Sexually transmitted disease control in developing countries: the challenge of involving the private sector

If people have access to alternatives, they make choices about the health services they use. Policies for the management of sexually transmitted diseases (STDs) will have minimal impact if they ignore the health seeking choices which people make. In developing countries, despite widespread poverty and ostensibly free public sector services, for-profit private providers are frequently the first port of call for those who suspect an STD, and are an important source of care for those who have had previous experience of STD care in public clinics. Self medication, following direct over the counter purchases from pharmacies and other outlets, is also extremely common in many countries, accounting for 80–90% of antimicrobial STD treatment episodes in Ghana. Traditional practitioners are an earlier source of care for up to 80% of patients who reach the formal health sector in South Africa, and for many of the 19–30% of rural dwellers with STDs who sought care in the informal sector in Uganda.

Private sector services, whether provided by medically qualified personnel, pharmacists, traditional practitioners, or other types of providers, are apparently more attractive and acceptable to many people who perceive that they offer greater accessibility, confidentiality, and less stigmatising care than public sector facilities. Even where those who suspect an STD believe government services to be technically superior, they may still prefer to visit a private provider. Poor quality public sector STD services, low morale of public sector staff, shortages of drugs, and formal or informal user charges all push treatment seekers towards the private sector. International health policies, such as those promoted by the World Bank, propose increased government roles in managing information and regulation, and a reduced role in service financing and provision: such policies are likely to lead to increased use of private sector services, further strengthening the latter’s dominant role in STD management.

The provision of effective and affordable (preferably free) public sector STD services is, and should continue to be, the cornerstone of STD control. Recognising the role of the private medical and pharmacy sectors in STD care does not imply that they should be promoted at the expense of the public sector. However, acknowledging their popularity should open the way to working with them to promote service quality and to utilise their potential for increasing treatment coverage. Despite this, recent reviews have made little reference to the need to involve the private sector in STD control programmes. This is a serious omission, especially given the major deficiencies in the quality of private sector STD treatment which have emerged in recent pharmacy based, specialist STD clinic based, and general practice based studies. The quality of services delivered by other categories of private provider is likely to be as bad or worse. The uncontrolled availability in the market of late generation antimicrobials, often unavailable in public facilities, fuels the emergence of antibiotic resistance. Moreover, those who obtain drugs directly over the counter, where treatment taking may be most ineffective, are often at highest risk of HIV infection.

The importance of provider knowledge for promoting evidence based care is obvious; private providers who report using non-evidence based STD management protocols are providing poor quality care. However, knowledge is only one determinant of provider behaviour and, while necessary, is not sufficient; interventions limited to the dissemination of information are usually ineffective at shifting provider behaviour. Training programmes which have been highly popular among private providers have achieved limited success as stand alone strategies, producing improvements in prescribing practices in their public sector work which have not carried over into their private practices. Fee paying patients look for affordable short courses of treatment, creating an economic incentive for providers to satisfy these demands even if the treatment offered is incomplete, especially when faced with competition from other providers. Understanding the beliefs, interests, and incentives which operate on both providers and care seekers is crucial. Multifaceted strategies which enlist the support of local opinion leaders, incorporate practice visits, promote patient mediated interventions, and modify community treatment seeking behaviour are more likely to be successful than those restricted to increasing provider knowledge and skills, and they need to be adapted to the prevailing social, professional, regulatory, and economic contexts which determine local provider practices.
In many developing countries, the capacity to enforce regulations which restrict antimicrobial prescribing to professionally qualified practitioners is limited or non-existent. The limitations do not mean that policymakers should adopt a laissez-faire approach to the distribution of drugs which are essential for the control of priority public health diseases. Controlling unmettered, irrational distribution and use of antibiotics are essential if further multidrug resistance is to be avoided. However, there is increasing recognition that “carrots” will have more utility than “sticks,” especially in relation to shifting the behaviour of qualified, independent providers. Mechanisms need to be tested and evaluated for rewarding good practice and for supporting and underpinning the regulations which prolong the lifespan of available treatments. Incentives could include accreditation or other forms of recognition of private providers who provide good quality, reasonably priced STD treatment. Prerequisites for obtaining and retaining accreditation, which requires that individual providers demonstrate that they provide comprehensive high quality care, could include the obligation to regularly provide data to public health authorities; ongoing participation in continuing professional development programmes; and willingness to have their prescribing, dispensing, counselling, use of laboratory services, and partner notification practices audited.

