to be expanded to help keep more old people in their own houses, but the Dutch to whom I spoke did not believe that enough money would be found for the expansion needed. As in Britain and Denmark, the government has mounted a public relations campaign to convince the population that old people are best cared for in their own homes with the support of their neighbours and family, with help from volunteers and from home nursing and home help services. Certainly there has been some increase in the numbers of home nurses, but other support services (such as helps) have been frozen or actually declined a little.

Administrators of nursing homes can produce objective evidence of a recent decline in the quality of care provided for the elderly. Projections based on demographic change have shown that 5000 additional beds will be needed by the end of the decade. No one now believes that these new nursing homes will be built. Waiting lists are lengthening substantially: in Eindhoven (population 200 000) the number waiting for admission to psychogeriatric beds has doubled (from 90 to 180) in the past 12 months. Patients in hospital beds (who make up

about 25% of all admissions to long term psychogeriatric care) are now having to wait for between six and 12 months for transfer to a nursing home—only two years ago the average delay was only one month.

Those doctors, nurses, and administrators to whom I talked saw the future as depressing. Until very recently the system had functioned efficiently and compassionately, with few old people having to wait more than a few weeks between assessment and admission to a nursing home. Now the administrators have been told to cut their budgets by 3% in the coming year; new building has come to a virtual end; and—remarkably quickly—free movement of the elderly from their own houses to residential units or nursing homes has slowed down and in some cases stopped. The presence of demented old persons in units meant for the physically disabled is lowering the quality of life for the non-demented—a problem all too familiar in Britain but new to the Netherlands. Resignedly, however, the health professionals accept that the economy is in a poor state, and they believe that the care of the elderly will have to worsen substantially further before there is any real public protest.

The State of the Prisons

The physical health of prisoners

RICHARD SMITH

The uninitiated might imagine that dreadful diseases are to be found in our thoroughly unpleasant prisons and that prison doctors are specialists in dealing with these conditions. It was true at the end of the eighteenth century that prisons had their own disease—gaol fever, a form of typhus—but now the diseases to be found in prisons are the same as those in the community, only some are much commoner behind prison walls. The special skills required of a prison doctor are less to do with knowledge of disease and much more to do with being able to practise medicine within difficult conditions.

Conditions of prisoners on entering prison

Any doctor who has ever worked in the casualty department of a large hospital in an inner city would recognise the chaos that prevails in the prisons that take prisoners directly from the street. At Brixton, for instance, which is London's main remand prison for men, about 200 new prisoners come in each day, and many of them are in a desperate state. Many have spent some time in police cells, but few have been "sorted out." The mad, the bad, the sad, the homeless, the filthy, the infested, the drunk, the high, the dangerous, the grief stricken, and the suicidal pour into Brixton every day and have to be quickly sorted out into those needing close medical attention, those who need to be watched, and those who will be safe in the main body of the prison.

All of them are searched, bathed, and examined, usually by part time doctors who are also local general practitioners but sometimes by full time prison doctors, but the examination is necessarily brief. This is triage, as in a wartime casualty station, and any diabetic or epileptic or prisoner with a heart problem, no matter how stable his condition, is likely to end up in the hospital for a while at least, and anybody showing the least sign of mental instability will be sent to the euphemistically named "psychiatric wing."

I know of no detailed study of the medical state of prisoners entering British prisons, but a study was done on 1420 prisoners entering the New York City correctional facilities over two weeks in June 1975.¹ Thirteen hundred of the prisoners were men, and 120 women; three quarters were under 30; and 57% were black, 24% Hispanic, and 17% white. Forty one per cent of the prisoners gave a history of illicit drug use, and a previous study reported in the same paper had found that urine samples from 36% of 485 adult male prisoners taken on admission contained either opiates, methadone, barbiturates, or amphetamines. In addition 18% of the men and 14% of the women had a history of alcohol abuse.

More than a quarter of the prisoners reported an illness at the time of admission, and 60% received at least one diagnosis. Four per cent gave a history of epilepsy, 8% of asthma, and 8% of hepatitis. On examination new trauma was seen in 10% of the men and 17% of the women. An abnormality of the mouth and teeth was noticed in 18%, and a detailed examination of the 257 with dental findings showed that two fifths had missing teeth and a third multiple caries. Seven per cent had eye abnormalities, and 46% skin abnormalities—mostly scarring secondary to drug use, tattoos, non-specific dermatitis, and fungal infections. When it came to making an examination of the prisoners' mental state, 13% of the total and 10% of the women were judged to be

suffering from a psychiatric disorder; also 2% of the men and 4% of the women were diagnosed suicidal.

