuthaditjhaba, 28 May (n=23).

the assumption that responses spontaneously available to respondents usually reflect what is most important to them, as opposed to what may be anticipated by the researcher (cf Kane & Schuman 1991: 82). The categories of health providers who participated in the survey are listed in Table 2. Most (n=81) of the respondents were PHC clinic and hospital TB co-ordinators. Other participans included health workers responsible for sputum collection, diagnosis, admission and treatment, DOT supervision, tracing of treatment "defaulters", health education, drug procurement and dispensing, infection control and HIV/AIDS programme co-ordination. The resulting data thus reconstruct the views and experiences of a broad cross-section of categories of public health workers and managers engaged in TB control in the Free State. Henceforth they will be cumulatively referred to as district-level providers.

Table 2: Respondents' (district-level providers') role in TB control, 2002*

Role in facility/ district TB control programme	Northern Free State	Lejweleputswa	TM(B)**	TM(P)***	Motheo	Xhariep
TB co-ordinator	19(54)	14(58)	9(53)	15(65)	13(65)	11(44)
TB treatment and DOT supervision	4(11)	6(25)	4(24)	-	2(10)	3(12)
TB diagnosis/ sputum collection/ admission of patients	7(20)	2(8)	4(24)	4(17)	2(10)	3(12)
Tracing TB treatment defaulters and TB patients' contacts	1(3)	-	-	-	-	3(12)
TB health education	1(3)	-	-	-	-	3(12)
TB drug ordering and dispensing	1(3)	1(4)	-	1(4)	1(5)	-
Infection control	-	1(4)	-	-	-	-
HIV/AIDS co-ordinator	-	-	-	1(4)	-	-
No response	2(6)	-	-	2(9)	2(10)	2(8)
Total 35(100)	24(100)	17(100)	23(100)	20(100)	25(100)	25(100)

* N-values with (rounded) percentages in brackets.

** Research feedback workshop in Bethlehem, Thabo Mofutsanyane.

*** Research feedback workshop in Phuthaditjhaba, Thabo Mofutsanyane.

3. Findings

3.1 Opinions of district-level providers

This section reports on the opinions of district-level public health workers and managers, drawing on the self-administered questionnaire survey of May 2002. The questionnaire posed the following questions:

- What, if any, problems are you currently experiencing with the hospitalisation of TB patients?
- What, if any, problems do you foresee as resulting from the closure of the Santoord Hospital?
- What changes, if any, would you like to see in the hospitalisation of TB patients?

3.1.1 Problems with TB-related hospitalisation, 2002

Most of the respondents said that they were not experiencing any problems. A few referred to bed shortages at district hospitals, stating that very ill TB patients were being discharged from these hospitals prematurely, that hospital wards were poorly ventilated, and that staff were reluctant to admit TB patients or only admitted them if very ill. Apparently, in some cases TB patients themselves were reluctant to be hospitalised. Various aspects of Santoord Hospital's operation were seen as problematic. On the other hand, one respondent was actually concerned about its then anticipated closure.

3.1.2 Problems anticipated as a result of the closure of Santoord Hospital, 2002

The district-level providers' expectations of the problems that would emanate from the Santoord Hospital's closure are depicted in Table 4. Most respondents were concerned that MDRTB would be neglected and consequently spread in the district/province. These respondents emphasised that (general) hospital staff were not specifically trained to manage MDRTB. A large proportion of respondents anticipated drug-related problems in the treatment of MDRTB after the Santoord Hospital's closure. They were concerned that the single drugs used in MDRTB were not generally available to public health care facilities.

Table 3: District-level providers' indications of problems experienced with hospitalisation for TB, 2002

Problems	Northern Free State	Lejweleputswa	TM(B)	TM(P)	Motheo	Xhariep
"No problem"	17(49)	8(33)	6(35)	2(9)	3(15)	13(52)
Bed shortage	6(17)	6(25)	2(12)	4(17)	8(40)	6(24)
Premature discharge of very ill patients	2(6)	3(13)	1(6)	11(48)	2(10)	1(4)
Reluctance to admit patients	3(9)	2(8)	2(12)	-	-	1(4)
Doctors non-adherence to National TB Control Programme (NTCP) guidelines	2(6)	2(8)	-	1(4)	-	-
Patients failure to turn up for transport to hospital	-	1(4)	1(6)	1(4)	-	1 (4)
Hospital/doctors over-reliant on X-rays	-	-	-	3(13)	-	1(4)
TB patients unwilling to be hospitalised for extended periods	1(3)	-	-	-	2(10)	-
Hospital doctors lack of knowledge about TB	-	-	1(6)	1(4)	-	-
Difficulty in transporting TB patients to hospital	1(3)	-	-	-	-	1(4)
TB patients refusal to be admitted to or absconding from SANTA Santoord Hospital	-	-	2 (12)	-	-	-
Lengthy sputum test turn-around times	1(3)	-	1 (6)	-	-	-
SANTA Santoord Hospital closing down	-	-	-	-	1 (5)	-
Doctors discharging TB patients on discovering that they are HIV-positive	-	1(4)	-	-	-	-
SANTA Santoord Hospital taking only MDRTB patients	-	1(4)	-	-	-	-

