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Initial anticipations and experiences of antiretroviral therapy among managers at ART-assessment facilities in the Free State

Before the implementation of ART, and again seven months later, interviews were conducted with facility managers and nurses leading PHC programmes. Their perceptions of the impact of ART are discussed. A positive finding was that ART assessment site managers had been optimistic about ART from the outset, and by the end of the seven-month period even more so. Nurses leading other PHC programmes were initially concerned about overcrowding the facility due to ART, but this problem did not feature prominently during the follow-up survey. ART programme nurses' perceptions of the problems at their facilities mostly related to staff and space. On the whole the data show that pessimism preceding the implementation of ART was in many respects allayed with implementation.

Aanvanklike verwagtings en ervarings van antiretrovirale terapie onder bestuurders by ART-assesseringsfasiliteite in die Vrystaat

Voor die implementering van ART, en weer sewe maande later, is onderhoude gevoer met fasiliteitsbestuurders en verpleegkundiges wat PGS-programme lei. Hul persepsies van die impak van ART word bespreek. 'n Positiewe bevinding was dat die bestuurders van assesseringsfasiliteite uit die staanspoor optimisties was oor ART, en teen die einde van die sewe maande-periode selfs meer so. Verpleegkundiges wat ander PGS-programme lei, was aanvanklik besorg oor oorlading van die fasiliteit vanweë ART, maar dié probleem was nie prominent tydens die opvolgopname nie. Verpleegkundiges in die ART-program se persepsies van die probleme wat in hulle fasiliteite ontstaan het, het meestal met personeel en ruimte verband gehou. In die geheel toon die data dat die pessimisme wat ART voorafgegaan het, in vele opsigte met implementering weerlê is.

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Antiretroviral treatment (ART) has an extraordinary beneficial impact on the lives of people living with HIV/AIDS (PLWHA). Where ART is provided on a wide scale the health of PLWHA improved significantly, AIDS wards in hospitals are less crowded, and HIV/AIDS-related mortality has decreased radically. However, because ART entails lifelong medical treatment, labour-intensive assessment, monitoring and support services, it is not an easy programme to implement. In resource-poor settings in Africa, Asia, and South America — where altogether 90% of people with HIV/AIDS are living — access to Highly Active antiretroviral Treatment (HAART) continues to be limited (ART-LINC Study Group 2005: 979). With persistent and serious distributive inequities in health care provisioning, this is also the case in South Africa (Van Rensburg & Pelser 2004: 164).

This paper considers the implementation of ART in the first 16 primary health care (PHC) clinics and community health centres (CHCs) selected to serve as ART assessment sites in the Free State. With increased emphasis on PHC services in South Africa (Ehlers 2000: 76-76), nurses are at the frontline in implementing new health policies. This provides them with unique insights into the challenges, successes and failures involved in implementing new policies (Walker & Gilson 2004: 1253). In the Free State, ART assessment services are located at the PHC level where nurses have assumed expanded responsibilities brought about by the programme. Based on face-to-face interviews with ART assessment site facility managers and nurses, the question addressed here is: What were nurses' anticipations of ART before roll-out, and what was their experience of the programme seven months later?

We commence with a description of the background of ART implementation in South Africa and particularly the *Comprehensive Plan* (NDoH 2003), the role assigned to ART assessment sites, as well as reservations that have been expressed about ART implementation in South Africa. Progress made in implementing the ART programme in the Free State is next described. This is followed by discussion of facility managers' and other PHC programme nurses' initial anticipations and later actual experiences of the ART programme. Specific attention is also paid to the problems caused by ART in their facilities, as reported by nurses working in the ART programme. Given that at the time of the follow-up appraisal ART had been implemented only for seven months, and also

because the patient load at ART assessment sites was still low, the paper cannot lay claim to conclusive findings about nurses' experiences (cf also Stewart & Loveday 2005: 224).