Among the women 4% were diagnosed as having a genito-urinary disorder and 3% as being pregnant. More recent data from women admitted to Rikers Island, a prison in New York, showed that 7% of the women were pregnant, 10% had untreated syphilis, and 10% untreated gonorrhoea (cited by Dr Nancy S Shaw, second international conference on prison health care, Ottawa, 1983).

Nine per cent of the men and 10% of the women in the New York study were prescribed drugs on admission, and a quarter of the men and a third of the women were referred for further medical care. Seven per cent of the men and 5% of the women were admitted to areas where they could be observed because of worries about their mental state.

This is a depressing toll of illness, and I suspect that a similar study of those prisoners admitted to Brixton or Holloway would not find big differences. Drug abuse is not yet quite on the same scale as it is in New York, but it is becoming an ever more important problem in our prisons.²

Problems of "settled" prisoners

At the CIBA Foundation symposium on the medical care of prisoners and detainees in 1972 Professor Norval Morris (see box) said that he thought that age for age prisoners suffer a higher incidence of most illnesses.³ Most prison doctors would, I suspect, agree, and the only detailed, comprehensive study that I know (again from the United States) comparing the health of prisoners with that of people in the community certainly showed a higher prevalence of most conditions.⁴ It must be remembered that most prisoners are from social classes IV and V, and so a greater prevalence of many illnesses would be expected automatically if prisoners are compared with the community at large rather than with controls from the same social classes. Certainly, the conditions that are more common among lower socioeconomic groups are to be found often among prisoners.

Almost 95% of British prisoners are males aged between 14 and 50.⁵ This is a group that has a very low consultation rate with general practitioners—less than three times a year.⁶ Yet among 42 000 male prisoners in England and Wales 3200 report sick every day. This gives an annual consultation rate of something

like 26 consultations annually for each prisoner. For women the figure is 102 consultations annually. The figure for the average number of daily consultations for men has gone up by a third in the last three years, while the average for the population has risen by only 5%. The annual statistical report for the prison department in England and Wales also shows that each male prisoner received an average of 0.32 treatments daily, while women prisoners receive 1.22.¹ These treatment figures are not quite as extraordinary as they seem for they include all dispensing of drugs, and a prisoner who is taking a drug that has to be

FIG 1—Toilet facilities in Camphill prison.

"The doctor and the attendant medical staff occupy a peculiarly sensitive position in the prison community. It is always a mistake for one in a hurry to ask a prisoner 'How are you?' He will tell you—at burdensome length. Hypochondria is chronic and endemic in prison. And so is malingering. And so also, I believe, age for age, is a higher than average incidence of most illnesses. Hence the task of the prison doctor is to meet genuine medical needs without himself becoming cynical, assuming that he is merely the constant butt of the prisoners' efforts improperly to manipulate him; this is no easy challenge. Pressures to debase the healing profession pervade prisons.

What underlies this is, of course, the sheer sensitivity of the doctor-patient relationship in the penal institution, where freedom of choice both for doctor and patient is inexorably limited by the pressures of an unreal social setting. Conflict and hostility tend to replace medical trust, and this is true even when medical services are of high quality and facilities are adequate to medical needs. Where, as is not unusual, services are less ample, diligent, and skilled and facilities antique rather than sufficient, these conflicts are exacerbated."

Norval Morris

given four times a day will thus be recorded as receiving four treatments daily. Prisoners are not given drugs to take themselves, and they have no access to even aspirin. The numbers of treatments for each prisoner daily have not increased in parallel with the increase in the consultation rate—indeed, there has been no increase at all in the last five years. The statistical report for 1982 also shows that 39 700 men and 3900 women were admitted to prison hospitals.

These sorts of figures are seen in prisons all round the world. Data from Tennessee in 1972 show that male prisoners under 45 reported acute sickness at a rate 3.2 times above the national average and those over 45 at 4.5 times.⁸ Certainly, the picture is the same in Scotland and Northern Ireland. Indeed, one doctor I spoke to in the Maze prison had seen an entire H block (about 125 men) in one surgery that took from 9 o'clock in the morning to 4 o'clock in the afternoon. This was, of course, part of a protest, but the doctor's problem was that he could not refuse to see a prisoner who reported sick and among the 125 men there might have been one or two who were genuinely ill.

This last example illustrates that there are many reasons for a prisoner to consult a doctor apart from a physical illness that the doctor can treat. When the cells are unlocked in the morning a prisoner can request either to see the governor or one of the welfare workers, including the doctor. Any prisoner who feels the least bit shaky, does not want to work, wants a change from routine, is worried about his wife, feels depressed, wants to complain about the food, or has any one of a thousand minor

FIG 2—The gymnasium at Wormwood Scrubs.

