castrating slaves goes back to Mesopotamia and to Queen Semiramis of Assyria, being later transmitted to the Persians, the Greeks, and finally from the Byzantine empire to the Turks. The slaves were often captured at the upper reaches of the Nile and became objects of a flourishing trade. They were operated on in transit, with a curved, sharp knife, and buried up to the neck because desert sand was regarded as balm to induce healing. Many of the slaves died, perhaps as many as 5%, largely from infection or anuria due to local oedema, depending on how extensive an operation was performed. The survivors became an expensive merchandise, growing up hairless, fat, flabby, often mean, with beautiful voices. Some became exceedingly powerful, in charge of the seraglio or even of the empire. Most powerful was the chief black eunuch, the highest officer in the empire after the grand vizier, powerful, wealthy, most bribed of all functionaries. Splendidly dressed, often concealing a silver quill in their turbans to relieve urinary retention, the eunuchs guarded the sultans' wives and concubines as they bathed and intrigued and lived a life of inactivity and boredom.

Relief from the waltz and the tango

But what is this boredom? A disease, like syphilis, that has been attributed to different nations? A North American epidemic, according to the American Psychological Association, of assembly workers pushing the same button day after day, of people staring blankly at television screens and wondering if this is all there is to life? An English disease of the traditional novel in which a lord in chequered coat crisscrosses the continent with his butler to relieve his ennui? A morbus gallicus that may have afflicted

Stendhal, Flaubert, and Baudelaire, and earlier may have even provoked the bored provincials to rise because the king had forced all the non-boring people to move to Versailles? The "taedium," as the Romans called it? A Russian illness, temporarily relieved when the boring Lenin, who had written so many boring pamphlets, made an exciting revolution that Trotsky promised would be permanent, until the boring Stalin killed it with terror and more boredom? A problem, too, for the Chinese, so bored during their revolution that Chairman Mao had to bring back the waltz and the tango. And it was boredom that drove Kierkegaard to the rotation method, a perpetual and capricious changing of relationships and occupations. For he deemed boredom to be the root of all evil, it rather than idleness being the devil's pillow.

But the ever optimistic popular magazines recommend thousands of remedies for boredom. Make friends, get a dog, gamble, take a genuine interest in people, try new hobbies, work in the garden, or learn to knit. Don't try to sleep it off or you will merely wake up bored. Magazines for retired doctors suggest buying a foreign car for which spare parts are hard to find, or a condominium in Florida that will open up the world of lawyers, decorators, plumbers, lawn committees, and condominium associations. We learn that boredom makes successful men suddenly sell their business or inexplicably resign from successful positions. Boredom, like Latin, may be good for you if it throws you into a library where you acquire a liking for the smell of old leather and company of great authors.

The less introverted, and those who score high in the sensation seeking test, however, may have to try skiing, scuba diving, mountain climbing, or insider trading, all of which promise an exciting but not necessarily long life.

Housing and Health

Getting things done

Stella Lowry

In previous articles in this series I have discussed how housing can affect health and identified some of the worst features of housing in Britain today. Despite building regulations and public health laws many people live in conditions that would have been familiar to the Victorians. In this final article I examine how the residents of two of the worst housing estates in Britain have tried to put things right.

Divis

The Divis flats have been described as "the youngest slum in Europe," yet ironically they were built as part of Belfast's slum clearance programme in the 1960s to replace mill workers' houses in the Old Pound Loney district.¹ There was religious and political pressure to keep the old community intact, and the planners devised a system of 13 seven storey deck access blocks and a 19 storey tower block, providing accommodation for nearly 3000 people on the old site in an area of 6025 hectares (14.8 acres).

The developers in Divis, as in other parts of Britain, were offered subsidies to use new building techniques, and by the early 1970s the residents were noticing problems now known to be common in such systems built properties. Cracks in the cladding, poorly constructed joints, ill fitting windows, cold bridging

between slabs, and poor insulation made the flats cold and damp. Flat roofs encouraged penetrating damp. Asbestos had been widely used for insulation, including blue asbestos rope around the window panels. Calcium chloride had been added to the cement to speed the drying time, and when the concrete later cracked water penetrated and chloride ions attacked the steel supporting beams. There were problems with the sewerage system, and flooding was common. Rats and cockroaches colonised cracks in the structure.

