# Antimicrobial chemoprophylaxis

Recommended

- For women with recurrent infections
- After acute pyelonephritis in pregnancy
- Before instrumentation of the urinary tract for short term urinary catheterisation
- Before extracorporeal shock wave lithotripsy

with a low incidence of side effects in long term therapy. Suppression is recommended for women who experience troublesome recurrence of infections and is generally given for six or 12 months but has been effective for two to five years with no increase in adverse effects.33 Infections occurring during suppression are usually resistant to the antimicrobial agents being taken, and an alternative appropriate drug should be selected on the basis of the bacterial sensitivities. An alternative to long term continuous suppression is postcoital treatment, which should be combined with postcoital voiding in women who identify this as a precipitating factor for infections. Early self treatment with a broad spectrum antibiotic for symptoms of urinary tract infection is also effective in women with recurrent infections.34 Low dose suppression has also been recommended following acute pyelonephritis in pregnancy as recurrence rates of 10-25% have been reported.35

Treatment with antibiotics before instrumentation of the urinary tract prevents bacteraemia and Gram negative septicaemia. Antibiotics should also be given before extracorporeal shock wave lithotripsy to prevent infection by viable organisms retained in stone fragments.36

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# London After Tomlinson

# Care in the capital: what needs to be done

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This is the second article in our series looking at the issues highlighted by the Tomlinson report into London's health care and medical research and education

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# Summary

One of the aims of the Tomlinson report is to shift more care from the secondary to the primary sector in London. But the primary sector is already underresourced and overloaded. The capital has a heterogeneous population which often makes inappropriate demands on general practitioners. Many premises are inadequate and there are insufficient support staff. David Metcalfe emphasises that London is special and that the shift will not become a reality unless these problems are tackled. He suggests the establishment of different models of practice centres which could treat some of the patients who now go to accident and emergency departments. Some would be the night emergency service base, some would have primary care beds,

and each would have a different mix of specialist support.

Primary care has been used to describe a variety of activities, but most meanings stem from the idea of first contact care, with referrals to secondary care by more specialised personnel with better resources. They may in turn refer onwards for tertiary care. In Britain the nub of the NHS has been open access to general practitioners and to those who work alongside them to provide medical care outside the hospital, such as district nurses and health visitors.

These professionals do not only provide first contact care; their training equips them to look after people with chronic diseases, to practise preventive medicine, and to care for the dying and support their families.

BMI VOLUME 305 **7 NOVEMBER 1992**  Because of their primary role they are often described as gatekeepers to expensive secondary care—in this case hospital based specialist services. In fact their most important gatekeeping role is to exclude serious disease early in the illnesses presenting to them, and with as little use of expensive investigations as possible: the gate between health and illness.

The King's Fund report and the Tomlinson report, recommend a major shift of care from the hospital (secondary) sector to primary care in London, while recognising that that sector already faces major problems. Moreover, it is not made clear whether what is to be shifted is primary care inappropriately being done in hospital (such as surveillance of people with chronic disease, or terminal care, not to mention midwifery), or specialist care that has up to now not been possible within the constraints of primary care. What needs to be done to make this shift a reality?

#### Real causes of ill health

London has a large and heterogeneous population, looked after by a large number of general practitioners who are equally heterogeneous. In sociogeographical terms it is a dense patchwork of small areas of widely differing characteristics; affluence existing cheek by jowl with poverty, neighbourhoods with excellent care close to others with seriously deficient services. In the early 'eighties the Jarman report' and the Acheson report4 highlighted the association between the districts with the worst health statistics and a higher than average number of older, singlehanded, and overseas qualified practitioners. Some who quote them seem to have seen this as implying a causal relationship. What is widely recognised is that poverty, bad housing, unemployment, poor education, and the dangers inherent in many unskilled manual jobs account for far more of the variance in health than do medical care variables. What the Black report showed was that the NHS had not counteracted these forces.5 General practitioners in these unhealthy neighbourhoods probably comprise several distinct categories. While there are some who went there because they were not good enough to get into practice elsewhere, there are more who have been ground down by high workload, limited resources, and lack of backup, or, more depressingly, lack of respect from their local hospitals. But there are those who have survived these traumas and continue to provide good care in difficult circumstances, many carrying on beyond their preferred retirement age to look after populations of whom they are fond. There are, too, an increasing number of exceptional practices staffed by highly idealistic young general practitioners, who see the inner city as a professional challenge to be tackled head

All of these categories face the same levels and sort of demands and the same dearth of investment. Jarman in his study of general practitioners' perceptions of

# Improving primary care

Proper premises must be provided in the NHS or in the private sector.

