THE MORBIDITY OF ONE-PARENT FAMILIES AND MARRIED FAMILIES IN A GENERAL PRACTICE IN INNER CITY BIRMINGHAM

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SUMMARY

A prospective study was carried out in the author's practice at the Lee Bank Health Centre, Birmingham by the use of self and interviewer administered questionnaires and health diaries to test two hypotheses. Firstly, that in families registered and living in the Inner City of Birmingham the morbidity reported to the General Practitioners by mothers and children of one-parent families was greater than that reported by the mothers and children of married families ("reported morbidity"). Secondly, that there were greater numbers of occasions over a period of a month that one-parent mothers perceived themselves or their children to be ill than married mothers and their children ("unreported morbidity").

Two unexpected findings were that the differences between the one-parent and married families for both arms of the study were small, and that although exact comparisons with national figures could not be made, (because the latter also contained data for all women irrespective of marital status and parity) it was found that both groups of mothers reported at least 50% more reported morbidity than nationally. The results for the children are not as great but still show a greater rate when compared with national figures.

It is proposed that it is the stress-inducing factors associated with housing, deprivation and education, present to a large degree in both groups, which are more important in creating excess morbidity than marital status.

In the reported morbidity arm of the study, families were identified by questionnaire and were defined as one-parent if a mother or father who was never married, separated, divorced or widowed had sole responsibility for bringing up his or her child or children. A married family was defined as one where the mother and father were married and where the mother did not have sole responsibility for bringing up her child or children.

Families were included if they met two criteria. Firstly, that they were registered with the Practice and lived within the Inner Core boundary of the Inner City as defined by the Birmingham Inner City Partnership; and secondly, that they had at least one child over the age of six months and under the age of sixteen years on the 12th of July 1987. Of the 351 families thus identified, 137(39%) were one-parent and 115 (33%) were married and formed the study population.

There were no differences in the numbers of one-parent or married mothers or children who consulted, or in the number of consultations made by the one-parent or married mothers or their children in the study period. There were no differences in the numbers of mothers or children were seen at home or in the surgery.

Morbidity was categorised under 19 headings for the mothers and 17 headings for the children based on the Reid Classification system installed on the Practice Computer.

For the mothers there were only two differences in morbidity. In the one-parent group, pelvic infection & vaginal discharge were significantly commoner , but there was however no concomitant excess of prescriptions for vulval or vaginal conditions or antibiotics so the importance of this increase is reduced. Secondly there was an increase in requests for sickness benefit and this probably reflects the reduction in help available when either the one-parent mother or her child is ill.

Although not significant, the one-parent mothers tended to report greater amounts of minor orthopaedic problems and this may be caused by lack of help with carrying large objects such as shopping and prams upstairs, as more of the one-parent mothers lived in maisonette accommodation which do not contain lifts.

There was no significant difference in any category of reported morbidity between the children of one-parent and married mothers.

For the unreported morbidity arm of the study the definitions of one-parent and married families were the same as for the reported morbidity arm, except that the children studied were the youngest child in each family.
There was no significant difference in the ages of the children in either group.

There were no statistically significant differences in the number of days that either group of mothers or children felt unwell,self-medicated or in the number of episodes of illnesses that they had.

Differences occurred in help-seeking on the first day of illness for both groups of mothers and children and this is a reflection of the relatively immediate sources of help accessible to the married mothers on the first day, and the different support networks available to both sets of mothers when advice is required.

Significantly more one-parent mothers reported cough, probably as a result of a greater number who smoked. The one-parent mothers also complained more about orthopaedic problems; again this may be due to the predominant type of housing occupied by this group.

The one-parent children were recorded as having more earache and the children of married mothers more upper respiratory infection, but the reasons for this are not clear.

DEFINITIONS

One Parent Family

A mother or father who was either separated, divorced, widowed or who had never married, and who had sole responsibility for bringing up his or her child or children.

Married Family

A family where the mother and father were married and where the mother did not have sole responsibility for bringing up her child or children.

Child Of A One-Parent Family

a) Reported Morbidity Study

Any child over the age of 6 months and under 16 years living in a one-parent family on the 12th of July 1987.

b) Unreported Morbidity Study

The youngest child under the age of 16 years in a one-parent family on the last day of health diary recording.

Child Of A Married Family

a) Reported Morbidity Study

Any child over the age of 6 months and under 16 years living in a married family on the 12th July 1987.

b) Unreported Morbidity Study

The youngest child under the age of 16 years in a married family on the last day of health diary recording.

Inner City Birmingham

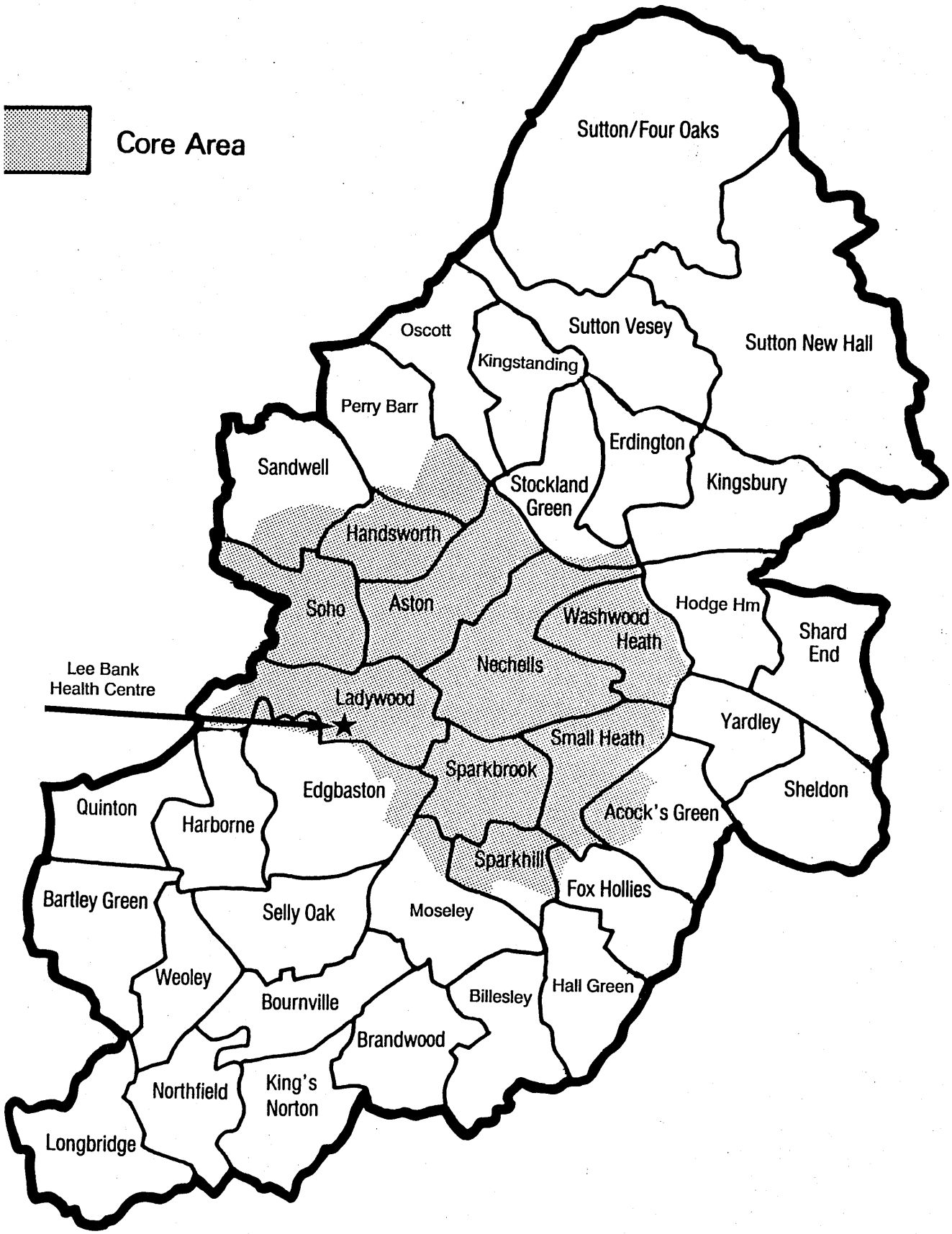
One Parent and Married Families registered at Lee Bank Health Centre whose addresses fell within the Inner Core Boundary of Birmingham Inner City Partnership.

Reported Morbidity

Diagnoses or symptoms recorded by General Practioners at Lee Bank Health Centre from 12.1.87 to 12.7.87 following consultations at the surgery or at home by study subjects.

Unreported Morbidity

The number of occasions that one-parent and married mothers perceived themselves or their youngest child under 16 to be unwell over a period of a month, plus the symptoms, action taken and the persons contacted by the mothers.



Inner City Inner Core Area showing Wards and position of Lee Bank Health Centre.

Figure 1

View of Lee Bank.

Figure 2

Lee Bank Health Centre.

Figure 3

CHAPTER 1

INTRODUCTION

The aim of this thesis was to test two hypotheses. First that the morbidity presenting to an Inner-City General Practice was greater among one-parent mothers and their children than among married mothers and their children (Reported Morbidity). Secondly that there were a greater number of occasions over a month that one-parent mothers perceived themselves or their children to be ill than married mothers and their children (Unreported Morbidity).

A subsidiary aim was to show if possible that when compared with women and children in the United Kingdom, one-parent mothers and their children would have greater morbidity and married mothers and their children would have similar morbidity.

The basis for these hypotheses came from two observations. The first was from the Post Neonatal Mortality Survey[1] which showed that in a study of deaths of infants aged one week to two years in eight large urban areas,deaths were commoner among single parent families than controls; and from OPCS data[2-11] which showed a higher stillbirth, perinatal, neonatal,postneonatal and infant death rate among illegitimate births.

The second was that after moving from a practice on the outskirts of an inner city to one in the centre of an inner city (Figures 1-3) it seemed that there were consistently more one-parent families than married in the city centre practice and that they appeared to consult more often. Could there be a link between these two observations? If mortality was higher among illegitimate children then was morbidity increased amongst one-parent families generally?

A review of the problems of inner city families needs to address the problems known to be associated with living in the Inner-City; poor housing with generally greater occupancy, reduced facilities and less owner-occupation; greater population mobility and decline; employment difficulties; greater crime, vandalism, pollution and noise as well as a loss of community spirit and a feeling of alienation.

One-parent families have their own distinct problems; finance, housing, employment, social difficulties, the education of children and their own educational status and health. One-parent families are further disadvantaged by living predominately in Inner-City areas, but does this mean that one-parent families are necessarily less healthy than the married families living in these areas?

One-parent families are not however a homogeneous group but consist of either single, widowed, divorced or separated women and their children. Nevertheless they are still invariably associated in most peoples minds with young unmarried women struggling to bring up children on their own; a stereotyped picture probably originating from novels and television drama of Northern towns in the 60's and 70's.

Macintyre[12] found that health care professionals had differing attitudes towards single and married women, depending on several factors. These include the history of past sexual relations, contraceptive use and personal 'demeanour'. Single pregnant women tended to be classified by carers in several ways: a) Normal-as-if-married women who would be expected to continue with the pregnancy and keep the child. b) "Nice girls who made mistakes", women who would be expected either to have abortions or have the child adopted. or c) "Bad girls" who did not deserve an abortion and who would therefore become unmarried mothers or give the child up for adoption.

To the women however being single and pregnant meant different things, their response related to their own personal circumstances, what the options were, and the actual or perceived responses of others. As a result for some, pregnancy was a crisis, to others it was a partial crisis and for others it was not a problem at all.

There seems therefore to be a difference of views between health workers and mothers. When MacIntyre was reporting, professional opinions seemed to indicate that lone parenthood was a major problem for a woman. The woman herself could be quite likely to feel that although it may be difficult, being a lone parent was not as big a problem as others thought. If this perception of difficulty persists amongst health professionals into the 1980's and 90's then one-parenthood nationally is an even "bigger problem" now, as the number of lone parents has increased since MacIntyre reported.

Greater morbidity might also be one of those "problems" of single parenthood. If this is true then it may have important implications for those Primary care workers working with one-parent families and will assume even greater importance if the number of one-parent families continues to rise.

This thesis seeks to discover therefore whether there is greater reported and unreported morbidity among one-parent families than among married families in an area of deprivation, the former by the use of direct recording of morbidity in the General Practitioner's surgery and the latter by the administration of health diaries for a month in the patient's homes.

CHAPTER 2

LITERATURE REVIEW

1) NUMBERS OF ONE-PARENT FAMILIES

Much of the work on one-parent families has come from the United States. Caution however has to be exercised over direct comparison with results from the U.S.A. and Great Britain. In the U.S.A. illegitimate births in some studies may refer only to unmarried mothers[13]. Because of problems with definition and differing cultural and social networks in the U.S.A and United Kingdom references to work in the U.S.A have generally not been included in this review. Likewise in some of the work on health and one-parent families in the U.K and the 1981 Census[14], problems have also occurred with definitions. Where this occurs reference is made in the text.

There has been very little published work on the situation of one-parent families since the early 1970's. The major study at that time was the Finer Report[15] published in 1974 in two very large volumes. This dealt with the origins and numbers of one-parent families as well as the effects of family law, social security, income, housing and employment on one-parent families and their children, and made many recommendations. The report drew evidence from several sources, the important elements of which were published separately by Hunt[16] and Ferri[17]. These two reports, as well as dealing with the above areas also reported on health issues within one-parent families. Further evidence on the circumstances of one-parent families came from Marsden[18].

At the time of the Finer report[15]; one tenth of all families were one-parent (620,000 families) and contained one million children. The majority of families were headed by mothers on their own, but nevertheless 100,000 families were headed by a lone father. Of the fatherless families, 23% were headed by a widowed mother and 17% were single.

The report made the important point however that there was a considerable flux in and out of one parenthood.

Ferri[17] identified one-parent families from the National Childhood Development study (N.C.D). The N.C.D. was derived from the Perinatal Mortality Survey and gathered sociological, medical and obstetric information on every baby born in England, Scotland and Wales during the week 3rd to 9th March 1958. These children entered a longitudinal study and were traced and assessed at the ages of 7 and 11.

At the age of seven 8% of all children were no longer living with both parents, but by the age of eleven this had increased to over 11%. At all ages fatherless children outnumbered the motherless, but with increasing age the proportion of children who were motherless increased. This was possibly due to the fact that in some cases of marital breakdown, as the age of the children increased, they became more likely to elect to live with their father rather than mother.

The number of one-parent families has continued to grow. The reasons for this increase are discussed later.

2) THE PROBLEMS OF ONE PARENT FAMILIES

A) FINANCE

Finer[15] found that income was a major problem for one-parent families and that they were worse off than their two parent counterparts. Widows and lone fathers were generally better off than other one-parent families, the former because of State Insurance Benefit and the latter because of the general rule that men earn more than women. For the remaining one-parent families - single and divorced women, over half were on Supplementary Benefit and for most of them it was the main source of income. Ferri[17] reported that 47% of all fatherless children had received Supplementary Benefit sometime in the 12 months preceding the age of 11; however when analysed by social class those children where the father had had a manual occupation were more likely to be in a family receiving Supplementary Benefit (52%) than those where the father had had a non manual occupation (31%). The greatest number of families requiring continual benefit were those with illegitimate children.

Finer[15] reported that of those families not on Supplementary Benefit about 15% were living below the Supplementary Benefit level, surviving on Maintenance payments and part-time earnings.

Those women who were working were better off financially than those who were not, but because womens' pay was generally lower than mens', and because of the restrictions of running a home, their income was much less than those families where two parents were working. Some divorced women were further disadvantaged by the failure of their former husbands to pay maintenance.

Ferri's[17] study also details another report, echoed by Marsden[18] that fatherless one-parent families felt financially troubled even when compared to two parent families in similar financial circumstances.

Hunt[16] also showed that one-parent families had lower incomes than two parent families (£11.50p - £14.55/week for fatherless families vs. £32 - 25.90/week for two parent families). One-parent families were also more likely to be receiving Supplementary Benefit (48% - 63% of all fatherless families). Supplementary Benefit was less likely to be received by widowed mothers than other lone mothers and more likely to be received by younger mothers and those with three or more children. Further disadvantage occurred with one-parent families over Family Allowances because they generally had smaller family size than two parent families.

B) HOUSING

Finer[15] found that second only to finances, housing was the largest problem for one-parent families. Large numbers of one-parent families, particularly unmarried mothers were sharing a house usually with close relatives. Unmarried mothers on Supplementary Benefit were least likely to be householders, followed by separated wives and divorced women. Widowed mothers were the most likely to be householders (97%).

Ferri[17] & Hunt[16] found that fatherless children were less likely to be living in a "whole house" than children of two parent families. Further analysis showed that the proportion of widows and two parent families living in a "whole house" were similar and that the figures were skewed by other types of one-parent family with 23% of children from divorced or separate families living in a flat or maisonette and 12% of illegitimate children with unsupported mothers living in rooms.

Finer[15] found that lone mothers were less likely to be owner-occupiers than two parent families with only 17% of lone mothers (apart from widows) being owner-occupiers as opposed to 50% of the married at that time. Unmarried mothers were the least likely of all to be owner-occupiers (3%).

Ferri[17] found the proportion of owner-occupiers to be higher (25%). However as her survey was done when the children were 11, it may be that as the children became older so the financial circumstances of the mothers improved. The differential between widowed mothers (38% owner-occupier) divorced/separated (19% owner-occupier) and unsupported mothers of illegitimate children (12% owner-occupier) persisted however.

Finer[15] found that many one-parent families were living in privately rented accommodation, paying high rents for poor conditions and were unlikely to obtain or maintain a mortgage. Ferri[17] found that 17% of fatherless children were living in privately rented accommodation as opposed to 7% of children in two parent families. Again the widows were less likely than divorced or separated women (20%) or unsupported mothers of illegitimate children to be living in such accommodation (26%).

In terms of amenities children in fatherless homes were less likely to have sole use of a hot water supply, fixed bath or indoor toilet (75% of fatherless children vs. 87% two parent children). Once more it was children of divorced/separated parents or illegitimate children of unsupported mothers who were more disadvantaged; the children of widowed mothers being as supplied with amenities as the children of two parent children.

Hunt[16] also found that fatherless families, in all five areas of the country which she studied, were less likely to possess the basic household amenities of separate kitchen, separate bathroom, inside toilet, own water supply or own hot water supply.

Ferri[17] was further able to compare the availability of amenities in private and local authority accommodation as experienced by one-parent and two parent families. In privately rented accommodation, children in fatherless families had poorer quality accommodation than those in two parent families; one in three one-parent families having access to basic amenities as opposed to one in two two-parent families. For council accommodation there were again differences between fatherless and two parent families but they were small (90% two parent families having access to all amenities versus 85% of fatherless families). Ferri felt however that there was some support for the claim that mothers on their own were found in inferior council accommodation.

The results for overcrowding came as a surprise. It had been expected that one-parent families were going to show further evidence of deprivation. The survey showed that fatherless children were no less overcrowded than those in two parent families. The numbers for non-manual families were too small to analyse, but for manual families fatherless children were less likely to be overcrowded than two parent children.

The author felt however that the 1961 census definition of overcrowding (which was taken as the definition for the study) might be too lenient and too simple and this and the necessarily smaller family size might underestimate the true amount of overcrowding. Hunt[16] in support of this argument found that single parent families were more likely to have an occupation of over one and a half persons per room and single parent children were more likely to have to share their bed with their mother.

Ferri[17] enquired into the number of moves of home the family had had since the child's birth. Limitations were quoted for this part of the study firstly because of the retrospective nature of the question, and secondly, no allowance could be made for the number of move of house divorced, separated or widowed families had had prior to breakdown.

Fatherless families were found to be different to two parent families. Children of widowed mothers moved homes less than any group of parents (37.7% not moved at all versus 25.7% of two parent families); the author felt that this perhaps represented disadvantage rather than advantage in that widowed mothers might be unable to move house because of financial constraints, bearing in mind the similar proportions of widows and two parent families who were owner occupiers.

The children of families of marital breakdown were the least likely not to have moved (14.2%), whereas illegitimate children of unsupported mothers were the most likely to have moved over 5 times (19.6%). Hunt[16] too found that the proportion of fatherless single parent families who had lived at their present address for less than 5 years exceeded the proportion of married families.

Ferri[17] felt that a change of address would be more disruptive if accompanied by a change of school. A similar pattern to that described earlier was found. There were no differences in the number of schools attended between fatherless children of widows and two parent children. However fatherless children of marital breakdown or illegitimate children of unsupported mothers were more likely to have changed school. Up to one in 10 of children with mothers who were divorced or separated had attended four or more schools over six years. The point was made though that when two parent families move it is generally planned and less disruptive, with the family deciding to move within the same schools catchment area. For fatherless families moves are often forced as a result of necessity.

Questions were asked about satisfaction with accommodation, as a possible indication of family morale. Mothers caring for children alone, particularly children of marital disruption or illegitimacy were much less likely to be satisfied with their accommodation (25% of each group expressing dissatisfaction).

C) EMPLOYMENT

The Finer Report[15] also considered the employment problems experienced by one-parent families. It found that lone parents in employment suffered from at least 3 combined disadvantages when compared with women in two parent families. Firstly, that the lone parent is the sole wage earner rather than one of two . Secondly, that (as has previously been mentioned) being a woman her pay and working skills were often restricted. Finally being an only parent, arrangements for work to fit in with the care of children are more difficult than when there are two people to share the responsibilities.

These three factors combined with the `poverty trap' of Supplementary Benefit rules which meant that any earnings of over £2 per week would be subtracted from Benefit, created the large numbers of one-parent women who found it advantageous to rely on Supplementary Benefit, rather than work.

Finer[15] found that it was the number of children in the family, the age of the youngest child and whether she shared a home were found to be the main determinants of whether a mother could work full-time and thereby achieve a larger level of income. Mothers with several children, at least one of whom was under 5 and living on their own were the least likely to work.

Hunt[16] showed that where a mother in a fatherless family was able to work, in addition to being less deprived financially, she also felt less deprived socially. One parent mothers were much more likely than married mothers to be working full-time, with more lone parent mothers working over 35 hours a week than married mothers. Hunt found some evidence that both non-married and married working mothers were doing jobs which were at a lower level than their usual jobs and that non-married womens' jobs overall were at a lower level than married women. This was confirmed by Ferri[17] who found that unsupported mothers (with the exception of widows) were in less well-paid or prestigious
jobs.

Ferri[17] also found that unsupported mothers who were working full-time (14%) were less likely than married mothers (23%) to have jobs which coincided with the school day. Of those working mothers who were away at work outside school hours, unsupported mothers, particularly those with illegitimate children, would be away the longest.

Part-time work did not seem to be a solution to the school-hours problem for working mothers, with over half of all part-time working mothers being away from home between 9 and 4 o'clock. This may have been less of a problem for the married mothers who might be `covered' by their husbands.

Hunt[16] found that in all five areas except one, the lone mothers were more likely than the married to leave home before the children went to school. She found however that what happened to the children while their parents were at work depended on local customs and facilities. In the urban areas studied, for children under school age, day nurseries were very important for the offspring of lone mothers; these urban areas giving priority to children of lone parent families. The comment was made that working parents with children under school age who didn't go to day nurseries would like them to do so; and that expansion of the number of places would greatly help not just the lone mothers, but all families. A great deal of help was obtained from relatives - especially where there were few nursery places.

D) SOCIAL CIRCUMSTANCES

The reports also looked at the social and personal circumstances of one-parent families. Finer[15] found that although one-parent families varied in their differing situations, certain problems were common to all: a sense of loss and suffering; the social isolation and the problems of coping alone with the emotional and physical requirements of the children. The children too had their problems, for some the burden they experienced in terms of their own loss and grief and the problems of living with an unhappy parent, led to delinquency and poor school performance.

Hunt[16] and Ferri[17] studied these areas in greater detail. Ferri[17] looked at the contact made with Social Services by one-parent and married families. The differences were large. Of the one-parent families, mothers of children who had been divorced or separated were most likely to have contact with Social Services (43%), followed by unsupported mothers of illegitimate children (36%) and widowed mothers (22%). The contact rate for married mothers was only 8%.

The commonest reasons for contacting the Social Services were for material aid, welfare applications for free school meals and grants for clothing and uniforms, and for help from Childrens' departments. 8% of the fatherless families had been involved with agencies dealing with crime as opposed to 2% of two parent families. The numbers of families involved were small and the author stresses that no comment could be made on this evidence of a link between parental absence and crime or delinquency.

Hunt[16] studied how often lone mothers contacted the other parent or relatives; in all areas single mothers contacted the father less often (60.6% - 68.5%) than other one-parent mothers (72.4% - 53%). Non married mothers and their children were found to have almost as much contact with their own mothers as married mothers. However more one-parent mothers (2.5% - 3.7%) had no contact with relatives at all than two parent mothers (0 - 1.1%).

