

The pathology of planning*

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Summary

A study of morbidity on a new housing estate reveals a higher prevalence rate of both physical and mental illness. Much of this is due to physical factors associated with the estate which could have been avoided in the light of previous experience had more attention been given to detail. The proposals embodied in the management arrangements for the reorganised National Health Service should provide the machinery to prevent these faults recurring.

Urban renewal, the euphemistic term for slum clearance and subsequent redevelopment, is a highly emotive subject as it affects the lives of many people and is used as one of the yardsticks of success by both major political parties. At the time when increasing emphasis is being placed on taking medicine into the community and closer integration is being encouraged with the local authority services it is opportune that doctors in general practice, the hospital medical service, and community medicine, should study the medical implications of this problem.

The *raison d'être* for slum clearance is the poor sanitary standards of these dwellings and the person responsible for initiating a slum clearance programme is a doctor. Under the Housing Act of 1957, one of the many pieces of legislation introduced by successive governments in the post-war years to deal with this problem, the Medical Officer of Health informs his local authority of those dwellings which he deems to be unfit by the criteria laid down in the Act.

In the immediate post-war years the major problem was homelessness and overcrowding, the result of bomb damage and the return of ex-servicemen and women most of whom were anxious to start families. The only solution was the creation of new housing estates on the periphery of the larger urban areas and the development of new towns. Combined with this was the unsatisfactory state of many older houses which lacked the basic amenities of life. Of the many publications on the problem in Liverpool one of the most detailed is that of Muchnick (1970).

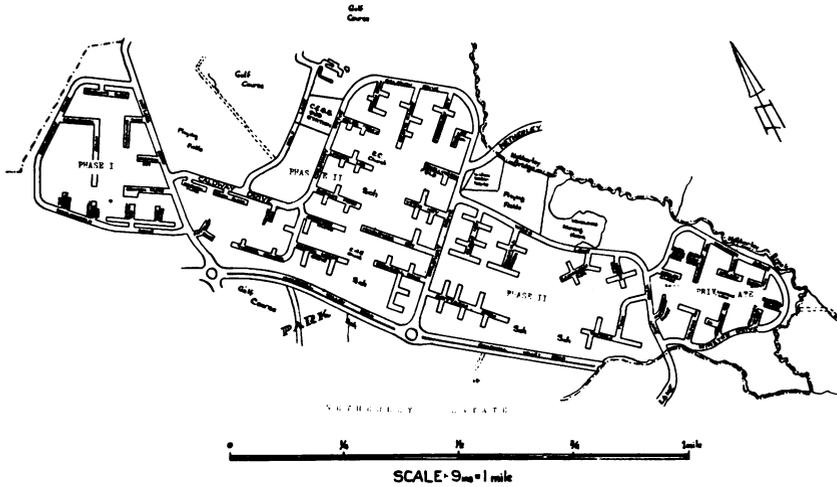
The estate

The estate is the latest of several which Liverpool has built during the last 20 years to help alleviate the twin problems of overcrowding and slum clearance. In keeping with modern urban design the basic plan separates the motor car from the pedestrian by providing traffic-free pedestrian throughways. Pedestrian precincts, in the form of court dwellings, existed in Liverpool more than 100 years ago.

The main throughway runs longitudinally across the estate, a distance of about a mile and a half, with underpasses beneath the distributor roads. The conventional straight or slightly curved streets have been replaced by blind access roads coming off the distributor road at right angles (figure 1).