Each practice centre could provide a van based service, with a professional driver, which the doctor, nurse, or physiotherapist could use to provide care in the home.

Some of the new premises could be designed to enable general practitioners to provide 24 hour facilities which people could use in the same way as they now do accident and emergency departments.

Practices could be adapted to cottage hospitals with beds for clearly defined conditions which could not be treated at home. stress inducing patients tapped into a rich vein of experience, and from it developed the basis of the new deprivation allowance.6 This estimate is essentially qualitative—a high deprivation score does not necessarily generate high utilisation rates.7 These patients confront their general practitioners with greater and more complex needs, and have fewer resources of their own to cope. Inner city general practitioners will agree that a large proportion of their consultations relate to conditions in which social stresses have been conributory, or where the management of the problem is complicated by such factors. They may not consult more often—indeed their life agendas often preclude them from doing so, to the concern of their doctors but when they do the consultation lasts longer, is more stressful, and is less likely to lead to clear solutions.

# Resource for non-medical help

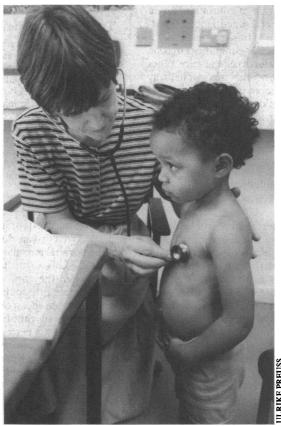
In addition to these high needs for medical care, including the exclusion of serious illness that might add to the social ills they suffer, people have come to see their general practitioner as a resource for other, essentially non-medical help. As the social security benefits have been steadily whittled away harassed social security officers, citizens advice bureau staff, lawyers, and others have advised their clients to describe their distress as illness in order to qualify for such benefits as are available. This adds to workload, challenges the integrity of the doctors, and, when they demur, generates anger which is liable to be expressed as violence to doctors, nurses, and practice staff.

In a massive shift of care from the secondary sector to the primary sector it is essential to identify the objectives—different objectives will require different resources and different planning. It is important that managers, administrators, politicians, and specialists should understand the basic transactions of general practitioner care, lest, failing to value it properly, they make demands on it which will damage it still further while trying to bail out the secondary sector.

To exclude serious illness safely or to make a provisional diagnosis of disease requires good quality consultations, which in turn need adequate time, decent facilities, and proper records, as well as clinical and interpersonal skills. Similarly, these interactions provide opportunities and often the mandate for preventive advice about risks and lifestyle. Both build on previous knowledge of each other held by both doctor and patient, something seldom appreciated by specialists, but always quickly recognised and respected by students when they are attached to general practitioners. In providing surveillance for chronic disease general practitioners have to balance the efficiency of holding clinics where medical and nursing skills can be concentrated and suitable equipment and other facilities deployed against the cultural norm of allowing people with such illnesses to get on with their lives and come more or less when it suits them. Either way time for personal interaction between patients and carers, to discuss not only the symptoms and signs but the impact of the disease and its management on their lives, must be safeguarded. Clinics are not to save doctors' time but to enhance their effectiveness, physically, socially, and psychologically. The first objective, therefore, in enhancing primary care in the capital, must be to ensure and defend an adequate supply of high quality consulta-

## Inappropriate demands

The high utilisation rates often reported from disadvantaged areas need to be carefully investigated. Apart from the noise in the system of completely



