- 2 Zawels EA, Stedman SJ, Daniel DCF, Cox D, Boulden J, Tanner F, et al. Managing arms in peace processes: the issues. Geneva: United Nations Institute for Disarmament Research, 1996.
- 3 Gamba V. Disarmament and conflict resolution. In: Zawels EA, Stedman SJ, Daniel DCF, Cox D, Boulden J, Tanner F, et al. Managing arms in peace processes: the issues. Geneva: United Nations Institute for Disarmament Research, 1996xiii-xv.
- 4 Eiseman B. Casualty care planning. J Trauma 1979;19:848-51.
- 5 Smith C. Light weapons and ethnic conflict in south Asia. In: Boutwell J, Klare MT, Reed LW, eds. Lethal commerce: the global trade in small arms and light weapons. Cambridge, MA: Committee on International Security Studies, American Academy of Arts and Sciences, 1995:61-76.
- 6 Coupland RM. The effects of weapons: defining superfluous injury and unnecessary suffering. Medicine and Global Survival 1996;3:A1.
- 7 Coupland RM. War wounds: classification and management. In: Johnston

- CD, Taylor I, eds. Recent advances in surgery. London: Churchill Livingstone, 1994;121-34.
- 8 Williams P, Naylor RT, Mathiak L, Batchelor P, Potgieter J, eds. Society under siege: crime, violence and illegal weapons. Halfway House, South Africa: Institute for Security Studies, 1997.
- 9 Gamba V. Introduction. In: Williams P, Naylor RT, Mathiak L, Batchelor P, Potgieter J, eds. Society under siege: crime, violence and illegal weapons. Halfway House: Institute for Security Studies, 1997:1-9.
- 10 Cox D. Peacekeeping and disarmament: peace agreements, security council mandates, and the disarmament experience. In: Zawels EA, Stedman SJ, Daniel DCF, Cox D, Boulden J, Tanner F, et al. Managing arms in peace processes: the issues. Geneva: United Nations Institute for Disarmament Research, 1996:83-133.

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The quality of health care in prison: results of a year's programme of semistructured inspections

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Abstract

Objectives: To assess, as part of wider inspections by HM Inspectorate of Prisons, the extent and quality of health care in prisons in England and Wales. **Design:** Inspections based on a set of "expectations" derived mainly from existing healthcare quality standards published by the prison service and existing ethical guidelines; questionnaire survey of prisoners. **Subjects:** 19 prisons in England and Wales, 1996-7. Main outcome measures: Appraisals of needs assessment and the commissioning and delivery of health care against the inspectorate's expectations. **Results:** The quality of health care varied greatly. A few prisons provided health care broadly equivalent to NHS care, but in many the health care was of low quality, some doctors were not adequately trained to do the work they faced, and some care failed to meet proper ethical standards. Little professional support was available to healthcare staff.

Conclusions: The current policy for improving health care in prisons is not likely to achieve its objectives and is potentially wasteful. The prison service needs to recognise that expertise in the commissioning and delivery of health care is overwhelmingly based in the NHS. The current review of the provision of health care in prisons offers an opportunity to ensure that prisoners are not excluded from high quality health care.

Introduction

Health care in prisons has long been a matter of concern. Research has shown high levels of mental disorder and drug misuse and general poor health among prisoners. Health screening on entering prison is only moderately effective, and the Health Care Service for Prisoners is at times seen by prisoners as more interested in the needs of the prison as a secure institution than their needs as patients. The practice of shackling patients—especially women—has been widely criticised. On the other hand, it has been claimed that the Health Care Service for Prisoners provides quicker access both to primary and specialist care than the NHS does, and all prescription are free.

HM Inspectorate of Prisons

Since 1791 prisons have been subject to inspection, but only in 1979 was a truly independent inspectorate of prisons established.¹⁵ The inspectorate's work comprises announced inspections lasting a week, shorter unannounced inspections, and a series of thematic reports. Inspection reports are public documents available from the inspectorate or on the internet (www.penlex.org.uk).