One-parent mothers were more likely than married mothers to never receive or to visit friends. In addition the proportion of lone mothers who have no spare time leisure activities is higher than for married mothers; and one-parent families were much more likely to have never had a holiday (44.4% - 29.8%) than married (15% - 26.6%). As an index of deprivation mothers were asked when their children had last had a warm coat or outdoor shoes. There was very little difference between fatherless children and children of married parents for new shoes, but the fatherless children were much less likely to have had a new coat or night clothes in the year prior to the study. Similarly lone mothers were less likely to have a new warm coat or outdoor shoes.

Hunt[16] also enquired into the possession of household equipment and other amenities. In all areas the possession of items such as electric iron, washing machine, vacuum cleaner, refrigerator, spin drier, T.V. or car was less for one-parent families than for two parent families.

Widows' households were better off than other non-married mothers. For heating, with the exception of one area, two parent families were more likely to possess central heating, and were slightly more likely to have gas fires. Conversely there were more single parent families reliant on solid fuel.

These findings are supplemented by the work of Marsden[18]. He studied the living conditions and social standards of 116 fatherless families in two towns in the North and South East of England who were dependent on National Assistance. 1 in 10 mothers said they had eaten no solid food on the day prior to interview, and often missed two meals a day in order to give the children sufficient - 25-33% were missing meals every day. They either lost or gained weight because of an unbalanced diet, preferring the children to have the food. The children fared better than their mothers because of the provision of school meals, there were however great problems in school holidays and at weekends when money was running out. In a week about a tenth of the families had no fresh meat, a third spent nothing on butter and one tenth spent nothing on fresh fruit.

The mothers often bought cheap high calorie foods and because they lacked culinary skills bought expensive prepacked meals. Many women never bought new clothes, relying on hand-me-downs. The children had some new clothes but in a third most of the childrens clothes were bought by relatives or were passed on. Footwear and fuel were particularly expensive. If money was available then the money might be spent on a television as a family without a TV felt very deprived. About the same number as the national proportion smoked and many kept pets for company.

Budgeting was more difficult for some than others and many were getting into debt. It also seemed that lack of possessions or poor housing might be very influential in a mothers feeling of poverty.

Of all the fatherless families, the unmarried again had the lowest incomes and also had fewest possessions.

E) CHILDRENS' EDUCATION

Hunt[16] and Ferri[17] studied the educational aspects of one-parent families. Hunt found that children in single parent families were more likely to have left school before the age of 15 than those from married families. Also, where there was selective education or where fees were paid, the percentage of children from one-parent families who attended these schools were less than children from married families. In keeping with this a higher percentage of children of one-parent families attended secondary modern schools.

Ferri[17] studied school attainment. Again the families of widows fared better with these children doing as well as children of two parent families. Boys however did less well than girls. Of the fatherless children in one-parent families caused by a marital breakdown, arithmetic performance and to a lesser extent reading abilities were poorer than in two-parent families.

The abilities of illegitimate children however were related more to the associated factors of illegitimacy than to illegitimacy itself or father absence; so that the performance of illegitimate children was similar to that of non-manual social class married families where the mother worked full-time or to manual married families where the mother had not worked or had a part-time job.

Social adjustment at school was also assessed. Again although children in one-parent families seemed less adjusted than those in two-parent families, more important were the factors associated with one parenthood and poor adjustment. Differences were small and the author felt that parental absence did not have a large effect on adjustment.

Hunt[16] analysed the educational status of one-parent mothers and found that more of them (85.5% - 66.1%) had finished their education by the age of 15 or earlier than married mothers (82.7% - 54.7%). Interestingly working non-married mothers, especially those working full time were more likely to have had education finishing after the age of 15.

F) HEALTH

The health problems of one-parent families have been more extensively and recently researched. Ferri[17] assessed the health of children in one and two parent families by looking at school absence.

No difference in school absence was found for boys in one-parent fatherless families and married families either overall or with allowance for social class. Girls from fatherless one-parent families had more school absence however than girls from married families. (Only 54% of girls from fatherless families had been absent from school for less than a week, as opposed to 60% of girls from two parent families). The reason for this is not clear, but other findings were quoted which have suggested that the burden falls on the girl children in a one-parent family when the mother is sick and that they are more likely to take time off from school as a result.

Hunt[16] found that the percentage of children with health problems was similar for unmarried and married mothers (27.9% to 34.8% of children to unmarried mothers vs. 24.1 - 32.9 of children to married mothers). However there were significant differences when other problems (i.e problems other than those of a physical disorder) were compared: between 10.7% and 15.7% of children from one-parent families suffered from these problems as opposed to between 4.7% to 9.2% of children of married mothers.

The authors were able to make some tentative conclusions about the figures: for both types of family where the mother was aged 25-44 and not working there was more likely to be a child with a health problem, and that families where the mother was 35-44 there were more likely to be children with `other' problems.

They could neither find a relationship between the mothers occupational status and the incidence of `other' problems nor between income and health/`other' problems. In addition it was discovered that in the majority of families only one child had a problem.

Further analysis showed that for fatherless and two parent families the health problems of boys and girls did not differ consistently. The commonest health problem was for respiratory illness. However in both groups of families boys were more likely to have `other' problems - these being mainly behavioural in nature.

Kruk and Wolkind[19] compared single and married mothers in an Inner London Borough and found that children from both groups were progressing well in terms of number of visits to a GP, outpatient or inpatient referrals, accidents or the mother's perceptions of her child's health. The definition of single mother in this study however differs from others in that a single woman was someone who had conceived before marriage or establishing cohabitation.

Other studies [20] have shown an association of `broken homes' with enuresis (in children whose homes broke up before the age of six) and a higher risk for boys of delinquency (i.e being cautioned by the police or sentenced before the courts).

Children in single parent families in their first five years of life are more likely to suffer accidental injury than those living with two natural parents[21]. However in the same study frequent household moves, low maternal age and poor child behaviour were more strongly associated with accident rates than family type. Family type, after accidents, appeared to be the most important influence on hospital admission, either because children from one-parent families were more seriously injured (the children were more likely to be burned or scalded) or because casualty officers are more cautious when considering admission of children from these families. Children with non accidental injury[22] are more likely to come from families with unmarried mothers or where a father is absent, and be illegitimate.

Jennings & Sheldon[23] in a retrospective study compared the health and the parents response to health, of preschool children from single-parent and two-parent families from a suburban area of Nottingham which was "slightly below average disadvantage when compared with the remainder of the county". They asked parents to recall the number of times their children had been ill in the preceding 10 months. Single-parent children were reported to have had significantly more episodes of <u>acute</u> illness than two-parent children. In addition more single-parent than two-parent children had experienced any illness, but the differences were not statistically significant.

Episodes of illness were divided into infectious disease, respiratory infection, skin disorders, diarrhoea/vomiting and "others". Single parent children were shown to have more episodes of illness in each category, particularly respiratory infection and diarrhoea/vomiting. Unfortunately no statistics were applied. The study also appeared to show that as well as having more episodes of illness, the single-parent children had more days of illness than the two-parent children. This was not statistically significant.

In seeking the parents' response to illness, two-parent families said they would seek professional help more than the single-parent families. In addition single-parent families said they would use nursing care rather than non-prescribed medicines more frequently than two-parent families.

Both sets of mothers felt they could talk easily to their General Practitioners but single-parent mothers reported less frequently that they could talk easily to their Health Visitors.

GP records for the 10 months of the study showed no differences in the average consultation rate for the children from the two groups. The difference in types of morbidity between the two were small.

This study however involved very small numbers, the population being 16 single-parent children and 16 two-parent children, out of a possible 478 children identified from Health Visitor records. There was no assessment of social class and the two parent families consisted of either married or cohabiting couples, whose characteristics may be quite different.

Bolden[24] compared the morbidity of single-parent families with `normal' two-parent controls. The study was based on an urban practice in Exeter comprising mostly patients in social classes III IV and V. He found that single-parent children had more consultations in the year of the study than children of two parent families, but this just failed to reach significance.

Studies from Australia have shown differences in morbidity between children in nuclear families and of single mothers. Underwood et al[25] found that for children aged under 15, single parent mothers reported significantly more nervous and mental disorders, more asthma, and more bedwetting in those aged 6-14 years. The study also reported on immunisations rates and accidents: children of single parents had an inferior immunisation uptake although this was only significant for oral polio vaccine. Similarly significantly more children in one-parent families had had accidents.

Ferri[17] also assessed the health of the one-parent mothers and their married counterparts. This however was a retrospective analysis based on parental recall of the time when the child was between 7 and 11 years old. Mothers on their own were reported to be twice as likely as those from intact families to be chronically sick or disabled, (13% vs. 6%), the highest rates being in those mothers with marital breakdown. Numbers were too small for detailed comparisons but a high prevalence of psychiatric disturbance was reported among the mothers who had marital breakdown.

Hunt[16] also assessed the health of the single parent mothers in her five study areas. In all areas fewer one-parent mothers perceived their health to be good (50.7% to 64.7% of unmarried mothers vs. 68.9 to 76% of the married). The study discovered that the difference between the two was largely due to a higher proportion of one-parent mothers suffering from `psychiatric disorders' which ranged from "bad nerves" to conditions requiring regular psychiatric treatment. The proportion of non married mothers who had this definition of "psychiatric disorder" varied from 13.2% to 26.4%, while for married mothers the proportion range from 5 to 8.7%.

Similar results were obtained by Kamien and Underwood[26] who compared reported illnesses between nuclear families and single mothers in a low socioeconomic group in Perth Australia.

Significantly more single mothers reported a higher rate of mental and nervous disorders and headaches. When the General Health Questionnaire was applied, significantly more one-parent mothers were unhappy and depressed, felt they were not useful to society, had lost confidence, were sleepless due to worry, couldn't enjoy daily activities, couldn't concentrate, and were constantly stressed, unhappy and indecisive. Loneliness, tension and depression were the commonest symptoms.

Ritchie in a study from New Zealand[27] found that for the majority of solo mothers whether they had married or not, housing, employment, child care and social did not present problems. 53% reported financial problems only 10% of whom thought they were serious.

In terms of health 32% reported no health problems, but 29% suffered more than one. The commonest being fatigue, weight problems or frequent colds and flu. In terms of psychological problems 25% were unaffected, but there were twice as many psychological problems reported as physical.

Bolden[24] in his study from General Practice in Exeter found that significantly more single-parent adults had consultations in the year of the study than controls.

Significantly more single parent adults consulted for respiratory disease, and there were significantly more patients in the one-parent group who had a termination of pregnancy. He also showed that lone mothers may have consulted more for gynaecological problems - but this just failed to reach significance. There are however problems with the methodology of this paper in that single-parent families were identified by computer screening of the practice population for anyone who had a recorded history of divorce or separation, and for any adult and child who seemed to be living together without there being a matching spouse.

Finally Hunt[16] looked at the antenatal care given to one-parent and married mothers. There was no consistent pattern of care; attendance at either the family doctor, antenatal clinic or hospital depended on locally available facilities. There was however a trend for single mothers to be more likely to be delivered in hospital than at home.

CHAPTER 3

INNER CITIES

1) OVERVIEW

The `Inner Cities' are indubitably , the areas of Great Britain which drew the greatest attention in the 1980's. The riots in Brixton, St Pauls, Toxteth and Handsworth caused much concern and variously brought reports[28] and Prime Ministerial promises.

The problems, however, were apparent before then [29-31]. The problems of today[32] have their beginnings in the Nineteenth century with the development of mass urbanisation, as new industries in towns followed the progress started in the `Industrial Revolution', and as they replaced traditional rural activities. Towns became the centres of industry as they were the sites where raw material production and transport could be concentrated. But because there was no public transport, the population supplying the workforce for factories had to be close at hand. In the absence of effective housing legislation, buildings were built close together so that there was high population density. Houses were of poor quality and the standards of sanitation were very low.

As public transport developed, the outer urban areas flourished and those who were able to (generally those who could afford to - the skilled and managerial classes) moved out to the suburbs.

However because of the casual nature of employment and lower wages, unskilled and semiskilled workers remained in the inner city areas, a position which is generally true now.

The industrial decline of the late 70's and 80's can also be seen in a historical context. In the 19th Century, Birmingham was predominantly involved in the manufacture of articles made from raw products produced in the nearby `Black Country'. The city being particularly involved in brass goods, jewellery and finished metal products - "The city of 1000 Trades". But as the surrounding industries declined at the beginning of the 20th Century, manufacturers switched to producing those goods which were less dependent on the local production of raw materials and needed special skills - items such as tools, bolts and screws. Coupled with this the armament requirements of the 1st World War boosted the developing engineering, and motor trades. These industries suffered between the wars, but after World War 2 they were in the right position to take advantage of the expanding post war economy.

With increasing competition and the fact that local industry had become increasingly reliant on supplying a few large manufacturers, (particularly those in engineering metal manufacture and the motor industry) and had become less efficient, many of these firms became increasingly economically vulnerable in the 1960's.

Unemployment therefore had begun to become a problem in the West Midlands by the middle 1960's, having been below the national rate prior to that. By 1983 unemployment was 23% above the average for Great Britain. Problems started with large scale redundancies in the motor trade; and this had a knock-on effect on the manufacturers of components. Unemployment had started to fall in the late 1980's but recently has started to rise again.

The population of Birmingham is continuing to decline having fallen by 8.3% from 1971-1981[33]. In the Inner Core area of the Inner City the fall has been twice as great with a loss of 17.6% in population over the same period. The reason being the higher levels of unemployment and the growth of populations in the surrounding areas such as Redditch, Tamworth, Bromsgrove and Solihull.

Those most likely to move have been the white population, but this has been accompanied by a secondary influx of ethnic minorities, who are generally less skilled and have lower educational attainments. Various sources have identified the problems of the Inner City population[29,30,34-38] and many of these have bearings on the quality of life and thus health.

The Inner City areas have higher amounts of crime and vandalism, greater pollution and noise, as well as suffering from the previously mentioned general decline in the economic and industrial base. As a result there is greater vulnerability to economic change. There are reduced levels of private and public investment as well as a loss of community spirit and a feeling of alienation, particularly as the rest of the country seems to prosper.

Populations within Inner City areas are more mobile and generally have greater proportions of the very young and elderly persons particularly those living on their own. Incomes are lower and possession of assets generally less and there is a concentration of the semi-skilled and unskilled workforce. Educational attainment is at a lower level and there are reduced levels of quality and accessibility to public services. There are greater concentrations of single parents and homeless people.

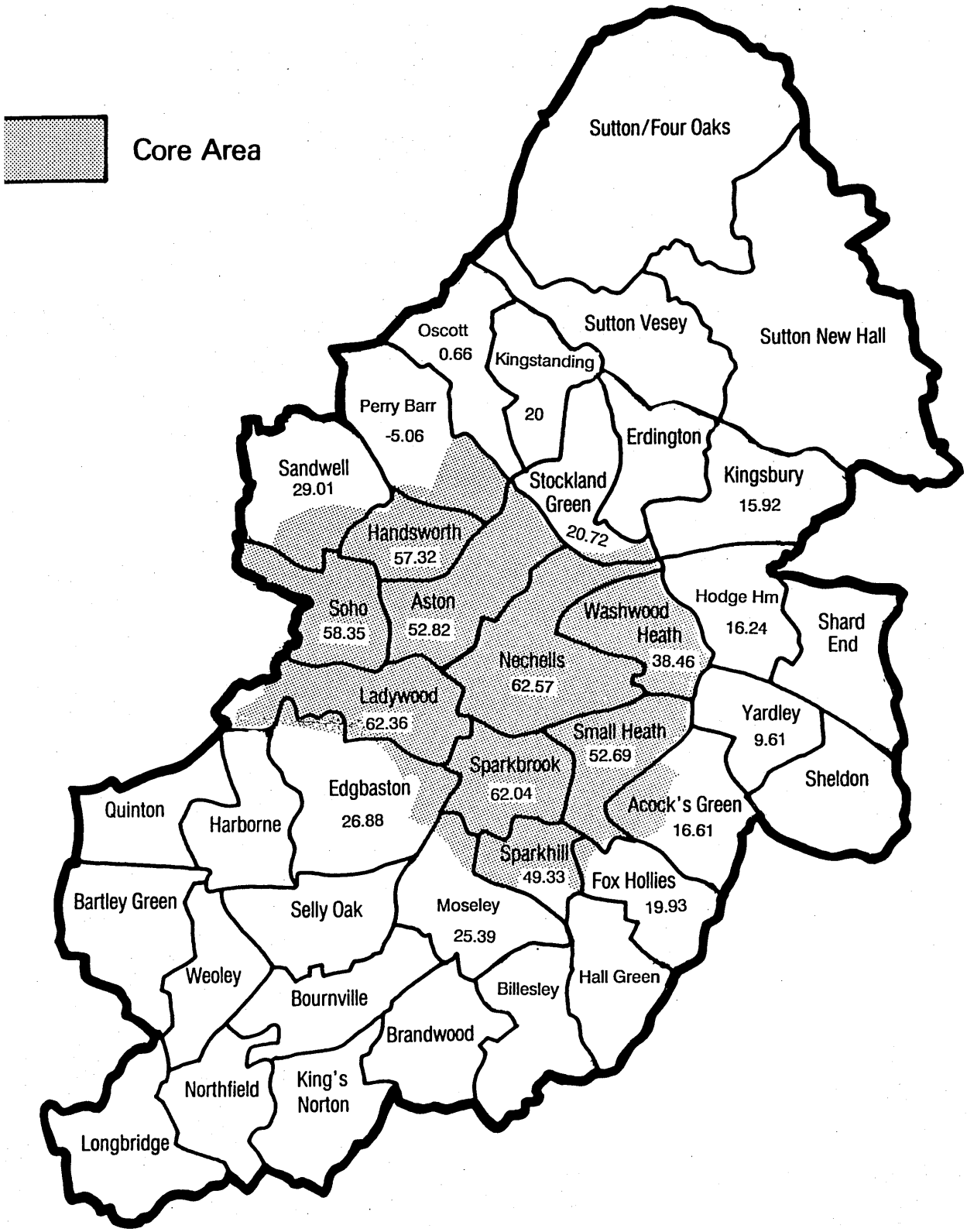
As part of the Governments strategy to improve the Inner City areas of Britain, seven areas including Birmingham were given Inner City Partnership Status - Manchester/Salford, Liverpool, Lambeth, Hackney/Islington, Docklands and Newcastle/Gateshead.

The Birmingham Inner City Partnership was created in 1978 with the aim being to "give priority status and support to Birmingham's Inner City area in acknowledgement of its social, economic and environmental problems".

The Partnership administers a budget of £25.2m (1988-89) devoted to the District Health authorities (2.6m) as well as economic development,housing,leisure and technical services,social services and urban renewal etc.[39]

The Partnership consists of elected representatives of Birmingham City Council, the Birmingham Health Authorities, and the former West Midlands County Council. The Committee is chaired by the Secretary of State for the Environment. The Inner City Partnership area (Fig.3) contains an inner-city core area, in which are concentrated "high levels of economic, physical and social deprivation."[39]

Jarman[40] has devised a system of identifying underprivileged areas by the use of census data. By taking certain variables (% elderly living along, % population aged under 5, % one-parent families, % unskilled, % unemployed, % overcrowded, % who have changed address within one year, % ethnic minorities) and by the use of weighting values a mathematical score - the Underprivileged Area Score (Jarman Index - UPA Score) for each ward can be obtained. This score has been shown to correlate well with General Practitioners' assessment of areas with increased workload. Values for the scores range from -62.52 for the least deprived to 72.95 to the most deprived.



Inner City Core Area showing Wards and Underprivileged Area Scores (Jarman Index).

Figure 4

10 of the Inner Core Wards of Birmingham (pre 1982 Ward Boundaries) are in the top 50 worst wards in England and Wales. Figure 4 shows the scores for the Wards as for post 1982 boundary changes. All the Inner City Wards except one have UPA scores over 49, indicating severe deprivation, Ladywood Ward where the study families were concentrated had the second highest UPA score of all Inner City Wards with a score of 62.36.

2) NUMBER OF ONE PARENT HOUSEHOLDS

The percentage of all households which are one-parent families is twice as high in the Inner Core areas than in Great Britain. The Ladywood Ward had the highest proportion of one-parent households than any of the other Inner City Wards.

Differences in the sex of the head of one-parent households are apparent when comparing the Inner Core areas with National figures, one-parent families being more likely to be female-headed and less likely to be male-headed in the Inner Core Areas. Ladywood was even more likely than any ward to contain female-headed rather than male-headed one-parent households (Table 1).

	Rank: Highest to Lowest % of one Parent Households	% One Parent Household	% Male Headed	% Female Headed
Inner Core Area		4.2	8.3	91.7
Great Britain		2.1	10.9	89.1
Ladywood Ward (Post 1982 Boundary)	1/16	6.3	5.5	94.5

Percentage of Lone Parent Households

TABLE 1

Source[41]

The Percentage of all births that were illegitimate is highest in the Inner Core area; and is higher than for Great Britain.The Ladywood Ward at 43% had the highest percentage of births that were illegitimate for any of the inner core electoral wards (Table 2). The reasons for this are discussed later.

Illegitimate Births

	% Total Births Illegitimate
Inner Core Area	17.3
Great Britain(1981)	12.0
Ladywood Ward (Pre 1982 Boundary)	43

Percentage Illegitimate Births of Total Births 1977-81

TABLE 2

Sources[42,43]

3) HEALTH IN THE INNER CITY

Health status has traditionally been assessed by mortality statistics. The Black Report[44] highlights the inequality in health suffered by those in the lower social classes, who are concentrated within Inner Cities. Death rates for men and women in Social Class V are two and a half times as great as those in Social class I. Similarly standardised mortality ratios are greater than 100 for stillbirths and infant deaths and for children age 1-14 in Social Classes IV and V. There is a similar trend in children for accidents, bronchopneumonia, acute bronchitis and congenital anomalies.

For adults the Standardised Mortality Rate is greater than expected for respiratory deaths (male and female) in classes IIIN IV and V; greater than expected for digestive diseases in social class IV and V for males and IIIN IV and V females.

It is also greater for Genitourinary disease in social class IV and V males and IIIN IV and V females, for malignant neoplasms in social class IIIN, IV, V males and females, for circulatory disease in social class III IV V males and III N IV and V females; and for accidents, poisoning and violence in social class IV and V males and females.

Balarajan [45] compared census data for inner cities with mortality statistics. He found the West Midlands to have significantly higher standardised mortality ratios for men and women for infectious and parasitic diseases, Tuberculosis and its late effects, carcinoma of the respiratory tract (males only), anaemias, chronic rheumatic heart disease, hypertensive disease, ischaemic heart disease, pneumonia, bronchitis, emphysema and asthma, chronic liver disease, cirrhosis and injury (females only).

For Birmingham the disadvantages in terms of health and living in the Inner City can be demonstrated by standard mortality ratios and the various predications of mortality in the 1st year of life (Table 3). Standardised Mortality ratios for the West Birmingham Health Authority (which covers most of the Inner Core Area) are significantly higher for many conditions which are preventable - infection and parasitic disease, cervical cancer, ischaemic heart disease, cerebrovascular disease, asthma, chronic liver disease, and injury and poisoning (adults and children). Similarly the Inner Core area of Birmingham has greater numbers of still births (Table 4), as well as a greater perinatal mortality rate than Great Britain (Table 5). Infant mortality is lower than the figures for Great Britain presumably because of the small numbers involved (Table 6). The Ladywood ward where much of the present study was based comes about midway in the league table of best to worst electoral wards.

	Number of Deaths	SMR
Infectious and Parasitic Diseases	16	179
Colonic Cancer	44	108
Cancers of Trachea, Bronchus and Lung	132	102
Breast Cancer	46	94
Cervical Cancer	11	159
Diseases of Blood & Blood forming organs	12	148
Hypertensive Disease	13	97
Ischaemic Heart Disease	673	121
Cardiovascular Disease	304	126
Pneumonia	73	89
Bronchitis and Emphysema	40	114
Asthma	9	127
Chronic Liver Disease and Cirrosis	15	150
Injury and Poisoning	84	122
Injury and Poisoning (Children)	7	172
Poisoning and Toxic Effects	8	58
Suicide	14	90

Standard Mortality Rates for Selected Conditions
West Birmingham Health District

TABLE 3 Source [46]

(Where the number of deaths is low SMR's should be treated with caution.)