Conclusive findings will only be possible after a longer period of follow-up. The continuous ART facility appraisals being conducted by the CHSR&D in collaboration with the Free State Department of Health will provide the opportunity for more longitudinal studies and conclusive findings. The following appraisals form part of the project *Public sector antiretroviral treatment: documenting, monitoring, evaluating and facilitating the implementation of the national treatment plan in the Free State*. The project records and constructively criticises the Free State's approach to public sector implementation of the Comprehensive Care Management and Treatment (CCMT) programme. This overall project comprises, amongst others, regular interviews with health (line) managers and staff. The current article is based on interviews with ART assessment site nurses during the baseline and the first of four six-monthly follow-up appraisals.

1. Background

In 2003, the South African cabinet announced that the government would start to implement ART in the public health sector. The *Operational Plan for Comprehensive HIV and AIDS Care, Management and Treatment for South Africa* (NDoH 2003) aims to accomplish two interrelated goals: to provide comprehensive care and treatment for PLWHA, and secondly, to facilitate the strengthening of the national health system. It is the intention of the Plan to allocate new health professionals to the health system, to upgrade the skills base and competencies of health workers, and to improve the physical infrastructure of facilities (NDoH 2003: 24-9). The overall goal of the Plan is to provide all South Africans and permanent residents who require comprehensive care and treatment for HIV and AIDS with equitable access to ART; within their local municipal area and within a period of five years (*ie* by 2008).

In the *Comprehensive Plan* the Department of Health (NDoH 2003: 60-1) clearly stipulates that PHC clinics and CHCs (the assessment sites) are to be the primary sites for diagnosis, staging and routine follow-up of HIV-positive patients. These sites provide most of the ART adherence monitoring and support functions. Here patients also receive counselling, nutritional assistance and psychological support. Simultaneously, assess-

ment sites cater for HIV-positive patients who are early in the course of their infection and do not yet require ART, but need counselling to promote prevention of the disease, good nutrition, stress reduction, and behavioural modification. In the course of their management, and prior to the initiation of ART, patients also receive drug-readiness training (DRT) at assessment sites. They are closely observed by nurses and trained counsellors as to their individual social circumstances and any other therapies they may be receiving, including traditional medicine. Once the patient is on ART, PHC nurses, guided by treatment protocols, provide regular monitoring and follow-up in conjunction with a doctor. It is thus clear that ART assessment sites, and the nurses staffing such sites are crucial to the success of the roll-out.

Concerns have long been raised about the feasibility of providing ART to large numbers of people in resource-limited settings like South Africa (Abdullah 2003, Barron 2003, Schneider 2003, Venter 2006, WHO 2003). The objections raised relate mostly to the scarcity of trained health care providers, the complexities of the drug regimens, insufficient infrastructure for patient monitoring and the threat of non-adherence and drug resistance. In the Western Cape, where ART was first provided in a large-scale public sector context, the key health system challenges to scaling-up ART reportedly included drug and supply distribution; recruitment and retention of medical and nursing staff; as well as sustainable funding through the fiscus. As ART was implemented in sub-Saharan Africa, and nationally, there were frequent warnings about the public sector's ability to implement ART, *ie* ART would entail "undesirable opportunity costs, the fragmentation of health systems, worsening health care inequities and poor and unsustained treatment outcomes" (McCoy *et al* 2005: 18, cf also Ndlovu & Daswa 2006, JCSMF 2006). The challenge to meet the need for ART in South Africa is daunting (Venter 2006: 298):

> We have been successful in putting approximately 130 000 people on treatment in the last 18 months in the public sector, through an almost superhuman effort on the part of government's stretched health services with a lot of help from civil society. We need to put four times this number on treatment, we need to do it annually, and we need to do it over and over again till prevention starts to work. In 10 years' time, theoretically, 5 million people should be on ARVs. The health sector is buckling under the current load, and currently does not have the capacity to do any more than dent the numbers needed to treat, unless a radical restructuring of health services occurs.

Addressing the risks of ART scale-up in South Africa, Barron (2003) emphasised that the aim was not only to introduce ART, but to actually make the programme work. This implied attending to the factors that would support or undermine the implementation of ART. This author states that to expect a huge ART programme to be run by already overworked staff is wishful thinking. Additional doctors, nurses and other health care workers will have to be added to the system — "but where will they come from?" The ART programme should not be introduced in the same way as many other PHC programmes, in which case it would do more harm than good. If ART were implemented incorrectly, the overall performance of the whole PHC service would be compromised without improving the health care provided to HIV-positive patients.