Provider accreditation would need to be supported by community based educational campaigns to encourage the utilisation of those providers who adhere to predefined, agreed, and well publicised quality standards. More informed and assertive service users will also help shift provider behaviour. Other incentives for providers could include subsidised access to appropriate drugs, fast track access to diagnostic and referral services, and/or options to participate in schemes which franchise or contract out service provision, possibly linked with third party payment schemes. Where reimbursement or incentives are used, these could be actively linked to quality assurance mechanisms for encouraging evidence based management. The distribution of treatment purchasing vouchers to commercial sex workers in Nicaragua, linked to quality promotion in the public and private sectors, is one such example. The difficulties in implementing incentive based strategies, which require robust and reliable monitoring mechanisms to minimise undesirable outcomes, should not be underestimated. Enlisting the cooperation and support of private providers towards public health goals will be essential.

Provider self regulation has been the cornerstone for controlling and maintaining clinical standards in developed countries; and peer audit and review is increasingly being used to promote best practice. Similar approaches have been recommended for developing countries, which require identifying existing networks of providers and exploring the role and potential influence of peers and local opinion leaders. This will be easier in countries where the different types of private providers are organised into professional representative organisations. Working with such organisations would be one way for developing acceptable and reliable forms of peer review, self regulation, and incentive based schemes. Another approach, which recognises that professional organisations are often formed on self interest, would be for public health authorities to contract out monitoring to non-governmental organisations, and to also substantially boost public sector capacity to perform this function. Whatever strategies are adopted to influence both demand and supply, these need to be acutely sensitive to the policy, professional, and political contexts of healthcare provision if they are not to encounter substantial obstacles and ultimately fail in their public health objectives. A project which successfully trained pharmacies in syndromic STD diagnosis and the dispensing of prepackaged drugs in Cameroon was not scaled up to programme level and was abandoned, partly as a result of resistance and the influence of the powerful medical lobby on policymakers. Technical solutions which fail to involve and gain the acceptance of powerful stakeholders who can support, or block, the incorporation of promising strategies into national policies and programmes are bound to fail. Identifying leverages, and developing the capacity of government, to ensure that private sector stakeholders work within a pro-public health framework continues to be a neglected area.

Identifying and reaching consensus on the most promising context appropriate strategies will require inclusive processes which take account of the interests, constraints, needs, and possible sources of resistance from the wide range of groups and organisations involved. Governments must have a central role in this process. Where the agreement and support of policymakers, professional bodies, and pharmaceutical companies have been obtained at the inception of a project, there is a much greater likelihood of scaling up project successes to the programme level. Examples where the potential of the widespread and growing for-profit private sector has been successfully utilised to promote public health goals, including STD control, have been extremely limited to date. Countries with organised private allopathic sectors, and an engaged public, offer the most promising starting points. It is likely that synergistic combinations of strategies will be needed, balancing incentives with controls; giving providers the skills and essential supports necessary for providing STD care within local resource constraints; and complementing provider training with the education and involvement of patients, their partners, and communities. Greater recognition and rigorous evaluation of the potential for private sector involvement in STD treatment and control is crucial if recent advances in the control of STDs are to be translated into improved public health strategies which impact on the health of populations. This will require collaborative approaches involving STD and health systems’ policymakers, programme managers, providers, users, and researchers: neglecting this difficult challenge will leave large sections of the populations of many developing countries, especially those at highest risk, much worse off in the years to come.

RUAIRI BRUGHA
ANTHONY B ZWI
Health Policy Unit,
London School of Hygiene and Tropical Medicine,
London WC1E 7HT

Public-private health sector partnerships for STD control in developing countries: perspectives from experience in rural South Africa

In another editorial in this issue Brugha and Zwi provide a timely overview of the challenge of involving the private health sector in STD control activities in developing countries. As they show, there are few empirical data or any carefully documented experience from which to work. In rural Hlabisa, South Africa, local health service providers and researchers worked together to improve STD control. Substantial success has been achieved in the public sector, but not in the private sector. Why?