No longer are the even numbers on the right and the odd on the left; here the numbering runs consecutively in an anticlockwise manner with the first house on the left, as one enters the street and the last one opposite it on the right. Within the streets

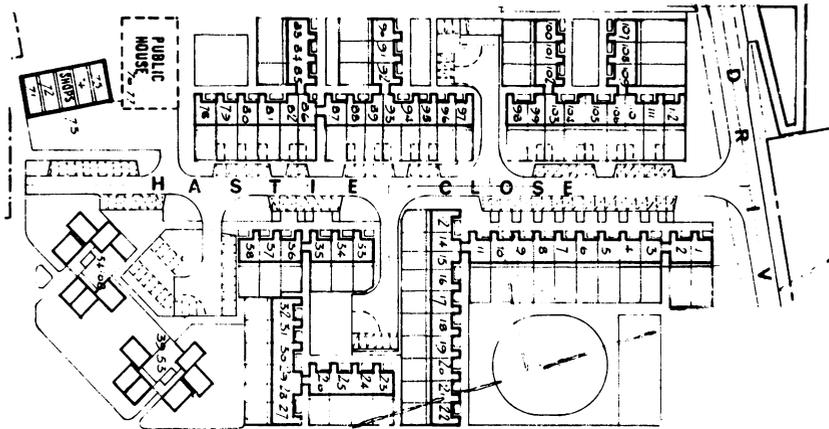
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NAYLORSFIELD, NETHERLEY & WOODLANDS ESTATES.

Figure 1

the houses run a tortuous course like a malignant racemose gland. Often the houses are not consecutively numbered (figure 2), e.g. number 106 can be next door to number



Hastie Close

Figure 2

110. This is a hazard to those who provide services in the area, not least to the general practitioner making home visits at night or in fog. Furthermore, no two streets have identical patterns. To make life more difficult, in some streets houses are mixed with cluster blocks of flats or mid-rise blocks of flats. Many of these difficulties could be overcome by a more practical and realistic approach to the identification of both streets and individual houses.

The dwellings

The detailed designs of the dwellings themselves present difficulties. A brick wall built in front of each front door obscures the number plate of the house, which is incorporated in the letter box. It is not only difficult to identify a particular house but impossible to carry a patient out on a stretcher.

The open plan design of the living area, with no central heating upstairs, limits the privacy of children wanting to study or a person wishing to sit quietly on his own.

The mid-rise blocks of dwellings, combining single-storey flats with split level flats (maisonettes) is a new concept in planning. Many of these blocks are 250 yards long, some longer and others shorter, most are eight storeys high but a few of the smaller ones are only five storeys. In cross section they resemble a Neapolitan sandwich (figure 3). For most of these blocks one lift shaft, with three lifts, serves three blocks.

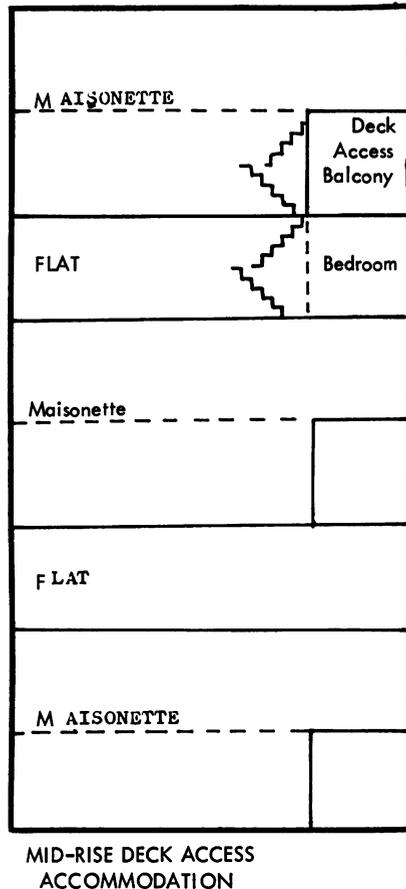


Figure 3

The lift shaft and individual blocks are connected by covered bridges. The walking distance from the nearest point of access for a car to some flats or maisonettes is more than a third of a mile. Access to the dwellings in these blocks is at three levels, ground floor, third floor and sixth floor. On the third and sixth floors deck access balconies, wide enough to take a milk float, run the complete length. The ground floor of each split level flat is at access level and the bedrooms are upstairs, but all the single-storey flats are below access level, so that they are 'cellars in the sky'.

On opening the front door of a flat, one meets the first of two flights of stairs, each of seven stone steps, which lead down to the flats. At the bottom of the first flight there is a small landing and one has to turn 180° to descend the second flight. This meant that one patient who died had to be laid out on the balcony of the block as the undertaker was unable to get him out of the flat in the coffin.