From the outset it was clear that a national ART programme would require monitoring and evaluation at a number of levels. However, PHC supervisors are often thought to be ineffective in this respect. Most targets set by the NDoH for key PHC programmes (TB cure rate, VCT provision, immunisation coverage for instance) have not been met for some time (Janse van Rensburg-Bonthuyzen 2005a, 2005b). This has been ascribed to limited acquaintance with and ownership of the PHC package, lack of integrated and comprehensive PHC services, PHC management problems, insufficient staffing and training, unavailability of protocols and stationery, lack of community involvement, shortage of equipment, inadequate availability of PHC tests, lack of referral systems, difficulties in managing drugs and supplies and insufficient implementation of client-held records (Heunis *et al* 2003: 69-72). The ART programme can aggravate this situation as it would distract attention and resources from other programmes.

Long before the roll-out of ART, many PHC facilities in South Africa already had substantial unmet needs that made it difficult for these facilities to provide good quality, comprehensive PHC services. Already in 2002, Petersen & Swartz (2002: 1005) suggested that:

> the emphasis on 'packaged' priority programmes with measurable outcomes, which characterizes third generation reforms, needs to be accompanied by the reorientation of [PHC] providers towards an empowering comprehensive approach to care.

Resources available to PHC were insufficient to facilitate the volume of patients and to provide the comprehensive basket of services required by the PHC package (Chita *et al* 2004). Examples of health workers displaying resistance to new health policies (especially because they had not been consulted in the policy-making process) include the implementation of termination of pregnancy and free health services policies (Engelbrecht 2005: 107-8, Walker & Gilson 2004: 1251). Many facilities did not have the necessary infrastructure or back-up systems to fully provide existing programmes, let alone another complex and resource-intensive programme. Therefore the fear that just adding on to the ART programme, without addressing under-funding and under-resourcing, would weaken PHC in general. All these problems signalled major difficulties for PHC facilities to implement ART.

On the positive side, expectations also emerged that large investments brought about by ART implementation could strengthen the health system substantially and generally, including improvement of access to and quality of care for all health conditions (Barron 2003c: 3). Also positive is the observation of McCoy *et al* (2005: 15) that sub-Saharan Africa should "capitalize on the opportunities [...] AIDS 'treatment activism' provides an opportunity to catalyze comprehensive health systems development and reduce health care inequities".

2. ART implementation in the Free State

During 2004, the Free State Department of Health (FSDoH) commenced implementation of the first phase of its ART programme by establishing ART service sites in each of the five health districts in the province. One such site consisted of a hospital or upgraded CHC and three clinics or CHCs selected according to specific criteria determined by the national Department of Health (NDoH) and the FSDoH. The hospitals or CHCs tasked were called treatment sites and the clinics/CHCs, assessment sites. However, in the largest, yet sparsely-populated southern district of the Free State, Xhariep, treatment and assessment sites were combined in three cases (cf Van Rensburg in this volume). This implied that a clinic/CHC serving as an assessment site was upgraded to the status of a treatment site, with a resident or visiting doctor and pharmacist providing services that do not fall within the scope of nursing practice. This was done to improve accessibility to ART in the district,

ie patients no longer had to travel vast distances to a central district hospital or CHC, but could attend at their nearest ART site instead.

This paper focuses on ART roll-out in the assessment sites and in the assessment site sections of the combined treatment-assessment sites in the Free State. Table 1 depicts the state of affairs in Phase I of the roll-out (cf Map in Preface).