	Still Births/ 1000 Live Births	No of Deaths
Inner Core Area	10.3	65
United Kingdom	5.6	3095
Ladywood (Rank of Highest to lowest still birthrate by inner core wards)	5.7 9/16	3
Post-1982 Boundary		

Still Birth Rate/1000 Live Births 1983. Inner Core, U.K & Ladywood

TABLE 4 Sources [47,48]

	Perinatal Mortality/1000 Live & Still Births	No of Deaths
Inner Core Area	15.1	95
United Kingdom	10.2	5610
Ladywood (Rank of Highest to lowest perinatal mortality by inner core wards)	9.6 9/16	5
Post-1982 Boundary		

Perinatal Mortality Rate/1000 Live and Still Births 1983. Inner Core, U.K & Ladywood

TABLE 5 Sources[47,49]

	Infant Mortality per 1000 live births		No of Deaths
Inner Core Area	9.3		58
United Kingdom	9.9		5413
Ladywood Post-1982 Boundary (Rank of Highest to lowest infant mortality rate by inner core wards)	0	10/16	0

Infant Mortality Rate/1000 Live Births 1983. Inner Core, U.K & Ladywood

TABLE 6

Sources[47,50]

Morbidity statistics from inner city areas are less numerous. Marsh[51] comparing a council estate of mostly social classes IV and V with a private housing estate of mostly social classes I, II or III found a greater rate of mental illness, hospital admission and casualty attendance and reduced levels of preventative care especially immunisation and cytology among the council estate residents. Rutter[52] found a greater proportion of inner London boys and girls than children living on the Isle of Wight, to have neurotic and conduct types of deviance or psychiatric disorders. Psychiatric disease was associated with family discord and disturbances, where the families were large and overcrowded, or where the school attended had high turnover of staff and pupils.

Townsend[53] looking at health indicators and indications of maternal and social deprivation found a correlation in that those areas with poorest indicators of health were those with the worst indicators of deprivation. The little research published from General Practice suggests that levels of preventative care tend to be poorer. In one study[54] of an audit of cervical screening only 16% of women aged 20-64 had had a cervical smear performed. With effort though this can be improved, the same study showing an increase of 14% by instigating a recall system. Figures from the study practice in 1990 show a smear uptake rate for women 25 to 65 years in the last 5 years of over 85%. High immunisation rates are possible. Rossdale et al[55] reported 95% Diphtheria, Tetanus and polio uptake and 93% measles uptake in a General Practitioner run inner city well baby clinic. Figures for the study practice show similarly high figures.

Drug abuse is common in inner city areas, but alcohol, self neglect and dementia (the latter because of the concentration of elderly patients) also have important effects, being particularly related to hospital admissions [56,57].

An other important feature of inner city medicine is the large homeless population. Amongst these patients chronic alcohol abuse and mental illness are extremely common. In a population attending a primary medical care centre for the homeless in Birmingham run by the study practice the proportion of patients with alcohol addiction and schizophrenia is 36.3% and 3.6% respectively.

Much has been written about the state of Primary Care in the Inner City[58-64] but this has dealt almost entirely with the problems of London. Little progress seems to have been made[60], although agencies such as the Inner City Partnership, Urban Programmes, and Community Programmes have helped with manpower and resource schemes. The difficulties faced by these areas are many, with greater concentrations of single handed General Practitioners. These doctors tend to have smaller list sizes, poorer premises, employ less ancillary staff, use locum and deputising services more often and tend to be older. Surgery premises are often poorer and patients less informed about the available services. Registration with doctors may be difficult and consequently larger proportions than elsewhere may not be registered with a doctor (1-23% in Inner London Boroughs[65]), thereby putting extra burdens on to the Accident and Emergency Services.

In terms of primary care data and the Inner City of Birmingham, there is little information. One study[66] showed that the levels of registration of the Inner City population with a General Practitioner were very high. Asian patients were more likely to have visited their doctor in a year; whereas Afro-Caribbeans were more likely to have had more consultations for chronic conditions or repeat prescriptions. More whites were likely to have visited outpatient or emergency clinics whereas Asian and Whites were more likely than Afro-Caribbeans to have requested a home visit.

Visits for psychological based consultations were highest for white patients. Child attendances at clinic were very similar for all groups as were the percentages who were not immunised at all.However, the Asian children were better than the White or Afro-Caribbean in terms of completeness of vaccination.

Further evidence also comes from census data where more of the inner core population over 16 than Great Britain as a whole were permanently sick on the night of the 1981 census. For Ladywood the percentage sick was higher still (Table 7).

	%
Inner Core Area	5.6
Inner City Partnership Area	5.1
Great Britain	4.7
Ladywood (Post-1982 Boundary)	6.2

% of Residents (as % of economically inactive) over 16 years of age permanently sick on Census Night 1981

TABLE 7 source[67]

CHAPTER 4

METHOD

The study was divided into 2 sections. The first was a six month study of the reported morbidity of one-parent and married families recorded by the three full-time and one part-time partner in the practice plus the vocational trainee. This part of the study started on the 12th January 1987 and was completed on the 12th July 1987.

The second section consisted of the identification of a random sample of one-parent and married families from the first part of the study in whom aspects of social circumstances and morbidity not normally coming to the G.Ps attention, (Unreported Morbidity) were recorded.

1) Reported Morbidity study

The study was based on Inner City families who were registered at the Lee Bank Health Centre. Patients were included if they met the inclusion criteria (see below) and if their addresses fell within the Inner Core boundary of the Inner City Partnership Area. Unfortunately neither the Department of the Environment (D.O.E), the West Midlands Health Authority or Birmingham City Council (the West Midlands Regional Council by the time of the study being a Residual Authority, the council having been disbanded earlier) were able to supply a list of addresses within the Inner Core area. It was necessary therefore to identify streets from a map of the area supplied by the D.O.E.

This was very easy where whole electoral wards fell completely within the Inner Core area as addresses could be identified by Ward from the Index to streets for the Register of Electors.[68] At the margins where wards were partly included in the Inner core it was less easy but by cross reference to a large scale street map of Birmingham the remaining addresses were identified.

All patients attending the surgery or who were visited at home in the study period were asked to complete a questionnaire (Questionnaire 1 - Appendix1). This identified families, their address, occupation, mothers marital status and personal perceptions of ethnicity. It was designed to be simple to complete and to be self administered by patients in the waiting room.

Families were included in the study if they met the inclusion criteria, which were so defined as to obtain the most accurate assessment of marital status and one-parenthood when asked in a self-administered questionnaire format.

i) Married Family

A mother and father who were married and who had at least one child of age 6 months or under 16 years on the last day of the study in whom the mother shared responsibility for bringing up the child or children. The lower age limit for children was included to ensure that only children born before the beginning of the study (and thus available for study for the whole period) were eligible.

The upper age limit was set so that only dependent children as defined by the O.P.C.S. (with the exception of students in full-time education under 25 years of age) could be included.

The family had to be registered with the practice for the whole study period and live within the inner core area at the time of questionnaire completion.

No attempt was made to discover whether either or both parents were the child's or childrens natural parents.

Families were classified as white or mixed race if they responded by ticking these boxes. Families were ascribed to being black if they felt themselves to be African, Asian or West Indian.

ii) One Parent Family

A mother or father who was either separated, divorced, widowed or who had never married,and who had sole responsibility for bringing up their child or children. The age criteria for the children and the address criteria for the family were the same as for the married group. Ethnic grouping was assessed in the same way.

Families consisting of never-married, widowed, divorced or separated women and their dependent children who were not totally responsible for bringing up their children were classified as supported and were not included in the study.

By this method at the end of the study all those families who had attended for consultation by the doctors had been identified. It was already known however that the practice had a high turnover of patients so an elaborate system was devised to ensure as accurate an assessment as possible of the denominator one-parent and married population.

iii) Determination of Denominator Population

At the end of the study all children in the relevant age ranges with Inner Core addresses who had not attended within the study period were identified from the Computer.

Because there was doubt about the accuracy of the computer held age sex register (A.S.R.) which had only been downloaded from the Family Practitioner Committees mainframe nine months earlier, this list of non-attenders was compared with the practice's manual A.S.R which was still being maintained. If children were not on the manual A.S.R. and if they did not have a set of notes they were excluded. The addresses of the remaining children were compared with the latest addresses from the patients records and amended as necessary - the patient records being most likely to have an up-to-date address.

Questionnaires were sent to parents at those addresses and those that were returned which fitted the inclusion criteria were included in the study population. Those children whose questionnaires were returned by the G.P.O were excluded.

It was then necessary to confirm that those who had not returned questionnaires were still living at the address on their records.

The latest electoral register was consulted at Birmingham main Public Library and the names of the adults living at the childrens' addresses were recorded.

If the adults living at those addresses were not registered with the practice then the children supposedly living there were excluded on the grounds that the family was not completely registered or that the children had moved.

If these adults had already completed a questionnaire but had not included the children that were thought to be living there then it was presumed that the children had once lived at that address and had moved away. They were thus excluded.

The remaining children who had addresses where adults were registered with the practice and were on the electoral roll but whom had not returned a questionnaire were sent a second questionnaire. Those who returned the questionnaire and who fulfilled the inclusion criteria were included in the study populations.

Non-responders were identified and discussed with the Practice attached Health-Visitors whom it was felt were the most likely to know whether the children were still at the stated addresses.

Those whom they knew had left the area were excluded. The records of the remainder were consulted and any child who had not consulted within the previous 5 years was excluded on the grounds that it was highly unlikely for a child to be still registered and not consult within 5 years. The remaining children were classified as having parents who declined to take part in the study.

The remaining part of the questionnaire asked about current occupational status and current or past occupation.

Married women were ascribed the social class of their husbands, by reference to their husbands occupation. One-parent mothers were ascribed social class by their present or past occupation. Social class was determined by reference to the 1980 Census Index of Occupations[69].

From initial reading it was originally planned to ascribe the social class of a one-parent mother to the social class of her upbringing by reference to her own father's occupation (Question 11 Questionnaire 1) but this was not used. There are however major theoretical problems in the determination of social class of one-parent families and this is discussed fully in the section on results.

Each doctor consulting was provided with a sheet at the beginning of each surgery on which details of his/her consultations were to be recorded. Each entry detailed the patient's name and date of birth. Wherever possible the doctor was asked to record the consultation in terms of diagnosis; when this was not possible symptoms were recorded, but a space was reserved on the recording sheet to indicate when a diagnosis had been made or altered in the light of consultant opinion, laboratory test or elapsed time. Only new episodes presenting after the onset of the study, or new problems in pre-existing conditions were included in the study for example retinopathy in a previously diagnosed diabetic.

Morbidity was categorised under nineteen headings for the mothers and seventeen headings for the children based on the Reid classification of morbidity installed on the practice computer (Appendices 4 and 5).

Management was recorded in terms of drug therapy, verbal advice or reassurance; referral, laboratory testing or certification. Finally the site of the consultation whether at the surgery or a home visit was recorded.

At the end of the study results were transferred from the Practice Computer to an Apricot Zen Microcomputer for further analysis. Analysis was by Chi Squared Test, Fishers Exact Test or Mann-Whitney U test where appropriate using either Nanostat or S.P.S.S-P.C software.

2) Unreported Morbidity Study

The first task was to further update the denominator population. The reasons for this were twofold; firstly the first part of the study had identified those families who had joined the practice during the first study period, or who had had children who were born during the first part and thus had children who were not included or who were not included as whole families. Secondly there were families who had joined or left the practice between the end of the first part of the study and the start of the second part on the 13th November 1987.

All women with inner city addresses who had delivered children in 1987 were written to and asked to fill in Questionnaire 1. Non responders were written to a second time. Those whose letters were returned were regarded as having moved away and were not included.

The mothers of all children under 16 who had registered with the practice since the beginning of the 1st part of the study and who had not already completed a questionnaire were also written to and asked to fill in Questionnaire 1. Non responders were written to a second time and again those whose letters were returned were excluded.

Those families who failed to respond had their notes tagged and had a Questionnaire included so that they could be asked to fill in a Questionnaire at their next Consultation.

The population from which the second part of the study was chosen consisted of all white, mixed race and black one-parent and married families living in the Inner Core of the Inner City who had a child or children under the age of 16 on the 13th of November 1987. The criteria for Inner City, one-parent family, married family and ethnic groups were as for the 1st part of the study.

It was intended to study 100 one-parent and 100 married families. In the first part of the study of the one-parent families 28.5% were mixed race, 40.12% were black and 31.4% were white. Of the married families 13.9% were mixed race, 17.4% were black and 68.7% were white.

In order to keep the same proportions of ethnic groups in the second part of the study as the first to allow more accurate comparisons of the two parts of the study, it was intended to randomly chose 27 mixed race, 38 Black and 35 white one-parent families. Similarly 18 mixed race, 23 black and 58 white families were initially intended to be studied. Families were identified by a random number generator. Originally there was a denominator population of 44 mixed race, 62 black and 57 white one-parent families and 18 mixed race, 24 black and 84 white married families, but this altered slightly as changes of marital status and ethnic grouping and a few initially non responding families were included.

All families chosen to be studied were written to stating the purpose of the study and the fact that the author would be asking questions about themselves, their family members, asking their opinion on certain health matters and asking the mothers to keep a health diary on themselves and their youngest child for a month.

Mothers were interviewed at home, the letter proposing a date and time that the author should like to come to the home to conduct the interview. Mothers were invited to ring the surgery if they didn't wish to take part or if the date or time was inconvenient.

The Finer Report[15] stated that there was evidence of a considerable flux in and out of the state of single parenthood. This was confirmed by the administration of Questionnaire 2 (Appendix2) which first confirmed the marital status and ethnic group stated by the mother in Questionnaire 1.

Finally 27 mixed race, 39 black and 30 white one-parent mothers and 11 mixed race, 13 black and 57 white married mothers were interviewed.

Of the families included in the 2nd part of the study 11 one-parent families and 2 married families had assigned themselves to a different ethnic group than they had chosen in the first part.

This was thought at first to be quite surprising, but on reflection it is understandable as many mothers have a partner or partners from different ethnic groups by whom they bore children. The mothers may themselves have had parents from different ethnic groups and thus allocating their family to an ethnic group can vary with different perceptions of their background.

7 one-parent and 6 married mothers included in the 2nd part of the study had originally classified themselves as married and one-parent respectively.

5 one-parent mothers and 7 married mothers were excluded because they were now cohabiting. 10 one-parent and 10 married mothers were discovered to have moved away. 16 one-parent and 4 married mothers were not at home after 3 attempted appointments for interview. This imbalance is probably not surprising given the problems with child care and being at work experienced by one-parent mothers. 2 one-parent and 3 married families were excluded because their youngest child was either over 16 or was going to be sixteen years old in the month of the health diary.

Finally 6 married mothers were excluded one because of a recent stillbirth and 5 because their marital arrangements were not certain usually because of separation but in one case because the husband was in prison.

At the interview the purpose of the study was explained, and an opportunity to decline to take part was given. Questionnaire 2 was administered by the author and was identical to Question 1 for the 1st 9 Questions. Questions on the mothers, fathers and husbands, present or past occupation were more detailed than in Questionnaire 1 because it was not self administered by the mother. Subsequent questions enquired about the age that the mother had her first child, the age she left school, her academic achievement, whether she has easy access to somewhere the child or children can play safely, the main method of heating the house and whether difficulty was experienced in keeping the living room and the youngest child's bedroom warm in winter. Many mothers enquired whether this meant financial or physical difficulty with heating - the mothers were asked to make their own judgment about whether difficulty occurred. Further questions sought information on damp, noise from neighbours, tenancy/ownership of properties and type of accommodation, satisfaction with accommodation and car ownership.

Subsequent questions enquired about sources of advice when a family member was ill and the speed at which advise could be obtained, the number of addresses and doctors the family had had over 5 years; the receipt of Benefit, cigarette consumption and finally self-assessed ethnic grouping. During analysis, codes for open ended questions 7, 26 and 30 were derived based on mothers responses. Analysis was by two-tailed Mann-Whitney U test corrected for ties or by Chi Squared test with Yate's correction as appropriate.

Each Mother was given 28 Blank Diary sheets (Appendix3) in which she was asked to record separately each day for a month whether she thought either herself or her youngest child had been unwell that day, if so what did she think was wrong, did she give anything or do anything to make herself or the child better and did she speak to anyone about the problem. Each mother was given two `Post it' stickers saying "Remember the Diary" which they were invited to place in the Kitchen, Bathroom or Bedroom to help remember to fill the diary in each evening. In addition mothers were contacted by telephone, personal visit or letter after 7 days to check on how completion was being carried out - although the diaries were never inspected. After 28 days or as near as possible, the diaries were collected personally by the author.

Analysis first involved checking the diaries for sequential dating. Diaries were then inspected and all diagnoses, treatments and contacts were recorded. From this specific diagnostic, treatment and contact codes were created by the amalgamation of similar diagnoses, treatments and contacts (Appendices 6,7,8).

The number of completed days entries completed for each youngest child and mother were recorded, followed by the recording of the total number of days unwell, total days of treatment and days of contact.

Next the number of episodes of illness for each youngest child and mother was recorded, an episode being a day or sequential days of unwellness separated by a day or days without recorded symptoms.

The diagnosis, treatment and contact person for each episode was recorded using the aforementioned diagnostic, treatment and contact codes. In many entries there were several symptoms, treatments and contacts recorded. In order not to interpret the mothers perceptions, and to simplify analysis only the first mentioned symptom, treatment or contact was coded, on the grounds that these were probably considered to be the most important by the mother when she wrote them down, and were the first action she took.

e.g Cold, cough running nose,

Calpol and Vic

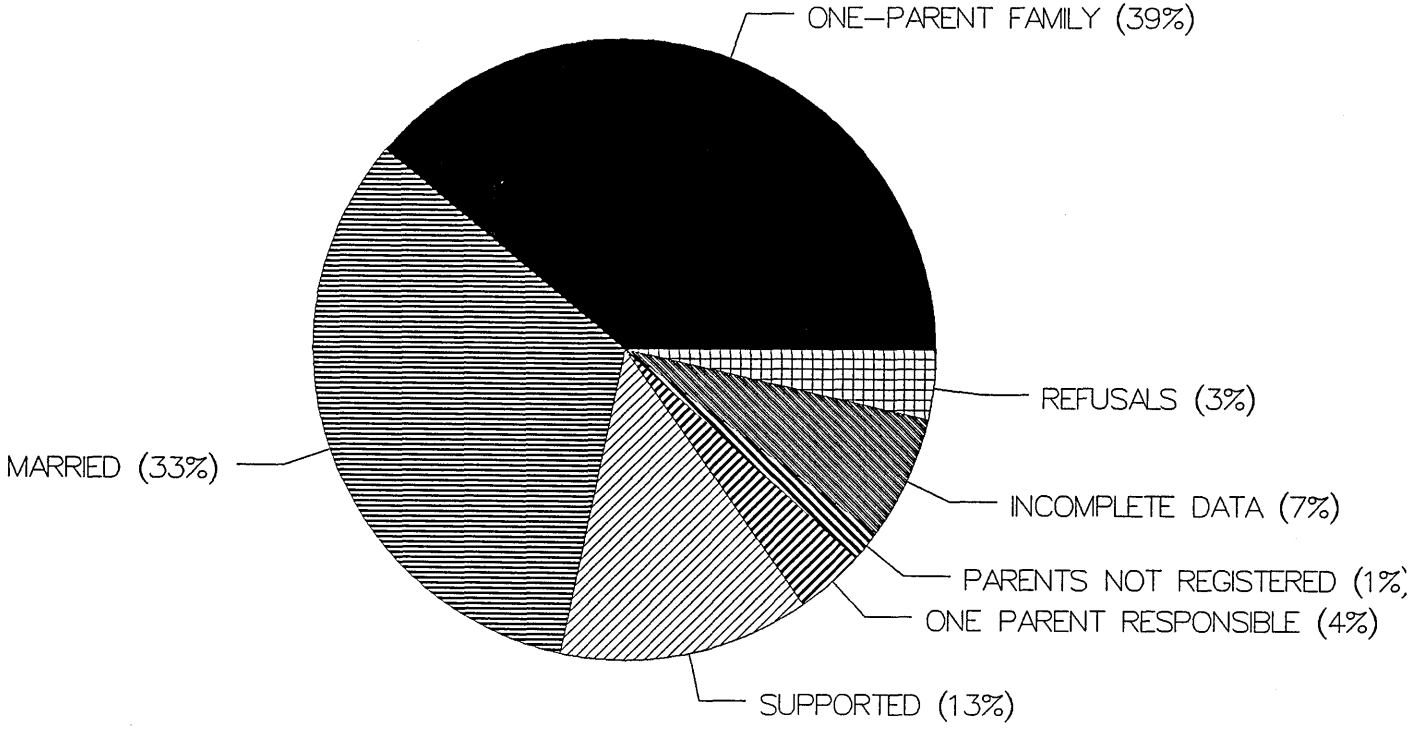
My Mother and my Sister

were coded as Cold, Calpol, Mother

Analysis was by two tailed Mann-Whitney U Test corrected for ties, two tailed Chi Squared Test with Yates' correction or by two-tailed Fishers exact test where appropriate.

Significance through the text refers to statistical significance where $p=<0.05$.

Local Government ward boundaries were changed in 1982. Where this is relevant indications are made in the text or tables.



Proportion of one-parent, married and other families living within the Inner Core of the Inner City and registered at Lee Bank Health Centre.

Figure 5

CHAPTER 5 RESULTS

1) REPORTED MORBIDITY STUDY

A) PRACTICE POPULATION

There were 137 (39%) one-parent families (OPF), 115 (32.8%) married families, 46 (13%) supported families (i.e. families where the mother was not married, but did not have total responsibility for bringing up the children) and 13 (3.7%) married families where only one parent had responsibility for bringing up the children. 5 (1.4%) families existed where the children but not the parents were registered with the practice. 23 (6.6%) of questionnaires were not fully complete, so that either marital status, responsibility for bringing up the children or ethnic group could not be identified. 12 (3.4%) of families refused to complete a questionnaire (Figure 5).

Of the 137 one-parent families, only 1 was headed by a male. This low proportion is in keeping with census figures for Ladywood Ward (Table 1). For the purposes of the following discussion this father will be included in the description of the mothers.

Twenty eight per cent of the one parent families were mixed race, 40.1% were black and 31.4% were white. Of the married families 13.9% were mixed, 17.4% were black and 68.7% were white.

The proportions of mixed and black one-parent families was significantly greater than the proportions in married families. Conversely there were significantly more white families in the married groups - Table 8.

	One Parent	Married	
Mixed	39 (28.5%)	16 (13.9%)	X^2 = 6.93 1df p = 0.0085
Black	55 (40.1%)	20 (17.4%)	X^2 = 14.42 1df p = 0.0001
White	43 (31.4%)	79 (68.7%)	X^2 = 33.37 1df p = 0.0000
	137 (100%)	115	

Numbers and Proportions of Mixed, Black and White Families in One-Parent and Married Groups

TABLE 8

Marital Status Of One Parent Mothers

More of the mixed and black mothers had never married than the white mothers. Conversely more of the white mothers had been divorced than mixed or married mothers. There were no widowed mothers in the mixed group but there were similar proportions of widowed black and white mothers. The proportions of separated mothers were similar in all 3 groups (Table 9).

	Mixed	Black	White	All One Parents
Never Married	33 (85%)	46 (84%)	25 (59%)	104 (76%)
Widowed	0	4 (7%)	1 (2%)	5 (4%)
Separated	2 (5%)	2 (4%)	4 (9%)	8 (6%)
Divorced	4 (10%)	3 (5%)	13 (30%)	20 (15%)
	39 (100%)	55 (100%)	43 (100%)	137

Marital status of one-parent families by ethnic grouping

TABLE 9

Ages of the Mothers

The one parent mothers were significantly younger than the married mothers (Table 10).

	One Parent	Married	
Mean Age	28.4 (n = 137)	31.7 (n = 115)	U = 5860 Z = -3.5088 P = 0.0005 Corrected for ties

Mean Age in Years of One-Parent and Married Mothers

TABLE 10

There was a surprising lack of very young mothers in either group. Only one one-parent mother was under 19 years old and only 5.1% of one-parent mothers and 1.7% of married mothers were under 20.

The majority of one-parent mothers were under 30 years old whereas the majority of married mothers were over 30 years old (Table 11).

	One parent	Married
(Under 19 years	1 (0.7%)	0)
(Under 20 years	7 (5.1%)	2 (1.7%)
Under 30 years	92 (67.2%)	50 (43.5%)
30-39 years	38 (27.7%)	45 (39.1%)
40-49 years	7 (5.1%)	19 (16.5%)
Over 49 years	0	1 (0.9%)
	137 (100%)	115 (100%)

Age groups of one parent and married families

TABLE 11

Ages of the Children

There was no significant differences in the ages of the children in the two groups (Table 12)

	One parent	Married
Mean Age	6.12 years (n=237)	6.45 years (n=222)

Mean ages of children in one and two-parent families

TABLE 12

There were very similar numbers of children in each of the age bands (Table 13)

	One parent	Married
6 months - 1 year	10 (4.3%)	10 (4.5%)
1 year - 5 years	106 (44.7%)	101 (45.5%)
Over 5 years	121 (51.1%)	111 (50%)
	237 (100%)	222 (100%)

Age groups of children in one parent and married families

TABLE 13

Proportions of Male and Female Children

There were 237 children in one-parent families and 222 children in married families.

There was no significant difference in the proportion of male and female children in the groups (Table 14).

