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IN PRACTICE

Improving the quality of STI care by private general practitioners: a South African case study

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Objectives: Evaluation of an intervention to improve quality of sexually transmitted infections (STI) care among 64 private general practitioners (GPs) working in two urban districts in Gauteng Province, South Africa.
Methods: We implemented a multifaceted intervention, the core of which were four interactive continuing medical education seminars. Changes in STI treatment practices were evaluated through record reviews before and after the continuing medical education intervention in 17 randomly selected practices in the intervention districts and in nine randomly selected practices from a reference GP group (n = 34).
Results: There were statistically significant improvements in the quality of drug treatment for urethral discharge but not pelvic inflammatory disease among both intervention and reference GPs.
Conclusions: Improvements in STI quality were possibly the result of a background secular trend rather than the intervention itself. Further research is needed on financial and other incentives to improved quality of STI care in the private sector environment.

The growth of a private for profit sector has been a key feature of health systems in many developing countries.[1] In South Africa, estimates are that half or more sexually transmitted infection (STI) care episodes in the formal health sector are treated by private general practitioners (GPs).[2] The majority (76%) of GPs dispense drugs and most have a mixed clientele of insured and "cash" clients, offering all inclusive packages of care for a fixed fee.[2]

Poor quality STI care has been well documented in this setting and stems from a lack of access to up to date knowledge and a low profit environment creating powerful economic incentives to minimise expenditure on care.[2–5]

We report on a study that aimed to identify and test local strategies to improve the quality of STI care by private GPs in South Africa.

METHODS

From 2000 to 2002, we implemented an intervention among all 64 GPs and their public sector counterparts working in two poor periurban districts of Gauteng Province (populations 250 000 and 350 000, respectively, referred to as D1 and D2). The intervention consisted of four interactive continuing medical education (CME) seminars, a joint public-private STI surveillance system to build public health awareness, engagement with elected leaders of local GP associations, and facilitation of meetings between GPs and public sector managers. There were no financial incentives or subsidies associated with the intervention. The content of the four CMEs included the participatory design of a local, evidence based STI treatment protocol, counselling and partner management, overcoming financial barriers to quality, and quality assurance methods. There were 26 GPs in D1 and 38 GPs in D2, the majority of whom were solo, dispensing practitioners.

Changes in practice were assessed through record reviews of STI patients seen before and after the CMEs in the intervention districts, as well as in a reference group of GPs (D3, n = 34), practising in a district 50 km away from the intervention GPs. Forty five randomly selected GPs (15 in each district) were approached to participate in the evaluation, 26 of whom consented to having their records examined—17 in the intervention districts (eight in D1; nine in D2) and nine in the reference group. All three GP groups were purposefully selected through negotiations with GP associations and public sector authorities.

Using practice registers as the starting point, patient records with an STI related diagnosis during the first 3 months of 2000 and the same period of 2002 were identified in the 26 practices. Data on the management of three syndromes (urethral discharge (UD), pelvic inflammatory disease (PID), and genital ulcers) were extracted. Because of difficulties in interpreting treatment of vaginal discharge, these records were not included. The feasibility of this method was established in a pilot study in one district at the start of the project. However, given the expected difficulty in gaining entry into GP practices, we conducted record reviews of the pre-intervention and post-intervention periods at the same time, 3 months after the last CME.

A total of 1194 records were obtained, each GP contributing a mean of 46 records (median 50, range 8–98). A low number of genital ulcer cases precluded before-after analyses and changes in drug prescribing in the remaining 1105 records (UD and PID) are reported. Drug combinations were categorised as effective, partially effective (one organism in the syndrome correctly treated), or ineffective, based on nationally developed treatment guidelines. Data were analysed using the statistical package for social sciences (SPSS). Ethical clearance was obtained through the University of Witwatersrand.

RESULTS

Of the 64 GPs targeted, 62 attended at least one CME, but only four attended all four sessions. Eighteen GPs (from a separate but overlapping group to the evaluation sample) voluntarily contributed to a STI surveillance system, submitting a mean of four returns per GP. Despite the demographic similarity of the three GP communities, the proportion of STI

Abbreviations: CME, continuing medical education; GPs, general practitioners; PID, pelvic inflammatory disease; STI, sexually transmitted infections; UD, urethral discharge

Table 1 Effectiveness of drug combinations for urethral discharge and pelvic inflammatory disease in records of STI clients by syndrome among intervention (D1, D2) and reference (D3) GPs (n = 1105)

District	STI syndrome	Time period (n)	Syndrome effectiveness			p Value
			Effective	Partially effective	Ineffective	
D1	Urethral discharge	Before (64)	18 (28.1%)	31 (48.4%)	15 (23.4%)	0.595
		After (56)	18 (32.1%)	29 (51.8%)	9 (16.1%)	
	PID	Before (129)	26 (20.2%)	89 (69.0%)	14 (10.9%)	0.184
		After (143)	30 (21.0%)	106 (74.1%)	7 (4.9%)	
D2	Urethral discharge	Before (78)	23 (29.5%)	42 (53.8%)	13 (16.7%)	0.005
		After (56)	30 (53.6%)	24 (42.9%)	2 (3.6%)	
	PID	Before (143)	24 (16.8%)	110 (76.9%)	9 (6.3%)	0.699
		After (163)	32 (19.6%)	118 (72.4%)	13 (8.0%)	
D3	Urethral discharge	Before (33)	6 (18.2%)	18 (54.5%)	9 (27.3%)	0.036
		After (31)	15 (48.4%)	11 (35.5%)	5 (16.1%)	
	PID	Before (103)	14 (13.6%)	69 (67.0%)	20 (19.4%)	0.007
		After (106)	24 (22.6%)	48 (45.3%)	34 (32.1%)	

Key messages

- Private practitioners are key providers of STI care in South Africa and other developing countries.
- Adherence to nationally accepted STI treatment guidelines in the private sector environment is poor.
- More research is needed on interventions to improve quality of privately provided STI care, possibly combining knowledge based strategies with financial incentives.

clients with health insurance varied from 34.2%, to 43.3% and 71.2% in D1, D2, and D3, respectively.

Of the 1194 records reviewed, PID was the most common (65.9%) STI syndrome. Although the overall adherence to national STI treatment guidelines was low, in the before-after analyses we observed a significant improvement in treatment practices for urethral discharge in D2 ($p = 0.005$) and D3 ($p = 0.036$) (table 1). Quality of treatment for PID did not change significantly in the intervention groups, while in the reference group there was an increase in both ineffective and effective regimens ($p = 0.007$).

DISCUSSION

Our conclusion is that the intervention probably did not influence the quality of STI care, as positive trends were present in both intervention and reference districts. However, the three groups of GPs studied were not randomly selected and the socioeconomic status of their patients varied. This may have reduced the ability to detect changes resulting from the intervention.

Behaviour change is evidently taking place among private GPs in poor urban areas in South Africa, although the exact mechanisms for this are not clear. Further research is needed into STI quality improvement strategies relevant to private GPs, possibly addressing financial incentives more explicitly.

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CONTRIBUTORS

HS and RB were co-PIs of the study; HS drafted the article; NC, TF, and HS jointly managed the intervention; DB had a significant role in the design and analysis of the study.

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Conflicts of interest: none.

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