Table 1: Treatment, assessment and combined treatment-assessment sites in Phase I of ART implementation in the Free State

District	Treatment site	Assessment site	ART commencement
Lejweleputswa	Bongani Regional Hospital	Matjhabeng Clinic Welkom Clinic Phomolong Clinic	3 May 2004
Motheo	National District Hospital	Heidedal CHC Batho Clinic MUCPP* CHC	28 June 2004
Thabo Mofutsanyana	Mofamahali Manapo Mopeli Regional Hospital	Namahali Clinic Tshiame Clinic Tseki Clinic	10 August 2004
Xhariep	Itumeleng CHC** Ethembeni Clinic** Bophelong CHC**	Nelson Mandela Clinic Itumeleng CHC Ethembeni Clinic Bophelong CHC	13 September 2004
Fezile Dabi	Metsimaholo District Hospital	Refengkgotso Clinic Metsimaholo Clinic Zamdela CHC	6 December 2004

* Mangaung-University Community Partnership Programme
** Combined treatment-assessment sites

The province followed a phased approach and the ART programme was implemented district-by-district and month-to-month over the period May 2004 to December 2004. At the time of writing all five districts had implemented Phase I of the ART programme for more than a year. In order to improve equity and accessibility of the service throughout the province, the FSDoH will expand the ART programme to further sites in the province over the course of coming years in sub-

sequent phases of implementation. Where thirteen assessment and three combined treatment-assessment sites had been established during 2004, a further eight assessment sites and seven combined treatment-assessment sites were activated during the 2005/6 financial year (cf Map in Preface).

3. Methods

Three categories of professional nurses were interviewed: clinic/CHC managers (n=16), nurses leading other PHC programmes (n=96) and nurses leading the ART programme (n=16).[1] Nurses responsible for other PHC programmes included those nurses leading the programmes for prevention of mother-to-child transmission (PMTCT), voluntary, confidential, counselling and testing (VCCT), tuberculosis (TB), integrated management of childhood illnesses (IMCI), sexually transmitted infections (STI), and family planning (FP). As such, the respondents collectively represented the nurses leading PHC facilities providing assessment for ART, as well as particular PHC programmes, including the ART programme, at these clinics or CHCs. These nurses were well placed to observe the frontline impact of ART roll-out in the public health sector.

As stated, the current study forms part of a larger longitudinal study of the CHSR&D in collaboration with the FSDoH. The baseline ("before") appraisal, by means of which, amongst others, the material for the current contribution was gathered, pertains to a subset of questions in the comprehensive data gathering instrument. The appraisal was conducted at the first 16 assessment sites, two to three weeks before ART was implemented at each site. The first follow-up ("after") appraisal was conducted seven months later. Although it was still "early days" (with low patient numbers), this was just the first in a series of follow-up appraisals to be conducted in this study. Nurses' (facility managers' and PHC programme nurses') perceptions of the impact of the ART programme will continue to be gauged by comparing their initial expectations against their actual later experiences of the programme as recorded in future follow-up appraisals. Additionally, during the first follow-up, nurses serving the ART programme were interviewed

1 Note that the latter category included, per facility, the nurse appointed to lead the ART programme.

to determine the problems they observed ART implementation to have caused at their facilities. This method, too, will be repeated in future appraisals in the longitudinal study.

Although the questions posed to the three nurse respondent groups differed, these questions all dealt with anticipations and experience of the ART programme:

- During the baseline appraisal facility managers were asked how they felt about their facilities embarking on ART, and in the follow-up survey about their facilities actually providing ART. These respondents were also asked at baseline whether they thought the implementation of ART would strengthen or weaken the overall services of their facilities, and, at follow-up, what actually transpired in practice. In all these cases, respondents were also asked, in an open-ended manner, to explain their responses to the above-mentioned questions.
- At baseline nurses leading other PHC programmes were asked to describe the impact they expected the ART programme to have on the delivery of the specific programme they were responsible for. In the follow-up they were asked to describe the most important problems, as well as benefits, resulting from ART for their programmes.
- ART programme nurses (who at the time of the follow-up appraisal had already been appointed) were asked to describe the most important problems caused by the ART programme at their facilities. In each facility the nurse leading the ART programme was interviewed.

The interview schedules used in the larger project were pilot-tested in the Lejweleputswa district and subsequently adapted and improved. The baseline appraisals took place district-after-district during April to November 2004, and the follow-ups from November 2004 to June 2005. The interviews were conducted by trained interviewers working under the close supervision of a fieldwork manager. Both in-field and office-based editing took place to enhance the completeness and clarity of the data. The responses to the open-ended questions were coded into themes and tabulated to enable comparisons of baseline and follow-up data.