Table 3: District-level providers' indications of problems experienced with hospitalisation for TB, 2002 (continued)

Problems	Northern Free State	Lejweleputswa	TM(B)	TM(P)	Motheo	Xhariep
Long distance to SANTA Santoord Hospital	1(3)	-	-	-	-	-
Hospital/clinic's inability to obtain single TB drugs	-	-	-	-	1 (5)	-
Food shortages in hospital	-	-	-	-	1 (5)	-
No isolation facility in hospital	-	-	-	-	1 (5)	-
Poor ventilation in hospital wards	-	-	-	-	1 (5)	-
TB patients' apathy	-	-	-	-	-	1(4)
Misdiagnosis/patient history not taken	-	-	1 (6)	-	-	-
Strict budgetary control in hospital	1(3)	-	-	-		-
Total	35(100)	24(100)	17(100)	23(100)	20(100)	25(100)

A small proportion of respondents expected an unmanageable influx of TB patients at district hospitals when the Santoord Hospital closed, and did not consider these public hospitals sufficiently staffed to deal with such a development. It was feared that district hospitals would consequently discharge TB patients prematurely.

It was also a revelation, however, that almost one-quarter of the district-level providers anticipated the Santoord Hospital's closure to be "no problem". These respondents might have been better informed than the rest about the imminent establishment of the MDR unit at the Dr J S Moroka Hospital in Thaba Nchu.

Table 4: District-level providers' expectations of problems after the closure of the Santoord Hospital, 2002

Problems	Northern Free State	Lejweleputswa	TM(B)	TM(P)	Motheo	Xhariep
MDRTB will spread/ hospital staff not trained to deal with MDRTB	13(37)	10(42)	13(76)	9(39)	6(30)	3(12)
"No problem"	11(31)	8(33)	1(6)	6(26)	6(30)	2(8)
Single drugs dispensed at Santoord Hospital not available elsewhere	9(26)	3(13)	2(12)	6(26)	2(10)	8(32)
Hospitals will experience unmanageable increase in TB patients	1(3)	2(8)	1(6)	2(9)	4(20)	9(36)
Other hospitals will discharge TB patients too soon	-	-	-	-	1(5)	2(8)
Santoord Hospital patients "not welcome" at other hospitals	-	1(4)	-	-	1(5)	-
Other hospitals not as well equipped as Santoord Hospital	1(3)	-	-	-	-	1(4)
Total	35(100)	24(100)	17(100)	23(100)	20(100)	25(100)

3.1.3 Suggested changes in TB-related hospitalisation, 2002

District-level providers' views on how hospitalisation for TB should change are indicated in Table 5. Almost a third of the respondents offered no suggestions for improving the system. Among those who were in favour of changes, most advocated special TB units in all hospitals. The remaining suggestions were intended to rectify a broad range of other existing and/or anticipated problems.

Table 5: District-level providers' views of changes that should be effected in respect of hospitalisation for TB, 2002

Changes	Northern Free State	Lejweleputswa	TM(B)	TM(P)	Motheo	Xhariep
No changes needed/ suggested	12(34)	7(29)	2(12)	2(9)	8(40)	10(40)
"TB units" in all hospitals	5(14)	5(21)	1(6)	2(9)	2(10)	5(20)
TB patients should not be discharged prematurely	1(3)	1(4)	1(6)	7(30)	1(5)	1(4)
Facility needed for long-term hospital care for MDRTB	2(6)	2(8)	4(24)	-	4(20)	1(4)
TB patients should be able to access hospitals more readily	3(9)	2(8)	-	1(4)	1(5)	2(8)
Re-treatment patients receiving streptomycin injections should be admitted	1(3)	1(4)	-	4(17)	-	-
Diagnosis in hospitals according to NTCP guidelines (sputum testing) /re-training of doctors	2(6)	1(4)	2(12)	4(17)	-	-
Unnecessary hospitalisation for TB should be avoided	1(3)	1(4)	-	1(4)	-	1(4)
More hospital health workers should be trained/ available for TB care	-	-	3(18)	-	-	1(4)
Hospital budgets should be increased	3(9)	-	1(6)	-	-	-
Care for TB patients in hospitals should be improved	-	1(4)	-	-	-	2(8)
Collaboration/ communication/referral between hospitals and PHC clinics should be improved	-	-	2(12)	1(4)	-	-
Staff should be rotated in hospitals	-	1(4)	-	-	2(10)	-