	One parent	Married	
Male	130 (54.9%)	119 (53.6%)	
Female	107 (45.1%)	103 (46.4%)	
	237 (100%)	222 (100%)	NS

Proportions of Male & Female Children in the One parent & Married Families

TABLE 14

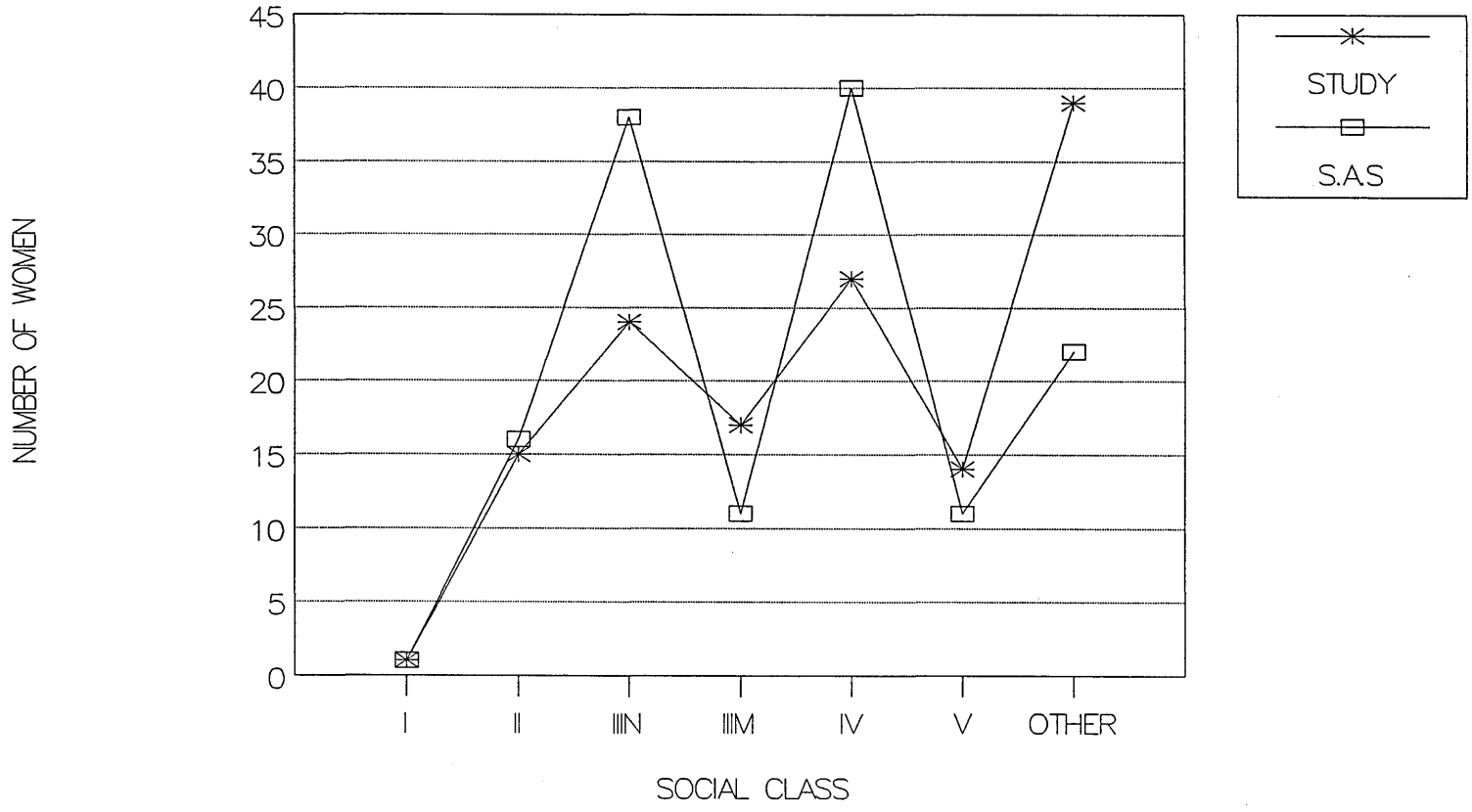
Social Class

Social class was measured conventionally, that is a married woman's social class was based on her husband's occupation. The social class of a one parent mother was determined either by her present occupation, or if she was unemployed by her last job. If she had had no job since leaving school then she had no social class. This method of determining social class has major limitations when comparisons are made between the two groups. This is amplified later in the discussion of the results.

By the conventional method there were significantly greater numbers of Social Class I in the married group. There were similar proportions of Social Class II in both groups, but significantly greater proportions of III N in the one-parent groups and III M in the married group. There were similar proportions of Social Class IV and V in each group.

There was no significant difference in the number of students in the two groups but a large number of one-parent mothers had no social class. This was because either they had never worked or because the information was not given.

This pattern of social class mirrors the pattern for social class for single, widowed and divorced women in the Ladywood Ward from the 1981 census, implying that the missing data on social class came equally from each group (Table 15 + Figure 6)



Social Class of study one-parent families and single, widowed and divorced women from Small Area Statistics (S.A.S.) Ladywood Ward 1981 Census[74].

Figure 6

	One parent	Married	
I	1 (0.7%)	10 (8.7%)	p = 0.0042
II	15 (10.9%)	16 (13.9%)	N.S.
III N	24 (17.5%)	3 (2.6%)	X^2= 13.01 1df p=0.0003
III M	17 (12.4%)	45 (39.1%)	X^2= 22.65 1df p=0.0000
IV	27 (19.7%)	26 (22.6%)	N.S.
V	14 (10.2%)	5 (4.3%)	N.S.
Student	5 (3.6%)	1 (0.9%)	N.S.
No.Social Class	34 (24.8%)	9 (7.8%)	
	137 (100%)	115 (100%)	

Social Class of One parent & Married Families

TABLE 15

Employment

Similar numbers of married and one-parent mothers were in employment (Table 16)

	One Parent	Married	
Not known	10 (7.3%)	12 (10.4%)	N.S.
Student	5 (3.6%)	1 (0.9%)	N.S.
Not working	82 (59.9%)	59 (51.3%)	N.S.
Working	40 (29.2%)	43 (37.4%)	N.S.
	137 (100%)	115 (100%)	

Employment Status of One parent & Married Mothers

TABLE 16

B) REPORTED MORBIDITY

MORBIDITY

Morbidity has been determined in two ways. Firstly by the number of patients presenting at least once with a complaint and secondly by the total number of episodes for each condition.

i) MOTHERS

There was no significant difference in the numbers of one-parent or married mothers who consulted in the study period, 67.9% of the one-parent and 60% of the married mothers consulting at least once (Table 17).

	One parent	Married	
Consulted at least once	93 (67.9%)	69 (60%)	
Did not consult	44 (32.1%)	46 (40%)	
	137 (100%)	115 (100%)	N.S.

Numbers of one parent & married mothers who consulted at least once in the study period

TABLE 17

There were no significant differences in the numbers of consultations made by the one-parent and married mothers and the consultation rates for the two groups therefore were very similar (Table 18).

	One parent mothers	Married mothers	
1 consultation	93	69	
2 consultations	59	42	
3 consultations	36	21	
4 consultations	23	14	
5 consultations	14	8	
6 consultations	6	6	
7 consultations	3	7	
8 consultations	0	3	
9 consultations	0	3	
	234	173	N.S.
Consultation Rate Per Annum	3.42	3.01	

Number of consultations made by one parent and married mothers and Consultation Rate/Annum

TABLE 18

Site of Consultations

There was no significant difference in the proportions of one-parent and married mothers who were seen at home or in the surgery (Table 19).

	One parent	Married	
Surgery consultations	219 (93.6%)	164 (94.8%)	
Home visits	15 (6.4%)	9 (5.2%)	
	234 (100%)	173 (100%)	N.S.

Numbers of surgery and home consultations by one parent and married mothers

TABLE 19

Numbers Of Mothers

The greatest numbers of patients presented with upper respiratory tract infections, pelvic infection and vaginal discharge, orthopaedic conditions, skin problems, other gynaecological problems, gastrointestinal disorders and consultations for contraception/pregnancy.

The only significant differences were an excess number of one-parent family mothers presenting with pelvic infection and vaginal discharge and requesting sickness benefit (Table 20).

	One Parent	Married	
U.R.T.I	26	23	NS
Pelvic Infection & Vaginal Discharge	28	10	$X^2 = 6.7$ P=<0.01 1df
Orthopaedic	22	14	NS
Skin	17	15	NS
Other gynaecological	22	11	NS
Gastrointestinal	19	9	NS
Contraception/pregnancy-testing	11	11	NS
Renal	6	8	NS
ENT	4	9	NS
Headache	5	7	NS
Counselling	8	4	NS
Anxiety/depression	7	4	NS
Pregnancy/puerperium	7	9	NS
Breast	3	4	NS
Diarrhoea/vomiting	2	5	NS
Sickness benefit	7	0	P = 0.0262
Housing requests	3	0	NS
Lab tests	2	1	NS
Others	27	22	NS

Number of one parent & married mothers presenting at least once with each complaint

TABLE 20

Episodes of illness

The only significant difference in the numbers of episodes of illness between the one-parent and married mothers were also for pelvic infection and vaginal discharge,and for requests for sick notes (Table 21).

	One parent Mothers	Married Mothers	
U.R.T.I.	29	27	NS
Pelvic infection & Vaginal Discharge	30	10	X^2=5.5 p=<0.02 P=>0.01 1df
Orthopaedic	22	14	NS
Skin	18	16	NS
Other gynae problems	22	11	NS
Gastrointestinal	19	10	NS
Contraception/pregnancy testing	12	12	NS
Renal	6	8	NS
E.N.T.	4	9	NS
Headache	5	7	NS
Counselling	8	4	NS
Anxiety/depression	8	4	NS
Pregnancy/puerperium	7	9	NS
Breast	3	4	NS
Diarrhoea/vomiting	2	5	NS
Sickness benefit	7	0	P=0.0400
Housing requests	3	0	NS
Lab tests	2	1	NS
Others	27	22	NS
Total number of consultations	234	173	

Number of episodes of illness in one parent and married mothers

TABLE 21

ii) CHILDREN

There was no significant differences in the numbers of children who consulted in the study period, 50.6% of the children of one-parent and 56.8% of the children of married families consulted at least once (Table 22).

	One parent	Married
Consulted at least once	120 (50.6%)	126(56.8%)
Did not consult	117 (49.4%)	96 (43.2%)
	237 (100%)	222 (100%)

Numbers of children in one-parent and married families who consulted at least once in the study period

TABLE 22

There was no significant difference in the total number of consultations made by either group of children (Table 23)

	One Parent	Married	
1 consultation	120	126	
2 consultations	60	74	
3 consultations	37	43	
4 consultations	22	19	
5 consultations	10	11	
6 consultations	6	4	
7 consultations	3	3	
8 consultations	2	2	
9 consultations	1	2	
10 consultations	1	1	
	262	285	NS
Consultation Rate/Annum	2.21	2.56	

Number of consultations made by children of one parent and married families and Consultation Rate/Annum

TABLE 23

Site of Consultations

There was no significant difference in the proportions of study children who were seen at home or in the surgery (Table 24).

	One Parent	Married	
Surgery consultations	246 (94%)	262 (92%)	
Home visits	16 (6%)	23 (8%)	
	262 (100%)	285 (100%)	NS

Numbers of surgery and home visit consultations by children of one parent & married families

TABLE 24

The greatest numbers of children presented with upper respiratory tract infections, skin problems, earache, diarrhoea and vomiting, eye inflammation and the infectious diseases. In none of these groups were there any statistically significant differences (Table 25).

Number of Children

	One parent	Married	
U.R.T.I.	80	84	NS
E.N.T.	26	35	NS
Skin	24	26	NS
Diarrhoea & vomiting	16	22	NS
Infectious disease	17	14	NS
Eye Disorders	13	17	NS
Renal/Urinogenital	9	11	NS
Gastrointestinal	7	10	NS
Anxiety/sleep disturbance) Enuresis/hyperactivity)	9	5	NS
Abdominal pain	5	3	NS
Speech/hearing/headache	2	6	NS
Injuries	5	3	NS
Lab tests	2	5	NS
Orthopaedic	3	3	NS
Asthma	2	1	NS
Pneumonia	1	1	NS
Others	21	28	NS

Number of children in one-parent and married families presenting at least once with each complaint

TABLE 25

Episodes of illness

The greatest numbers of episodes of illness were for upper respiratory infections, earache and E.N.T. problems, skin problems, diarrhoea and vomiting, the infectious diseases and eye inflammation. There were no significant differences between the one-parent and married groups (Table 26).

	One parent	Married
U.R.T.I.	90	90
ENT	30	37
Skin	25	27
Diarrhoea & vomiting	18	24
Infectious disease	17	14
Eye Disorders	14	17
Renal/Urinogenital	9	11
Gastrointestinal	7	10
Anxiety/sleep disorder)		
Enuresis/hyperactivity)	9	5
Abdominal pain	5	3
Speech/hearing/headache	2	6
Injuries	7	5
Lab tests	2	5
Orthopaedic	3	4
Asthma	2	1
Pneumonia	1	1
Others	21	25
Total number of episodes	262	285

Number of episodes of illness in children of one parent and married families presenting at least once with each complaint

TABLE 26

2) UNREPORTED MORBIDITY STUDY

A) POPULATION AND SOCIAL CHARACTERISTICS

96 one-parent mothers and 81 married mothers agreed to take part in the second part of the study. These percentages agree almost exactly with the proportions of mixed, black and white one-parent families in the 1st part of the study (Table 27).

	One parent			Married		
	Mixed	Black	White	Mixed	Black	White
Number	27	39	30	11	13	57
%	28.1%	40.6%	31.3%	13.5%	16.1%	70.4%

Proportions of one parent and married families by ethnic group.

TABLE 27

Ages of the mothers

The one-parent mothers were significantly younger than the married mothers. The ages ranged from 19-43 years in both groups but the mean age of the one-parent mothers was 28.6 years and for the married mothers 31.9 years (Table 28).

	One parent mothers	Married mothers
(Under 19 years	0	0)
(Under 20 years	3 (3%)	1 (1%))
Under 30 years	66 (69%)	34 (42%)
30-39 years	24 (25%)	36 (44%)
40-49 years	6 (6%)	11 (14%)
TOTAL	96	81
MEAN AGE	28.6 years	31.9 years

U = 2864.5
Z = -3.0183
P = 0.0025
Corrected for Ties

Ages of one parent & married mothers

TABLE 28

Numbers of children under 16

There was no significant difference in the numbers of children under 16 in the one-parent and married families (Table 29).

	One parent	Married	
1 child	41	26	
2 children	35	33	
3 children	14	15	
4 children	6	5	
5 children	0	2	NS
	96	81	
Mean number of children/Family	1.8	2.1	

Number of children under 16 in one parent and married families and mean number of children/family

TABLE 29

Age at 1st child

Overall the one-parent mothers were significantly younger than the married mothers when they had their first child, the mean age for the one-parent mothers being 19.6 years and for the married being 21.4 years (Table 30).

	One parent Mothers	Married Mothers
Less than 20 years old	57 (59%)	38 (48%)
Over 20 years old	39 (41%)	42 (52%)
		U=3043
		Z=2.5033
		P=0.0123
		Corrected for ties
Mean Age	19.6 years	21.4 years

Ages of one parent and married mothers at birth of first child

TABLE 30

Ages of the youngest children

There was no significant difference in the ages of the study children (Table 31).

	One parent	Married	
0-5 years	71 (74%)	58 (72%)	
6-10 years	15 (16%)	14 (17%)	
11-15 years	10 (10%)	9 (11%)	
TOTAL	96 (100%)	81 (100%)	NS
Mean Ages	3.91 years	4.04 years	

Ages of the youngest child in each one-parent and married family

TABLE 31

Social Class

The pattern of social class in the second part of the study mirrored the pattern demonstrated in the first part with significantly more social class I and II and IIIM married families. There were significantly more social class IIIN and IV one-parent families. 8% of the one parent families had no social class because they had not been in employment since leaving school (Table 32).

Social class	One-Parent Families	Married Families	
I	0	5 (6%)	P=0.0374
II	5 (5%)	15 (19%)	X^2=6.49 P=0.0108 1df
IIIN	25 (26%)	3 (4%)	X^2=15.07 P=0.0001 1df
IIIM	19 (20%)	37 (45%)	X^2=12.44 P=0.0004 1df
IV	25 (26%)	17 (21%)	NS
V	14 (15%)	3 (4%)	X^2=4.91 P=0.0267 1df
Student	0	1 (1%)	NS
No social class	8 (8%)	0	P=0.0130
TOTAL	96 (100%)	81 (100%)	

Social class of One-parent & Married families

TABLE 32

Qualifications

There was no significant difference in the number of one-paren mothers and married mothers who had achieved some form of educ tional qualification (Table 33). 1 married mother had a forei qualification and one did not check her results after leaving school. Both groups had smaller proportions having some form qualification than nationally.

	One parent Mother	Married Mother	Great[70] Britain
Some Qualification	45 (47%)	35 (44%)	61%
No Qualification	51 (53%)	44 (56%)	39%
	96 (100%)	79 (100%) NS	

Number of one-parent and married mothers with qualifications

TABLE 33

Accommodation

For all families there was no significant difference in the numbers of one-parent or married mothers who lived in flats, terraced or town houses or other accommodation. Significantly more one-parent mothers lived in maisonettes and more married mothers lived in semi or detached properties (Table 34).

	One parent mother	Married mother	
Maisonette	55 (57%)	26 (33%)	X^2=10.27 P=0.0014 1df
Flat	28 (29%)	18 (22%)	NS
Semi/Detached	2 (3%)	18 (18%)	X^2=15.89 P=0.0001 1df
Terraced/Town	10 (10%)	14 (17%)	
Other	1 (1%)	5 (6%)	
	96 (100%)	81 (100%)	

Types of Accommodation occupied by one parent and married mothers

TABLE 34

Smoking

There were significantly more smokers than non-smokers amongst the one-parent mothers than the married mothers, (Table 35) there being twice as many one-parent smokers than nationally.

	One parent Mothers	Married Mothers		Great Britain[71] 1986
Non smokers	36 (38%)	49 (60%)		
Smokers	60 (62%)	32 (40%)		31%
	96 (100%)	81 (100%)	X^2=8.41 p=0.0037 1df	

Non smokers & smokers amongst one parent and married mothers

TABLE 35

Time taken to get advice

Significantly more married mothers were able to get instant advice if they or their child were ill during the day and if they were not sure that the problem was serious or not.

There was no significant difference in the numbers of one-parent or married mothers who had to wait from less than 15 minutes or up to 4 hours.

Significantly more one-parent mothers had to wait over 4 hours for their advice (Table 36).

Time to obtain advice	One parent mothers	Married Mothers	
Immediate	3 (3%)	18 (22%)	$X=13.55$ $p=0.00023$ 1df
Less than 15 minutes	30 (31%)	28 (35%)	NS
15 minutes to 1 hour	18 (19%)	8 (10%)	NS
1-2 hours	16 (17%)	10 (12%)	NS
2-4 hours	7 (7%)	11 (14%)	NS
Over 4 hours	19 (20%)	5 (6%)	$X^2=5.841$ $p=0.0157$ 1df
Not Known	3 (3%)	1 (1%)	
	96 (200%)	81 (100%)	

Time take for one parent and married mothers to receive advice

TABLE 36

B) DIARY DATA

87 one-parent families and 78 married families completed and returned health diaries.

The numbers of days filled in for the one-parent mothers and children varied between one day and 31 days, and for the married mothers and children between 8 days and 32 days.

The mean number of days filled in for the one-parent mothers was 26.3 and for the married mothers was 27.4. The numbers of days completed by both groups was significantly different (U=2718.5 Z=-2.41 P=0.016 2 tailed test corrected for ties).

The mean number of days filled in for the children of one-parent families was 26.5 and for the children of married families was 27.4. The numbers of days completed for both groups of children was significantly different (U=2824.5 Z=-2.31 P=0.0208 2 tailed test corrected for ties).

Analysis was therefore confined to those who filled in diaries for either 27, 28 or 29 days. There was no significant different in the numbers of days filled in by the two groups (Table 37).

Analysis for the children was similarly confined to the 74 children of one-parent families and the 72 children of married families who had had diaries completed on them for 27,28 or 29 days. The number of completed diaries for children of one-parent families was greater than those for one-parent mothers because two of the mothers had entered less information on themselves than they had for their children and were excluded because their personal entries fell outside the 27-29 day range.

There was no significant difference in the numbers of days filled in by the two groups (Table 37).

	Number	Mean No of Days Filled	Std Deviation		Significance
One parent Mothers	72	27.9	0.59	}U=2242	Z=-1.6227 P=0.1046
Married Mothers	72	28.07	0.64	}	
One parent Children	74	27.91	0.58	}	
Married Children	72	28.07	0.61	}U=2305.5 }	Z=-1.6517 P=0.0986

Number of married and one parent mothers and children who completed diaries for 27-29 days & Number of diary days completed

TABLE 37

i) MOTHERS

There was no significant difference in the mean number of days in the month that either the one-parent mothers or the married mothers had been unwell or self-medicated. Similarly there was no significant difference in the number of episodes of illness reported by both groups of mothers. there were however significantly more days when the married mothers sought advice than the one-parent mothers (Tables 38-41).

	Number	Mean No of Days Unwell	St. Deviation	Minimum No of Days Unwell	Maximum No of Days Unwell		Signif-cance
One parent Mothers	72	4.67	5.07	0	25	}	
Married Mothers	72	5.53	6.18	0	28	} } } }	NS

Number of days unwell reported by one parent and married mothers in themselves

TABLE 38

	Number	Mean No of Days of Self Medication	St. Deviation	Minimum No of Days of Self Medicat.	Maximum No of Days of Self Medication		Significance
One parent Mothers	72	2.24	3.01	0	16	}	
						}	NS
Married Mothers	72	3.01	4.15	0	20	}	

Number of Days of self-medication by one parent and Married Mothers for themselves

TABLE 39

	Number	Mean No of Days Advice Sought	St. Deviation	Minimum No of Days of Advice Sought	Maximum No of Days of Advice Sought	Significance
One parent Mothers	72	1.17	2.08	0	12	} U=1816.5
						} Z=-3.2433
						} P=0.0012
						} (2 Tailed
Married Mothers	72	2.47	2.93	0	13	} test corrected
						} for ties)

Number of Days When Advice was Sought by One Parent and Married Mothers about Themselves

TABLE 40

	Number	Mean No of Episodes	St. Deviation	Minimum No of Episodes	Maximum No of Episodes		Signifi-cance
One parent Mothers	72	2.10	1.92	0	8	}	
						}	NS
Married Mothers	72	2.29	2.00	0	8	}	

Number of Episodes of Illness reported by one parent and Married Mothers in themselves

TABLE 41

Self Reported Illnesses

The nature of the illness was taken to be the first self reported symptom or diagnosis on the first day of each recorded episode.

There were significantly more episodes of musculo-skeletal problems and cough amongst the one-parent mothers, but there was no significant difference between the two groups for any other diagnosis (Table 42).

"Diagnosis" or "Symptom"	Number of Episodes in One-Parent Mothers	Number of Episodes in Married Mothers	Significance
Headache	33	33	NS
Sore throat/URTI	20	17	NS
Anorexia	1	0	NS
Constipation	0	1	NS
Musculoskeletal	31	15	$X^2=8.27$ P=0.0040
Dizziness	2	2	NS
Vomiting ± Diarrhoea	9	15	NS
Abdo. Pain	11	10	NS
Anxiety/ Depression	1	3	NS
Epileptic Fit	2	0	NS
Cough	7	0	P=0.009
Chest Pain	2	2	NS
Trauma	1	3	NS
Eye Problems	0	1	NS
Asthma/ Breathing Trouble	1	3	NS
Period Problems	2	9	NS
Tiredness	11	23	NS
Temperature	2	1	NS
Toothache	1	1	NS
Earache	8	7	NS
Skin Problems	2	1	NS
Cystitis	1	0	NS
Chickenpox	0	1	NS
"Don't Know"	0	1	NS
Hangover	1	2	NS
Shock	1	0	NS
Piles	0	5	NS
Mouth Ulcer	0	2	NS
Hot Flushes	0	4	NS
Lonely	0	1	NS
Contraceptive Problems	0	1	NS
Discharge	0	1	NS
Total No of episodes	150	165	

Number of episodes & diagnoses reported by one parent a married mothers in maternal health diaries

TABLE 42

Self Medication

The one-parent mothers were significantly less likely to self medicate on the first day of episodes of illness than the married mothers (Table 43).

	One parent	Married	
Number of episodes with self medication on 1st Day	62 (41%)	95 (56%)	
Numbers of episodes with no self medication on 1st Day	88 (59%)	76 (44%)	
Total number of episodes	150 (100%)	171 (100%)	$X^2=5.91$ P=0.0150 1df

Number of episodes with & without self medication on 1st Day of maternal illness

TABLE 43

There was no significant difference between the numbers of one-parent and married groups for any classes of treatment in those who self medicated on the first day of the episodes (Table 44).