Ethical clearance for the larger study was obtained from the Ethics Committee of the Faculty of Humanities (University of the Free State), while authorisation to conduct the research was secured from the FSDoH.

Further permission to conduct the research was obtained from district, local and facility authorities. All subjects participated in the research on the basis of informed, voluntary consent. No refusals were encountered.

4. Findings

4.1 Facility managers' anticipations and experiences of ART

Not only do facility managers play the key management role within clinics/CHCs, but they serve as the link between frontline health workers and higher management authorities. Indeed, they are ultimately responsible for interpreting and implementing policy directives (Walker & Gilson 2004: 1253). Successful implementation of ART requires that facility managers feel positive about the programme.

As shown in Figure 1, when asked to rate their feelings about the provision of the ART programme the large majority of managers of the first 16 PHC facilities selected for implementation of ART initially received the ART programme positively, and seven months into the roll-out continued to do so. It further reflects well on the Free State ART programme that the number of "undecided" responses decreased from four out of 16 to two out of 16 by the time of the follow-up appraisal. It has already been stressed that seven months into ART roll-out was still "early days", but these early findings are indicative of a positive response to ART roll-out on the part of facility managers.

Figure 1: PHC facility managers' feelings about provision of ART at their facilities (n=16)

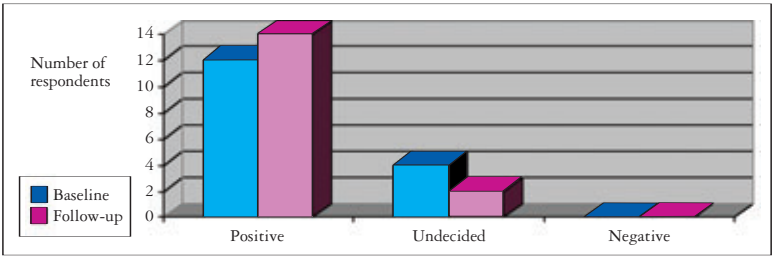

Table 2: Facility managers' explanations for feeling positive or negative about their facility's provision of ART

District	Baseline		Follow-up	
	Feeling	Explanation	Feeling	Explanation
Lejwele putswa	Positive	"I am more informed than before." "We will work together with the hospital." "The criteria are much clearer now." "It is better that it is done at the clinic – the hospital is too far." "In this community HIV/AIDS is rife." "Staff members are positive because of challenge." "The facility as a whole will improve if authorities provide necessary personnel and equipment."	Positive	"I realise the relief for patients." "We are able to help very sick people." "We are centrally located, especially for people coming from the farms."
	Negative		Negative	
Motheo	Positive	"The staff feels positive that treating patients with ARV and being able to help very ill patients in this way will now become part of their job." "It will feel good to be able to help people"	Positive	"[ART] assists in prolonging life of patients" "[The ART clinic] is not a problem — we got staff" "The majority of [ART patients] are not working — so it helps that the service is free of charge" "The medication is improving lives – people nowadays feel positive and are being tested."
	Negative	"I am worried about space." "We are struggling to get equipment." "The space is very small." "This is not very organised – the space needs attending to."	Negative	"Structurally-wise there are problems"

Table 2: Facility managers' explanations for feeling positive or negative about their facility's provision of ART (continued)

District	Baseline		Follow-up	
	Feeling	Explanation	Feeling	Explanation
Thabo Mofut sanyana	Positive	"At the moment we have enough personnel." "We have a large catchment area and can save a lot of ill people." "It is also central." "The staff is positive and ready to start programme." "We will be ready because we will be trained."	Positive	"The clinic is centrally located - very accessible by foot and taxi." "The clinic has recognition that it did not have before." "The ARV programme improved standards by providing equipment we did not have before." "I am personally feeling optimistic — the staff members are committed." "The clinic is patient-friendly and has enough facilities for a good service."
	Negative	"The community is not exited about ARV services – I am not sure if they will make use of ARVs as expected." "There is a shortage of space." "The clinic is not centrally located."	Negative	