Table 5: District-level providers' views of changes that should be effected in respect of hospitalisation for TB, 2002 (continued)

Changes	Northern Free State	Lejweleputswa	TM(B)	TM(P)	Motheo	Xhariep
More hospital beds for TB care	-	-	-	1(4)	1(5)	-
TB patients without family support should be hospitalised	-	-	-	-	-	1(4)
Treatment of HIV patients who do not have TB with TB drugs should be avoided	-	1(4)	-	-	-	-
Non-adherent TB patients should be hospitalised and strictly monitored	1(3)	1(4)	-	-	-	-
All TB/MDRTB patients should be treated at local hospitals to allow for family support	2(6)	-	-	-	-	-
Special cubicles needed at hospitals for TB-symptomatic patients awaiting diagnosis	-	-	-	-	1(5)	-
Hospitals should have wards especially equipped for TB care/extraction fans	-	-	-	-	-	1(4)
Less hospitalisation of re-treatment patients (employers to transport patients to clinics)	-	-	1(6)	-	-	-
All professional nurses should be allowed to refer TB patients to hospital	1(3)	-	-	-	-	-
TB patients should be admitted to hospitals on request	1(3)	-	-	-	-	-
TB patients should be better informed/educated on admission to hospital	1(3)	-	-	-	-	-
Total	35(100)	24(100)	17(100)	23(100)	20(100)	25(100)

The self-administered questionnaire survey of May 2002 revealed some concern among health providers about the state of hospitalisation for TB in the Free State. While certainly not unanimous in this respect, respondents cautiously suggested that the closure of the Santoord Hospital and the move towards an elevated role in TB control for district hospitals were promising developments. Those who knew about it were also optimistic about the anticipated MDR unit.

3.2 Opinions of a district TB co-ordinator

This section reports on the earlier (November 2001) and later (October 2003) views of the district TB co-ordinator for Lejweleputswa (incorporating Welkom/Thabong) on TB-related hospitalisation.

3.2.1 Earlier view, 2001

The district TB co-ordinator was concerned about a number of problems relating to the management of TB in district hospitals. Of most concern was that these institutions over-utilised radiographic (X-ray) diagnosis — especially in the case of children — while there was, in her view, a shortage of doctors in the district who could read X-rays accurately. She was also perturbed by problems in respect of the training, commitment and attitude of doctors, especially those performing community service. These doctors, she thought, were not informed about the new TB policies and did not adhere to NTCP guidelines. After she arranged training for 34 doctors, presented by a senior official of the NTCP in October 2001, one doctor commented from the floor: "Dit is nou baie mooi en alles, maar dit werk nie vir ons nie".[6]

Asked how she thought this problem could be resolved, the co-ordinator stated that all they could do was to interact with the doctors as frequently as possible. To this end, another series of NTCP training had been planned for doctors in March 2002, to be presented by the then provincial TB co-ordinator of Mpumalanga, together with an expert from the Medical Research Council of South Africa (MRC). The district TB co-ordinator hoped that because both these presenters were respected doctors, they would be able to persuade hospital doctors to adhere to the national and provincial guidelines.

6 That is all very well, but it does not work for us.

Another problem at the district hospitals was that these facilities were pressed to "empty beds". At PHC clinics, suspected TB cases who produced sputum smear-negative results would be placed on antibiotic treatment for seven days. Hospital staff, on the other hand, felt that they could not accommodate such patients for seven days. X-ray testing would thus take place to speed up diagnosis. Then, when the patient reached the clinic, TB treatment would be halted in the case of a smear-negative result and the patient would be treated with antibiotics instead. The district TB co-ordinator was concerned that this "stop-start" treatment was contributing to drug resistance in the district.

However, the co-ordinator did not blame only the (hospital) doctors. She also suggested that nurses at PHC clinics could take more trouble when communicating with hospital doctors about the diagnosis of TB patients, especially when a doctor diagnosed TB but this could not be confirmed by sputum testing at the clinic. Better communication would improve team building in the Lejweleputswa TB programme.