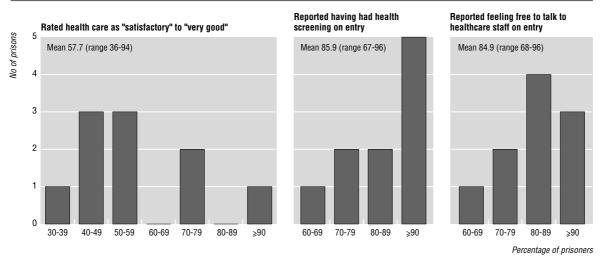
In 1996 a review of prison health care by the inspectorate concluded that it was no longer sensible to have a healthcare service for prisoners separate from the NHS, and that disadvantages arose from having two parallel systems. ¹⁶

We report some results from the inspection of 19 prisons (for men, women, and young offenders) in England and Wales from September 1996 to August 1997. The prisons have a population of some 7250 prisoners, about 12% of the total prison population.

Methods

The inspectorate works to a set of "expectations" of the level and quality of service that it expects to find in prisons. Expectations for health care 17 are based on existing healthcare quality standards in the prison service, 18 19 and, for areas not covered by these standards or for which the published standards are not explicit, they reflect the standards in the NHS as the prison service has a commitment to provide "the same standards of health care as those provided by the NHS" 20

Healthcare inspections—carried out by a doctor and, when necessary, a nurse—last one to three days and involve (a) visits to all healthcare areas, (b) discussions with staff (both those employed by the prison and visiting specialists), (c) review of the annual reports on health care in the prison and of local guidelines and protocols, and (d) meeting patients both individually and, when appropriate, in a group. During a full inspection 10% of inmates are asked to complete a questionnaire about aspects of prison life. The sample is not random, though attempts are made to ensure that all categories of inmate get questionnaires. The questionnaire allows responses on a five point scale



Responses of prisoners in 10 prisons who completed questionnaire about health care at their prison

from 1 (very bad) to 5 (very good) to the question, "how would you describe the quality of the healthcare service?" It also asks about health screening on entry to prison and provides space for comments on any aspect of life in prison.

Inspection reports make recommendations to the prison and to a range of bodies such as prison service headquarters (including the Directorate of Health Care—equivalent in function to the NHS Executive) and to external bodies.

Results

Questionnaires

Questionnaires were circulated in the 10 prisons receiving full inspections. The figure shows the ratings given by prisoners to the quality of their prison's health care. The ratings varied considerably between prisons. All prisoners must undergo health screening on the day of entry and be examined by a doctor within 24 hours. Questionnaire results showed that 85.9% of prisoners reported having had a healthcare assessment and that 84.9% felt free to tell the nurse or the doctor of any problems (figure). In 3 of the 10 prisons, however, less than 80% of inmates felt able to talk freely to healthcare staff on entry; the prison with the lowest percentage (68%) also scored worst in the overall rating for quality of health care.

Assessing need

Health Care Standards (No 3) requires prisons to conduct an assessment of need for health care and suggests seeking specialist advice. None of the 19 prisons had conducted a needs assessment, though two had made some preliminary moves in that direction. None had sought advice.

Budgets

No prison knew its overall budget for health care, though all knew the locally held budget for drug treatment and visiting specialists. Budgets were decided on the basis of the previous year's budget, taking account of planned changes and of a reducing overall prison budget.

Managing health care

Ten prisons had a clear healthcare management structure, with a managing medical officer who sat on the prison senior management team. In other prisons a junior governor represented health care on the senior management team. Clinical, academic, or management meetings involving all healthcare staff were unusual.

Primary care

Most health care in prisons is primary care. The inspectorate expects that primary care in prisons will be given by or under the supervision of doctors who are qualified to work as principals in NHS general practice. In 10 prisons all primary care was delivered by doctors who were so qualified. In the remaining prisons much primary care was given by doctors who had not completed primary care training.