(and sometimes serious but not strictly medical) problems may put down to see the doctor. The prisoner can do little for himself—not even stay in bed, take an aspirin, or make a phone call—and so it is not surprising that the consultation rate is so high. We know that more than three quarters of all symptoms experienced in the community are managed without going to the doctor.⁶ but in prison the resources for a prisoner to manage his own problems are not to hand.

The problem is that the doctor is thus confronted each morning by a huge number of patients, many of whom he cannot help much. Yet he has to get through them all, and many surgeries are undertaken at a breathtaking pace—even by the standards of inner city general practice. The hope is that these prisoners who might benefit from longer sessions with a doctor will be sorted out and referred to the full time doctor, who in many prisons will be able to be quite generous with his time. This time to listen is important because some prisoners have problems that spill over into the frankly psychiatric, and many more are sad people weighed down with loneliness, guilt, and a sense of failure, who are living in a horrible, squalid environment and are separated from their friends and relatives.

Diseases of prisoners

Professor John Gunn has shown that epilepsy is commoner among British prisoners than among the general population,⁷ but apart from that study, published in 1969, scientific studies comparing the physical health of British prisoners with that of the general population seem to be scarce if not non-existent. Yet there is much concern that those sent to prison may not only be having their liberty taken away from them but may also be being sent to places where their health will be put in jeopardy. A mysterious article in a recent issue of *The Times* spoke of prison doctors being “disturbed by the number of prisoners who developed septic cuts because of dirty conditions and shortage of bathing facilities.”⁸ The main emphasis of the article was the familiar one that a prison doctor who wrote to *The Times* about these problems had been barred from speaking to the press. All too often the policy of opening up the prisons that is advocated at the top does not extend down to those working in the service. The prison doctors had, according to *The Times*, “repeatedly drawn attention to hygiene standards . . . ‘but little or no action has resulted.’ ”

The article raised again the story that the blood transfusion service will not accept blood from prisoners for direct transfusion because of fear of hepatitis. In 1974 the North West Metropolitan Blood Transfusion Service refused to accept blood from prisoners in Wormwood Scrubs for the same reasons. Given the high number of opiate addicts in prisons, the high incidence of venereal disease among those admitted, and the

commonness of homosexuality it is not surprising that hepatitis is common. But it would be nice to know the exact incidence of hepatitis among prisoners and whether the prevalence of serological evidence of infection increases during prisoners’ sentences.

Evidence from the Tennessee study shows that prisoners between 17 and 44 reported infective and parasitic conditions at a rate three times that of the average American population.⁵ The crucial word in that last sentence is reported, and it must be remembered that this is very different from saying that infectious and parasitic disease is three times commoner among prisoners than among the general population. The conditions that the Tennessee study found were most high among prisoners compared with the general population were gastrointestinal conditions: among prisoners aged 17 to 44 ulcers were three times commoner, abdominal hernias three times, and “chronic enteritis or ulcerative colitis” fourteen times commoner. Prisoners over 44 reported chronic digestive conditions 20 times more often than the comparable population outside prison.

When all the objective data are so weak, I think it is worth repeating what several prison doctors said to me: that prison seems to age a man prematurely. In the Maze prison I stood with a doctor of long experience and watched a prisoner who had been in for more than 15 years jogging around one of the compounds. The doctor had known the prisoner, who was still in his 50s, for years and said he could hardly believe how much he had aged. Another prison official at the Maze observed to me how he had gone away for a few years and when he came back was astonished to find that “all the young tearaways had turned into geriatrics.”

Health effects of overcrowding

When so little serious research has been done on the health of prisoners at any time, it is not surprising that little definite can be said about the health effects of overcrowding. Overcrowding must put all sorts of extra pressures on prisoners and so might affect their mental health; it might, too, mean that standards of hygiene and sanitation decline so that infections and infestations become more common. But hard evidence that it does have these effects is hard to come by. Overcrowding might be expected to raise suicide rates because it makes prison life more intolerable, or then again it might lower them because it is more difficult to kill yourself if you are in a cell with two other men. Both lines of argument have been advanced, but in Britain it is not possible to find any straightforward correlation between suicide rates and degree of overcrowding.