In respect of the Santoord Hospital the co-ordinator stated that its distance from Lejweleputswa was prohibitive, making family visits impossible. Therefore, patients often failed to return to the hospital after their "pass-outs" had expired. Patients also experienced transport difficulties, eg when they visited the district to collect their pensions. The co-ordinator stated that the main complaints from TB patients from her district were that the hospital was too far away and that they did not receive enough food there. On the positive side, she applauded the conduct of the Santoord Hospital matron, who took great trouble to ensure follow-up care at PHC clinics in the district for Santoord Hospital patients once they were discharged: "Sy doen regtig moeite".[7]

The district TB co-ordinator deplored the 1999 closure of Allanridge Chest Hospital, particularly because of its location within the district. It was much easier for TB patients to return to this hospital after weekend home visits. Generally, she saw the decrease in hospital beds implied by the closure of the two hospitals as a negative development in TB control in the Free State. She felt that at least one ward at the then Goldfields Regional Hospital[8] ought to have been

7 She really takes trouble.
8 Now Bongani Hospital.

allocated solely to TB patients. It would not have needed to be heavily staffed with nurses, but could have made use of trained DOT supporters to ensure adherence to treatment. A full-time doctor would not have been necessary, as long as the ward was visited once a day. Such a ward would have been especially useful for re-treatment patients and very ill patients requiring intravenous resuscitation or medication. She stated further that such an arrangement would have prevented the kind of abusive practice that previously occurred in the district when a TB meningitis patient who was too ill to walk to the clinic was summarily sent home by a hospital. In fact, the co-ordinator stated that at a facility such as she envisioned for Goldfields Regional Hospital was needed at each of the Free State's regional complexes.

With reference to the readiness of district hospitals to accommodate more patients once the Santoord Hospital closed, the co-ordinator was concerned about the lack of staff at these hospitals. While some, such as the Hoopstad Hospital, reserved a few beds for TB, the general bed shortage in hospitals necessitated the use of these beds for other patients. Consequently, these hospitals would merely diagnose TB patients before sending them home and to PHC clinics. In effect, many, such as the Winburg Hospital, could not claim that any beds were available for TB.

3.2.2 Later view, 2003

Almost two years later the district TB co-ordinator reflected on the training of public and private physicians by the Mpumalanga provincial TB co-ordinator in March 2002. The attendance of doctors was not as good as during the first round of training. She felt that the trainer did a fine job, but that some of the doctors most in need of training had not attended. They apparently thought that they knew enough about TB.

In July 2003, the doctors in the district had requested a meeting with the control programme staff. As it turned out, the reason was that they were aggrieved that PHC nurses were not acting on their instructions for TB treatment when they (the doctors) referred patients to clinics. The doctors insisted that if they diagnosed TB by means of X-rays, "then it was TB". One doctor said that it was unnecessary and a waste of time to conduct sputum testing once he had diagnosed

TB by X-ray. But in the end, the doctors "kept quiet because they realised that we [the nurses] had more problems with them than they with us".

Problems voiced by nurses at this meeting included the fact that doctors sometimes placed patients on isoniazid prophylactic treatment for six months, in contravention of the Free State TB treatment policy. Doctors were also accused of "intentionally" and "wrongly" diagnosing extra-pulmonary TB, "because they knew that nurses were not allowed to diagnose this type of TB": "Dit is nou 'n lekker ompaadjie".[9] Nurses also complained that doctors sometimes refrained from indicating on referral letters which method of TB diagnosis had been used, simply, even arrogantly, stating: "PTB[10] — treat". The nurses claimed that doctors were over-utilising the extraction of stomach juices from children as method of diagnosis. Since the sputum so obtained had usually become too diluted to yield accurate results, this was an unreliable method of diagnosis. It was unnecessary as well as traumatic for children. Doctors were, reportedly, still loath to apply the score-sheet diagnosis system. Standardised operational procedures apparently affronted their sense of their professional status. They preferred to pronounce diagnoses unhindered by official policy guidelines.

The co-ordinator related the case of a district hospital doctor who diagnosed "five!" cases of miliary TB. Treatment for this type of TB takes nine months and includes antibiotics. However, suspecting that diagnoses were erroneous, the co-ordinator sent the X-rays to a national expert who confirmed that none of the patients actually had miliary TB. Some, in fact, did not have any form of TB at all.

On the positive side, the co-ordinator was satisfied with the good co-operation she received from the mines and especially from the Harmony and Ernest Oppenheimer hospitals. (A previous problem of not receiving routine data from the latter was resolved when it amalgamated with the former.) In fact, all mine hospitals were now regularly sending their statistics to the Lejweleputswa TB programme. Also, staff from all mine hospitals had undergone NTCP training. Mine hospital staff had also undergone regular district-level TB training in concert

9 What an easy way out.
10 Pulmonary tuberculosis.

with their public sector counterparts. The public and mine sectors were at last now following the same policies and protocols. The importance of this development was emphasised by the co-ordinator's pointing out that mine hospitals such as the Harmony Hospital diagnosed as many as 340 TB patients quarterly.

3.2.3 Comparison of the 2001 and 2003 views

Over the period November 2001-October 2003 the main concerns of the Lejweleputswa district TB co-ordinator were hardly addressed. The perplexing problem of hospital and community service doctors, *i e* their preference for radiographic diagnostic techniques, persisted despite ardent, high-level training efforts to persuade such doctors to adhere to the precepts of the NTCP. Since Thaba Nchu (home to the new MDR unit at the Dr J S Moroka Hospital) is so far from the Free State Goldfields, the co-ordinator also continued to deplore the closure of the former local Allanridge Chest Hospital. On the positive side, by the end of 2003 the relationship between the Lejweleputswa TB programme and the private mine hospitals was marked by good co-operation.