Mental health care

The inspectorate expects that mental health care other than primary care will be given by or under the direction of a doctor whose name is on the relevant specialist register. All prisons except two had arrangements for visits by local psychiatrists (either forensic or general) mainly to facilitate transfer out of prison. However, many prisoners have important mental health problems but do not meet the criteria for transfer to the NHS under the Mental Health Act 1983. Outside prison they would often be under the care of a consultant psychiatrist; in prison they are often inpatients in the healthcare centre.21 No prison had arrangements for all mentally disordered inpatients to be under the care of a consultant psychiatrist, and none provided a full multidisciplinary mental health team. At one prison, considered by the prison service to be a national resource for the care of mentally disordered prisoners, neither of the doctors responsible for the care of inpatients had completed specialist training in psychiatry or primary care.

Referral and transfer to the NHS

Except in Wales, transfer of mentally disordered patients to the NHS was reported to be easier than in the past, though still delayed by disputes about security

required in the NHS. Physically ill patients requiring either a consultant opinion or transfer to NHS inpatient care were often advantaged over NHS patients; the wait for an appointment or admission was generally not long. However, 18 of the 19 prisons reported frequent problems in obtaining staff to act as escorts to outpatient departments or as "bed watches" for NHS inpatients. This led to frequent last minute cancellation of appointments at substantial cost to the NHS. After the criticism last year of the shackling of patients transferred to hospital, new security procedures were introduced in January 1997. Inspections will assess the impact of these changes.

Supervision and support for healthcare staff

Only four prisons had established clinical supervision in the prison for their nursing staff. Visits by senior nursing colleagues from the Directorate of Health Care were rare; the prison service for England and Wales is covered by only two nursing advisers.

Most doctors were unsupported except by visits every three to six months from their area medical advisers. Few doctors were members of medical royal colleges, and those who were, often thought their colleges irrelevant to their work. Two doctors had serious (but previously undetected or unresolved) health problems that might have affected their professional capabilities.

Hours of work

Most prisons had established sensible hours of work for their staff, but difficulties in recruiting staff, especially nurses, meant that these hours often could not be maintained. Several prisons had failed to make adequate arrangements for medical cover, so that doctors had excessive on call commitments. At three prisons the medical officer was on duty continually unless he or she made arrangements for cover; one of these prisons had failed even to provide the doctor with a mobile phone. At two other prisons the doctor was on duty every day and every other night and weekend.

Continuing professional development

All prisons had a commitment to continuing professional development for doctors and nurses, but all except one reported serious shortage of money to fund such programmes. At one prison, for six years staff had to use annual leave to attend courses and meetings. Twelve prisons were meeting the postgraduate education and practice requirements of the United Kingdom Central Committee for Nursing and Health Visiting (UKCCNHV).

Pharmacy and supply of drugs to patients

Although *Health Care Standards* (No 9) requires a legal and ethical pharmacy service, the prison service claims Crown immunity in this area; at the time of these inspections the inspectorate team did not include a pharmacy inspector.

Prescribing patterns varied widely. At one prison two thirds of the prison population was estimated to be receiving regular drug treatment, usually benzodiazepine tranquillisers or hypnotics. In contrast, six prisons operated a policy of not prescribing benzodiazepines or hypnotics except for withdrawal and were highly successful in weaning patients off treatment; one

of these prisons was frustrated by the speed with which patients re-established benzodiazopine prescriptions from NHS general practitioners after release before re-entering prison after a further offence.

Nursing staff often found it difficult, owing to staff shortages, to meet the UKCCNHV's standards during treatment rounds. At one prison, nurses had to give patients treatment based on unsigned treatment cards as doctors often failed either to cancel or to renew prescriptions.

Audit

Only four prisons were conducting audits of any aspect of their activity.