The bedrooms in the single-storey flats are situated beneath the access decks where

the milk floats begin their rounds at 06.30 hours and where residents returning home late at night congregate and often make a lot of noise. None of these flats has been fitted with an alarm system by the Corporation and with the inability to watch people passing by, a sense of isolation generates anxiety in many of the elderly. Groups of residents, themselves suffering financial difficulties, are valiantly trying to raise funds to have bells installed.

The estate was planned to receive a balanced population and the single-storey flats were intended for senior citizens. A number of recommendations have been made by the Ministry of Housing and Local Government (1958 and 1961) on the provision of flatlets and bungalows, preferably with wardens, but there are few flats on the estate which do not involve climbing stairs. There was no medical assessment of tenants for these flats. Many people were really unsuited for them but they accepted tenancy to escape the vandalism which was prevalent in clearance areas as the houses became vacant before demolition, and which damaged the few houses that still remained occupied.

As soon as the shells of these flats were built it was apparent that the arthritic, the bronchitic, and the patient with myocardial insufficiency would encounter difficulty in climbing the stairs each time he had to answer the front door, but it was 18 months before the Housing Department was persuaded to change its policy and the flats were offered to anyone on the housing list willing to take them. By this time there were many elderly people already living in the flats. To the newly-weds these flats looked attractive, but now, with young babies, they too, are experiencing difficulties in getting prams in and out.

The residents have been rehoused on to the estate for two main reasons, slum clearance and housing application; the number who are given new homes for reasons of health does not exceed more than 400 for the City as a whole, out of about 10,000 medical certificates which are submitted annually. Nearly all the houses are occupied by families from compulsory purchase order areas, whereas only the earlier occupants of the flats come from these areas. The more recent occupants are mainly people who have been on the housing list for Corporation dwellings.

In an analysis of 113 of my patients living on the estate and who were given medical certificates for housing transfer, 102 (90 per cent) were given to people living in flats. Of the total 48, nearly half, were suffering from organic disease and should not have been rehoused into this type of flat.

Illustrative patients

(1) F.H. born 1911, a single man living alone. He suffers from diabetes mellitus which has proved difficult to stabilise. Before coming to the estate he had two hypoglycaemic comas and several less severe hypoglycaemic episodes. He is afraid of not being able to summon help should he go into another coma.

(2) E.J. born 1905, is a widow living alone. In 1959 she had a thoracotomy and pneumonectomy for bronchiectasis. Following this she was found to be suffering from mitral stenosis with incompetence and shortly afterwards began to fibrillate. A pseudomucinous cystadenoma was removed from her left ovary in 1964 and in 1969 she suffered a small cerebral embolus. Subsequently she had three attacks of congestive cardiac failure before being rehoused in a below-access level flat.

(3) N.S. born 1913, suffering from a right hemiplegia with aphasia and also diabetes, was rehoused from a clearance area where he had an outside lavatory. In his new low level maisonette the lavatory was upstairs and so a commode had to be used in the living/dining area.

Amenities

The provision of housing units is but one aspect of redevelopment; equally important are the amenities. Most people who 'had their homes taken away from them' expect to find similar amenities in their new environment. Again, there have been many official publications which have emphasised the importance of the provision of services on new estates at the earliest stage of occupancy (Ministry of Housing and Local

Government, 1967). These recommended rehousing the elderly near relatives and friends, the earliest provision of a public telephone and the re-instatement of the dispossessed corner shop among many other suggestions.

On this estate it was two years before the first shop—a supermarket—opened and four years before there was a pharmacy. Now, five years after the first residents moved in and when the estate is fully occupied with over 10,000 people, it is likely to be another 18 months before there is a post-office. With only two supermarkets, a chemist, a hairdresser and a newsagent, the estate is served by permanently sited 'mobile shops' including fish and chip vans which offer a limited choice of foods, at relatively high prices, and under dubious standards of hygiene.