We estimate that 25% of women of reproductive age have at least one STD on any given day in Hlabisa, and surveys among pregnant women showed that 42% were HIV infected in late 1998, indicating the urgent need for effective control. Health facility surveillance indicated that half of all STD patients attend the private sector, supporting the data summarised by Brugha and Zwi.

There may be a common perception that quality of private sector care is much worse than public sector care. Our work indicated that the quality of care in both settings was very poor. In public sector clinics only 9% of simulated patients received comprehensive management and only 41% received correct drugs. In the private sector none of the prescriptions written matched those recommended by the provincial health department, and only 9% were judged likely to provide adequate therapy. Clearly, quality of care in both these settings is very inadequate and there is nothing to be gained by suggesting that one is any better than the other. Public sector practitioners should not automatically assume their quality of care is substantially better than that of their private sector colleagues.

In response to these findings we developed a successful intervention that produced a dramatic improvement in quality of care in the public sector clinics (submitted). In contrast, our efforts to develop a private sector intervention failed. Why?

We found it relatively easy to work with the public sector because of historical ties and perhaps a closer philosophic kinship with this sector. Whereas public practitioners were more able to spend time in meetings and training sessions, private practitioners lost income by doing this. Similarly, whereas public sector personnel were usually keen to come together to share experiences and solutions, private doctors were often less keen to do this as they were in competition with each other. Finally, in this setting at least, while there was a strong ethos of continuing professional education among public sector practitioners, this was not so prevalent among their private sector counterparts.

Brugha and Zwi are quite correct that the private sector must be involved if the epidemics of STDs and HIV are to be effectively controlled in developing countries. It seems possible that “technical” interventions shown to be effective in the public sector may not be directly applicable to the private sector. Thus, there may be an even greater need to address structural determinants of poor quality care, be they social, political, economic, or professional, if the quality of STD care in the private sector is to be enhanced to the level that communities deserve. A challenge indeed.

DAVID WILKINSON
South Australian Centre for Rural and Remote Health,
University of Adelaide and University of South Australia,
Whyalla Norrie, SA 5608, Australia

---

2 Wilkinson D, Rottchford R. Continued explosive rise in HIV prevalence among pregnant women in rural South Africa. AIDS 1999; (in press).
Cervical screening in genitourinary medicine clinics—what are we trying to achieve?

The National Health Service Cervical Screening Programme (NHSCSP) was instituted to reduce the number of deaths from cervical cancer. Its aim is to identify asymptomatic precancerous lesions before invasion has occurred. When the programme started only 44% of women were attending for screening and since its introduction in 1988 more than 83% of the target population have attended each year. The recommended screening interval is every 4 years but varies within each health authority from 3 to 5 years. The most recent NHSCSP guidelines recommend regular cervical cytology in all women between the ages of 20 and 64. They state that there is no justification for screening women younger than 20 nor do they recommend any additional screening in women who smoke heavily, who have had multiple sexual partners, or who have any sexually transmitted infection including genital warts. Risk factors associated with cervical intraepithelial neoplasia include human papillomavirus (HPV) infection, multiple sexual partners, and immunosuppression. Women who attend genitourinary medicine clinics often have these risk factors and include teenagers, and women with genital warts and HIV infection. The fact that these women are potentially at increased risk of cervical intraepithelial neoplasia (CIN) and cervical cancer has led some to question whether women attending genitourinary medicine clinics should be screened before the age of 20 and more frequently than recommended (see paper by Foley and Harindra, this issue, p 349).

The incidence of cervical carcinoma is decreasing in all age groups but remains highest in the fifth and sixth decade. The incidence of cervical carcinoma in women under 20 is two per million and, in 1995, none of the 1245 deaths from cervical cancer occurred in teenagers. In contrast, since the programme began, rates of CIN 3 in older age groups but remains highest in the fifth and sixth decade. The incidence of cervical carcinoma in women under 20 is two per million and, in 1995, none of the 1245 deaths from cervical cancer occurred in teenagers. In contrast, since the programme began, rates of CIN 3 in older age groups have consistently remained low while in women aged 20–29 rates have been rising steadily.