Discussion

Health care is, understandably, a secondary function for prisons, though they aim to achieve equivalence with the NHS.²⁰ Some health care in prisons is of good quality and broadly similar to good NHS care, but the quality of care varies. Several areas cause the inspectorate particular concern: entry procedures, ethical standards, the experience and training of medical staff, the external support available for healthcare workers, and the arrangements for purchasing health care and for audit and monitoring.

Entry procedures

Questionnaire results show that a large majority of prisoners feel able to talk freely at entry, in contrast with research findings in individual prisons. ⁹ 10 But this result hides wide variations, which may reflect differing case loads. Although entry procedures can work well in quiet prisons, in busy prisons with up to 100 prisoners arriving each day, effective screening and medical examination is virtually impossible with current working patterns.

Ethical standards

One prison had produced a "patient's charter" setting out what inmates could expect from the healthcare service and what the service expected of its patients. But in some prisons healthcare staff adopted over-punitive attitudes. One NHS general practitioner doing sessional work in prison said of mentally disturbed prisoners: "One or two nights in the special [unfurnished] rooms tends to bring them to their senses." A nurse in charge of a ward said: "What they [young prisoners] respond to best is a good shouting at." One doctor sanctioned the "nursing" of a suicidal patient naked in an unfurnished room in early spring. Some staff are acutely aware of the ethical dilemmas they face. As one doctor put it, "I am working in a substandard service, but at least I know it's substandard. Who knows who would come here if I resigned?"

Limited guidance on ethical practice is available. *Standing Order 13*, which is not mandatory, requires medical officers "at all times observe the United Nations Code of Medical Ethics and principles relating to health personnel in the protection of prisoners and detainees." The *Health Care Standards* require "strict adherence to professional standards and ethical codes." The United Nations's Declaration on the Principles of Medical Ethics, ²² the World Medical Association's Declaration of Tokyo (1975), and the World

Psychiatric Association's Declaration of Hawaii (1983) are not commonly available to doctors working in prisons who face difficult ethical decisions daily. What these principles mean to the practice of health care in prisons in England and Wales needs wide debate, with published guidance for staff.

Experience and training of doctors

Many doctors were fully trained to undertake the work they did, but in some cases doctors were not sufficiently trained to be eligible to deliver the same care in the NHS. Often they had started but not completed training in general practice or a specialty. Current criteria for appointing doctors are not sufficiently exacting: one prison specified only that they required a "registered medical practitioner" to run its primary care service.

Managing medical officers are required to ensure that staff training needs are met, and the prison service as a whole has a target of five days' training a year for each staff member. This is broadly similar to the time required to gain the postgraduate educational allowance by NHS general practitioners; it compares less well with the recommendations of professional organisations, some of which have recently reviewed the need for continuing professional development. The Royal College of Psychiatrists, for example, recommends 150 hours annually of continuing professional development. A statement of the qualifications and experience required for working in prisons, together with mandatory standards for continuing professional development, is urgently needed.

Support for staff

Healthcare staff in prisons do not have the external professional advice and support enjoyed by those working in the NHS, though many nurses said how helpful they found the Royal College of Nursing's special group for nurses working in prisons. No similar group is available to doctors, and for many the Directorate of Health Care is their only source of advice. A better external supporting structure is needed urgently.

Purchasing health care

Since 1992-3 governors have been responsible for purchasing health care for their individual prisons, with the Directorate of Health Care providing advice on strategy, policy, and standards. Effective purchasing of health care depends on an understanding of the needs of the population and on expertise in such purchasing. Needs assessments have not been done, and prison governors do not have healthcare purchasing skills. The present policy of seeking to achieve "better health services and better value for money by contracting with the NHS and other providers" 21 is unlikely to be successful unless it is backed by much greater expertise in needs assessment and purchasing. Creating such expertise in individual prisons or even in the Directorate of Health Care when it is already available in NHS health authorities would be wasteful duplication.