At the outer end of the estate, where there is some private development, a small number of shops has been let at relatively low rentals compared to that asked by the Corporation in their part of the estate. The absence of a post-office is acutely felt by old age pensioners and mothers with young children, drawing their allowances. The nearest post-office is a mile and a quarter from the mid-point of the estate.

In the early days of the estate, provision of school places was grossly inadequate and a satisfactory state of affairs is not likely to be reached for some time. The cost of transport is an important item for residents on a peripheral estate not only for the fares to work and to the shops but also to the nearest district general hospital. The round journey costs 24p and involves a change of bus in each direction. For open-access laboratory services when, in the year 1971/72, 1,592 specimens (excluding cervical smears) were taken at the surgery and transported privately to the local hospital. This represents a rate of 302/1,000 of the practice population. The increasing use is, to some extent, due to the research projects undertaken in the practice, but the relatively small number of patients, 24 (1·5 per cent), who are sent to the laboratory is because of the inconvenience of travelling.

The study

This study has been designed not only to analyse the variations in the patterns of morbidity in successive six-monthly periods (April-September and October-March) but also to compare the incidence in different types of dwellings. Nine different types have been defined but these can be grouped into four main categories:

- (1) Owner-occupied houses
- (2) Local Authority tenanted houses
- (3, 4+5) Local Authority ground floor tenanted maisonettes and three-floor cluster blocks of flats without lifts.
- (6, 7, 8+9) Local Authority mid-rise deck access single and split level flats served by lifts.

The extent of the practice is confined to the estate itself and is limited by the outer distributor road. As it is co-terminous with a number of census districts the ratio of the practice patients to the estate population at the time of the 1971 census can be calculated when these figures become available.

Unlike the catchment area of most hospitals the population of a general practice is an identifiable group which can be accurately analysed by age and sex. In this practice the ratio of males to females is 45:55. It is predominantly a young practice, with 88 per cent of patients below the age of 45 (figure 4). This is similar to that described by Brotherston and Chave (1956).

It is not easy to measure the health of a practice population but an attempt can be made to compare the prevalence of illness with that in the country as a whole. The results of the recent National Morbidity Study, undertaken by the Royal College of

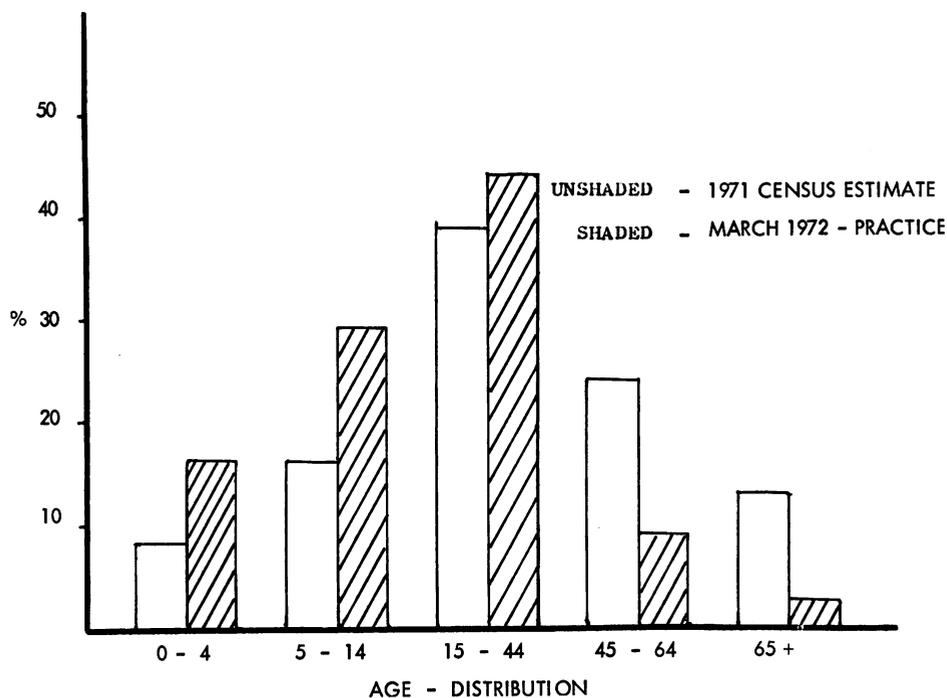


Figure 4

General Practitioners and the Office of Population Censuses and Surveys, have not yet been published and until these figures are available comparison can only be with the findings of earlier surveys and individual studies.