Table 2: Facility managers' explanations for feeling positive or negative about their facility's provision of ART (continued)

District	Baseline		Follow-up	
	Feeling	Explanation	Feeling	Explanation
Xhariep	Positive	"Most HIV patients here in Edenburg are underprivileged and cannot afford to get treatment elsewhere." "They do not have to pay for transport to get to the clinic — and if referred to Jagersfontein transport will be provided." "It is a service to the community — a poor community" "Mostly poor people are [HIV+] or have AIDS" "We will help people in Koffiefontein and surrounding areas to live a more productive life." "AIDS patients will have access to treatment without travelling long distances." "Because of more disclosure it will be easier to stop the spread of AIDS." "Many patients are HIV+. Now they will have the chance to live longer."	Positive	"Now our community can get comprehensive health care even although it is a small community in a rural area." "We are part of the comprehensive service provided to patients." "Patients do not have to travel far to access ARVs." "...because we are able to help people."
	Negative	"There is a need to provide ART as part of a 24-hour service."	Negative	"It is complicating general service delivery."

Table 2: Facility managers' explanations for feeling positive or negative about their facility's provision of ART (continued)

District	Baseline		Follow-up	
	Feeling	Explanation	Feeling	Explanation
Fezile Dabi	Positive	"There will be more people going for VCCT." "Relationships between staff and patients will be better because we will be able to help them." "More lay counsellors are going to be trained." "We will be more exposed to comprehensive health." "If the whole structure and personnel is ready — I am positive."	Positive	"We had a lot of people who needed ARVs." "It is a small community far from many services — for them it is a good service." "We've got enough staff at ARV – except for the clerk who resigned — and according to statistics we see many more patients."
	Negative	"There will be serious problems of overloading." "The new building should have been finished by February [interview conducted 12 June 2004] this year but it is not finished — we definitely do not have enough space."	Negative	

This data is confirmed in Table 2, showing that positive notions predominated in facility managers' self-reported anticipations and experiences. In other words, ART would and did address (poor) community and patient needs; improve relationships between staff and patients; strengthen the facility/services; enable, inform and motivate staff; bring about co-operation between the PHC facility and the hospital; encourage disclosure of HIV status, and improve VCCT uptake.

On the negative side, Table 2 indicates that some assessment site managers responded that ART would and did indeed contribute to a lack of space in their facilities. One of the two respondents who anticipated a lack of space at baseline at the time of the follow-up appraisal repeated this concern: "Structurally-wise there are problems." It was also reported by some managers during the follow-up appraisal that ART had "complicated" service delivery.

Figure 2 depicts the initial anticipations of facility managers of whether the ART programme would strengthen or weaken the overall services delivered at the facility and, in the follow-up, whether implementation of ART had in fact done so. The responses to this question support the previous findings. In the baseline appraisal the majority of facility managers indicated that they expected the overall services of their facilities to be strengthened by ART. Again, and now in a greater number and with the benefit of hindsight, the majority of facility managers in the follow-up survey reported that their facilities' overall services had been strengthened.

Figure 2: PHC facility managers' views of whether provision of ART (will) strengthen(ed) or weaken(ed) overall services (n=16)