Audit and monitoring

The Health Care Standards cover important areas of practice from entering to leaving prison; if the

standards were fully implemented, they would greatly improve health care in prisons. But implementing many standards has important resource consequences, and with a rapidly increasing prison population and a reducing budget it is not surprising that many prisons have not reached the standards required. The Directorate of Health Care has tried to audit the implementation of the standards through the annual reports from managing medical officers, but inspection showed that annual reports not infrequently said that standards had been met when they had not. More effective audit is needed, and failures to reach the standards should be considered by the Prisons Board, 23 which agreed their introduction as a way of raising standards.

Conclusion

The Health Care Service for Prisoners is a small, isolated service that is seen as an unattractive place to work. The work need not be unattractive-much is fascinating. Many staff are well qualified and care deeply for their patients despite adverse surroundings and a difficult clientele. Some health care in prisons is of high quality, particularly where provision of health care has been contracted out to a local NHS general practice with a lead general practitioner acting as managing medical officer. This arrangement often included additional clinical services (one practice, at no additional cost to the prison, brought in the practice midwife and community psychiatric nurse). But some health care is bad; some staff are poorly qualified, and some fail to operate within a proper ethical framework. These faults require urgent correction.

Prisoners retain the right, as set out in the United Nations's declaration, to have health care equivalent to that available to those outside prison.²⁴ But for many prisoners this right is not met, and the chain of responsibility and accountability to ensure that it is met has become more uncertain now that individual prisons are responsible for purchasing health care. The position would be clarified if responsibility for health care was separated from their custodial function and transferred to the Department of Health's ministers. Back in 1962 a Home Office working party, set up to consider how the prison medical service was organised and how relations with the NHS could be improved, was told by all major healthcare bodies, except the BMA, that the prison medical service should be integrated with the NHS. The working party recommended no change.²⁵ Similar advice, given to the May Committee in 1979, was again rejected.²⁶ The "efficiency scrutiny" of the prison medical service in 1990 received evidence about many of the concerns reported in this paper and recommended the development of a purchaser-provider split in prison health care, assuming that much care would be contracted in from the NHS and that concerns about quality could be met in the contracting process.²⁷ This has not always been the case.

The response to the inspectorate's 1996 review overwhelmingly favoured integration of the NHS and the Health Care Service for Prisoners, and it showed that health authorities were keen to play a part in purchasing health care in prisons. ¹⁶ Recently France has shown that integration of prison health care into the wider national health service can succeed. The announcement by ministers in both the Home Office and the Department of Health that the provision of health care in prisons will be

Key messages

- The standard of health care in prisons in England and Wales varies widely—a few provide a quality of care close to that in the NHS, but many provide low quality care
- The commissioning of health care and the monitoring of services in prisons are inadequate
- More exacting standards for appointing doctors, a mandatory system for continuing professional development, and better support for healthcare staff are needed
- A better ethical framework is essential
- The NHS should be more involved in both the commissioning and the provision of health care in prisons

reviewed means that an opportunity now exists to resolve this longstanding problem.

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- Smith R. Prison health care. London: BMA, 1984.
- Smith R. Prisoners's health: a test for civilisation. BMI 1997;315:1.
- Gunn J, Maden A, Swinton J. Treatment needs of prisoners with psychiatric disorders. BMJ 1991;303:338-41.
- Birmingham L, Mason D, Grubin D. Prevalence of mental disorder in remand prisoners: consecutive case study. BMJ 1996;313:1521-4.
- Brooke D, Taylor C, Gunn J, Maden A. Point prevalence of mental disorder in unconvicted male prisoners in England and Wales. *BMJ*
- Mason D, Birmingham L, Grubin D. Substance misuse in remand prisoners: a consecutive case study. BMJ 1997;315:18-21.