Infectious diseases

The notifiable infectious diseases, however, are a group in which comparisons can be made between the incidence in the practice and that reported in England and Wales. For various reasons the notification of these diseases is incomplete, varying from place to place and between one disease and another (Taylor, 1965); this must be borne in mind when considering these figures.

The first practice study was into a measles epidemic in 1969-70 (Goodman, 1971) in which 180 cases (93/1,000 children under the age of 15) occurred in a 12-month period. This incidence is double that for Liverpool (43/1,000 under 15) and quadruple that for England and Wales (24/1,000 under 15) in the same period and shows the vulnerability of a poorly immunised population to infectious diseases on this type of estate. Another study was undertaken into food poisoning during the six month period October 1971-March 1972. Of 466 cases of diarrhoea from all causes, 119 persons (21/1,000) in 50 families (spread all over the estate) were found to be suffering from proven dysentery. In 116 cases the causal organism was identified as *Sh. sonnei*.

A more critical appreciation of the significance of this latter outbreak can be made when these figures are compared with those obtained by the General Practice Research Unit of the Royal College of General Practitioners from data received from practices which keep detailed records. These figures are all the more significant coming from a newly built housing estate with indoor sanitation and wash-hand basins in each lavatory. Predisposing to the outbreak of enteric infection is the presence of mobile shops serving unwrapped or cooked foods and the misuse of frozen foods which may well have contributed to this high incidence.

Refuse

Refuse is another contributory factor to the spread of enteric infection. On the estate the houses and some ground-floor flats are provided with paper sacks, the modern successor to the traditional dust bin (Ellis, 1969) but these are strictly limited to one sack for a three-bedroomed house or smaller, and two for the larger four-bedroomed ones. In the absence of open fires these receptacles are grossly inadequate and storage of any excess in cardboard boxes may not be removed by the refuse collector. It is not surprising that refuse blows all over the estate because of these restricted services. The mid-rise flats are provided with refuse chutes at selected intervals along the balcony. In general these work successfully but there is always the irresponsible person who is too lazy to take his litter to the chute and either deposits it on the stairs, on the balcony or even over the balcony. A recent survey *The Dwelling Outside the Estate* (1972), showed that the system for collecting refuse on new estates was one of the unsatisfactory aspects of life on a new estate. Delay in building primary schools has meant that one county primary school has had to be housed in the secondary comprehensive school where the sanitary facilities intended for children over eleven are inadequate for infants and young primary school children and this, too, may have helped the infection to spread.

Respiratory diseases (ICD 460–519)

Respiratory diseases are those most commonly seen and treated in general practice in which definite clinical signs can be elicited. In the absence of any national figure it is difficult to assess the absolute significance of the prevalence rate in the practice which is 65·3 per cent. Two significant points are, however, apparent. The first is the high rate in children under five both in the summer and winter periods. The second is the significant difference between those living in flats and those in houses in all except the 15–44 age group during the winter months. The latter certainly reflects the anxiety and insecurity of mothers, as at least two thirds of the respiratory disease seen in the age group are non-febrile colds and catarrhal reactions which do not require medical attention (tables 2 and 3).

The conditions imposed by flat dwelling and the aversion many people have to adequate fresh air predisposes to upper respiratory catarrh. The ducted central heating without air filters and controlled by cheap and inefficient thermostats, which reflects the economic stringency applied to capital expense in building, the open plan living area with its restricted ventilation and the absence of a balcony, all help to perpetuate these conditions. Real treatment in these cases is not the prescribing of a suppressant cough linctus, although this may be necessary at night, to allow the parents and the child some sleep, but health education of the parents.