	One parent	Married	
Analgesia/Antipyretic	38 (61%)	57 (60%)	NS
Fluids/Diet/Antidiarrhoeals/ Laxatives	4 (6%)	11 (12%)	NS
Cold Cures/Linctus/Lozenges	6 (10%)	4 (4%)	NS
Relaxation/Stay off work	8 (13%)	11 (12%)	NS
Emollient	1 (3%)	0	NS
Homeopathic/Tonic/Prayers	3 (6%)	4 (4%)	NS
See Dr	0	2 (2%)	NS
PRN Medicine from Dr	1 (3%)	2 (2%)	NS
Not specified	0	4 (4%)	NS
Total No of 'Treatments'	62 (100%)	95 (100%)	

Number and types of treatment given on first day of maternal illness

TABLE 44

Mothers Contacts

The one-parent mothers were significantly less likely to contact any one for advice about themselves on the first day of an episode than the married mothers (Table 45).

	One parent	Married	
No contact with anyone for advice on 1st day of episode	110 (73%)	95 (56%)	
Contact with someone for advice on 1st day of episode	40 (27%)	76 (44%)	
No of episodes	150 (100%)	171	X^2=11.52 P=0.0007 1df

Number of episodes with and without contact for advice on the 1st day of maternal illness

TABLE 45

Significantly more one-parent mothers contact their mothers, friends or the doctor on the first day of their illnesses but as expected the married mothers sought advice from their husbands (Table 46).

Who Contacted	One parent	Married	
Mother	8 (20%)	1 (1%)	P=0.0016
Family	12 (30%)	14 (18%)	NS
Husband	0 (0%)	48 (63%)	X^2=40.53 P=0.0000 1df
Doctor	9 (23%)	6 (8%)	P=0.0006
Friend/boyfriend	6 (15%)	1 (1%)	P=0.0134
Hospital	0	1 (1%)	NS
Physio	1 (3%)	0	NS
Nurse at Work	1 (3%)	0	NS
Nursery Worker	1 (3%)	2 (3%)	NS
Not Specified	1 (3%)	3 (5%)	NS
No of episodes	40 (100%)	76 (100%)	

Persons contacted for Advice on first day of maternal illness

TABLE 46

ii) CHILDREN

There was no significant difference in the number of days in the month that either group of children had been unwell or self-medicated. The increased numbers of days that the married mothers had sought advice just failed to reach statistical significance, but there was no significant difference in the numbers of episodes in the two groups (Tables 47-50).

	Number	Mean No of Days Unwell	Standard Deviation	Minimum No of Days Unwell	Maximum No of Days Unwell	Significance
Children of One-parent Families	74	4.54	5.28	0	25	N.S
Children of Married Families	72	3.94	3.77	0	15	

Number of Days Unwell in Children of One-parent and Married Families.

TABLE 47

	Number	Mean No of Days of self Medc^{n}	Standard Deviation	Minimum No of Days of self Medc^{n}	Maximum No of Days of self Medc^{n}	Significance
Children of One-parent Families	74	3.27	4.28	0	19	N.S
Children of Married Families	72	2.90	3.29	0	14	

Number of Days of self-medication in children of one-parent an married families

TABLE 48

	Number	Mean No of Days of Advice	Standard Deviation	Minimum No of Days of Advice	Maximum No of Days of Advice	Signif-icance
Children of One-parent Families	74	1.19	2.38	0	14	N.S
Children of Married Families	72	1.87	2.59	0	14	

Number of Days Advice sought for children in one-parent and married families

TABLE 49

	Number	Mean No of Episodes	Standard Deviation	Minimum No of Episodes	Maximum No of Episodes	Signif icance
Children of One-Parent Families	74	1.69	1.51	0	7	N.S
Children of Married Families	72	1.68	1.30	0	5	

Number of Episodes of illness reported in children of one-parent and married families

TABLE 50

Self Medication

There was no statistical difference in the numbers of one-parent or married mothers who treated their children with self-medication on the first day of the episodes of illness (Table 51).

	Children of One Parent Families	Children of Married Families	
Number of episodes with self medication on 1st day	84 (88%)	82 (68%)	
Number of episodes with no self medication on 1st day	40 (32%)	39 (32%)	
Total No. of episodes	124 (100%)	121 (100%)	NS

Number of episodes with and without self medication on 1st day in children of one-parent and married families

TABLE 51

There were significantly more one-parent children who had earache and significantly more married children who had URTI + Sore Throats. There was no significant differences for any other category (Table 52).

Illnesses	One-Parent	Married	Significance
Headache	5	4	NS
URTI + Sorethroat	28	42	X^2=4.4 p=<0.05 >0.02 1df
Anorexia	2	5	NS
Constipation	0	1	NS
Musculoskeletal	0	1	NS
Vomiting ± Diarrhoea	11	10	NS
Abdominal Pain	7	2	NS
Cough	23	13	NS
Behaviour Problems	1	0	NS
Trauma	7	4	NS
Eye Problems	0	2	NS
Asthma/ Breathing Problems	0	1	NS
Tiredness	2	7	NS
Miserable	5	4	NS
Pyrexia	9	10	NS
Toothache/Teething	5	8	NS
Earache	12	4	X^2 = 4.0 p=<0.05 >0.02 1df
Skin Problems	5	1	NS
Chickenpox	1	1	NS
"Don't Know"	1	1	NS
Total no of episodes	124	121	

Number of episodes and Diagnosis reported in Health Diaries of children from one-parent and married families

TABLE 52

Significantly more married mothers were likely to give their children antipyretic/analgesia. There was no significant differences for other groups of treatment (Table 53).

	One-Parent	Married	
Analgesia/Antipyretic	33 (39%)	49 (60%)	$x^2=6.16$ p=0.0131 1df
Fluids/Diet/Antidiarhoeals/ Laxatives	10 (12%)	6 (7%)	NS
Cold Cures/Linctus/ Lozenges	23 (27%)	17 (21%)	NS
Relaxation/Stay off school	9 (11%)	6 (7%)	NS
Eye/Ear applications	2 (2%)	0	NS
Emollient	4 (5%)	3 (4%)	NS
Do Nothing	1 (1%)	0	NS
See Doctor	1 (1%)	0	NS
Not Specified	1 (1%)	1 (1%)	NS
Total No of 'Treatments'	84 (100%)	82 (100%)	

Number and types of treatment given to children of one-parent and married families on the first day of episode

TABLE 53

Contact for Advice on 1st day of episodes - Children

The one-parent mothers were statistically significantly less likely to contact anyone for advice on the first day of an episode of illness in their children than were the married mothers (Table 54).

	One Parent	Married	
No contact with anyone for advice on 1st day of episode	90 (73%)	68 (56%)	
Contact with someone for advice on 1st day of episode	34 (27%)	53 (44%)	
Number of episodes	124 (100%)	121 (100%)	$X^2=6.48$ P=0.0109 1df

Number of episodes with and without Contact for advice on the first day of illness for children of one-parent and married families

TABLE 54

The one-parent mothers were more likely to contact their mothers and the married mothers their husbands on the 1st day; but unlike illnesses occurring in themselves they were just as likely as the married mothers to contact the Doctor or a friend for advice if their children were ill (Table 55).

	One parent	Married	
Mother	10 (29%)	1 (2%)	P=0.0006
Family	1 (3%)	4 (8%)	NS
Husband	5 (15%)	29 (55%)	$X^2=12.30$ P=0.0005 1df
Doctor	7 (20%)	10 (17%)	NS
Friend/Boyfriend	1 (3%)	2 (4%)	NS
Chemist	5 (15%)	1 (2%)	NS
Health Visitor	2 (6%)	1 (2%)	NS
Teacher	0	2 (4%)	NS
Not Specified	3 (9%)	3 (6%)	NS
No of episodes	34 (100%)	53 (100%)	

Persons contacted for advice on 1st day of episodes of illness for children of one-parent and married families

TABLE 55

CHAPTER 6

DISCUSSION

The study population showed very different proportions of one-parent families, married families or cohabiting families than the national figures. The percentage of one-parent families in the study population was 39%, whereas in 1987, the year of the study - the figure for one-parent families with dependent children (i.e those with children under 16, or aged 16-19 and in full time education) for Great Britain was 14%[72]. In this study 13% of families were "supported" one-parent families. Women were not directly asked if they were cohabiting but were asked rather, that if they were either single, separated, divorced or widowed were they "the only person responsible for bringing up the child?" A positive answer to this question may indicate support other than the physical presence of a partner within the home, but was taken to indicate cohabitation.

It is not possible to compare this figure of 13% with national figures because there are no separate published statistics on the percentage of families with dependent children who are cohabiting couples. It is argued later though that this figure is correct. Figures for married couples in the study were much lower than nationally. 85% of families in Great Britain with dependent children were married as compared with 33% in this study[72], however this 85% included cohabiting couples with dependent children.

Allowances need to be made however for the 5% of married families who were not included because the mother was married but yet regarded herself as a one-parent family, and 1% of families where the children were registered with the practice but the parents were not. In addition information on 10% of the families was incomplete or unavailable.

The proportions of lone mothers who were divorced, separated, widowed or single differed greatly from the proportions of these groups of mothers nationally (Table 56).

	Study one parent mothers	Great Britain[73] 1987
Single	76%	29%
Divorced	15%	44%
Separated	6%	19%
Widowed	4%	8%

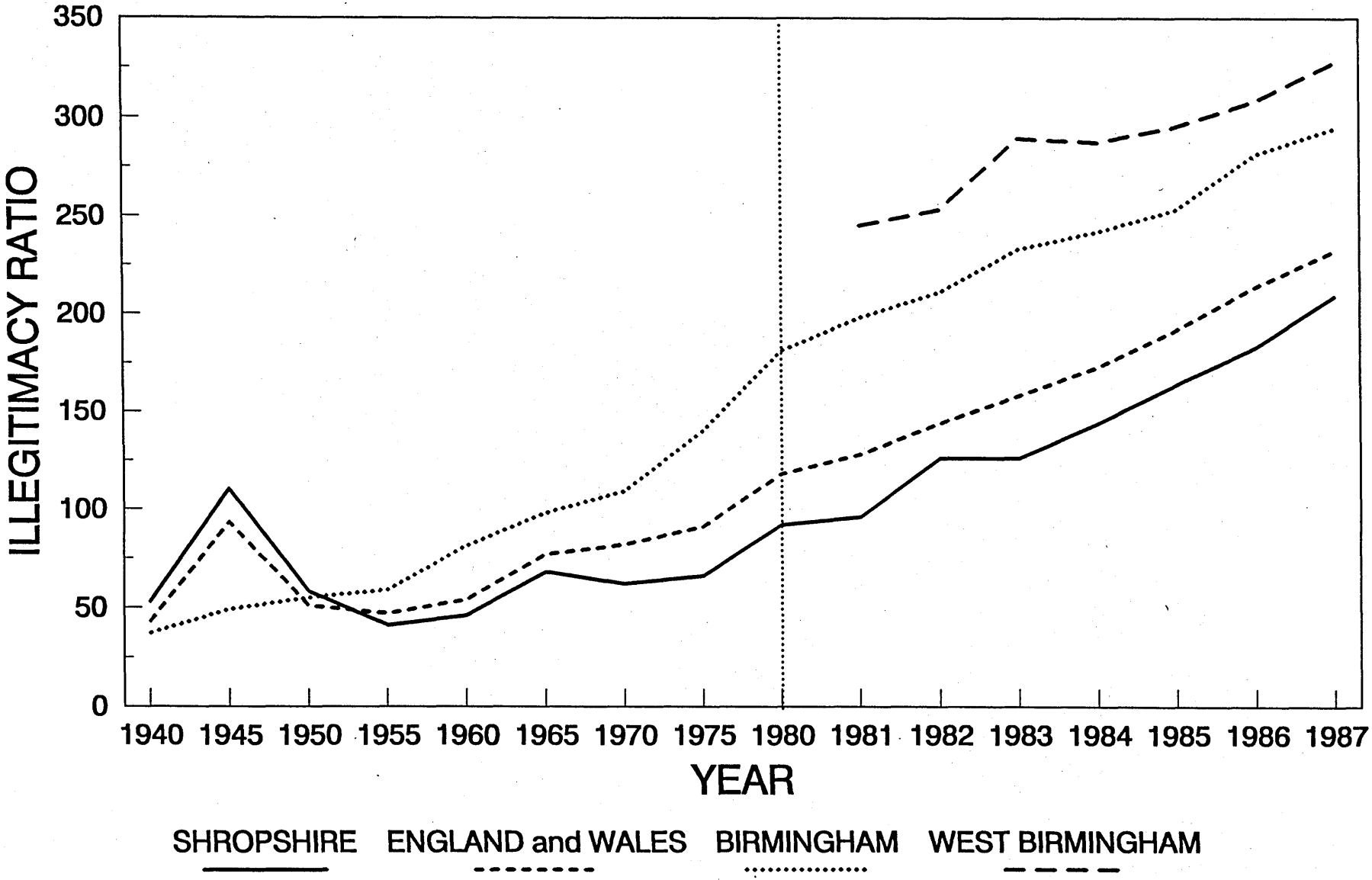
Marital Status of Study One Parent Mothers and in Great Britain

TABLE 56

The number of one-parent families with dependent children in Great Britain has remained stable since about 1981 at 13-14%. Prior to that there was a slow increase from a figure of 8% in 1971[72]. This would seem not to be the case in the area of the present study. The closest comparison would be with the Ladywood Ward results from the 1981 census.

Small Area statistics for the Ladywood Ward[74] show that 53% of households with dependent children contain at least one one-parent family. This figure is at first sight significantly larger than the present study but is inflated by two factors. First, the results do not differentiate those households where there are more than one one-parent family. Secondly, the estimate of one-parent families relies solely on information about the age, sex and marital status of each person resident in the household since information on relationship was only coded for 10% of the household census forms. In households not containing a married couple, or where there was one adult who was not part of a married pair age difference between selected household members were calculated in order to impute a parent/child link. Counts were then made of householders with a lone 'parent'/child link. Hence one-parent figures for the Census also contain those families where the partners are cohabiting[14].

Despite the stability in percentage of all families with dependent children who are one-parent there has continued to be a sharp rise in the illegitimacy ratio (the number of illegitimate births per 1000 total live births for England, Wales, Birmingham and the West District of Birmingham (Figure7).



Illegitimacy Ratios 1940-1987 England and Wales, Shropshire, Birmingham and West Birmingham[75-94].

Figure 7

The ratio for the West District of Birmingham is 38% greater than the figure for England and Wales in 1987. It also had at 327 the 17th highest illegitimacy ratio for any Health District in England and Wales in 1987[94].

There may be several reasons for this rise in illegitimacy ratio in the face of a stable proportion of one-parent families.

1 The number of cohabiting couples with children is increasing at a faster rate than the number of one-parent families. In 1982 for single women, 27% of those with dependent children were cohabiting[95] . In 1986 this had risen to 32%[96] . In keeping with this, the rise in registrations of illegitimate births has been greatest for joint registrations where both parents share the same address[97] .

2 Couples are becoming slightly less likely to marry after conception - 6% of all pregnancies in 1976, 5% of all pregnancies in 1986[98]

3 Cohabiting families and one-parent families may be behaving more like married families and are choosing to have more than one child. (Average size of family for married couples = 1.8 children, for lone parent = 1.6)[99]

In line with this there is no statistical difference in this study between the size of one-parent and married families (Table 29).

In this study 13% of the families were "supported one-parent families" and 39% were one-parent; presuming a similar proportion of single, widowed, separated and divorced women in both, then to have a third of all non-married families with children in this study as cohabiting, is virtually the same proportion as nationally.

The reasons for the increase in one-parent families are the rise in divorce rate and a rise in the number of births outside marriage:

1) Rise in the Divorce Rate

The rise in numbers of one-parent families has been partly due to the increase in divorce rate. In 1961 there were 27 thousand divorces, in 1987 165 thousand[100].

The rise between 1961 and 1971 coincided with the 1969 Divorce Reform Act which allowed divorce on the grounds of inevitable breakdown of the marriage or because couples had lived apart for more than 5 years. The rise between 1984 and 1985 coincided with the Matrimonial and Family Proceedings Act which allowed couples to divorce after 1 year of marriage. Along with the increase in divorce rate, there has been since 1981 a fall in the marriage and remarriage rates per 1000 eligible men and women[101].

2) Rise In Number Of Births Outside Marriage

The rise in numbers of live births outside marriage began in about 1960 having been stable at about 5% since the turn of the century, with the exception of the period of both world wars. There has been a sharp rise since 1960 and was 23% of all births in 1987[102] and mirrors the graph for the rise in illegitimacy ratio. The rise in births outside marriage has been multifactorial.

i) Change in attitudes toward pre-marital sexual intercourse

The reason may in part be due to the 'liberated' attitude towards premarital sexual intercourse which began in the 1960's, persists through to the present time and is still increasing. In 1983 28% of people felt that premarital sexual relations were always or mostly wrong, but in 1987 this had fallen to 25% with 71% thinking that premarital sex was either sometime wrong, rarely wrong or not wrong at all[103].

ii) Change in attitudes towards marriage

There has been a change in attitude towards marriage, and this is reflected in the rise in the number of people cohabiting. In 1979 10.6% of non married women 18-49 were cohabiting and by 1986 this had increased to 16.6%[104]. Similarly for those women aged 16-49 who married between 1970 and 74 8% were cohabiting with their future husband before their first marriage but this had increased to 27% for those marrying between 1980 and 1984[105].

Thornton[106] in an American study noted that although the majority of Americans believe that marriage and family life is important and that 90% hoped to marry the legitimacy of singleness as an alternative life-style is becoming increasingly recognised. He states that most Americans do no longer regard married life as necessarily better than singleness, nor do they hold negative views towards those who do not wish to marry. Similar changes in attitude may be happening amongst the young in the United Kingdom, particularly as the percentage of young men and women who remain single into their mid and late 20's is rising in parallel[107]

Until recently a further economic factor encouraging single status was the advantage that cohabiting couples had over married couples by receiving twice the income tax relief on a combined mortgage.

How many of these factors are important in an inner city, predominantly lower social class and less educated population is uncertain. A study of attitude towards marriage and reasons for choosing the course of one parentness would be particularly interesting among the study population.

iii) The effect of parental divorce on the marital and sexual attitudes of the subsequent generation

Several investigators have shown a consistent but weak relationship between the incidence of parental divorce and the child's marital status. Children from disrupted marriages having a higher, rate of divorce than children from intact marriages, whether they be black or white[108-110]- the transmission hypothesis.

Others have proposed a "role model rationale" where in order for a child to become a successful husband or wife he or she must learn from two loving and competent parents. In situations where the marriage ends in disharmony then the child cannot learn such skills.

Thornton[106] showed that there is a weak association with negative attitude towards marriage in those who have experienced divorce in childhood, but he quotes other possible reasons. i) The reversal of marriage as opposed to single status being associated with "personal freedom" from the early to latter part of 20th Century. ii) The economic benefits associated with the increasing trend of single people to work rather than go straight into marriage, (e.g by both partners giving themselves time to save). iii) The greater willingness of people to achieve higher education before marriage. iv) Evidence from his paper that the mothers of the children studied reported fairly evenhanded attitudes towards marriage for their children, suggesting that the younger generation will not experience as much parental pressure to marry as did previous generations.

Other studies have shown that daughters from divorced families report more sexual experience than those from married families. Kinnaird[111] showed that among 30 daughters from married families (mean age 18.5 years) and among 30 daughters from divorced families (mean age 18.4 years) significantly more girls from the divorced group had had their first intercourse at the age of 16 or younger (57.1%) than from the married (18.8%). By the time of the study there was no significant difference in the numbers of girls from divorced or intact families who were sexually experienced, indicating age of first intercourse to be the most important finding.

Douglas[20] in a British longitudinal study showed that girls who had experienced a break in a family before the age of 6 had high rates of illegitimacy, particularly where a mother died but numbers were small and not statistically significant.

Parental divorce is therefore likely to increase the number of one-parent families by making it more likely for the children of divorced families to themselves become a one-parent family. This might be through affecting attitudes towards marriage or by possibly creating an unfavourable role model. Finally, children from divorced families are more likely to be at risk of having children and becoming single parents because they are more sexually active at an age when they are least likely to ask for contraception.

Nationally these may be very important factors; the exact influence on the study population cannot be estimated, as parental marital status was not asked.

iv) Reduction in the numbers of mothers seeking adoption of their children

The number of non-parental adoptions of illegitimate children has declined sharply from 19 thousand in 1968, 11 thousand in 1971 to 3.5 thousand in 1983[112,113] in contradistinction to the increase in number of illegitimate births. Triseliotis and Lobban[114] showed that for Scotland this trend started before the introduction of the 1969 abortion act. They also showed that in 1970 in an Edinburgh study that although there was an increase in likelihood that women in all social groups who had an illegitimate child would keep their children, and that the biggest change was in the professional and technical groups, there were still big differences between the two with 77% of the semi-skilled and unskilled mothers and 50% of the professional and technical group keeping their children. If there is still this differences in the adoption behaviour of the different social classes and if it is maintained through the country then it might be a further factor in the high proportion of one-parent families in the study group.

Another factor in the large number of one-parent families is that there is more likelihood of the children remaining illegitimate as a result of the mother being less likely to marry. Mothers are now less likely to legitimate the child by marrying the father or enter a "parental adoption" by marrying a man who was not the child's natural father. The fall in the number of parental adoptions (over 5000 in 1971 and 2000 in 1983[112]) is also parallelled by the previously mentioned fall in non-parental adoptions so that of children born illegitimate in 1967, 62.6% were still illegitimate at the age of 3; and of those born illegitimate in 1973 74.9% were still illegitimate at 3 years old[113].

v) The effect of availability of contraception and the relationship between age and unwanted pregnancy.

Several studies have shown that younger women are less likely to seek contraception, are less efficient in its use, and are more likely to present with unplanned pregnancies.

Stott[115] in 1980 in a survey of an inner London practice showed that of the age groups of women attending for contraception the maximum consulting rates were for women in their late teens to mid 20's - with between 15-28% of women aged 17 to 25 attending during the nine months of his study. Of all the women attending 63% were single, and 61% were using the oral contraceptive.

He asked the women attending whether they had been pregnant and whether the pregnancies were planned - 58% were unplanned - in 45% of these no contraception was being used. 50% of these pregnancies had ended by termination.

Stott also found similar results to Kinnaird[111] in that for 70% of the women the age of first intercourse was between 15 and 17 years. He also found that the average length of time between first coitus and starting contraception was between one and two years; for many, pregnancy was the motivation for seeking contraception.

Metson in another General Practice study[116] studied those women who became pregnant over a two year period. 36% of 518 pregnancies were unplanned. This figure is lower than that obtained 8 years earlier by Stott; Metsons practice however, is in a large new town 40 Km from London - whereas Stott's practice was in Inner London.

He also found that unplanned pregnancy was commonest in the 15-19 year old group (46% of pregnancies in this group), of whom over half used either no contraception or were using the oral contraceptive incorrectly. He also found that failure rates for the combined pill, progesterone only pill, sheath and IUCD were greater for women under 25 than over 25 years.

McCance[117] in 1972 studied the sexual behaviour and contraceptive practices of female undergraduates at Aberdeen University. 53% had not used contraceptives at first intercourse. 39% of those who had had intercourse within a six week period had not used contraception, but the more stable the relationship and the more frequent the intercourse, the more likely was contraception to be used. The students, despite the presence of a Student Health Service, the availability of GP's who provided family planning services, and Family Planning Clinics, felt they needed more guidance and advice on contraception, venereal diseases and abortion. McCance makes the point "If so much ignorance exists about contraceptives, and if they are used so ineffectively amongst university undergraduates, how much more are they a closed book to less privileged young women?".

In their study from the Brook Young Persons Clinic of the pattern of contraceptive use 1975-1980, Jamieson et al[118] also showed there had been little change in the percentage of new clients aged under 20 who were sexually experienced and had used no previous contraception other than withdrawal (36% of under 20's in 1975 and 37% in 1980). Interestingly the proportion of teenagers presenting for the first time who were not sexually active increased from 11% of all teenager first presenters in 1975 to 22% in 1980. She offered however an explanation for the low uptake of contraception among young people.

"Drawing on a number of sources, a typical pattern of contraceptive practice, involving a series of discrete stages, may be described. Each stage involves a different constellation of attitudes to sexual activity and contraception. At the first stage, centred on the occasion of first intercourse, contraception is typically absent or ineffective. Attitudes towards sex and contraception are ambivalent, and this is associated with uncertainty about the relationship in which sexual activity occurs. In subsequent stages there is an acceptance of sexuality as part of ones personal identity ..... In the context of a stable relationship contraception becomes more effective".

Finlay et.al.[119] studied the patterns of contraceptive practice in an inner city General Practice and found that only 28% of patients were taking the oral contraceptive correctly and only 26% would use the sheath if a pill was missed.

Cobliner[120] described a phenomenon called 'frustration intolerance' which when combined with the other factors added to the likelihood of contraceptive failure. 46% of Negro women particularly those over the age of 25 showed exceptional intolerance of the frustration experienced with the public health facilities, with unsuitable appointments, no appointment or unhelpful staff. Under these circumstances women were likely to discontinue their method of contraception.