- Bellis MA, Weild AR, Beeching NJ, Mutton KJ, Syed Q. Prevalence of HIV and injecting drug use in men entering Liverpool prison. BMJ 1997:315:30-1
- Bridgwood A, Malbon G. Survey of the physical health of prisoners. London:
- Mitchison S, Rix KJB, Renvoize E, Schweiger M. Recorded psychiatric morbidity in a large prison for male remanded and sentenced prisoners. Med Sci Law 1994;34:324-30.
- $10\,$ Birmingham L. Should prisoners have a say in prison health care? BMJ 1997;315:65-6.
- Dillner L. Shackling prisoners in hospital. BMJ 1996;312:200.
- 12 Smith R. Don't treat shackled prisoners. BMJ 1997;314:164.
 13 Lawrence Beech BA. How could I breastfeed with a man in the room? BMJ 1996;312:256.
- 14 Hall JM. Promoting health in prisons. BMJ 1997;314:302.
 15 Stockdale E. A short history of prison inspection in England. Br J Criminol 1983;23:209-28.
- 16 HM Inspectorate of Prisons. Patient or prisoner? London: Home Office,
- 17 HM Inspectorate of Prisons. Expectations of the availability and quality of health care in prisons in England and Wales. London: HMIP, 1996.

 18 HM Prison Service. Standing order 13—health care. London: Home Office,
- 1991. (As amended, 1994).
- 19 HM Prison Service, Directorate of Health Care. Health care standards for prisons in England and Wales. London: Prison Service, 1993, 1996. 20 Home Office. Custody, care and justice: the way ahead for the prison service in
- England and Wales. London: HMSO, 1991. 21 Prison Service Report of the Director of Health Care 1995-1996. London: Sta-
- tionery Office, 1997.
- 22 United Nations. Declaration on the principles of medical ethics. New York: United Nations, 1981.
- 23 Department of Health, Home Office. The government's response to the advisory committee on mentally disordered offenders' recommendations. London: DoH, Home Office, 1997.
- Committee on the Prevention of Torture and Inhuman or Degrading Treatment or Punishment. Report to the United Kingdom government on the visit to the United Kingdom. Strasbourg: Council of Europe, 1991.
- 25 Home Office. The organisation of the prison medical service. London: HMSO,
- 26 Committee of Inquiry into the United Kingdom Prison Service. Report. London: HMSO, 1979. (J D May, chairman.)
- 27 Home Office. Report of an efficiency scrutiny of the prison medical service. London: Home Office, 1990.

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Household survey of locomotor disability caused by poliomyelitis and landmines in Afghanistan

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After 19 years of civil war and the total collapse of health services, disabled people are numerous in Afghanistan. Injuries caused by landmines are a major cause of disability,1 but data on other causes of disability are lacking. We assessed locomotor disability, rehabilitation needs, and coverage of oral polio vaccine in Kandahar province, a heavily mined area in south west Afghanistan.2

Methods and results

A multistage random cluster sampling was performed in four districts of Kandahar province (population 428 390). A disabled person was defined as someone unable to walk normally without help or unable to move their hands or arms properly for a reason other than age. Poliomyelitis was defined as recommended by the World Health Organisation for lameness surveys.3 Coverage of oral polio vaccine was measured by standard WHO methods for children aged 12-59 months.4 Data were collected in June 1996 and analysed by EpiInfo 6 software; design effect was accounted for in the analysis.5

Overall 12 065 people were surveyed. The global prevalence of locomotor disability was 23 per 1000, but some populations at higher risk of disability were not included (nomads, soldiers, and the residents of a few mined villages). War related injuries were the leading cause of disability, but they affected men almost exclusively. Other causes of disability were medical problems and other traumas. More people had been disabled by poliomyelitis than by landmines (table). Among those <15 years old the leading cause of disability was poliomyelitis (4.8 per 1000). Of the 275 disabled people, 204 (74%) had a disability that required an orthopaedic device. Though the rehabilitation needs of people who had had a limb amputated were adequately covered, the rehabilitation needs of those with other disabilities

Of the 327 children surveyed for vaccination coverage, 11 (3%; 95% confidence interval 1% to 6%) had received three doses of the vaccine according to their immunisation cards and 43 (13%; 7% to 20%) had according to their carer.