3.3 Opinions of the provincial TB co-ordinator and the Free State MEC for Health

This section reports on the earlier (November 2001) and later (October 2003) views of the Free State TB co-ordinator on TB-related hospitalisation. A brief indication of the Free State MEC for Health's perspectives is also presented.

3.3.1 Earlier view of the Free State TB co-ordinator, 2001

During the unstructured interview with the Free State TB co-ordinator in November 2001, she immediately mentioned that major problems were experienced with and at the Santoord Hospital. Patients from a higher socio-economic background, in particular, became dejected at the hospital. It suffered very high rates of interruption and absconding, and patients were unwilling to return. In fact, in her view, the patients were so unhappy with the hospital that the "whole situation" had become politicised and even militant. Disgruntled patients wrote letters to the MEC for Health, who demanded that the problems be speedily resolved. Among other things, the patients complained to the MEC

about the food at the hospital. Apparently, this problem was later resolved when the catering function was outsourced to a private provider. Patients also had problems with the hospital staff, whom they found very dominating. The fact that there was "no professional relationship" between the matron and the centre supervisor made matters worse.

According to the co-ordinator, the Santoord Hospital was so occupied that the situation was, at times, quite unacceptable. Apparently when a patient died, the body was simply covered and left lying there conspicuously for a long time, to the dismay of other patients. MDRTB patients were accommodated between other patients until a WHO team visited the hospital and protested against this practice. Ventilation in the wards was poor as windows were only opened "when outsiders were expected". At one stage doctors conversed with patients from behind a glass partition. The sessional specialist did not turn up for at least one outpatient clinic. For all these reasons, the co-ordinator said that she understood the need to close down the hospital: "Dit maak eintlik sin".[11]

On the other hand, like the district TB co-ordinator in Lejweleputswa, the provincial TB co-ordinator was of the opinion that it was a great pity that the Allanridge Chest Hospital was closed down. This facility was located more centrally in the Free State, and better able to accommodate the large numbers of patients from the mines. Her appreciation also related to its motivated and knowledgeable full-time doctor. In general, she viewed Lifecare's approach as more professional than that of SANTA (at least as it was manifested at the Santoord Hospital).

Contrary to the views of all other strategic informants interviewed in this study, the provincial TB co-ordinator was quite confident that district hospitals in the Free State could accommodate the increased load that would result from the closure of the Santoord Hospital. The only district hospital about which she had reservations was the Winburg Hospital, which was very overcrowded at the time. She emphasised that district hospitals had to reserve beds specifically for TB patients: "Hulle móét".[12] She believed that when bed shortages oc-

11 This actually makes sense.

12 They must!

curred at certain district hospitals, beds could always be found at others: "Dit ís moontlik om reëlings te tref".[13]

The provincial TB co-ordinator stated that the registration of TB patients at district hospitals posed a major problem. Some patients were in hospital for just a day or two before being discharged to clinics and marked "transferred-out" in the register. At the clinic they were then to be registered as "transferred-in". However, many of these patients never actually reached the clinic. In general it was very difficult, if not impossible, for hospitals to determine cure rates for patients whose treatment they had initiated. A better system, according to the co-ordinator, would have been for someone from the hospital staff to accompany the patient to the clinic, where s/he was then to be registered as a new patient.

The Free State TB Control Programme was aspiring to establish an MDR unit similar to the one in the North-West province. At that stage the co-ordinator was already optimistic about the choice of the Dr J S Moroka Hospital as the location for the unit. She did not agree with the centre supervisor of the Santoord Hospital that location of the MDR unit in the middle of Thaba Nchu would cause social problems. She said this was unlikely if the MDR unit was modelled along the lines of the one at the Klerksdorp Hospital in the North-West province. At any rate, she felt that the Santoord Hospital was the last one that should be critical of other hospitals. She related the case of one MDRTB patient who had absconded no less than four times from the Santoord Hospital, but when she was admitted to the Klerksdorp Hospital, managed to adhere to her treatment and to convert to sputum smear-negative on the first time attempt.

3.3.2 Later view, 2003

About two years later, in October 2003, the provincial TB co-ordinator said it was already clear that the province was able to hospitalise TB patients at the district level. Admittedly, some district hospitals had insufficient bed capacity, but generally the impact of the Santoord Hospital's closure was a lot less severe than she had anticipated. In fact, she suspected that both the Allanridge Chest Hospital and the

13 It *is* possible to make arrangements.

Santoord Hospital had previously hospitalised TB patients unnecessarily. The patients were so poor that the hospitals had probably represented refuges where they could obtain food and shelter.