Screening of teenagers has shown that they have a high incidence of cervical cytology abnormalities. Several studies have shown that up to 23% of teenagers will have some degree of dyskaryosis with a greater proportion of these lesions being mild to moderate. Sankar et al audited 3377 smears taken from 2750 women attending a genitourinary medicine clinic. Twenty seven per cent (921) of these smears were from teenagers. Although 23% of the smears from teenage women had some abnormality only 7% had mild dyskaryosis and less than 1% had moderate or severe dyskaryosis. Of the seven patients with moderate or severe dyskaryosis, five had CIN 1 and two had CIN 2 on biopsy. In a study by Walker of 100 selected teenagers referred for colposcopy none progressed to invasive carcinoma over 11 years of follow up.

Despite the increased incidence of CIN in young women, regression of CIN also occurs as part of its natural history and is more likely to do so in younger age groups. Van Oortmarssen and Habbema have shown, using mathematical modelling, that dysplasia and CIN have high rates of regression. Using data from the screening programme in British Columbia they found that the model of best fit to the data collected was when different regression rates occurred above and below 34 years. They calculated that 84% of new lesions would regress spontaneously in women under 34 years and that the average duration of cervical dysplasia was 11.8 years. Population screening data from the Netherlands (1966–82) also studied non-progression of CIN. Of 977 pre-invasive lesions in women between 25 and 50 years 39% regressed, 38% remained, and 24% progressed.

The relation between HPV infection, CIN, and cervical cancer is well recognised. The prevalence of HPV infection in young women is reported to be between 20% and 46%. In a study by Ho and Bierman who followed sexually active college women for an average of 3 years it was found that 60% of them acquired HPV infection. The median duration of HPV infection was 8 months; 70% of women were no longer infected 12 months after initial infection and at 24 months only 9% had persistent infection.

Immunosuppressed women are also at increased risk of CIN. Alloub and Barr reported a significant increase in all CIN in women with renal allografts—49% compared with 10% in non-immunosuppressed individuals. Women with HIV infection have an increased risk of HPV, HPV associated dysplasia, and have a higher rate of treatment failure and recurrence. They are probably at risk of accelerated progression to invasive disease although there is little evidence for this at present. The United States now recommends annual smears for HIV positive women. The UK guidelines currently state that the course of CIN may be different for HIV negative individuals and that increased cervical surveillance should be left to those responsible for their care.

In May 1999 we sent a short survey on cervical cytology to 260 genitourinary medicine clinics in the United Kingdom. A total of 161 questionnaires were returned giving a 62% response rate; only one questionnaire was excluded from the final analysis. Six clinics (4%) were unable to offer cervical screening and four clinics (2%) regularly screened all women who attend. Sixty two clinics (40%) followed the current NHSCSP guidelines. Of the 88 clinics that screened women outside the recommended guidelines, 7% screened women under 20 and 13% screened women younger than 20 years who have been sexually active before the age of 16 (table 1).

Three per cent of clinics screened women even if they were up to date with the NHSCSP and 19% screened women if they were overdue (table 2). Sixty three per cent

---

**Table 1** Cervical screening outside the current NHSCSP guidelines

<table>
<thead>
<tr>
<th>Response (n=88)</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;20 years of age</td>
<td>6 (7%)</td>
<td>82 (93%)</td>
<td>0</td>
</tr>
<tr>
<td>Sexually active before 16 years</td>
<td>11 (13%)</td>
<td>74 (84%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>and currently ≤20 years</td>
<td>80 (91%)</td>
<td>6 (7%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Cervical warts</td>
<td>80 (91%)</td>
<td>6 (7%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Vaginal warts</td>
<td>38 (43%)</td>
<td>46 (52%)</td>
<td>4 (5%)</td>
</tr>
</tbody>
</table>

**Table 2** Indications for cervical screening in the genitourinary medicine clinic

<table>
<thead>
<tr>
<th>Response (n=150)</th>
<th>Yes</th>
<th>No</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to date on NHSCSP &gt;20 years</td>
<td>5 (3%)</td>
<td>144 (96%)</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Not registered with GP &gt;20 years</td>
<td>94 (63%)</td>
<td>50 (33%)</td>
<td>6 (4%)</td>
</tr>
<tr>
<td>Are overdue on NHSCSP &gt;20 years</td>
<td>28 (19%)</td>
<td>120 (80%)</td>
<td>2 (1%)</td>
</tr>
<tr>
<td>Are HIV positive</td>
<td>121 (81%)</td>
<td>23 (15%)</td>
<td>6 (4%)</td>
</tr>
</tbody>
</table>
of clinics screened women if they did not have a general practitioner. Eighty one per cent of clinics screened women with HIV infection more frequently compared with other genitourinary medicine clinic attenders. Of these, 74% were screening HIV positive women annually and 5% screened every 6 months. Twenty one per cent of clinics reported screening HIV positive women more frequently but did not appear to have their own policy.