In the older age group the predominant pathology is chronic lower respiratory disease, again aggravated by the lack of fresh air and the restriction of flat dwelling. As there are no seats provided on the open spaces and as there are no balconies, all the elderly can do is sit at the open window with a view of the sky or of adjacent blocks of flats.

Mental illness (ICD 290–315)

The diagnosis of mental illness is made by eliciting subjective symptoms. In evaluating this group of diseases and attributing its cause to environmental factors on a new estate, care has to be taken not only to identify those patients whose records show previous psychoneurotic illness but also those whose symptoms are merely an expression of dissatisfaction with the estate, and who present with vague symptoms all too easily classified as 'neurosis' for want of another label.

These patients have been excluded from this group and recorded elsewhere (ICD 780–799). Twenty two per cent of all patients suffering from psychoneuroses had a

TABLE 2
RESPIRATORY ILLNESS (EXCLUDING DISEASES OF THE EAR)
VARIATION OF PREVALENCE RATES AMONG DWELLING TYPES (ALL AGES)
APRIL 1971-SEPTEMBER 1971

Age group (years)		Dwelling type				Total cases	Significance level
		1	2	3, 4, 5	6, 7, 8, 9		
0-4	Observed cases	36	349	54	66	505	not significant
	Expected cases	35.93	351.94	53.89	63.20		
	Observed rates	66.7%	65.9%	66.7%	69.5%		
5-14	Observed cases	8	226	24	6	264	not significant
	Expected cases	9.30	233.90	27.57	3.15		
	Observed rates	14.3%	16.8%	14.5%	31.6%		
15-44	Observed cases	25	200	49	60	334	not significant
	Expected cases	22.61	217.14	43.37	50.91		
	Observed rates	15.7%	13.1%	16.1%	16.8%		
45-64	Observed cases	1	19	41	55	116	P<0.001
	Expected cases	1.15	40.52	31.54	42.82		
	Observed rates	20.0%	10.8%	29.9%	29.6%		
65+	Observed cases	0	2	11	17	30	not significant
	Expected cases	—	3.60	8.80	17.60		
	Observed rates	—	11.1%	25.0%	19.3%		
TOTAL	Observed cases	70	796	179	204	1,249	P<0.02-0.05 (due to 45-64 age group)
	Expected cases	63.95	839.77	171.08	174.12		
	Observed rates	25.6%	22.2%	24.4%	27.4%		

previous history, although it may be argued that in many of these the precipitating factors were the conditions of life in the redevelopment area. About one third of the psychoneuroses are of only short duration and are usually precipitated by domestic crises, many of which might have been avoided had there been a friend or relative nearby who could have mediated.

Mental illness on the estate was twice as prevalent as in the general population (tables 5+6) with the 45-64 age group showing the highest prevalence rate. In both six-month periods the flat dwellers showed a higher rate although the difference was only

TABLE 3
RESPIRATORY ILLNESS (EXCLUDING DISEASES OF THE EAR)
VARIATION OF PREVALENCE RATES AMONG DWELLING TYPES
OCTOBER 1971-MARCH 1972

Age group (years)		Dwelling type				Total cases	Significance level
		1	2	3, 4, 5	6, 7, 8, 9		
0-4	Observed cases	85	524	161	200	970	P<0.01- 0.001
	Expected cases	77.60	580.03	146.25	166.15		
	Observed rates	108.97%	89.9%	109.5%	119.8%		
5-14	Observed cases	29	508	68	22	627	P<0.01- 0.001
	Expected cases	24.51	512.34	78.79	11.31		
	Observed rates	44.6%	37.4%	32.5%	73.3%		
15-44	Observed cases	42	469	108	157	776	
	Expected cases	57.51	456.24	115.03	147.21		
	Observed rates	21.7%	30.6%	27.9%	31.8%		
45-64	Observed cases	1	55	55	89	200	
	Expected cases	2.54	67.52	53.36	76.59		
	Observed rates	14.3%	29.6%	37.4%	42.2%		
65+	Observed cases	0	6	25	47	78	
	Expected cases	—	8.72	23.74	45.54		
	Observed rates	—	33.3%	51.0%	50.0%		
TOTAL	Observed cases	157	1,562	417	515	2,651	P<0.01- 0.001
	Expected cases	152.70	1,637.00	417.60	443.42		
	Observed rates	45.7%	42.5%	44.5%	51.7%		

significant in the winter months. Of the cases of mental illnesses seen in patients over 15, 80 per cent occurred in women, and the significance of this will be discussed later.