In respect of the district hospitals' role, the co-ordinator acknowledged that there was "still" a problem with overuse of X-rays, especially in Lejweleputswa. There were signs, however, that the University of the Free State was "at last" now successfully training physicians to use sputum testing. Nevertheless, a small minority of doctors still "believed" in X-rays, and professed that as lung health "specialists" they would not be prescribed to by nurses or by the provincial TB control programme.

The co-ordinator was pleased that, with the new MDR unit in Thaba Nchu, the high interruption rate that had previously obtained at the Santoord Hospital was a thing of the past. Of the more than 150 outpatients treated thus far at the MDR unit, only three had absconded. Patients were clearly a great deal better satisfied with the standard of care as well as with the physical infrastructure at the Dr J S Moroka Hospital than they had been with the Santoord Hospital. There was a full-time physician available to the MDR unit and the outpatient clinics held at this unit. This doctor had visited the acclaimed MDR unit in the North-West province. He was fully conversant with the new protocols, and had the interests of the Free State TB Control Programme at heart. His availability was of great benefit of the MDR unit and its patients.

The Free State TB Control Programme was also doing its level best to support the MDR unit. At the time of the interview, for example, the programme was in the process of procuring tracksuits for patients. The co-ordinator was also pleased that the Free State Department of Health planned to equip the MDR unit with ultraviolet lighting. The physical layout of the unit was such that very ill patients could be accommodated in private rooms.

There was a special, safe location in the MDR unit where sputum could be obtained without endangering staff or other patients. On discharge, patients would be accompanied by a staff member of the unit to an appropriately located clinic in order to ensure good follow-up care. The length of stay for patients at the unit ranged from twelve

Ten-year-old patient in private room, MDR unit, 2003

Photo: Christo Heunis

to sixteen months, or until two negative sputum cultures had been obtained. Unnecessary hospitalisation was reportedly a thing of the past.

3.3.3 Comparison of the 2001 and 2003 views

The provincial TB co-ordinator was in favour of the closure of the Santoord Hospital and the establishment of the new MDR unit in Thaba Nchu. Her concerns about the conditions and the level of care at the Santoord Hospital changed to contentment with the facilities and standards of care at the MDR unit at the Dr J S Moroka Hospital, where patients were much happier. She was particularly pleased with the availability and motivation of doctors at the new unit.

She did not initially expect district hospitals to be inundated with TB patients formerly accommodated at the Santoord Hospital, and two years later she felt that she had been proved right. The ability of the public health system to provide intramural care for TB patients

Female cubicle, MDR unit, 2003

Photo: Christo Heunis

at the district level had been demonstrated. Despite her admission that over-utilisation of radiographic TB diagnosis still occurred late in 2003, she added that there were signs that doctors were becoming more amenable to the NTCP guidelines, perhaps as a result of a different approach in their training.

3.3.4 Opinion of the Free State MEC for Health, 2000

The then Free State MEC for Health made her views on SANTA public in 2000. She acknowledged that SANTA was an important role-player in the campaign against TB, that it was strategically placed, and that it was supported by the Department of Health. However, she added:

> Every organisation has its own internal dynamics. Those dynamics can either be positive and constructive or negative and destructive. It is unfortunate that it appears that there are some dynamics that have in the recent past been reported to be affecting the efficient marketing of SANTA. We hope that these internal dynamics will be addressed as soon as possible (Tsopo 2000: 3-4).

The MEC did not hesitate to point out what she perceived to be the problem in the organisation: "SANTA, which has been a leader and

torchbearer finding lasting solutions to the disease of TB, is itself plagued by racial conflicts in its ranks." Deploring the fact that internal and allegedly racial conflict had found its way into the media, she encouraged the NGO to deal with these issues in order to address the major challenge of TB.

3.4 Opinions of officials at the national level, 2003

The In-patient Care Team is a specialist grouping in the National Tuberculosis Control Programme (NTCP), with the principal function of addressing issues within NGO TB Hospitals (In-patient Care Team 2003). Interviews with senior officials of the Team took place in October 2003.

The In-patient Care Team emphasised that the Free State was not the only province that no longer had SANTA and Lifecare hospitals. This was also the case in the North-West, Limpopo and Northern Cape provinces. In fact, it might even be a national trend to oust private and NGO providers from intramural TB care and to reassign this role to public (district) hospitals.