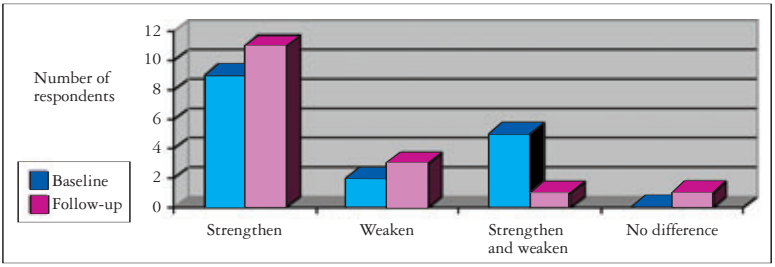

Table 3 depicts the reasons provided by the nine facility managers in the baseline, and eleven in the follow-up opting for "strengthen". Both at baseline and seven months later, facility managers had many positive expectations and experiences of the impact of the ART programme on the overall services delivered by their facilities. Although these categories to some extent overlap, the expectations and experiences can be broadly described in terms of positive impacts on facilities/services, staff and patients respectively. The most frequently mentioned expectations included that a more comprehensive service would be provided, that facilities would be upgraded, that additional staff would be appointed, and that nurses would be equipped with a wider range of knowledge. During the follow-up, the most frequently mentioned reports of strengthening included that nurses were now able to offer treatment for HIV-positive patients (whereas in the past they could not do anything for them), that TB case finding had improved, and that more people made use of the facilities. Overall, seven months into roll-out it seemed that facility managers had a positive experience of ART implementation.

4.2 Other PHC programme nurses' anticipations and experiences of ART

As stated, nurses leading other PHC programmes were asked to describe the impact they expected the ART programme to have on the delivery of the specific programme they were responsible for: PMTCT, VCCT, TB control, IMCI, STI and FP. In the follow-up appraisal they were asked to describe the most important problems and benefits experienced as a result of the implementation of the ART programme (Table 4).

The responses in Table 4 can be summarised in sets of observations in respect of impact on:

- Facilities/services/other programmes: On the one hand, respondents' negative baseline anticipations of overcrowded facilities due to the implementation of ART were not born out in their reflections on their experiences in the follow-up appraisal. This also holds true for negative anticipations about lack of space, problematic drug supply,

2 ARV drug procurement indeed became problematic during November 2004 to January 2005, cf Van Rensburg in this volume.

Table 3: Facility managers' explanations of why overall services would be/were strengthened by ART*

Positive impact on:	Response	Baseline	Follow-up
Facility/ services	Provision of a more comprehensive service	5	2
	Improved TB case finding	0	4
	Availability of a wider range of drugs	1	0
	Upgrading of facility	4	2
	Training of traditional health practitioners — "this will facilitate a better relationship with staff"	1	0
Staff	Improved staff morale — due to the fact that they would/could offer HIV/AIDS patients treatment	1	7
	Additional staff	3	2
	Nurses equipped with a wider range of knowledge/skills	3	0
Patients	Higher take-up of services by patients	6	3
	Better quality of care for patients	1	0
	Improved family planning outcomes — due to ARV counselling patients will decide not to have [more] children	1	0
	ART patients "really helped" — more individual attention	0	2
	Availability of special services — "Dieticians and psychologists visit the facility and patients in other programmes also benefit from this."	0	1

* In cases where individual facility managers provided more than one explanation, all are included.

and disproportionate attention to the ART programme.[2] On the other hand, positive baseline anticipations of increase in VCCT uptake and TB case finding were affirmed in respondents' reports on their actual experience.

- Staff: On the one hand, anticipations among key programme nurses of nurse shortages and a heavier nurse workload due to ART were observed to a substantial degree during the baseline appraisal, but

Table 4: Impact of ART in PHC facilities as expected and experienced by other PHC programme nurses*

Theme	Number (%) expected	Number (%) experienced
Impact of ART on services/facilities/other programmes		
Overcrowding of facility	31 (14.2)	3 (1.7)
Increased VCCT uptake	24 (11.0)	19 (10.9)
Lack of space	15 (6.8)	5 (2.9)
Problems with ARV drug supply	8 (3.7)	0 (0)
Disproportionate attention to ART programme	5 (2.3)	1 (0.6)
Increased TB case finding	2 (0.9)	7 (4.0)
Impact of ART on staff		
Shortage of staff	62 (28.3)	4 (2.3)
Increased workload	15 (6.8)	10 (5.7)
Enabling effect on staff	3 (1.4)	22 (12.6)
Impact of ART on patients		
Patients defaulting treatment	9 (4.1)	0 (0)
Hope of treatment and a better and prolonged life	9 (4.1)	10 (5.7)
Patients demanding treatment	8 (3.7)	0 (0)
Compromised HIV-status confidentiality	6 (2.7)	0 (0)
Improved HIV awareness among patients	4 (1.8)	7 (4.0)
Increased willingness to be tested for HIV	1 (0.5)	8 (4.6)
No benefits or problems		
No benefits/problems as a result of ART	17 (7.8)	78 (44.8)
Total responses	219 (100)	174 (100)

* Total number of responses — all responses of each respondent incorporated.

decreased (as measured by the number of responses affirming this fear from actual experience) during the follow-up. On the other hand, there were anticipations at baseline that ART would enable health workers to offer HIV-positive patients treatment and to save and extend their lives. This anticipation was affirmed in the reflections on actual experience in the follow-up.