Discussion

Nearly all the medical studies into health on new housing estates have concentrated on mental illness. The results have usually been obtained by asking specific questions at one particular point of time. This study is different as specific questions are not asked of the patient and information is collected over a number of years. In one of the first studies Martin, Brotherston and Chave (1957) showed a significant increase in mental

TABLE 4
MENTAL ILLNESS
TOTAL CASES SEEN MAY 1969-MARCH 1972

	<i>Psychotic</i> (I.C.D. 290-299)	<i>Neurotic</i> (I.C.D. 300-315)	<i>Total</i> (290-315)
Previous history	20 (55.6)	186 (22.0)	206 (23.4)
No previous history	16 (44.9)	660 (78.0)	676 (76.6)
TOTAL	36 (100)	846 (100)	882 (100)

TABLE 5
VARIATION OF PREVALENCE RATES OF PSYCHONEUROSES AMONG DWELLING TYPES
(AGE GROUP 15-64)
OCTOBER-MARCH 1972

	<i>Dwelling types</i>					<i>Significance level</i>
	1	2	3, 4, 5	6, 7, 8, 9	Total cases	
Observed cases	9	120	28	54	211	
Expected cases	12.58	130.52	26.21	41.69		
Observed rates	5.5	7.1	8.2	9.9	7.7	
MARCH-SEPTEMBER 1971						
Observed cases	22	218	79	95	414	P<0.001
Expected cases	23.85	255.69	65.21	69.26		
Observed rates	6.4	5.9	8.4	7.0	7.0	

illness (table 6) which they attributed to the dislocation of moving house and the process of adaptation to a new environment. Fanning (1957) has shown that living in flats can give rise to a higher rate of morbidity compared to that seen in a similar group of people living in houses. Taylor and Chave (1964) differentiated between those people suffering from psychoneurosis due to constitutional factors, those due to environmental factors and those where there is a combination of both.

Female syndromes

Hare and Shaw (1965) failed to demonstrate any difference in the indices of mental illness between the old and new areas of Croydon, but Hall (1964 and 1966) while stating that moving house does not precipitate mental illness in a well adjusted personality admits that immature women do suffer a loss of kinship.

The nuclear family, a useful unit for research purposes, when involved in rehousing brings into play the ramifications of the extended family where the housewife, in particular, is isolated from her close relatives (Young and Willmott, 1968) becoming what Gavron (1968) describes as the 'captive wife'. This more often occurs in young working-class families where maternal responsibilities, lack of local amenities and financial

TABLE 6
PREVALENCE RATES OF PSYCHONEUROSES

<i>Author</i>		<i>Rates</i>
Martin <i>et al.</i> (1957)	Actual	5.9
	Expected ¹	4.1
Taylor & Chave (1964)	Newton	7.5
	Outlands	8.1
Fanning (1967)	Flats	3.6
	Houses	1.6
Practice		13.8
Population ³		7.6

1. If rates were the same as general population
2. Rates of women in age group 20+
3. Morbidity statistics from general practice

restrictions limit the leisure activities of the young mother. In extreme cases a phobic anxiety state may develop—the 'housebound housewife' (Roberts, 1964).

In the twilight areas, living under the shadow of a compulsory purchase order, close neighbourhood ties develop; a community spirit which Buchanan (1972) sees as a defence mechanism to make life bearable under intolerable conditions. These, too, are severed when rehousing occurs and the resulting emotional insecurity is reflected in the high prevalence rates of what are really trivial illnesses. The young mother has only the doctor, the health visitor or the nurse to turn to on a new estate. The conclusions of Maule (1955) that a greater degree of social support from neighbours is found on a new estate has not been borne out in this study.