However, the In-patient Care Team questioned the ability of the infrastructure of district hospitals to isolate TB from other patients. TB patients should not be accommodated among other patients, but this was happening at district hospitals nationally. This placed HIV-infected patients, in particular, at risk because they are more likely to develop active TB once infected. If district hospitals had possessed isolation facilities it would have been acceptable for them to accommodate TB patients, but they generally did not. The In-patient Care Team was also dubious as to whether district hospitals generally had the infrastructure to ensure that TB patients received the correct treatment and that the correct tests were performed in the case of sputum smear-negative TB subjects. It also doubted whether doctors at district hospitals would really be trained in the new TB protocols. The Team was of the opinion that there was a serious lack of knowledge about TB among physicians. It was also very concerned about the follow-up of TB patients once they had been discharged from hospitals. Who would ensure that such patients actually reached a clinic, to continue their treatment? This was crucial because most patients

would at that stage still be sputum-positive: "District hospitals will definitely not keep them until they are sputum-negative."

In general, the In-patient Care Team was sceptical about the role of district hospitals in TB control. There was, for example, "precious little communication" between these hospitals and peripheral PHC clinics. The Team also felt that it was probably cheaper for the government to make use of SANTA and Lifecare hospitals for TB hospitalisation than to provide this service itself. Surprisingly, the Team stated that district hospitals were less concerned about and accommodating of TB patients' socio-economic conditions than SANTA and Lifecare hospitals. The Team thought that district hospitals were less willing to accommodate TB patients "for a few days longer" to make arrangements for them to obtain food if they had none at home, since TB patients in hospitals were often the poorest of the poor, and were frequently homeless and without any family support whatsoever. In fact, the Team viewed district hospitals as having an ethos of "getting beds empty as quickly as possible". SANTA and Lifecare hospitals in the Team's view, were more inclined to consider TB patients' socio-economic circumstances.

The Team was also of the opinion that in the past SANTA hospitals might have inflated patient numbers by unnecessary hospitalisation. SANTA hospitals did not have fixed budgets, which created an opportunity for financial misdemeanour. To an extent, this was understandable because SANTA hospitals had large overhead expenses whether their beds were occupied or not, and it was a constant struggle to keep their doors open.

As far as the monitoring of SANTA hospitals by the provinces was concerned. The team felt that this had improved, although the contracts with these hospitals were still in disarray. While expressing appreciation for SANTA's community services, the Team said that the role of the head office (SANTA National Secretariat) remained uncertain. "SANTA National" laid claim to $7\frac{1}{2}\%$ of the funds meant for the hospitals and no one knew exactly what happened to this "substantial amount". Only once SANTA National's role was openly questioned[14] did it start to effect improvements to SANTA hospitals. SANTA National claimed that it allocated a third of the $7\frac{1}{2}\%$ to hospital improvement, but before the questons were raised, it did nothing for the hospitals. Due to massive mismanagement by SANTA

National, the Team strongly advocated that SANTA hospitals themselves should contract with the provinces. However difficult the transformation in respect of agreements with SANTA hospitals might be, the Team felt that the country could ill afford to do without the SANTA infrastructure for the hospitalisation of TB patients.

While the Team acknowledged that the Santoord Hospital in the Free State had had a negative impact on SANTA's reputation, it considered some SANTA hospitals, for example those in Gauteng, Mpumalanga and the Western Cape, to be "excellent". Certain Lifecare Hospitals, like the one in Richmond, KwaZulu-Natal, were also considered "first-class". However, the Team emphasised the need for provinces to monitor the quality of services provided by both SANTA and Lifecare hospitals. Traditionally, these hospitals had been given a free hand. There was effectively no control over what was done with government money in state-aided hospitals.

The Team felt that in order for district hospitals to perform their proper role in TB control, they should explicitly reserve beds for TB patients, and also should have isolation facilities to shield HIV and other patients from TB infection. The Team repeatedly emphasised the need for district hospital doctors to be trained or re-trained in respect of TB. It was especially crucial to persuade them to make less use of X-rays. Unnecessary radiographic diagnosis of TB was costing South Africa a great deal of money. Even so, the Team acknowledged that X-ray diagnosis was necessary in the case of sputum smear-negative TB suspects. The Team felt that it was vital for communication between

14 Cf Van Rensburg 2000, Altenroxel 2001 and especially Kirk in *Mail & Guardian* 2001: 3: "[A]uditors have recommended that the national office of the South African National Tuberculosis Association [...] be closed down [...] the national office of SANTA in Gauteng has little or no communication with the 22 hospitals and clinics run by the Association and wastes much-needed money and resources that should be used to combat [...] TB". Within the SANTA National Office the former chief executive officer is singled out for particularly vehement criticism by this author: "Dr Andrew Ratsela [...] is paid a salary of R500 000 a year for working two days each month. He also had a SANTA credit card with a R50 000 a year limit for 'incidentals', a petrol card and a top-of-the-line BMW for his use. Previous SANTA CEOs either [were] unpaid volunteers or were paid a token allowance."

provincial and district TB co-ordinators and the SANTA hospitals to be drastically improved. It was also necessary for all hospitals to keep a TB register. An effective mechanism (eg a step-down facility or bridging clinic) was also needed to ensure that TB patients were followed up after being discharged. If this happened, the Team felt that both the SANTA and the Lifecare TB hospitals had a future, which was why it was so important to clarify and resolve the contractual issues.