Research carried out in the United States does, however, suggest a correlation between death rates and overcrowding.⁹ Figure 3 shows the striking correlation between prison population and death rates in the psychiatric unit of the Illinois correctional system—in the years of the study the accommodation area was unchanged. Many of these deaths are

FIG 3—Variation in prison death rate in the psychiatric unit of the Illinois correctional system related to the variation in the population (examination area remained constant).

probably due to homicide, which is much commoner in American prisons than British ones. Indeed, a study from Oklahoma, reported in the same United States Department of Justice publication,⁹ showed a statistically significant increase in non-natural deaths in years when the prison population was high compared to when it was low. But another study in the publication—this time from Texas—showed that actual death rates among prisoners over 50 (for all deaths not just non-natural ones) were 220% above expected death rates in years of high population density.⁹ The same report also produces evidence that overcrowding leads to higher rates of illness complaints, suicides, psychiatric commitments, and violent confrontations between staff and inmates. A separate American study has shown that the blood pressure of some prisoners is raised by overcrowding.¹⁰ In contrast, Dr Dorothy Speed has produced figures from two British prisons showing that the incidence of recorded violence fell as overcrowding increased.^{10a}

In the last analysis, overcrowding is like unemployment in that it seems likely that it has an adverse effect on health (and most unlikely that it has a beneficial effect) but evidence to prove the link is deficient—particularly in Britain. The main reason that it's deficient in Britain is, of course, that nobody has bothered to study the effects, despite the fact that many of our prisons are grossly overcrowded and have been so for a long time (3 December, p 1705).

Drug problems among prisoners

Alcohol problems are common among prisoners. Some prisoners are in prison because of their drink problem; these are the so called habitual drunken offenders who pass in and out of prison, usually serving short sentences. All that prison has to offer these men is detoxification, a month or so without drink, a roof, and a reasonable diet. It has been agreed for more than a century that prison is not the place for these men, but attempts to find a better place have been singularly unsuccessful.¹¹ Some small attempt is made to help them within the prison system—for example, at Low Moss prison in Scotland—but such attempts are scattered and poorly supported.

But alcohol problems are also common among those prisoners who could not be called habitual drunken offenders. Professor Gunn and others found in their study that of 467 prisoners who answered questions on alcohol consumption 15% described themselves as problem drinkers and 11% as heavy drinkers.¹² American studies have consistently found a high level of drinking problems among prisoners, and whenever comparisons are possible the problems seem to be commoner among those inside than those on the outside.¹³ Studies of young offenders in both Scotland and England have found high prevalences of drink problems.¹⁴

But alcohol does not present a serious problem inside the prisons because it is not available. Some hooch is occasionally brewed up illicitly, but it is hard to hide bottles and hard to smuggle them into the prison. But, almost paradoxically, absence of alcohol makes it difficult to counter drink problems inside prison. Alcohol becomes a problem only when the prisoner is released from the unreal, alcohol free world of prison. Nevertheless, some limited attempts to help prisoners with drink problems have been made inside the prison system—for instance, in the Wormwood Scrubs annexe.

The annexe also attempts to help prisoners who are addicted to opiates. Although the problem of drugs among prisoners and in prisons has not yet reached the scale of those in New York, all the signs are that drugs are rapidly becoming a more serious problem in prisons as well as in the community. In 1982, 1666 prisoners were reported as having some dependence on drugs

compared with 1558 in 1981 and 1003 in 1979.¹⁵ These figures, like all figures for drug addiction, have to be treated with caution, but there seemed agreement among all the prison doctors that I spoke to in England and Wales, Scotland, and Northern Ireland that this problem is increasing. The Advisory Council on the Misuse of Drugs, which looked into drugs in prisons in 1980, also thought that it was a growing problem and recommended closer cooperation between prison doctors and the NHS drug treatment clinics as well as the expansion of specialised units like the annexe and that at Holloway within the prisons.³ There are no new units as yet, but there may have to be eventually.

Drugs present much more of a problem within prisons than alcohol because they are much easier to smuggle in. Many prisoners bring drugs into prisons inside their bodies, and a morning duty in many prisons around the world is to pick up the tennis balls full of drugs that are hit over the wall during the night. In some prisons in the Netherlands, the USA, and Australia opiates are said to be so freely available that it is possible to become an addict while in prison. I could not find any evidence that the problem is that bad in Britain, but certainly in many prisons it is not hard to come by cannabis and other "soft" drugs. The use of soft drugs is in many ways more of a security problem than a medical one, but the deputy general director of the prison department makes particular reference to it in his annual report for 1982.¹⁵

Conclusion

From this ragbag of old studies and American studies, anecdotes, rumours, impressions, and figures from the prison department a hazy picture emerges of the physical health of prisoners, and Professor Morris's belief that prisoners have a higher than average incidence of most illnesses compared with their counterparts in the community seems to be confirmed. In the next article, I will consider death in prison, and later the problems of the mentally disordered within the prison system.

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