The residents in Divis suffered the emotional strains found in similar blocks across Britain. Poor maintenance added to the squalor, and young mothers and old people were especially isolated. Unemployment and poverty were rife. Added to these problems was the additional strain of living in a politically sensitive part of Northern Ireland. The Divis complex is a nationalist stronghold. Many of its residents have been interned, some have been shot, and the complex has been the scene of several pitched battles with the army. There is constant military presence in the area, including frequent helicopter surveillance, and homes are often raided and searched.

In 1986 the Divis Joint Development Committee, a voluntary group of local residents and social workers, commissioned a survey of the health of residents.² Conditions in Divis were compared with those in the

Twinbrook estate in west Belfast. Twinbrook consists mainly of houses with gardens—but, like Divis, it is a deprived area. At the time of the survey 82% of adults and 85% of children in Twinbrook were living in poor households (with an income of 140% of the supplementary benefit rate) compared with 96% of adults and children in Divis.

A questionnaire was used to collect information about health, and major differences were found between the two estates. Respiratory and gastrointestinal illnesses were more often reported in children from Divis, and nearly a third of children had been

seen by a general practitioner during the previous month, compared with less than a tenth of those in Twinbrook. Adults in Divis were about four times as likely to report that their health was poor as those in Twinbrook and nearly twice as many in Divis had a longstanding medical problem.

The study had been commissioned to further the struggle for better housing, but in the end one of the main disadvantages of living in Divis (the political situation) proved the key to success. Since the late '60s the residents had wanted total demolition of the complex, but the Northern Ireland Housing Executive favoured rehabilitation of the blocks. Official reports estimated that rehabilitation would cost £5m and extend the life of the blocks by 15 years. Total replacement would cost £15m, and the new houses would last 60 years. Heated exchanges between the residents and the housing executive led, in 1970, to the offer of a compromise: demolition of two blocks, rehabilitation of 11, and the building of 100 new houses, at a total cost of £8m. But the residents continued to demand total demolition.

In 1979 the Divis Demolition Committee was formed. This group of residents organised a campaign of wrecking flats as they became empty in an attempt to force the housing executive to meet their demands. The campaign received a boost in 1981 when three ringleaders pleaded guilty in court to charges of causing malicious damage, and the judge gave only a nominal fine.

In 1985 the Town and Country Planning Association mounted an exhibition in London about conditions in Divis. This caused an outcry in the national and international press. In October 1986 the Northern Ireland housing minister announced that all of the deck access blocks in Divis would be demolished and the residents rehoused. The official explanation for the decision was economic, but political embarrassment caused by international publicity about the appalling conditions in Divis must have had some influence. "The troubles" may have been a strain on the residents of Divis, but they also allowed poor housing to become a political issue.

Easthall

A survey by the City of Glasgow District Council in 1987 found that nearly a third of the city's houses were damp.³ More than half had no central heating, and less than a quarter had full central heating. Almost a third of Glasgow's council tenants could not afford to run the heating installed in their homes.

Easthall, part of the Easterhouse area of north east Glasgow, has had more than its share of problems with damp, but it also has an active residents' association that is determined to put things right. In 1984 they set up a Dampness Group which discovered that many homes in the area were badly affected. Local residents were disheartened by the failure of the housing department to take any effective action in response to complaints. The best that happened was a temporary repair job with fungicidal washes, which worked for about three months, or dry lining of the walls, which camouflaged the problems for about a year.

The residents commissioned the Technical Services Agency to find out what was causing the dampness and whether it could be cured.⁴ A survey disclosed that many of the houses were not brick buildings, as the residents had believed, but Wilson blocks—two leaves of concrete with metal ties between them. Damaged joints between the blocks of concrete had allowed water to permeate by capillary action, and moisture had crossed many of the integral ties and soaked the inner walls. The insulation properties of these houses were very poor, and it could cost up to £50 a week to

Divis—the youngest slum in Europe

New two storey houses are replacing the old blocks in Divis—why not elsewhere too?

RICK MATTHEWS

Wilson block houses in Easthall

heat them adequately. (Residents in Easthall cannot afford to spend this much on heating; even by restricting the amount of heat used most spend about £15 each week on fuel.)

The residents had also been concerned by large cracks in the walls of their homes, and exploratory digs confirmed that the buildings had moved on their foundations. Full surveys confirmed a diagonal crack on the third floor walls in all of the Wilson block houses, and this was attributed to the use of a poor mix of concrete. Poor maintenance of window frames, roofs, and gutters throughout the estate added to the problems.