The NHSCSP aims to screen every woman 3–5 yearly and unless indicated not to decrease this interval. Despite achieving high coverage rates nationally geographical variations do occur and some inner city areas of London only achieve attendance rates of 40–50%. The challenge for any screening programme is to capture those within the target population who have evaded screening to date as these are usually a higher risk group. A more efficient way of increasing the number of life years saved is to encourage more women to attend than screening the same women more frequently. Increasing the frequency of smears in genitourinary medicine clinic attenders may increase the detection of pre-invasive disease and also increase the rate of intervention without affecting the mortality rates from cervical cancer, rendering it relatively poor in cost effectiveness.

Opportunistic screening has not been proved to be beneficial but such screening within the genitourinary medicine clinic may be appropriate in selected asymptomatic and symptomatic women who have not yet been screened because of issues such as cultural or language difficulties. Identifying women who have never attended or who are at higher risk, and providing a point of entry into the NHSCSP screening would seem justifiable but requires informing general practitioners, where possible, in order to ensure continued surveillance. Screening women who attend the genitourinary medicine clinic outside the NHSCSP may discourage women from attending the general practitioner’s surgery when invited and undermine the call-recall programme.

Screening of teenagers identifies mostly minor abnormalities that have a high rate of regression. Concerns that unidentified precancerous disease may develop into cervical carcinoma before the age of first cytology appear unproved.15 Given the long natural history of CIN younger women will have had several invitations to attend before invasive disease would occur. The presence of genital warts confirms that HPV infection is present but increased screening of women with vulvovaginal warts is not justified as HPV is usually a transient infection giving rise to low grade disease which is more likely to regress.14 Any non-regressing lesions should be detected by the routine screening programme at the age of 20.

Conversely, CIN in immunosuppressed patients may progress more rapidly and could theoretically be missed by the current screening interval of 3–5 years. These patients are probably the only group in whom frequent screening could be justified. In the case of HIV positive women annual smear tests as a minimum appear to be the consensus. Genitourinary medicine clinics may sometimes need to manage these patients outside of the programme to ensure adequate surveillance and confidentiality.

In conclusion, we agree with Foley and Harinda, and 40% of genitourinary medicine clinics in our survey, that there is no benefit, in general, from screening women who attend genitourinary medicine clinics outside the current guidelines. Our role is to collaborate with general practitioners and health authorities to ensure the continuing success of the established screening programme.

CAROLINE BRADREER
LESLEY NAVARATNE
Guy’s and St Thomas’s Hospital Trust, London SE1 7EH

13 O’Mahoney C. There is no longer a place for under age cytology in genitourinary medicine clinics. Genitourin Med 1996; 72: 433–44.

An ombudsman for more transparent refereeing

Our highly successful editorial board meeting in Denver, brought up a number of issues which I thought I might share with our readers.

The editorial board wishes to inform authors that the entire editorial process is open to both scrutiny and challenge. We hold a “hanging committee” every other week in the STI offices, and anyone is welcome to attend as an observer. In the interest of a more rapid turnaround time, we have introduced a preliminary triage process which has reduced our mean rejection rate to 18 days. It does mean that occasionally papers, because their subject matter is not of contemporary interest, are not being sent for peer review. These papers might, at other times, have occupied a worthy place in the journal.

If authors feel that their papers have been unfairly rejected, either before or after the reviewing process, we would welcome their views. Normally, the hanging committee would reconsider the paper, and might send it for further review.
Because of the possibility that authors may be unhappy with the decisions or the decision tree, we have introduced a concept of an ombudsman. Dr Alexander Macmillan, former distinguished editor of the journal, has kindly agreed to act as ombudsman for the journal. His task would be to arbitrate between aggrieved authors and the hanging committee. We hope this independent arbitration process will solve any potential conflicts that might arise in the peer review process.

We welcome comments from readers.

MOHSEN SHAHMANESH

Editor