With reference to MDR units, the Team applauded the institution of a separate, isolated facility at the Dr J S Moroka Hospital in the Free State, likening it to the successful unit in the North-West province. It was also an improvement on the situation in the Western Cape where MDRTB patients went to the Brooklyn Chest Hospital and the King George V Hospital, but were not isolated from other TB patients.

After the In-patient Care Team visited three district hospitals and one special TB hospital in the Eastern Cape in July 2003, it identified, on the one hand, the following encouraging aspects (In-patient Care Team 2003): All four hospitals had on-site sputum microscopy services, designated TB wards, and arrangements for referring MDRTB patients elsewhere. Three of the four hospitals had 24-hour sputum test turn-around times, adequate staffing levels, and copies of the NTCP guidelines and training manuals. They also diagnosed pulmonary TB mainly by means of sputum microscopy. On the other hand, aspects of concern identified by the Team in all four hospitals included the absence of patient education pamphlets and TB information, as well as clinical audit policies for TB; inadequate discharge arrangements; a lack of follow-up processes; incomplete registers; no MDRTB management policies, and only remote sputum culture facilities. Furthermore, at least two of the four hospitals had no admission or discharge policies, no TB-related training for nursing or medical staff "in living memory"; no notification forms for health-care workers; a high proportion of re-treatment patients (around 50%), and TB drug "stock-outs" during the past year. The Team consequently recommended that all provinces need to ensure that hospitals which provide inpatient TB care are properly equipped and capable of playing their full part in the TB control programme. Hospitals should treat TB patients in conditions that minimise the risk of cross-infection; have easy access to appropriate diagnostic and treatment facilities; adhere

to the latest policies and procedures, with staff trained to implement them competently.

4. Conclusion

It is clear that the trend is to eliminate specialised state-aided institutions for intramural TB care in the Free State. Both such institutions that defined the TB hospital scene in the late 1900s have been closed, at least one of them, the Santoord Hospital, having been plagued by organisational problems and apparently unable to adhere to the principles of South Africa's NTCP. The history of non-state hospitalisation for TB in the Free State appears to have come to a complete halt.

During the period 2001-2003 the Joint Free State TB Research Project revealed an array of facility-level problems relating to hospitalisation for TB. This was also a time of general uncertainty about the future — certainly so for the staff of the former (SANTA) Santoord Hospital, but also for TB control practitioners throughout the province. Moreover, there were clear indications of rivalry between PHC nurses, who favoured adherence to the NTCP guidelines, and hospital-based physicians, who were much less inclined to follow these guidelines. In fact, this problem was constantly raised during interviews with TB co-ordinators at the district, provincial and national levels, as were concerns about the capacity of district hospitals to accommodate the growing numbers of TB patients.

Even as recently as late 2003, health managers at the district, provincial and national levels were concerned about hospital doctors' understanding of and commitment to the guidelines of the NTCP. They were still emphasising the importance of re-orientating doctors towards adherence to otherwise universally-accepted TB control principles. So, for example, doctors disliked utilising sputum testing to diagnose TB, preferring to use, overuse and misuse costly X-ray diagnosis. With a few much-appreciated exceptions, doctors remained deaf to the pleas of the health managers in their facilities, districts and the Free State at large. Their re-orientation and re-training by national-level health managers generally met with poor results. The current study's findings suggest that health managers experience hospital doctors as self-righteous in their opinions to an extent that is even detrimental to TB control.

On the positive side, the study revealed that the public district hospitals in the Free State are probably able to deal with the extra workload brought about by the closure of the Allanridge Chest Hospital and the Santoord Hospital. While health workers and managers were certainly not unanimous in this respect, and while district hospitals' intramural care for TB does not always function without friction, there seems to be growing confidence in the public sector's own ability to hospitalise TB patients, when necessary. Certainly, the one development which all health managers and workers agree to be in the best interests of TB control in the province is the new MDR unit outside Thaba Nchu.

Just as the provincial and national health managers interviewed for the purposes of this study suggested, it is recommended that district hospitals should reserve beds for TB cases and isolate such beds from others. However, hospitalisation for TB remains an intricate and dynamic affair, and the views and experiences of health workers and managers will change in the course of time. Social or health systems researchers interested in the phenomenon of hospitalisation for TB can hardly afford to ignore the suggestions of frontline TB control practitioners and their managers. A particular concern which should be addressed by future research is how the TB/HIV co-epidemic is affecting the need for hospital (*i e* hospice-type) beds.

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