The elderly

It is not only the young adults who are affected; the elderly feel the move acutely. As long ago as 1939 Thorpe described the syndrome of 'demolition melancholia' precipitated by the dispossession of a lifelong home with its associations and the change in routine and environment which necessarily occurs.

It was hoped that deck access accommodation, where young families would be alternated with older ones, would compensate for this, but new friendships cannot be planned, nor can they be formed overnight. Deck access reduces the public circulation area and, consequently, the capital building costs. One disadvantage, as revealed in this paper, is the 'cellar in the sky' type of dwelling. This type of building is better suited for undulating hilly ground where it can fit into the natural landscape and where the balconies can lead off at ground level at one end. This would avoid the need for the elderly having to climb steps or use lifts.

In comparing the prevalence rates for diseases between flats and housing it should be borne in mind that the housing department has made no health assessments and therefore there has been no selection of residents for different types of dwelling on health grounds.

Economic factor

The economic factor of rent differential can also be discounted as the rental of flats is basically cheaper than of houses.

With the added financial commitments of life on a new estate, attempts to make ends meet produce anxiety, and failure to do so may cause depression. The summation of higher rents, fares, food prices and hire purchase payment may result in an intolerable burden. Coin slot meters for gas and electricity have, because of vandalism, been replaced by quarterly accounts. Many families just do not know how to budget their accounts from week to week, even less for three months ahead. Each week more and more fail to pay their accounts with the resultant withdrawal of their heat and light. The responsibility for educating tenants on their new financial responsibilities has not been accepted by any one agency and most of the work falls on the already overburdened health visitor.

If the purpose of redevelopment is to provide better living conditions for those in inadequate buildings then there is some evidence that this objective has not been fully realised. The plans may have achieved a reduction in the amount of physical disease directly due to housing but if this reduction has been achieved at the expense of increasing mental illness, have they been wholly successful? In a society in which there are fertility drugs and contraceptive drugs, anorectics, hypnotics and stimulants it is not surprising that patients, unable to adapt to their new environment, should turn to their family doctor for relief from the resultant symptoms.

But symptomatic relief, by antidepressants or tranquillisers, has no place in the long term therapy of any illness. Any effective treatment must remove the cause. It is no wonder that the younger generation, equally ill at ease with their surroundings and bored with life, should resort to drug-taking when they see their parents perpetually taking pills.

Prevention

The solution to this growing problem lies in its prevention. As in a surgical operation, pre-operative and post-operative care are as important as the operation itself. In the traumatic procedure of rehousing, preparation of the family for the move and constant support in the early days after removal are necessary. The preparation of a comprehensive plan should involve not only community physicians but doctors in clinical practice (general practitioners, paediatricians and geriatricians). In the reorganised National Health Service, where the basic unit will be the district health team, functional integration with the statutory local authority services in the redevelopment programmes should be more easily effected (Department of Health and Social Security, 1972).

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Another problem will be the relationship between the family practitioner committee (at area level) and the community health council (at district level)—something not even mentioned in section XII. Executive councils receive a large volume of inquiries from the public and the creation of these new bodies representative of the consumer will no doubt stimulate many more and if AHAs are to carry on the good public relations built up by executive councils since 1948 they will have to make ample staff provision for this.

Representatives of both public and practitioners on the family practitioner committee will want to keep their finger on the pulse of public opinion and the district community health councils should have the right of direct access to the family practitioner committee.

The membership of the family-practitioner committee should have a much closer link with the AHA than is proposed. The latter, in nominating 11 members, should appoint many more than one from its own membership.

Many of us have the gravest reservations about any improvement in the efficiency of the administration of the present executive council services by what is proposed.

Lower efficiency in this respect may perhaps be part of the price we are all going to be expected to pay in order, we hope, that unification will produce better planning of the provision of patient care. If this is achieved it will be worth while. The proposals in the White Paper are a challenge which we must accept and it will be taken up with some grit and determination as well as, by some, with enthusiasm.

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