In 1985 the residents presented the results of their study to the housing department of Glasgow district council, and the long battle for action began. The council agreed in principle that something should be done, but said that there was no money available. In the months that followed the residents had many unproductive meetings with officials and gradually accumulated a mass of evidence including photographs, maps, plans, and temperature profiles that they combined into a poster presentation. By mounting this exhibit at public meetings the residents were able to generate a great deal of badly needed publicity.

In 1987 the residents hit on their most effective scheme for generating interest and action. A "Heatfest" was organised in association with the Scottish Solar Energy Group, the West of Scotland Energy Working Group, the Technical Services Agency, and Glasgow district council. Architects, surveyors, engineers, housing managers, and tenants' representatives from all over Britain attended three days of seminars and workshops culminating in a competition for the best solution to Easthall's problems.

The winning scheme incorporates a glazed buffer space behind the kitchens and bathrooms. This could be used for washing and drying clothes, so removing a source of condensation from the main part of the house. Existing verandahs would be enclosed and glazed, and solar panels would collect heat and direct it

to the stairwells. Heat collected from solar panels or special roof tiles could also be used to preheat water, so reducing fuel bills. Insulation of the external walls would reduce heat loss, and gas central heating would provide the most economical heat source.

The planners calculated that the "Heatfest house" would provide value for money. The current expected lifespan of the Wilson blocks is about 15 years, but the proposed scheme would add a further 20 years at a unit cost of £15 000-17 000. Because fuel bills would drop to about £7 a week tenants could afford some rent increases that would help to meet the capital costs.

The winning package was offered a European Community grant of £400 000 as a passive solar demonstration project. Such grants are expected to cover 40% of the cost of demonstration projects, so the Easthall residents looked to Glasgow district council for the balance. The council had participated in the Heatfest and had mentioned the scheme in its own press releases as part of the World Health Organisation's healthy cities project, but it was slow to find the money needed. Last summer it looked as though the residents might lose their opportunity, as the offer had a time limit. They learnt only in January of this year that the council would provide £950 000, enough for a three year demonstration project of 36 houses. The scheme will be monitored by the Mackintosh School of Architecture in Glasgow, which will report to the European Commission, and the residents also intend to monitor the health of people in the Heatfest houses.

Comment

Studies of the effects of housing on health are complicated by confounding variables such as poverty, unemployment, and social class. It is not always obvious what should be measured, or how, or when. Self reported results may be biased, but objective measurements may underestimate effects. Standards that are acceptable for most people may be too lax for vulnerable groups like the elderly and children.

It is difficult to prove that housing harms health as defined by a strictly medical model, but if we choose the World Health Organisation's concept of health as a state of emotional and physical wellbeing¹ the effects are obvious. Modern medicine is as much about prevention as cure, and doctors have a role in campaigning for better housing conditions in Britain. Providing more and better housing is a cost effective way of improving people's health.

Easthall is typical of estates all over Britain. The residents have known for years that their living conditions are harming their health, but action is rarely taken on the basis of such claims. The residents have shown initiative and suggested a cost effective solution to their problems, but official help has been slow.

Conditions in Divis are bad, but they are no worse than in many other parts of Britain. Yet the old blocks are being demolished and new two storey houses are already taking their place. Officially this is the result of sound economic reasoning, so why are the economics so often ignored elsewhere? It should not be necessary to harness campaigns for good housing to political embarrassments like the tragedy of Northern Ireland before the government is shamed into action.

1 Graham D. *The Divis report. Set them free.* Belfast: Divis Residents' Association, 1986.

2 Blackman T, Evason E, Melaugh M, Woods R. *Housing and health in west Belfast. A case study of Divis Flats and the Twinbrook estate.* Belfast: Divis Joint Development Committee, 1987.

3 Robertson DS. Attacking the dampness plague: Glasgow's response. *Health Promotion* 1989;4:159-62.

4 Easthall Residents' Association. *Easthall—hard to heat, hard to beat.* Glasgow: Community Resources Project, Glasgow College of Technology, 1987.

5 World Health Organisation. *Alma-Ata 1978; primary health care.* Geneva: WHO, 1978. (Health for all series. No 1.)