An adequate supply of high quality consultations must be ensured

inappropriate demand (for doctors' letters, certificates, etc., to ameliorate lack of proper benefits, allowances, etc.), high utilisation is unlikely to represent high needs, since disadvantaged people actually find it quite difficult to make appointments and go to their general practitioner among the other pressures on their lives. High utilisation rates may result from poor consultations, when either the patient or the doctor feels that the matter has not been "bottomed," and returns for another bite at the cherry. Some studies have shown that longer consultation times are associated with a wider range of health issues being reviewed and greater patient satisfaction. The second objective, therefore, is to analyse the nature of high utilisation and develop strategies to reduce it.

Being overloaded with cases and constrained to provide suboptimal care by shortage of resources is no monopoly of doctors, and primary care in the capital is characterised by high turnover of nursing staff, in whom burnout is accelerated by the actual experience of abuse and real fear of personal violence. They, too, need the continuity which allows them to build productive relationships with their patients or clients, and are less efficient when constantly reattached or redeployed. Personal social support, in the form of case discussion, is often available to health visitors, sometimes to district nurses, and seldom to general practitioners. To tell others that a case disturbs or distresses you is to admit to weakness, to ask for help with it is to proclaim dysfunction. Under stress we pour opprobrium on each other: the restraint, sympathy, interpretative insight, and affection that we lavish on our patients or clients must never be wasted on each other. The third objective, therefore, is to provide adequate support for primary care workers, firstly, at the level of their physical safety; secondly, at the level of personal support; and thirdly, at the level of proper resourcing.

Achieving the above objectives will reduce the load on hospital services, since a considerable number of accident and emergency attendances represent dis-

satisfaction or frustration with primary care services, and because a large proportion of referrals to specialists are load shedding by general practitioners who have difficulty in coping. But the wholesale transfer from secondary to primary care called for in the King's Fund report goes further than that since it implies that many services currently provided by specialists in hospital could be provided in the community.1 It is true that many episodes of illness dealt with in hospital could be looked after by a properly skilled general practitioner with appropriate resources: minor surgery given access to sterile supplies for instance. Others may be simple medical tasks but require levels of social resource that may not be available. Given good housing and an extended family all pneumonias and many strokes could be cared for at home, but where those are not available hospital treatment may be inevitable and may

Deploying specialists in general practice premises has often been suggested and sometimes achieved. But as referral rates are low the population needed to generate a predictable workload for even the commoner specialties is large, if they are not to hang about unproductively, or to see (and expensively investigate) cases that do not need their skills. The fourth objective, therefore, is to identify the clinical situations with which a specialist deployed in the community could provide more effective care than a general practitioner and establish their incidence and prevalence so that the population needed to justify such a deployment can be worked out.

#### Need for proper premises

To achieve the four objectives the first priority is structural: the provision, either by the NHS or the private sector, of proper premises. Even now London prices generally preclude the provision of high quality group practice premises or health centres which are common elsewhere, including provincial inner cities. It will be impossible to shift a large amount of care into the primary sector unless premises are provided which can accommodate it.

A capacity for growth and adaptability to advances in information technology must be prime requisites in their design; it was failure in these areas that has left so many health centres run down and decrepit. As studies have suggested that the operating range of a parent with a child in a buggy was about 1 km good child care would argue for such buildings to be every 3 km at the most. Such premises will have to provide secure bases for primary care workers of all types, in which they, their equipment, and their records are safe.

If a considerable amount of inpatient care is to be shifted to the community much of it will require home visits by nurses, therapists, and doctors. Equipment will have to be made available for home use. The public sets high store by home care, and general practitioners' resistance to house calls generates considerable dissatisfaction. Some of that resistance is proper: many requests are for conditions that could be brought to the surgery, where staff and equipment are more readily provided. Some, however, weighs the patients' reasonable request against the stress of driving through dense traffic, finding somewhere to park, worrying about theft from the car, and even personal safety. Ongoing care of serious illness, including terminal care, in the home will need chauffeured transport to be provided. There could be a van service for each practice with doctor, nurse, and physiotherapist, and their equipment.