Those in the ethnic minorities may have other difficulties with obtaining contraception[121] in that services are usually planned by professionals from other ethnic groups. Ideally services should be provided in an acceptable environment, by a person of the same sex, ethnic background and language. Professionals from other groups may be unaware of the different cultural attitudes towards aspects of sex or the influence of ethnic minority peer groups or economic and personal factors, so that there is always the risk that inappropriate advice is given or misunderstood.

There has been less research on the attitudes of men towards abortion, contraception and sexuality. Hendrichs[122] studied a limited population of unmarried black adolescent fathers in 5 US towns. They were asked about their attitudes towards abortion, contraception, and sexuality and were paid for their response although participation was voluntary. The majority of the young fathers said if they were responsible for a pregnancy then they would not want the woman to have an abortion and the majority disagreed that it was the womans fault if she become pregnant. Two thirds disagreed that it was not right to use birth control and most disagreed that getting a girl pregnant proved you're a man. Four out of five disagreed that sex education was a waste of time and most agreed a man should use birth control.

There have been two recent studies from Britain on male attitudes Curtis et al[123] studied 46 men who were the partners of teenage mothers or primigravidas aged 20-25 years. The men were much less likely to have had sex education from their parents than the women although both the men and women were equally likely to have had sex education at school. 49% of the men said they had learned most about contraception from friends whereas most of the women learned about contraception from parents or school. Just under 50% of the men had had their first intercourse before the age of 16 and were much less likely to have used any contraception on the first occasion or to have continued to use it. Most the men said that their first intercourse was unplanned and 14% said that it was related to alcohol.

To what extent availability of contraception and age has had on the study population or the effect of male attitudes is difficult to gauge.

Single women in the study have been shown to have more addresses than married women, so they may have found contraceptive services more difficult to find. Opposing this is the fact that there was no difference in the number of doctors that either group of women had registered with in the previous 5 years. Nevertheless the large proportion of mixed race and black mothers in the one-parent group may have experienced greater difficulty in obtaining contraception because of ethnic barriers.

A particular problem may have arisen in the study practice because all the doctors are male.

The study also found that the one-parent mothers were young and were younger when they had their first child. This could be due to the practice population having a concentration of those women who began to have intercourse early and who conceived before they considered using contraception.

There can be no certainty about this in the study because the number of married women who conceived premaritally is unknown.

What is likely though is that the large proportion of unmarried one-parent mothers is partly due to those reasons identified in the aformentioned papers namely that intercourse is occurring earlier for men and women, and that intercourse may have been occurring for some time before contraceptive advice was sought. Even then it may have been ineffectively used and used only occasionally. For many therefore pregnancy would have been unplanned. The larger proportions of black and mixed race single mothers than white may have been due to inappropriate advice in an inappropriate setting at inappropriate times given by predominantly white health workers.

vi) Other Factors

a) Concentration of One-parent Families in Towns

Illesley and Gill[13] noted that there had been a change in the illegitimacy ratios between rural and urban areas in the second half of the 20th Century. In Scotland in 1948 illegitimacy ratios were higher for rural areas than for cities. By 1951 ratios for rural areas and cities were almost identical, but thereafter the illegitimacy ratio began to fall in rural areas and cities but the rate of fall for cities was slower. From 1959 illegitimacy ratios for cities began to increase sharply, but the rise in rural areas was delayed so that by 1964 there was a large difference between cities and rural areas. A similar pattern occurred in England and Wales, with a rise in illegitimacy ratios in conurbations from 1953 and a fall in rural areas until 1959 followed by a smaller rise, so by 1964 illegitimacy ratios for conurbations were almost twice that for rural areas.

If a comparison is made with one of the nearest rural areas to Birmingham i.e Shropshire this pattern is clearly seen (Figure7) with Birmingham in 1940 having a lower illegitimacy ratio than Shropshire, but by 1950 the ratio for Birmingham had begun to exceed that for Shropshire. There was then a fall for Shropshire, but a rise for Birmingham until 1955. Thereafter there has been a greater rise for Birmingham than Shropshire till 1965 when the illegitimacy ratios for both began to increase quite rapidly. Nevertheless by 1984 the illegitimacy ratio for West Birmingham was twice that of Shropshire.

It is not entirely clear why this should be. Illesley and Gill[13] point out that the urban increase first started and was more marked in London and that the pattern was followed by the Midlands and South East England and later by the industrial North.

The authors felt that these changes parallelled changes in sexual behaviour over the years. For the study population attitudes towards sexual experience were not assessed, so no comment can be made.

An urban factor may though partly explain the high proportions of black and mixed race one-parent families. 81% of all West Indian and 58% of all mixed race people live in English metropolitan towns compared with 31% of white people[124]. In addition in 1984-6 23% of all West Indian households compared with 4% of all white households were lone parent families with dependent children[125].

Thus not only is there a higher proportion of West Indian people living in the Inner Cities they are much more likely than white people to be one-parent families - results confirmed by this study.

Rodman[126] in his paper on illegitimacy in the Caribbean social structural discussed the values of the 'lower classes' in Caribbean societies with regard to 'non-legal marital unions' and the illegitimate children born to these couplings.

There is debate as to whether the high amount of illegitimacy in the Caribbean is customary behaviour or deviant with respect to the lower classes. If on the one hand the high amount of illegitimacy is the norm then the situation is very different from the dominant values of society; but on the other hand if illegitimacy is deviant then it too is different from societies values. In his review Rodman quotes examples from research which have taken both views; these arguments he amalgamates with the single hypothesis of "lower-class value stretch". This hypothesis states that for the lower class the usual values of society as a whole have been 'stretched', so that despite ascribing to middle class values of marriage and legitimacy, the lower classes fit in with the patterns of non-legal marriage and illegitimacy when circumstances make it impossible to behave according to the usual values of society.

Although illegitimate birth and `non-legal' unions were the usual pattern because circumstances of life demand it, most people felt that marriage was to be preferred.

Rodman proposes `vulnerability to environmental circumstances' as a possible cause for opting for the illegitimate status. This may be a factor within the present study population in that they may have limited economic resources and thus face greater difficulty in maintaining a marriage. Nationally the unemployment rate 1985-1987 for West Indian or Guyanese males was 18% compared with 9% for white males[127].

The social security benefit system encourages a couple with their own council flats and who are both unemployed to stay apart and unmarried. At 1989 levels a couple aged 18-24 living apart with their own Council owned properties would together receive £62.70 per week, as a couple under the same roof they would receive £56.30 per week, a difference of 10%.

Another reason for the concentration of one-parent families in the practice area concerns the allocation of housing. At present the Lee Bank area contains a large population of readily available (but also poor quality) housing stock. This is largely maisonette and high rise accommodation. Consequently if families are in urgent need of rehousing or housing then the Lee Bank area tends to be where people are accommodated. Women who are single with children or who are pregnant and are homeless or who require rehousing are classed as having priority and are therefore frequently housed in Lee Bank. This reason may be one of the most important reasons for the excess number of one-parent families in the study population. It may also explain the surprising lack of teenage one-parent families, in that teenage mothers are more likely to stay with their mothers and not be rehoused.

b) Religion

A possible predominance of one set of one-parents belonging to religious groups whose beliefs militate against abortion and contraception. This is not possible to ascertain as the question of religious beliefs was not asked.

c) The Effect of Maternal Age.

The one-parent mothers were significantly younger than the married mothers, the mean age of the married mothers being 31.7 years and the one-parent mothers 28.4 years. This confirmed the findings of Crellin[128] and Filinson[129] whose subjects were mothers of whom the children were born illegitimate. If marriage is the normative value then as mothers become older, then more will marry. The excess number of one-parent mothers may be partly explained therefore purely on the grounds that they are younger, although Filinson did not find any increase in the number of women who subsequently went on to marry or cohabit.

SOCIAL CLASS OF ONE-PARENT AND MARRIED FAMILIES

The results from the 1st part of the study (Table 15) showed significantly more families of social class I and IIIM in the married group and more one-parent families in class IIIN. There were however significantly more one-parent families who could not be categorised. Several families filled in the questionnaire so that their social class could not be identified, nevertheless the pattern of predominance of social class IIIN, IV and 'other' groups is mirrored by the results for social class for one-parent families from the 1981 census (Figure 6). The same pattern of excess I and IIIM in the married and an excess IIIN, in the unmarried is also shown in Table 32 - the social class pattern of the 100 randomly sampled families where the accuracy of social class is 100%.

There are difficulties when comparing the social class of one-parent and married families. This difficulty is caused by the fact that one is not comparing like with like when comparing a one-parent woman's social class with that of her married counterpart, as the former is based on her own occupation and the latter on her husbands. One author has attempted to justify a single woman's social class of up-bringing as the determinant of social class, whereas another has used the woman's own present or past occupation as the determinant.

Crellin[128] rejected the use of the woman's occupation as the determinant of social class on several grounds. For some women she thought there was some doubt as to whether their occupation at the time they became pregnant was their 'usual' occupation. Similarly others would not have been working at all either before or during the pregnancy. For other women because of the smaller range of occupations available to them many women born into social class I and II would have become downwardly mobile whereas those born into classes IV and V might have become upwardly mobile when seeking work. She also though it likely that when women married many of them would marry back into the class of their origin.

She argued in favour of an unmarried woman being classified by her fathers occupation because "the parental home and its community setting are much more likely to have shaped her values, attitudes and behaviour than the very much shorter time during which she has been influenced by the occupational milieu in which she has been living since starting work".

Gill[130] however argues that a womans own occupation before marriage can be used as a valid indicator of social class. To defend the argument he looked at data on all <u>legitimate</u> first pregnancies occurring in Aberdeen between 1951-1961. He divided social class into upper lower and middle and then divided women into those who were tall, medium or short.

He then attempted to show that height (a characteristic known to be associated with social class) was distributed similarly among women when classified by their own occupation and by their husbands'. He also tried to show there was less closeness of fit between womens height when determined by their own occupation and their fathers occupation. In fact for the upper classes there were no differences, and for the middle and lower classes the differences were very small and no statistical test was used. The author would suggest that it is not safe to extrapolate the 'proof' from Gill's argument to applying the same method of analysis of social class to illegitimate births or one-parent families and that it is not possible to assess one-parent and married women in this way.

Further evidence for this view the author believes comes from the work of Hunt[16] who showed that married and non-married women with children who were working, were employed in jobs which were at a lower levels than their "usual job". There was also evidence she felt that non-married womens' jobs were at lower levels than married womens' job's.

Filinson[131] found that the social class distribution of respondents in her study determined by their occupation at the time of pregnancy, by their fathers occupation and by their mothers occupation "inadvertently" turned out to be similar for illegitimate and legitimate child bearers, but this was not so when social class was determined by boy-friend or husbands occupation at time of interview.

Analysed in this way there were twice as many classes IV and V among the illegitimate group as in the legitimate and 7 times as many I and II in the legitimate as illegitimate.

The official policy of the OPCS, consulted before the onset of the study is to classify a married woman by her husbands occupation and a single parent woman by her own present or most recent occupation, but as has been shown above results obtained in this way are not compatible; I would propose that social class cannot be used to demonstrate any socioeconomic differences in the two groups of one-parent and married mothers which might have a bearing on health.

An alternative method is to calculate whether there are any difference in the numbers of mothers in each group who achieved an educational qualification. Table 33 indicates that there was no difference between one-parent and married mothers for possession of a secondary education qualification. The two set of mothers therefore, if seeking work, are likely to be similarly employed. This I feel represents a fairer and more accurate way of assessing socioeconomic similarities or differences.

1) REPORTED MORBIDITY

A) MOTHERS

There were no significant differences in the number of mothers consulting at least once in the study period, or in the number of consultations they made. The consultation rates per annum were therefore very similar for the one-parent and married mothers at 3.42 and 3.01 consultations per mother per annum. The consultation rate was much higher than the rate for women aged 15-44 from the 3rd National Study of Morbidity Statistics from General Practice[132] at 2.09 Consultations per annum - the reasons for this are discussed later. The percentage of consultations which were home visits was not significantly different for the two groups of mothers and were very similar to the National figures which ranged between 4.1 and 5.3% of consultations for women aged 15-44.

Bucquet et al[133] studied some of the factors associated with home visiting in an Inner London Practice and found that single women age 15-44 had a lower proportion of home visits than married or divorced/separated women. Another factor was distance from the surgery with the percentage of home visits increasing when the patient lived between a quarter and a half mile from the surgery and decreasing thereafter. The distance effect was not consistent when social class was considered.

In this study car ownership was obviously not an important determinant whereas distance from the surgery possibly was with the Inner City boundary coming close to the surgery for 3 of its boundaries.

In the reported morbidity study there were only two illness categories which showed significant differences between one-parent and married mothers namely pelvic infection and vaginal discharge and consultations to obtain sickness benefit. This was true for the numbers of mothers which presented at least once and for the total numbers of episodes (Tables 23 and 24). Appendix 4 shows that amongst this category the greatest numbers of consultations are for Candidiasis and Vaginal Discharge N.O.S.

Candidiasis may be promoted by the use of antibiotics, or oral contraception and is commoner in diabetics.

The number of new consultations for oral contraception were similar for the two groups and the difference in numbers of patients who attended for repeat prescriptions for oral contraceptives (6 for one-parent mothers and 5 married mothers out of 37 and 29 patients from each group who returned for repeat prescriptions) was not significant. There was no difference in the number of treatments given for infections, but interestingly neither was there any significant difference in the number of treatments by vulval/vaginal preparations (Table 57). There were no diabetics in either group.

	One parent Mothers	Married Mothers	
Infections	37	29	NS
CNS (Including analgesia)	23	12	NS
Vulval/Vaginal	12	5	NS
Skin Preparations	13	7	NS
ENT Treatment	8	8	NS
Gastrointestinal	10	4	NS
Antirheumatics	9	3	NS
Contraception	9	3	NS
Eye	3	6	NS
Respiratory	4	3	NS
Oral Rehidration/Nutrition	0	5	P=0.00134
Endocrine	1	1	NS
Cardiovascular	0	1	NS
Non-Drug Therapy	134	93	NS
	263	180	
Number of Consultations	234	173	

Drug and Non Drug Therapy for One-Parent and Married Mothers

TABLE 57

The reasons for an excess of pelvic infection and vaginal discharge is not clear. Multiple sexual partners among one-parent women, or multiple partners among their male consorts may be a factor, as well as a reluctance to practice barrier methods of contraception. Southgate et al[134] screened women between 15 and 45 in three inner city general practices and found evidence of Chlamydia trachomatis in 8% and Neisseria gonorrhoea in 2%. Most of the women with these infections were symptomatic, and the women with Chlamydia were more likely to be single or divorcees and to have a vaginal discharge.

It is not clear from the study why there is not a concomitant increase in therapies for vulval/vaginal conditions; an explanation may be that there is an increased awareness and anxiety about sexual matters and fear of catching a sexually transmitted disease amongst women with partners to whom they are not married or cohabiting and that this reflects in the numbers of consultations in this category. It probably also reduces the significance of this increase.

The greater numbers of requests for sickness benefit, in the absence of an overall increase in morbidity may possibly be due to the excess of pelvic/vaginal infections but probably reflects a reduction in available help at home when either the mothers or their children are unwell. It may however confirm Ferri's finding[17] that mothers on their own were more likely to be chronically sick or disabled, though there was no evidence for this.

Although there were no significant differences between the two groups for all other illness classifications it appeared that certain conditions, namely upper respiratory tract infections, orthopaedic, skin, other gynaecological and gastrointestinal problems were reported more by both groups of mothers. Within some of these groups, trends of morbidity are possible recognised. (Appendix 4). Within the orthopaedic injuries there appears to be a tendency for the one-parent mothers to suffer from back and neck problems and sprains, and to report U.R.T.I's.

There is also a trend although not significant for one-parent mothers to report other gynaecological problems more frequently, much of this related to menstrual periods. Other categories contain too few numbers for comment. This study shows differences from other studies which were largely retrospective and based on personal recall by the mothers and assessment of their own health. The self reported studies[16,17,26] reported higher psychiatric morbidity, but in this study there was no significant difference in reported morbidity for anxiety and depression. This is perhaps surprising given that for one-parent families loneliness, disadvantage, living alone and finance are important. Bolden's findings[24] that more single parent adults had consultations in a year were not found and differences for respiratory disease and termination of pregnancy were not confirmed. He did however show a trend for more single parent women to consult more for gynaecological problems - but that this just failed to reach significance.

The differences in antenatal care found by Hunt[17] cannot be commented on as this aspect was not researched.

An attempt was made to determine whether the inner city mothers had greater episode rates for all morbidity categories than national rates. The source of comparison was the 3rd. National Study on Morbidity Statistics in General Practice[132].

Exact comparisons are however difficult for three reasons - first this study was only carried out for six months as opposed to one year in the 3rd. National Study, secondly the age ranges for the female population in the National Study (15 - 24 years, and 25-44 years) would include younger women than in this study, and thirdly females in the National Study comprise of mothers and non-mothers.

Given these provisos, Table 58 compares the numbers of episodes per 1000 women at risk per year for one-parent and married women with national figures for women aged 15-44 presenting first time ever with a new complaint from the 3rd. National Study.

	No of Episodes in 6 months	No at Risk	Episodes/ 1000 at risk/ year
One-parent mothers	234	137	3416
Married mothers	173	115	3009
3rd National Study Morbidity Statistics from General Practice*			2092

*Source[131]

Comparison of Episodes of New illness/1000 women at risk/annum for ICD Chapters I-XVIII of 3rd National Morbidity Study and study mothers.

TABLE 58

The trend is therefore for inner city one-parent women to have more new episodes of illness than married women; but both groups have at least 50% more new episodes than national figures.

There has been very little published work on comparisons of morbidity in Inner City and other urban or rural areas as previously described. Studies[59-64] have shown greater rates of mental illness, hospital admission, casualty attendance and reduced levels of preventative care.

The study therefore appears to show that for the one-parent mothers there are statistically significantly higher levels of pelvic infection and vaginal discharge and sickness absence and that there is a tendency to greater amounts of musculoskeletal and other gynaecological problems. In addition, Inner city mothers probably have higher episode rates for new illnesses than nationally.

B) CHILDREN

There were no significant differences in the numbers of children consulting at least once in the study period or in the number of consultations they made. The consultation rates for the two groups were similar at 2.21 and 2.56 consultations per annum for the children of one-parent families and the children of married parents. The annual consultation rates were higher than for children 0-14 years from the 3rd National Study of Morbidity Statistics from General Practice[132] at 1.9 consultations per annum and the reasons are discussed later.

The percentage of consultations for either group of children which were home visits did not differ greatly from that for the national figures for children aged 0-14 years (6.3%-8.8%)[132].

For the children there were no significant differences in episode rates for any of the morbidity categories, or for the number of individual children presenting at least once (Tables 25,26). This might be considered surprising given the difference in mortality between illegitimate and legitimate births [2-11] and the large percentage of children to single mothers. The number of post birth marriages among the married mothers is unknown; but given the large percentage of never married mothers in the one-parent group it is unlikely that a similar proportion of now-married mothers gave birth to their children illegitimately and then married. The similarity between the two groups is likely therefore to be a true similarity rather than an 'apparent' similarity and confirms Hunts findings[16] of a similar percentage of children unmarried and married mothers having health problems.

The same author found that where either an unmarried or a married mother was not working there was more likely to be a child with a health problem. In this study there was no difference in the number of working/non-working parent or married mothers, so this may be another reason for similar results.

For the children the commonest morbidity groups were for Upper Respiratory Tract Infection, ENT problems, Skin Diseases, Diarrhoea and Vomiting and Infectious Disease again confirming Hunts finding that the commonest reported problems were for respiratory illnesses[16].

Unlike the adults there were no obvious trends in morbidity within the morbidity categories for either sets of children (Appendix 5).

If the morbidity categories are reclassified by ICD chapters then comparisons can be made between Inner City Children and National Figures[132].

Like for the adults, children of one-parent families and children of married families have higher episode rates than Nationally (Table 59). In this case figures are quoted for ICD chapters I-XVII; omitting the supplementary classification which includes immunisations - which were not recorded in the study. As for adults these figures will only indicate a trend; the National figures refer to children aged 0 - 14 years; in the following tables results for children aged 15 have been removed from the study results to give figures for children up to 14 years old but an exact comparison cannot be made as the youngest child in the study population is six months old.

	No of episodes in 6 months	No at risk	Episodes/1000 at risk/annum
Children of One Parent Families	246	231	2130
Children of Married Families	269	211	2550
3rd National Study Morbidity Statistics from General Practice*			1864

*Source[132]

Comparisons of Episodes of New Illness/1000 children at risk/annum for ICD Chapters I-XVII of 3rd National Morbidity Study and study children

TABLE 59

Rates for the study population would have been higher if children 0-6 months had been included as consultation rates in this period are considerable, but nevertheless the differences would still not have reached those in the adult population.

It would appear therefore that there are no significant differences in reported morbidity between the children of inner city one-parent and married families and there is no difference in trends of morbidity.

Compared with National figures both sets of children probably have higher episode rates.

2) UNREPORTED MORBIDITY

The proportions of mixed race, black and white one-parent and married families were identical for the two parts of the study (Tables 8 and 27). As in the first part, the one-parent mothers in the second were also significantly younger than the married mothers and the mean ages of the mothers in each group of one-parent and married mothers were virtually identical (Tables 10 and 28). The population in the second part can therefore be taken as a representative sample of the first part of the study. Hunt[16] demonstrated that for her 5 areas of study there was a trend for more one-parent mothers to be less than 24 years old, for some areas markedly so, and Crellin[128] showed that for legitimate births the peak age at childbirth was 25-29 years and for illegitimate births 20-24 years. This feature of single parents being younger than married mothers therefore continues. Table 30 shows however that the mean ages at having the 1st child for one-parent and married mothers are now younger that those described by Crellin[128]. The reason for this is probably related to the reasons for the general increase in illegitimacy and that some of these reasons may also apply to married parenthood as well.

As well as there being no difference in the mean numbers of children in each family there was no difference in the ages of the youngest children (Table 31).

The problems with the placement of social class applied to the second part of the study as well as to the first but the same considerations apply.

There was no significant differences in the number of days that either groups of mothers felt unwell, self medicated or in the number of episodes of illness that they had (Tables 39,40,42).

The trend for higher reported episode rates among one-parent mothers for upper respiratory tract infection and orthopaedic conditions is reflected in the significantly higher rates in the diaries for cough and musculoskeletal disorders (Table 42). One of the reasons for the former may be the higher rate of smoking among the one-parent mothers (Table 35).

The reasons for the latter may be that significantly more one-parent mothers live in maisonette accommodation. (Table 34). These dwellings frequently have accommodation on the second or third floor and never possess lifts. Accordingly many mothers complain of the difficulty of carrying a pram, shopping and one or two children up the stairs and this is not an infrequent reason for a request for rehousing.

The diagnoses that might suggest psychological problems did not show any differences, particularly headache, tiredness or anxiety/depression.

The married mothers were much more likely to seek advice about themselves over the month than the one-parent mothers (Table 40) but this is likely to reflect the immediacy of help and support networks which are discussed below.

A similar pattern of unreported morbidity emerged for the children, with no difference in the number of days that the children were unwell, in the total number of days of self medication or in the numbers of episodes of illness or days overall that advice was sought (Tables 47-50). The morbidity pattern for the children (Table 52) shows an excess of upper respiratory infection among the children of married parents and an excess of earache among children of one-parent families. The reasons for this are unclear, but the trend is for more children of one-parent families to have a cough, and although not significant, is again probably related to an excess of parents who are smokers.

There was no increase in behaviour problems among the children of one-parent families as might have been expected[16] and indeed the number of cases was only one, perhaps because the mean age of both sets of children was quite low. Abdominal pain or headache can sometimes be a pointer to emotional problems in childhood, but again there was no significant differences between the two.

Differences did occur between the actions of the mothers on the first day of their own and their childrens' illnesses. The married mothers were more likely to self-medicate themselves on the first day of an illness than the one-parent mothers (Table 43) although there was no difference overall in the types of medication taken (Table 44).

Conversely there was no difference in the number of one-parent or married mothers who gave their children self-medication. More married mothers were likely to give analgesia or antipyretics to their children on the first day than one-parent mothers, but the difference is probably explained by the excess number of upper respiratory tract infections and sore throats in the married group.
Both set of parents were more likely to give medication to their children than to themselves on the first day of an illness. For the children of one-parent families the rate was twice that of their mothers but for the children of married mothers the difference was not so great (Tables 43, 51).

Differences also occurred in help-seeking behaviour on the first day of illness for both groups of children and parents (Tables 45,46,55,56). The one-parent mothers were significantly less likely than the married mothers to contact someone on the first day when either they or the children were ill , maybe because they were more resilient, or because of differences in available help.

When they did contact someone if they or their children were ill, the one-parent mothers were more likely than the married mothers to contact their own mothers , and the married mothers their husbands. The one-parent mothers also relied on the doctor more than the married mothers when they were ill.