- Patients: Anticipations of a positive impact of ART on patients, as observed during the baseline appraisal, were born out in key PHC programme nurses' actual experience, as observed seven months later. On the one hand, the follow-up appraisal recorded fewer responses conveying fear of patient default, demands for ART and of compromising HIV-status confidentiality. On the other hand, the follow-up appraisal also recorded an increase in the number of responses reflecting positively on patients being given hope of treatment and a better/prolonged life, improved HIV awareness among patients, and increased willingness of patients to undergo VCCT.

On the whole the responses of other PHC programme nurses, as measured by their reflections on the impact, reflect a shift away from more negative anticipations of ART measured at baseline towards a more positive experience of ART at the time of the seven-month follow-up survey.

4.3 ART programme nurses' experiences of ART

It has long been suggested that more extensive use of nurse practitioners could safely enhance access to care for persons with HIV-related illnesses (Aiken *et al* 1993: 172). Table 5 indicates the responses of ART programme nurses when they were asked to describe the most important problems caused by ART implementation at their facilities.

This group was included to gauge the experiences of nurses within the ART programme. The most frequently reported facility-related problem caused by the ART programme was that the ART programme caused space shortages in facilities. The most frequently reported concern related to staff was that nurses were moved to the ART programme from other programmes without being replaced by external staff. Only two responses reflected negatively on the impact of the ART programme on patients or on patients' conduct.

5. Conclusion

As encountered in the literature, warnings in respect of ART implementation sketched a bleak and pessimistic future for ART implementation. This paper cannot claim that experiences of PHC nurses in the Free State seven months into ART implementation completely

Table 5: ART nurse-reported problems caused by the ART programme in clinics/CHCs*

Problems related to:	Response	Number
Facility/services/other programmes	"There [is] less space in the clinic for other programmes since ART programme implementation."	4
	"The ARV programme puts strain on the budget of the facility."	2
	"The phone bill of the facility has increased since ART implementation."	1
	"The ART programme needs to be integrated more with other programmes."	1
	"Separate ARV section in the facility can cause other patients to see who is [sic] ART patients — which compromises confidentiality."	1
	"Because ART patient consultations are longer, queues in the clinic become stagnant."	1
Staff	"One of the nurses in the facility was moved to ARV and that left a shortage of staff in other programmes"; "less staff available for other programmes"; "shortage of staff".	5
	"The ARV programme takes a lot of time from staff."	1
	"Other personnel [than ART programme staff] are not trained to provide ART services."	1
	"The ART programme causes professional jealousy among personnel."	1
Patients	"Patients in other programmes complain that they are being neglected and not taken care of like ARV patients are taken care of."	1
	"The patients want to be helped at any department with VCCT and ART services."	1
No problems reported		4

* Total number of responses — all responses of each respondent incorporated.

dispelled the pessimistic forecasts of many commentators. However, the findings do suggest that much of the initial pessimism among nurses about ART roll-out was allayed. If nothing else, it seems that PHC facilities in the province have a reasonable degree of resilience in implementing ART. It would seem that these nurses experience the implementation of ART as an opportunity to do something for patients so long denied this necessary treatment. The ART programme has apparently not diminished their morale — certainly none of the frontline nurses interviewed reported it to be an onerous burden on them. On the contrary, many nurses recognised the ART programme as an asset to their facilities. As previous research has found staff morale to be a great barrier to the delivery of high quality health services in South Africa, this is of great importance to the success of ART implementation (cf McIntyre & Klugman 2003: 10).

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