Most middle class health workers live out of emergency call range of their practices, so that it is left to deputising services to cover nights and weekends. The recent study by the General Medical Services Com-

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mittee showed that the tradition of continuous cover has been rejected by most general practitioners. Whatever the political consequences of this are, planning for care in London will have to address either the provision of acceptable quality night and weekend care other than by general practitioners, or, perhaps as a halfway house, the provision of general practitioner staffed facilities to which people could go as they now do to accident and emergency departments. Some of the new premises, therefore-perhaps one in six-should be designed to accommodate such services.

### Cottage hospitals should be adapted

While the proposed van borne home care teams described above could take on some of the care currently provided for inpatients, there will be others whose homes may be grossly unsuitable for such care, or who are without sufficient family support. Here the long tradition of general practitioner served cottage hospitals should be adapted to the capital's needs: some of the new practice centres should have a small number of beds for clearly defined conditions. These might include observation of patients who might turn out to have serious illness (right iliac fossa pain without rebound tenderness, for example); early aftercare for routine surgery (herniorrhapy, for example); general care of acute illness (pneumonia or stroke); and late stage terminal care. These patients' care could well be supervised by or shared with those specialists deployed in the community.

In order to protect medical services from social demand, while recognising the health implications of poverty, unemployment, poor or unavailable housing, and lack of education, each of the proposed practice bases should have in it advice workers, whether citizens advice bureau volunteers or professional welfare rights officers, and probably a law centre as well: a permanently manned social problems clinic. As well as ameliorating distress and enabling people to achieve a life of reasonable comfort and dignity this would have an educational role, helping people to differentiate between illness requiring medical care and distress needing social support. This would ensure a more appropriate use of the services available, but in the early stages some triage might be necessary.

Many of the hospitals to close are teaching hospitals. What is to become of their students? One scenario is to transfer considerable numbers to the provincial schools, but these already have student numbers inimical to high quality education. Exposure to, and teaching in, primary care, cannot completely replace



General practitioners most important gatekeeping role is to exclude serious illness

#### Teaching students

Exposure to primary care allows students to learn the use of clinical skills to make or exclude diagnoses in patients when they first present; demonstrate prevalence of illness in populations and therefore provide more reasonable ideas of probability; and show the natural history of chronic illness and the interactions between disease, person, and environment. With beds, specialist support 24 hour cover for new cases, and mobile care teams practice centres could go much further to support clinical teaching so that the same number of students could be attached to fewer hospitals but with more primary care attachments.

learning on the wards or in the clinics of a good general hospital. What it can do better than a conventional teaching hospital is to allow the student to learn the use of clinical skills to make, or exclude, diagnoses in patients when they first present; demonstrate prevalence of illness in populations and therefore provide more reasonable ideas of probability; and show the natural history of chronic illness and the interaction between disease, person, and environment. The practice centres described above, however, with beds, specialist support, 24 hour cover for new cases, and mobile care teams could go much further to support clinical teaching, so that the same number of students could be attached to fewer hospitals but with more primary care attachments.

#### Different models

Because these centres will be complementary, some having the night emergency service base, some having the primary care beds, and each having a different mix of specialist support, none will be self sufficient. While some may provide an excellent base for a fundholding practice, a better model might turn out to be the practice cooperatives being experimented with in south Sheffield and Oxfordshire, which organise purchasing for larger populations from smaller practices through their family health services authorities. It might be that NHS trusts whose hospitals are to disappear might choose to diversify into providing the sort of resources and organisations described above; alternatively new trusts set up by general practitioners and other health workers might accept the challenge.

Such models might sit uncomfortably with the concept of the independent contractor, but be attractive to that (minority) of doctors who have long argued for a salaried service. London is special, its problems both in quantitative and qualitative terms different from the other metropolitan cities, and certainly in the inappropriateness of its hospital provision demonstrated in the King's Fund report and the Tomlinson report. Radical solutions for the capital need not signal major change elsewhere, either among general practitioners or health authorities, but in London there is no alternative.

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