Scambler et al[135] studied 79 married, single, separated and divorced women in a housing estate in London. They found that 71% of symptom episodes were discussed first with a non-medical person. Married women were more likely to discuss their symptoms with their husbands whereas single, separated and divorced women were more likely to discuss their symptoms with their mothers. For both groups of women female friends were the second most likely choice of advice. In this study married women were most likely to consult their husbands on the first day of their own illnesses, one-parent mothers differed according to whether it was them or their child who was ill. Their mothers were only the most important source of advice when the child was ill, they were relegated to third place during maternal illness. Friends were the fourth or fifth source of advice to the mothers when they were ill, and unimportant when the children were ill.

Scambler et al.[135] found that where `large active' kinship networks were in place i.e where the women met a family member at least once a week there was a tendency for women to consult their GP more, the hypothesis being that family members can exert quite a pressure for the mother to consult the doctor.

Where there was discussion of symptoms with friends, symptoms may be minimised more and thus people were less likely to consult.

In this study, friends were only important to the one-parent mothers when discussing their own illnesses, and family advice (i.e mother/family or husband) was always given more to the married mothers. The only time that the doctor was consulted more was when the one-parent mothers were ill.

Scambler et al. emphasise the importance of the telephone in maintaining the large active kinship network; the low proportion of telephone possession in this study (Appendix9) and the fact that the one-parent mothers had less immediately available help (Table 36), infers that the large active kinship networks occurring in Scramblers study do not occur to such an extent in this population particularly on the first day of illness. This probably accounts for some of the differences in seeking medical help between this study and his subjects,and also explains some of the differences in self-medication.

Comparisons with other studies are difficult as there have been few studies on self reported illnesses in mothers, and health diary studies have tended to concentrate on young children - or have looked at total symptoms rather than episodes of illness. Campion and Jennett[136] in Dundee studied 113 families with young children under 12 over a 12 month period and found that overall there was more than one new symptom per week in children under 4 and rather less for children over 4. The consultation rate was once for every 12 new symptoms, so again the mothers were coping on their own for the majority of times.

Pattinson et al[137] studied forty mothers and their first born infants aged 6 to 45 weeks in Newcastle upon Tyne and looked at self reported illness over 8 weeks by means of Health Diaries. Symptoms were recorded on 75% of days - with 8% of the days having 4 or more symptoms recorded. Professional advice however was given on a few occasions - 6% of days. Pattinson quotes further work by Spencer where professional help was sought in 17% of days when symptoms were present. Lloyd et al[138] demonstrated that on any one day 2% of all infants under 6 months will have 2 medical symptoms and less than half are seen by a doctor. About 1 in 12 babies with symptoms is admitted. Cunningham-Barley[139] showed that health care professionals were contacted on 7.2% of days that "something was noticed" thus demonstrating that "the overwhelming response to a child's symptoms was some form of non-professional care".

Episodes of trauma were reported very infrequently in the health diaries; Wadsworth et al[140] found that children living in one-parent families (or stepfamilies) were more likely to suffer from accidental injuries in their 1st five years of life than children living with both parents. This study however relied on maternal recall of all accidents sustained since birth provided the injury was sufficiently serious to require medical attention.

Twice as many one-parent (and step-) children were admitted to hospital after accidents compared with those living with both their parents. Burns and scalds were reported more in the children of one-parent families. The mothers in the one-parent (and step families) tended to be younger, have had more frequent household moves and children whose mother perceived behaviour problems. The reason for a double rate of admission among one-parent (and step-) children was thought to be due either to these children being more likely to seriously injure themselves or that doctors were more likely to admit children from there families as they may have thought they were more at risk.

In this study the mean number of days that the children of one-parent families and married families were unwell varied from 3.94 to 4.54 whereas the number of days of self-medication was from 2.9 to 3.27 - roughly 75% of the days the children were felt to be unwell.

In the study by Cunningham-Barley[139] action was recorded on 65% of the days symptoms were recorded. The most common symptoms for which no action was taken were for respiratory symptoms, behaviour changes, sickness and diarrhoea, and spots.

Direct comparisons with the use of home remedies and proprietary medicines in Cunningham-Barleys study and this study are difficult - but analgesics were the more frequently used proprietary medicine in both studies with cough remedies being second and third in the two studies respectively.
The use of home remedies such as giving fluids and bed rest were similar in both studies also.

Rylance et al[141] studied drug taking in children and found that drugs were being taken on 9% of days and that 45% of these were not prescribed. Of the non prescribed drugs aspirin, paracetamol and expectorants or cough suppressants were the most commonly used - thus concurring with this study and that of Cunningham-Barley[139].

Very low usage of accident and emergency department was reported in either group for the mothers themselves or for their children. Singh[142] in a South London General Practice found that despite doing their own on-call, of 217 people from their practice attending a casualty department only 7% had contacted their General Practitioner.

The factors which determined casualty attendance were urgency, the need for an Xray, perceived unavailability of the doctor, speed, advice from friends and relatives, being out of a practice area or not wanting to bother the doctor.

Reilly[143] found that those patients who self referred themselves to an Accident and Emergency department tended to be single, young males, to have arrived by car and have problems of a few hours duration with accidents and trauma predominating.

The study population therefore by these criteria were probably unlikely to attend casualty, particularly as trauma was recorded infrequently both in surgery consultations and in the diaries and especially as car ownership is very low in both groups (Appendix 9).

In this study both sets of mothers had about 5 days when they were unwell and the children were unwell for between one and two days. Help in all forms was sought for between one and two days in both adults and children. The results do not indicate how many times professional help was sought throughout the month, but on the first day of illness up to 20% of occasions a one-parent mother or either group of children were ill, a doctor was contacted. This is a high attendance rate it seems, and may be due to a real increase in morbidity or to differences in help networks.

The similarity in the number of episodes of reported illness overall again infers that the support network may act differently on the first day of an illness than throughout an illness. Eventually just as many married women go to the doctors with their illness as one-parent, perhaps as married mothers get a 'second' opinion from other family members in the later days of illness.

The similarity in morbidity overall both in reported and unreported illnesses may also be due to collective similarities in health beliefs and illness behaviour.

Health beliefs[144] - health motivation, perceived susceptibility, perceived seriousness, the cost/benefit of seeking help and the presence of a specific cue to action may be influential. Health beliefs tend to be derived from an individuals experiences and are modified by factors such as age, sex, race, ethnicity as well as personality, social class and peer pressures. There were differences in some of these factors between the one-parent and married mothers, but in a separate parallel study of health beliefs, twenty vignettes covering a range of health problems ranging from trivial to serious affecting mothers and children were given to both sets of mothers. The vignettes sought to find differences in definition of what constituted a health matter, its seriousness and action the mothers would take in terms of self care or professional help.

There were no differences in any of these categories for nineteen out of twenty vignettes. The only difference occurred in vignettes covering the least significant health issue. It would appear therefore there were no differences in health beliefs between the two groups of mothers.

Illness behaviour[145] is "any activity undertaken by a person who feel ill - to define the state of his health and to discover a suitable remedy". This normally involves complaining about symptoms and seeking advice from relatives, friends and health professionals.

Mechanic[146] reviewed illness behaviours and noted that a person's action to seek medical help and assume a "sick role"[147], that is to be exempt from normal social responsibilities, to not be expected to care for oneself, to want to get well and to seek medical advice and co-operate with medical experts depended on various factors. These included the person's age, sex and position in the social group (family) as well as his own importance in that group. However another important factor was "stress". Those persons reporting higher "stress" (in his study those who were lonely or nervous) being more likely to use medical facilities.

Stress however may have a much more important and wider meaning for all families living in the Inner City and be related to all the factors known to be associated with disadvantage.

The Jarman Index shows deprivation to be a major problem in the Inner Cities and studies concerning one-parent families from the 60's and 70's[15] show that they are particularly disadvantaged in terms of finance and housing. Data from this study shows that this deprivation still exists for one-parent families especially, but in many cases married families also have poorer housing and amenities. Even if they are significantly better off than one-parent families for some factors, they are frequently still worse off than families nationally (Appendix 9).

The number of lone parents on Supplementary Benefit has increased six fold since 1961, so that by 1987 two thirds of lone parents were claiming it[148].

Deprivation and poor health has been linked to lower social class but comparisons based on this measure are very difficult in this study for the previously mentioned reasons. It is not sufficient however to purely ascribe mortality and morbidity to social class - it is more important to try and connect those aspect of life which may be responsible for the differences in morbidity/mortality.

Factors such as stress, unemployment, education, maternal care, housing, pollution, passive smoking, radiation, weather and breast feeding and nutrition have been implicated[149,150] as well as poverty. Golding[149] quotes examples of research which showed that children of parents under stress are more likely to be ill.

Unemployment

Table 16 shows that there is no difference between the numbers of one-parent and married mothers who are working. The percentage of lone parents who were working (29%) was almost identical to that in the Ladywood Ward at the 1981 census (31%)[74] and reflects the similarity in the percentages of non-married women who were working in national figures over the same time[151].

The 31% of female lone parents who were working in Ladywood in 1981 is exactly half that found to be working by Ferri in the early 1970's[17] . This can be explained by the trend in female unemployment which almost doubled over the period 1971 - 1981 from 3.6% of the available female workforce to 6.5%[152,153].

There was no significant difference in the number of married mothers or one-parent mothers who were working in the study population though the tendency was for more married mothers to be working, a trend opposite to that found by Ferri. There may be several reasons for this:

1 Ferri found one-parent employment to be greater because of the large number of widows who were working. In this study only 4% of the one parents were widows.

2 One-parent mothers had significantly less immediate help for health advice and had the longest to wait for that advice (Table 37). This may be due to the lack of child care in the community or that those mothers had less access to child minding help from friends or relatives while they worked, and were thus less able to work.

3 If Ferri's finding[17] is still true that one-parent mothers tend to have less well paid jobs they would be less likely to work because they couldn't afford child care, and would rather resort to State Benefit.

It would appear that Finer's finding that it is the age of the youngest child and the number of children in the family which determines whether a woman can work[15] is not applicable in this study as there were no differences in ages of the youngest child or family size between the one-parent and married group Tables 29,31).

Hunt[16] showed that working one-parent mothers felt less deprived socially and financially. It may be the case that working married mothers felt the same way too particularly if their husbands were out of work.

If that was the case then large numbers of non working married and non married mothers would feel this deprivation.

Beale and Nethercott[154] showed an increase in morbidity among men and women when subjected to compulsory redundancy. The power of the threat of unemployment was also demonstrated by an increase in morbidity dating from the announcement of the possibility of redundancy two years before the closure of the factory where the study population worked.

Arber[155] using data from the General Household Survey showed that women lacking paid employment reported poorer health than those who were employed and that such women were also concentrated among the lower social classes.

Crombie et al[156] looked at unemployment as a risk factor for coronary heart disease in women in Scotland and found that both the percentage of male unemployment and percentage of female unemployment had a significant independent association with mortality from coronary heart disease in women.

When comparing men and women they also found that the factors of percentage of single parent status and percentage living in a council house had a larger independent association with mortality from coronary heart disease for women than for men. Pritchard et al[157] showed that suicide was a risk for unemployed women with a significant positive correlation between the suicide index of change (that is the 1985 suicide rate as a percentage of the 1974 suicide rate) and unemployment, those countries having the highest suicide index of change having the highest female unemployment.

Hawton et al[158] showed that the ratio of attempted suicide among unemployed women in Oxford was between 7.5 and 10.9 times higher than those out of work for a year. The amount of reported and unreported psychiatric morbidity in this study was low, but may exist if formally tested[26] but education is likely to be a factor by continuing a `cycle of deprivation'.

Lower educational attainment would mean that the children will be less likely to obtain well paid or non manual occupations and be less likely to break out of their social environment.

Lower incomes mean poorer quality of life and greater likelihood to experience the risk factors for poorer health. In this study there was no difference in the presence of an educational qualification by either group or mother.

The correlation between adverse housing and health can be traced back to the 1830' and 40's when overcrowding unsanitary conditions and damp were unrecognised as major problems.

Gabe[159] et al found a relationship between the General Health Questionnaire (GHQ) score, and household size. Those with highest scores for GHQ (indicating greater psychological symptoms) were those both in homes with greatest overcrowding (>1.15 per room) and for the lowest occupancy (<0.5 per room) indicating that overcrowding and perhaps loneliness are significant for mental health. In this study area the Ladywood Ward had the lowest amount of overcrowding of any of the Inner City Wards so this is likely to be less important than other factors[160] .

Housing type also has bearing on health, most research having been done on flats. Fanning[161] compared the health of families in blocks of flats and houses and showed a 57% increase in referrals to hospital for flat dwellers over house dwellers. There were more ear infections, respiratory illnesses, musculoskeletal and menstrual problems among flat dwellers. First consultation rates were higher for all ages who lived in flats. The greatest differences were particularly marked for respiratory disease, especially for children under 10 and for psychosomatic disease especially in women aged 20-29, where it was almost 3 times as great. The attendance rate/1000 patients was greater for both respiratory and psychosomatic illness, the differences for respiratory disease were not great, but for psychosomatic illness the rate was twice as high for those living on the 3rd floor as opposed to the ground floor.

Moore[162] however found no increase in psychiatric illness in flat dwellers or any increase with differing floor levels. In this study a sizable but statistically equal population of one-parent(29%) and married mothers (22%) lived in flats so that flat dwelling may be an important factor for some families.

The quality of housing has been shown to be important to health. Byrne et al[163] studied groups of people living in different council areas of Gateshead. He compared those people who lived in areas where housing was difficult to let and those who lived in areas which were <u>not</u> difficult to let.

People living in 'difficult to let areas' were more likely to report housing and environmental defects and were the most dissatisfied with their housing circumstances. They found that dissatisfaction was determined more by location of a dwelling in one of these areas than by the type of dwelling or presence of a structural defect. Those living in 'difficult to let' areas reported more illness and inferior health status than did people living in other areas. They were also more likely to have poorer perceptions of their own health and report greater frequencies of longstanding and recent illness than those in 'easy to let' areas. They also reported more respiratory and psychological problems. When housing type was examined it was generally found that those who lived in houses were healthier than those in high rise accommodation.

The findings were not however statistically significant. In this study large numbers of one-parent mothers (54%) and married mothers (42%) - (Appendix 9) were dissatisfied with their accommodation. In addition, Lee Bank the main area of Study, is a "difficult to let" area for council properties. Dissatisfaction may be related particularly for one-parent families to the lack of a safe environment for the children to play, to the difficulty keeping living rooms warm in winter and to the lack of a car to escape from the area. Nevertheless many married families were similarly disadvantaged and equally large numbers of one-parent and married mothers complained of damp and noise from neighbours (Appendix 9). These factors therefore are likely to add to the realities or perceptions of ill health amongst occupiers.

Damp has been quite extensively researched as a potential cause of morbidity, and is thought to contribute through the medium of moulds or spores, by lowering room temperature and by favouring the growth of house dust mite. It gains access either by condensation, penetration or by rising dampness. Martin[164] studied the physical and mental health through questionnaire and the Nottingham Health Profile. Dampness was measured with a protometer.

For adults there were no associations with health problems for those living in damp homes with the exception of 'emotion reactions scores' which were significantly higher in damp houses.

For children living in damp houses there was significantly more reported 'aches and pains', diarrhoea, 'nerves' and headache. Though there was no significant difference for individual respiratory symptoms. Children in damp houses were more likely to have had at least one respiratory symptom in the previous two months.

If a comparison is made of children whose homes either do or do not have mould, not only are the previous symptoms still significant, but more children in mouldy homes have vomiting or sore throats.

Strachan[165] et al found a significant association between the reported presence of damp and mould with children who had ever wheezed, school absence and nocturnal cough. (Other variables such as family history of wheeze and leaving the bedroom window open and parental smoking were also found to be associated with wheezing/school absence or nocturnal cough). Children in damp houses however were not more likely to attend the doctor with respiratory disease. Strachan maintains that because questions about the environment and morbidity were administered separately then there would be a greatly reduced risk of reporting bias. He also casts doubt that general practice records are good indices of lower respiratory morbidity.

Another reason may be that mothers in damp housing are themselves aware of a possible association of dampness and respiratory morbidity and are likely to remember it. The association of damp with morbidity therefore is still being debated but the large numbers of one-parent mothers and married who reported damp (Appendix 9) and particularly the significantly large numbers of one-parent mothers who reported difficulty heating their living rooms and youngest child's bedrooms and who had no central heating, may individually have damp/cold as significant risk factors (Appendix 9).

Mobility is associated with psychological morbidity. Martin[166] found that mental health problems were higher in the population of a new housing estate than would be expected on demographic grounds. This he ascribed to the dislocating effects of rehousing and the conditions of life on the estate; as well as the tend for families to isolate themselves.

In this study significantly more one-parent mothers had changed address in 5 years than the married mothers but interestingly there were no differences in the numbers of doctors that they had registered with in the same time (Appendix 9). This infers that the moves may have been over short distances, perhaps lessening the unsettling effect of moving described by Martin.

Poverty is related to greater mortality - mortality being greater in those without a car and not being a home owner (and lower social class)[44,167].

Attendance at General practitioner's surgery has also been associated with poverty and poor education. Campion and Gabriel[168] showed that families with higher consulting rates had higher indices of economic disadvantage (finance, employment, housing and social class). Mothers with less education also scored higher on a test of `tendency to consult'.

In this study greater numbers of one-parent families than married neither owned a car nor owned their own homes. Greater numbers of one-parent families were on Supplementary Benefit and smoked, but equal numbers of one-parent families and married families had gained some form of educational qualification. The one-parent mothers had greater difficulties keeping their homes warm, but even in these cases the responses of the married mothers showed them to be worse off than families in the U.K generally. In some situations for one-parent families eg. the numbers on Supplementary Benefit, the number of owner-occupiers and the number dissatisfied with their accommodation, the position has deteriorated since 1971[15].

Similarly where there were no differences between one-parent and married families; for example in dissatisfaction with accommodation, the presence of somewhere safe for the children to play, the presence of damp in the house or being troubled by noisy neighbours, and even though comparisons with the U.K cannot be made, the levels of difficulty are unacceptably high for both groups of family.

CHAPTER 7

CONCLUSIONS

The two hypotheses that reported and unreported morbidity were greater among Inner-City one-parent mothers and children than among Inner-City married mothers and children were not proved.

Amongst the one-parent and married groups there were no differences in the numbers of mothers attending surgery or in the numbers of episodes of new illnesses reported. Within the total reported morbidity for the mothers two areas of difference could be identified. There were significantly more one-parent mothers who were diagnosed as having pelvic infection and vaginal discharge, and there were significantly more one-parent mothers who requested sick notes. The reasons for this excess pelvic infection and vaginal discharge are not clear and can only be speculated upon. It may be due to a multiplicity of sexual partners or reflect a lack of use of barrier methods of contraception. A lack of a concomitant increase in prescriptions for vulval or vaginal preparations, or excess prescriptions for antibiotics in the one-parent mothers perhaps reduces the significance of this result. The excess number of sick notes issued to one-parent mothers cannot be due to an excess in morbidity. Other studies have referred to the difficulties one-parent mothers experience with child-care when the children are ill. This is the most likely explanation for the one-parent mothers having more time off-work.

For the children there were no differences between the two groups in the number of children or in the number of episodes of new illness reported to the general practitioners. There were no differences in any of the categories of reported morbidity.

For unreported morbidity there was no difference in the number of days that either group of mothers or children felt unwell, self-medicated or in the number of episodes of illness. There were differences within morbidity categories, the one-parent mothers experiencing more musculoskeletal disorders and cough. It is proposed that the former is due to the larger numbers of one-parent families who are housed in maisonette accommodation and who consequently often have to carry children, prams and shopping up several flights unaided. The reason for the greater numbers of one-parent mothers who cough is probably because larger numbers of one-parent mothers are smokers.

For the children, more one-parent children reported earache and more children of married families reported upper respiratory infections but the reasons are not clear.

Despite there being no differences in unreported morbidity over the whole month, differences between the two groups did occur on the first day of an illness. The one-parent mothers were much less likely than married mothers to contact someone on the first day that either they or the children were ill.

The married mothers were also found to be more likely to self-medicate themselves on the first day. If advice was asked, then, greater numbers of married mothers obtained advice about themselves and their children from their husbands, whereas the one-parent mothers discussed their own and their childrens' symptoms with their mothers. One-parent mothers were also more likely than married mothers to discuss their own symptoms with the doctor or friends.

This similarity in unreported morbidity over the whole month but with differences on the first day is due either to the one-parent mothers having less immediately available advice, or to the different sorts of advice given on the first day within each group of mothers' support networks. These differences were not significant over the whole month of study.

The third aim of the study, to show greater rates of morbidity for one-parent mothers and their children and similar rates for married mothers and their children when compared with National figures was not proven. Although exact comparisons for the mothers could not be made because National figures also included women of younger age and did not distinguish those who had borne children , both one-parent and married women had almost fifty percent or more episodes of illness per one thousand persons at risk than nationally. Children too had greater numbers of episodes of illness per one thousand children at risk than nationally, though the differences were smaller.

The reason for this high but similar episode rate among inner-city one-parent and married mothers and children may because similar health beliefs were found for both groups of families, which if compared with mothers nationally would show a greater need for professional help in times of family illness. An alternative explanation is that illness and illness-behaviour is related to environmental stress. Indicators such as the Jarman Index show greater deprivation within Inner-City areas, but results from this study that for specific areas although one-parent mothers are often more disadvantaged than married mothers (for example car ownership, the need for Supplementary Benefit, smoking and difficulty keeping the house warm in winter), married mothers themselves are often as disadvantaged as one-parent mothers and considerably more disadvantaged than people nationally.

The study showed therefore no overall difference in reported and unreported morbidity between one-parent mothers and married mothers or between children of one-parent or married families. Small differences in some specific areas of reported and unreported morbidity were shown, but these are likely to be addressed through health education or housing and social policy.

Perhaps more importantly the study has demonstrated that overall, morbidity is greater for both groups of mothers and children than nationally. It also confirmed that in many cases one-parent mothers were more disadvantaged than married mothers, but quite often married mothers were themselves more disadvantaged than nationally.

It is proposed that it is the stress-inducing factors of deprivation associated with living in the Inner-City, present to a large degree in both groups of families that are more important in creating excess morbidity than is marital status.

APPENDIX 1

QUESTIONNAIRE 1

Thankyou for completing this questionnaire:
PLEASE ANSWER ALL QUESTIONS

1 SURNAME .....

First Name .....

Second Name.....

2 DATE OF BIRTH.....

3 Sex:Male(__) Female(__)

4 ADDRESS.....
.....
.....

5 POSTCODE.....

6 TELEPHONE N° .....

7 ARE YOU. Married.....(__)What is your husband/ wife's name & date of birth
.....
...../...../.....
Widowed.....(__)
Separated....(__)
Divorced.....(__)
or have you Never Married(__)

8 DO YOU HAVE CHILDREN UNDER 16 WHO LIVE WITH YOU? YES(__)
NO (__)

What are their names,sex
and dates of birth

NAME & SURNAME	SEX (m/f)	DAY	MONTH	YEAR
1.....	.....	...	.....	.....
2.....	.....	...	.....	.....
3.....	.....	...	.....	.....
4.....	.....	...	.....	.....
5.....	.....	...	.....	.....
6.....	.....	...	.....	.....
7.....	.....	...	.....	.....

PLEASE GO TO NEXT PAGE

9 IF YOU HAVE CHILDREN UNDER 16
ARE YOU THE ONLY PERSON
RESPONSIBLE FOR BRINGING
THEM UP? YES (__) NO (__)

10 ARE YOU...

Working.....(__)what job do you do?.....
.....
Unemployed.....(__)
Housewife.....(__)
Retired.....(__)what job did you do?.....
.....
At School or College(__)
Receiving Invalidity
Benefit.....(__)what job did you do?.....
.....
None of these?.....(__)

11 WHAT JOB DOES OR DID YOUR FATHER DO?.....
OR Is or was he unemployed? (__)

12 IN WHICH OF THE FOLLOWING GROUPS WOULD YOU PLACE
YOUR FAMILY

White.....(__)
African.....(__)
Chinese.....(__)
Asian.....(__)
West Indian...(__)
Mixed.....(__)
Don't Know....(__)
Other (Please Specify).....

13 **(FOR MARRIED,DIVORCED,SEPARATED & WIDOWED WOMEN ONLY)**

What job does or did your husband do?.....
.....

OR Is or was he unemployed? (__)

THANKYOU VERY MUCH INDEED

APPENDIX 2

QUESTIONNAIRE 2

1 SURNAME .....

First Name .....

Second Name.....

2 DATE OF BIRTH.....

3 Sex:Male(__) Female(__)

4 ADDRESS.....
.....
.....

5 POSTCODE.....

6 TELEPHONE N° .....

7 ARE YOU. Married.....(__) What is your husband's name & date of birth
.....
...../...../.....
Reg @ LBHC Yes(__) No(__)

Widowed.....(__)
Separated....(__)
Divorced.....(__)
or have you Never Married(__)

8 DO YOU HAVE CHILDREN UNDER 16 WHO LIVE WITH YOU? YES(__)
NO (__)

What are their names,sex and dates of birth

NAME & SURNAME	SEX (m/f)	DAY	MONTH	YEAR
1.....	.....	...	.....	.....
2.....	.....	...	.....	.....
3.....	.....	...	.....	.....
4.....	.....	...	.....	.....
5.....	.....	...	.....	.....
6.....	.....	...	.....	.....
7.....	.....	...	.....	.....

9 IF YOU HAVE CHILDREN UNDER 16
ARE YOU THE ONLY PERSON
RESPONSIBLE FOR BRINGING
THEM UP? YES (__) NO (__)

10 ARE YOU...

Working.....(__)...F/T(__) P/T(__)
Unemployed.....(__)
Housewife.....(__)
Retired.....(__)
At School or College(__)
Receiving Invalidity
Benefit.....(__)
None of these?.....(__)Specify.....

WHAT IS OR WAS YOUR PRESENT OR LAST JOB?

Occupation.....
.....

Description of Work.....
.....

Status: Apprentice.....(__)
Employee not supervising others.....(__)
Employee supervising others.....(__)
Self Employed not employing others.....(__)
Self Employed employing others.....(__)

11 IS OR WAS YOUR FATHER...

Working.....(__)...F/T(__) P/T(__)
Unemployed.....(__)
Housewife.....(__)
Retired.....(__)
At School or College(__)
Receiving Invalidity
Benefit.....(__)
None of these?.....(__)Specify.....

WHAT IS OR WAS YOUR PRESENT OR LAST JOB?

Occupation.....
.....

Description of Work.....
.....

Status: Apprentice.....(__)
Employee not supervising others.....(__)
Employee supervising others.....(__)
Self Employed not employing others.....(__)
Self Employed employing others.....(__)

12 (FOR MARRIED,WIDOWED,SEPARATED & DIVORCED WOMEN ONLY)

IS YOUR HUSBAND..

Working.....(__)...F/T(__) P/T(__)
Unemployed.....(__)
Retired.....(__)
At School or College(__)
Receiving Invalidity
Benefit.....(__)
None of these?.....(__)Specify.....

WHAT IS OR WAS YOUR PRESENT OR LAST JOB?

Occupation.....
.....

Description of Work.....
.....

Status: Apprentice.....(__)
Employee not supervising others.....(__)
Employee supervising others.....(__)
Self Employed not employing others.....(__)
Self Employed employing others.....(__)

13 How old were you when you had your first child?.....(____)Yrs

14 How old were you when you left F/T Education...(____)Yrs
Still at College.....(__)

15 Did you achieve a..University Degree.....(__)
College Qualification..(__)
"A"Levels.....(__)
"O"Levels.....(__)
"CSE".....(__)
None of these.....(__)
Don't Know.....(__)

16 Do you have easy access to somewhere where your child or children can play safely?.....Yes(__) No(__)

17 What is the main method of heating your house?.....
.....

18 Is it difficult to keep your living room warm in winter?.....Yes(__) No(__)

19 Is it difficult to keep your youngest child's room warm in winter?.....Yes(__) No(__)

20 Do any of your rooms show signs of damp?.Yes(__) No(__)

21 Do you get annoyed by noise from neighbours.....Yes(__) No(__)

22 Are you..Owner/Occupier..(__)
Private Tenant..(__)
Council Tenant..(__)
None Of These...(__)

23 Are you satisfied with where you live?...Yes(__) No(__)

24 What sort of property do you live in?
Maisonette.....(__)
Block of Flats....(__)
Semi-Detached.....(__)
Detached.....(__)
Town House.....(__)
Other.....(__)

25 Do you own a car.....Yes(__) No(__)

26 If you or your child are not feeling well and you are not sure if it is something serious who do you go to for advice first?.....

How long does it usually take to contact them?
0 Minutes.....(__)
Up to 5 minutes.....(__)
Up to 15 minutes.....(__)
Up to 30 minutes.....(__)
Up to 1 hour.....(__)
Up to 2 hours.....(__)
Up to 4 hours.....(__)
Over 4 hours.....(__)

27 How many addresses have you had in the last 5 years?.....(__)

28 How many different doctors have you been registered with in the last 5 years?.....(__)

29 Are you receiving Supplementary Benefit?.....(__)

30 Do you receive any other forms of Benefit?Yes(__)NO(__)
If Yes, What Ones?.....
.....

31 How many cigarettes do you smoke in a day? 0 (_)
1-5(_)
6-10(_)
11-20(_)
21-40(_)
>40(_)
Or Ounces of Tobacco.....(____)

32 Do you drink alcohol.....Yes(__).No(__)
How many alcohol containing drinks do you have in a week.....(__) Pints
(__) Single Measures
(__) Wine Glasses

33 IN WHICH OF THE FOLLOWING GROUPS WOULD YOU PLACE **YOUR FAMILY**

White.....(__)
African.....(__)
Chinese.....(__)
Asian.....(__)
West Indian...(__)
Mixed.....(__)
Don't Know....(__)
Other (Please Specify).....

APPENDIX 3

HEALTH DIARY

.....DATE.../.../... FAMILY N°.....

1) DID YOU THINK YOUR CHILD WAS UNWELL TODAY? YES...(__)
   NO....(__)
   If Yes, What Was Wrong?.....
   .....

2) DID YOU GIVE THE CHILD ANY MEDICINE OR DO ANYTHING ELSE TO MAKE HIM/HER BETTER TODAY? (Apart from what the Dr may have Prescribed) YES...(__)
   NO....(__)
   If Yes,What Did You Give?.....
   What Else Did You Do?.....
   .....

3) DID YOU SPEAK TO, OR SEE ANYONE ABOUT YOUR CHILD'S HEALTH TODAY? YES...(__)
   NO....(__)
   If Yes,Who?.....

4) DID YOU FEEL UNWELL TODAY? YES...(__)
   NO....(__)
   If Yes, What Was Wrong?.....
   .....

5) DID YOU GIVE YOURSELF ANY MEDICINE OR TABLETS, OR DO ANYTHING ELSE TO MAKE YOURSELF BETTER TODAY? (Apart from what the Dr may have Prescribed) YES...(__)
   NO....(__)
   If Yes,What Did You Take?.....
   What Else Did You Do?.....
   .....

6) DID YOU SPEAK TO, OR SEE ANYONE ABOUT THE WAY YOU WERE FEELING TODAY? YES...(__)
   NO....(__)
   If Yes,Who?.....

APPENDIX 4

Adults Reported Morbidity - Episodes by Type.

U.R.T.I.

Nasopharyngitis	1	1
Sinusitis	2	2
Pharyngitis	3	5
Tonsillitis	5	3
Laryngitis	3	2
Bronchitis	2	8
URTI	11	4
Cough	0	1
Influenza	2	1
	29	27

Pelvic Infection and Vaginal Discharge

Gonorrhoea	2	0	
Candidiasis	9	2	
Trichomoniasis	2	0	
Pelvic Inflammatory Disease	3	1	
Cervical/Vulval/Vaginal Inflammation	2	2	
Vaginal Discharge Nos	12	5	
	30	10	$X^2=5.5$ P=<0.02 >0.01 1df

Orthopaedic/Injuries

Rheumatoid Arthritis	0	1	
Joint Pain	3	2	
Disc Disorders	1	0	
Cervical Disorders	4	0	
Back Disorders	6	4	
Tennis Elbow	0	1	
Synovitis/Tenosynovitis	1	0	
Bursitis	0	1	
Rheumatism	0	1	
Myalgia	1	1	
Limb Pain	1	0	
Sprained Arm	1	0	
Sprained Knee	1	0	
Sprained Leg	1	0	
Sprained Back	1	0	
Superficial hand injury	1	0	
Superficial eye injury	0	1	
Hypothermia	0	1	
Accident by Fire	0	1	
	22	14	N.S

Skin Disorders

Boil	1	2
Cellulitis	0	2
Lymph adenitis	0	1
Skin Infection	1	1
Eczema	4	1
Lichen Planus	2	0
Pruritis	1	3
Corn	1	0
Nail Diseases/	2	0
Sweat Gland Problem	0	1
Sebaceous Gland Problem	4	0
Other Skin Problem	0	1
Herpes Simplex	1	0
Warts	0	2
Tinea/Ringworm	1	2
	18	16

Other Gynaecological Problems

Cervix Disorders	2	0
Genital Symptoms	5	4
Amenorrhoea	2	3
Menorrhagia	3	0
Irregular Menses	0	2
Pelvic Mass	0	1
Menstrual Data	1	1
Other Menstrual Problems	2	0
Post Coital Bleeding	1	0
Menstrual Disorders	2	0
Infertility	3	0
Genital Prolapse	1	0
	22	11

Gastrointestinal Problems

Tooth Disorders	0	1
Constipation	3	1
Functional GI Problems	1	0
Anal Fissure	2	0
Gall Bladder Disorders	0	1
Abdominal Pain	9	4
Indigestion	1	0
Weight Problem	3	2
Obesity	0	1
	19	10

Contraception/Pregnancy Testing

Pregnancy Testing	2	5
General Contraceptive Advice	1	1
Oral Contraception	4	2
IUCD	2	2
Diaphragm	0	1
Post Coital Contraception	2	0
Other Contraception	0	1
IUCD Problem	1	0
	12	12

Renal

Frequency	0	1
GU Pain	2	2
UTI	2	5
Cystitis	1	0
Urethral Disorders	1	0
	6	8

E.N.T.

Other Ear Disorders	0	2
Ear Diseases	0	2
Otitis Media (Non Supp)	1	0
Vestibular Syndromes	1	1
Hearing Problems	1	0
Nosebleed	0	1
Nasal Problems	0	1
Chronic Pharyngitis	0	1
Hayfever	0	1
Allergic Rhinitis	1	0
	4	9

Headache

Headache	0	3
Migraine	1	1
Tension Headache	4	3
	5	7

Counselling

Counselling	2	0
Social Counselling	1	1
Medical Counselling	3	3
Counselling Nos	2	0
	8	4

Anxiety/Depression		
Anxiety	2	2
Reactive Depression	1	0
Other Neurotic Disorders	1	0
Depression, 'low', situational unhappiness	4	1
Tiredness	0	1
	8	4
Pregnancy and Puerperium		
Pregnancy Diagnosis	4	4
Post Natal Visit	1	0
A.P.H.	0	1
Medical condition of Pregnancy	0	2
Obstetric Venous Problem	0	1
Obstetric Delivery	1	1
	7	9
Breast Diseases		
Mammary Dysplasia	1	2
Inflammatory Breast Disorder	1	0
Breast Problems Nos	1	2
	3	4
Diarrhoea and Vomiting		
Diarrhoea and Vomiting	2	5
Sickness Benefit		
Sickness Benefit	7	0
Inadequate Housing		
Housing letter requests	3	0
Laboratory Tests		
Laboratory tests	2	1
Others	27	22

APPENDIX 5

Childrens Reported Morbidity - Episodes by Type

Upper Respiratory Tract Infection

URTI	52	44
Temperature	2	5
Cough	5	5
Breathlessness	0	2
Acute Nasopharyngitis	2	1
Pharyngitis	5	5
Tonsillitis	15	13
Laryngitis/Tracheitis	3	2
Bronchitis/Bronchiolitis	6	8
Influenza	0	5
	90	90

ENT

Earache	1	1
Otitis Externa	1	3
Non suppurative Otitis Media	20	21
Suppurative Otitis Media	1	0
Chronic Pharyngitis	1	3
Hayfever	2	5
Allergic Rhinitis	0	1
Nose bleed	2	0
Nasal Symptoms	2	2
Laryngeal Signs	0	1
	30	37

Skin

Scabies	0	4
Warts	1	0
Cellulitis	0	1
Lymphadenitis	1	0
Impetigo	3	1
Fungal skin infection	1	3
Skin Infections Nos	1	2
Dermatitis/Eczema	6	2
Dandruff	0	1
Seborrhoeic Dermatitis	2	0
Atopic Eczema	3	2
Eczema Nos	0	1
Contact Dermatitis	0	1
Corn/Callosity	0	3
Hair/Hair follicle Disease	1	0
Sebaceous Gland Disease	1	2
Urticaria	2	0
Other Skin disorder	3	4
	25	27

Diarrhoea & Vomiting

Gastroenteritis	16	23
Vomiting	2	1
	18	24

Infectious Diseases

Erysipelas	1	0
Pertussis	1	1
CNS Viral Diseases	3	3
Chickenpox	3	5
Herpes Simplex	0	3
Measles	1	0
Rubella	5	1
Mumps	2	1
Viral Disease	1	0
	17	14

Eye Disorders

Congunctival Disorders	9	13
Eyelid Inflammation	4	2
Squint	1	0
Eye Symptoms	0	2
	14	17

Urinogenital Symptoms

Kidney Infection	1	2
Phimosis	1	1
Penis Disorder Nos	2	0
Cervix/Vaginal Inflammation	1	2
Female Genital Symptoms	0	1
Frequency	1	1
Micturition Control	1	2
Genitourinary pain	1	2
Vaginal Discharge	1	0
	9	11

Gastrointestinal

Candida	1	4
Helminthiasis	1	1
Constipation	1	3
Functional GI	1	1
Anal Fissure	2	0
Anal Abscess	0	1
Oral Soft Tissue Disease	1	0
	7	10

Anxiety/Sleep Disturbance, Enuresis/Hyperactivity		
Anxiety	1	0
Sleep Disorder	3	0
Enuresis	3	1
Other Symptoms	1	3
Overactive Child	1	1
	9	5
Abdominal Pain	5	3
Speech/Hearing/Headache	2	6
Injuries	7	5
Laboratory Tests	2	5
Orthopaedic	3	4
Asthma	2	1
Pneumonia	1	1
Others	21	25

APPENDIX 6

Unreported Morbidity - Symptom Codes

1	Migraine, Headache	Headache
2	Sore Throat, Tonsillitis, Swollen Glands	Sore Throat/Tonsillitis
3	Anorexia, Off Food	Off Food
4	Constipation	
5	Joint Pain, Aching, Backache, Stiff Neck, Leg Pain, Pain in the side	Musculoskeletal Aches & Pains
6	Dizziness, Fainting	Dizziness and Fainting
7	Cold, Running Nose, Congestion, No Voice, Flu, Sneezing, Frog in the throat, Virus, Blocked Nose	U.R.T.I.
8	Diarrhoea, Diarrhoea and Vomiting, Food Poisoning, Stomach Upset	Diarrhoea/Diarrhoea & Vomiting
9	Bed Wetting	
10	Stomach Ache, Stomach Cramp, Stomach Bloated	Abdominal Pain/Distention
11	Depressed, Panic Attack, Anxiety	Anxiety/Depression
12	Epileptic Fit	
13	Cough, Chesty	Cough/Chesty

14	Sick Travel Sickness Vomiting	Vomiting
15	Chest Pain	
16	Behaviour Problems Bad Temper	Behaviour Trouble
17	Injury Dog Bite Burn	Trauma
18	Conjunctivitis Swollen-eyes Eye Problems Sticky eyes Blood Shot eyes	Eye troubles
19	Asthma Breathing trouble Couldn't breathe	Asthma/Breathing Difficulty
20	Indigestion	
21	Period Pains PMT	Period Trouble
22	Run Down Tired Tiredness Weakness Lethagic Fatigued Heavy eyed	Tiredness
23	Miserable (of a child)	
24	Temperature Hot	Pyrexia
25	Teething Toothache Tooth loose & Painful	Teething/Toothache
26	Earache Ear infection	Earache
27	Eczema Itching Rash Spots Boil	Skin Problems
28	Nightmares	
29	Cystitis Urinary Frequency	Urinary Frequency

30 Chickenpox

31 "Don't Know"

32 Nosebleed

33 Hayfever

34 Shock

35 Post operative Pain

36 Piles

37 Mouth Ulcer

38 Hot Flushes } Menopausal Symptoms
Menopause }

39 Swollen legs

40 Painful breasts

41 Lonely

42 Contraceptive problems

43 Discharge

APPENDIX 7

Unreported Morbidity - Treatment Codes

1	Paracetamol, Calpol, Painkillers, Phensic, Aspirin, Nurofen, Hedex	Analgesics
2	Fluids, Hot Drinks, Fruit Juice, Drink Water, Glycolyte, Milk, Mint Tea	Fluids
3	Eat something, Soya Milk, Increase Breast Feeding	Eating
4	Bath Eyes	
5	Antacid	
6	Cough Medicine, Linctus, Actifed, Tixylix, Benylin	Linctus & Cough Medicine
7	Keep Warm, Sponge down, Hot Water Bottle	Raise or Lower Temperature
8	Lozenges, Throat Sweets	Lozenges
9	Cold Cures, Beechams, Honey & Lemon, Day Nurse, Lemsip	Cold Cure
10	Got to Bed, Lie Down, Cuddles, Early Night, Relax, Bath, Soak in Warm Water, Sleep, Pamper the Child, Comforting, Go For a Walk	Soothe/Relax

11 Decongestants } Decongestants
Vic }
Carvol }
Snuffle Babe }
Dimotane }

12 Massage } Massage/Rubifacients
Deep Heat }
Rub on Cream }

13 Sudocrem } Emollient Creams
Vaseline }
Calomine }
Cool Water on a burn }
Antiseptic Ointments }

14 Keep off School } Stay off Work/School
Stay off Work }
Stay at Home }

15 Regulan } Laxative
Enema }

16 Homeopathic Treatment } Homeopathy
Appointment with Osteopath }

17 Magnesia } Stomach Sedatives
Andrews }
Gripe Water }
Ginger & Lemon Water }

18 Eat Nothing

19 Bonjela } Mouth Pain Relievers
Difflam Oral Rinse }
Dentinox }

20 Brandy } Tonic
Coffee }
Iron & Vitamins }
Tonic Tablets }
Vitamins }

21 Do Nothing } Do Nothing
Suffer }

22 Read Bible } Prayer
Prayer }

23 Fasting

24 Appointment with the Doctor

25 Local Ear Application

26 P.R.N Medication from Doctor

APPENDIX 8

Unreported Morbidity - Contact Codes

1	Mother
2	Family Member
3	Husband
4	Doctor
5	Friend
6	Boyfriend
7	Chemist
8	Hospital
10	Teacher
11	Physio
12	Social Worker
13	Nurse at Work
14	Nursery Worker
15	Not Specific - Used where diary indicated help had been sought but not specified e.g Response = "Yes"

APPENDIX 9

Satisfaction with accommodation

There was no significant difference in the numbers of one-parent or married mothers who were satisfied with where they lived. A very large percentage of each group however, experienced dissatisfaction - Table

	One parent mothers	Married mothers	
Dissatisfied with accommodation	52 (54%)	34 (42%)	
Satisfied with accommodation	44 (46%)	47 (58%)	
	96 (100%)	81 (100%)	NS

One-parent and married mothers satisfaction with accommodation

TABLE 1

Possession of a car

Highly significantly more married mothers had a car than one-parent mothers Table 2)

	One parent Mothers	Married Mothers	Great Britain [169]
Without a car	94 (98%)	40 (49%)	
Possess a car	2 (2%)	41 (51%)	63%
	96 (100%)	81 (100%)	$X^2 = 53.66$
			P = 0.0000 1df

Possession of a car by one-parent and married families

TABLE 2

Ease of Access to Somewhere Safe For the Children to Play

Significantly fewer one-parent mothers had easy access to somewhere their children could play safely than married mothers - Table

	One parent	Married	
Nowhere safe to play	63 (66%)	39 (48%)	
Somewhere safe to play	33 (44%)	42 (52%)	
	96 (100%)	81 (100%)	$X^2=4.80$ P=0.0284 1df

Ease of access to somewhere safe to play for children of one-parent and married families
TABLE 3

Tenancy/Ownership of Properties

Significantly more married families were owner occupiers and significantly more one-parent families were council tenants. There was no significant difference in the numbers of one-parent or married families who were private tenants or had other arrangements (Table 4)

	One parent	Married		Great Britain[170]
Owner Occupier	0	20 (25%)	$X^2=24.317$ p=0.0000 1df	63%
Private tenant	3 (3%)	9 (11%)	NS	11%
Council tenant	91 (95%)	44 (54%)	$X^2=37.55$ p=0.0000 1df	26%
Other	2 (2%)	8 (20%)	NS	
	96 (100%)	81 (100%)		

Tenancy of properties occupied by one parent and married families

TABLE 4

Type of Heating

Some properties were heated either by night storage heaters, underfloor heating or gas fired convection or radiator central heating - these properties were grouped under the title of 'Central Heating'.

Other properties were heated by electric or gas fires or a combination of both, by paraffin heaters or by bottled propane gas heaters. These properties were grouped under the title of 'No Central Heating.

Significantly more married families had central heating than did one-parent families, the proportion of the former being almost identical to the proportion of families Nationally having Central Heating.

	One parent Families	Married Families	Great Britain[171]
Central Heating	47 (49%)	58 (72%)	71%
No Central Heating	49 (51%)	23 (28%)	29%
	96 (100%)	81 (100%)	X^2=8.42 p=0.0037 1df

Types of heating in homes of one-parent and married families

TABLE 5

Difficulty in keeping living room warm in winter

Significantly more one-parent mothers had difficulty in keeping their living rooms warm in winter than married mothers (Table 6).

	One parent	Married	
Difficult to keep living room warm	64 (67%)	29 (36%)	
Not difficult to keep living room warm	31 (32%)	52 (64%)	
Don't know	1 (1%)		
	96 (100%)	81 (100%)	X^2=16.24 p=0.001 1df

Difficulty experienced by one-parent and married families in keeping their living rooms warm in winter

TABLE 6

Difficulty in Keeping Youngest Child's Bedroom Warm in Winter

Significantly more one-parent mothers than married mothers found it difficult to keep their youngest child's bedroom warm in winter (Table 7).

	One parent	Married	
Difficult to keep child's room warm	70(73%)	37 (46%)	
Not difficult to keep child's room warm	26 (27%)	44 (54%)	
	96 (100%)	81 (100%)	X^2= 12.52 P = 0.004 1df

Number of one-parent and married mothers who found difficulty in keeping their youngest child's bedroom warm in winter

TABLE 7

Dampness

There was no significant difference in the numbers of one-parent and married families who reported the presence of damp in any of their rooms (Table 8)

	One parent families	Married families	
Damp Present	61 (64%)	42 (52%)	
Damp Absent	35 (36%)	39 (48%)	
	96 (100%)	81 (100%)	NS

Presence of damp in any of the rooms of properties occupied by one-parent and married families.

TABLE 8

Troubled by Noise from Neighbours

There was no significant difference in the numbers of one-parent or married families who were troubled by noise from neighbours (Table 9)

	One parent	Married	
Noisy Neighbours	27 (28%)	24 (30%)	
No Noisy Neighbours	69 (72%)	57 (70%)	
	96 (100%)	81 (100%)	NS

Number of One-parent & Married families troubled by noisy neighbours

TABLE 9

Supplementary Benefit

Significantly more one-parent families were receiving Supplementary Benefit than married families (Table 10)

	One parent	Married	
Receiving Supp. Benefit	87 (91%)	14(17%)	
Not Receiving Supp. Benefit	9 (9%)	67(83%)	
	96 (100%)	81(100%)	X^2 =93.48 1df P =0.0000

Numbers of one-parent and married families receiving supplementary benefit

TABLE 10

Number of addresses in 5 years

The one-parent families had had significantly more addresses in 5 years than the married families (Table 11)

	One parent	Married	
1 address	35 (37%)	37 (46%)	
2 addresses	29 (30%)	26 (32%)	
3	18 (19%)	13 (17%)	
4	7 (7%)	2 (2%)	
5	4 (4%)	1 (1%)	
6	1 (1%)	1 (1%)	
7	0	1 (1%)	
8	1 (1%)	0	
9	1 (1%)	0	
	96	81 (100%)	U=4453 Z corrected for ties-13.83 P=0.0000
Mean number of addresses	2.27	1.9	

Number of addresses in 5 years for one-parent and married families

TABLE 11

Number of Doctors With Whom Registered - Last 5 years

There was no significant difference in the numbers of doctors that one-parent or married families had been registered with in the last five years (Table 12)

	One parent	Married	
1 Doctor	47 (49%)	45 (56%)	
2 Doctors	37 (39%)	25 (31%)	
3 Doctors	9 (9%)	9 (11%)	
4 Doctors	2 (2%)	1 (2%)	
8 Doctors	1 (1%)		
	96 (100%)	81 (100%)	NS
Mean No. of Doctors	1.71	1.57	

Number of Doctors that one-parent and married families had registered with in previous 5 years

TABLE 12

There were no significant differences in the number of one-parent families or married families who possessed a telephone. Both groups were much less likely than nationally to possess a telephone (Table 13)

	One Parent	Married	U.K[172]
No Telephone	48 (50%)	28 (35%)	
Telephone	48 (50%)	53 (65%)	84%
	96	81 N.S.	

Possession of a telephone by One-parent and married families

TABLE 13

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