



**GREATER GLASGOW
HEALTH BOARD**

The Annual Report of the Directors of Public Health and Health Promotion 1997 ~ 1998

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Foreword

Perhaps the most important aspect of this Annual Report is the observation that cancer is now a more common cause of death amongst the population of the Greater Glasgow Health Board (GGHB) area than heart disease. We are seeing a progressive fall in deaths caused prematurely by heart disease. This is in part due to changing risk factors amongst the population and in part due to significant improvements in the effectiveness of treatment for heart attack, heart failure and high blood pressure. Glasgow participates in an international study which monitors the risk factors for heart disease in populations all round the world. Improvements in risk factors have been substantial in the Glasgow population but of course we are starting from an extremely high level of risk. The Local Authority areas which make up Greater Glasgow Health Board can take great heart from the fact that our health is improving. We need now to understand how we can make our health improve faster and how we can improve the quality of life of our population.

The principal underlying problems remain the social and economic conditions of the West of Scotland. High levels of death from respiratory disease and lung cancer point to the importance of smoking in determining health. The variation in a number of other indicators of ill-health by socio-economic status reinforces the importance of collaborative working between health, housing, education and employment agencies to improve the fabric of society in the West of Scotland. The necessary

partnership structures are now in place. Our collective challenge is to ensure that they make a real difference to the health of the people of Greater Glasgow. The Green Paper on Public Health issued by the Government earlier in 1998, is a welcome recognition of the points which we have been making about the importance of life circumstances in determining the lifestyles which individuals adopt and their subsequent risk of ill-health. The data contained in this Report compare GGHB with the rest of Scotland. In some of the graphs we have included information on Glasgow City. This is because Glasgow City contains the highest concentration of deprived postcodes in Scotland. The health status of East Dunbartonshire and parts of West Dunbartonshire, East Renfrewshire and North and South Lanarkshire that lie within the GGHB area tend to be better than the Glasgow City figure. In the course of the coming months we will produce information on the populations in each of the other Local Authority areas. There is no doubt that Local Authorities, with the power to effect radical change in the environment and in the lifestyles of their residents, hold the key to substantial improvements in public health.

In one aspect, the health of the children of Greater Glasgow has not improved in the slightest over the past decade. The dental health of our five year olds remains appalling. A number of initiatives have been put in place in an attempt to improve the incidence of dental caries in our young people. These initiatives are making an impact on a tiny proportion of the population and are having

no impact on the broader incidence of caries. A simple safe remedy for this problem exists. That remedy is fluoridation of the water supply. The arguments against fluoridation are not sustainable when subject to proper scientific scrutiny. West of Scotland Health Boards need to consider their policy on water fluoridation if our children, and particularly those living in deprived areas, are to be spared the risks of general anaesthesia and the pain and disfigurement of decaying teeth.

Some years ago, the previous Director of Public Health, Professor George Forwell,

first pointed out the importance of socio-economic factors in determining health. At that time, the issue was highly political and controversial. The climate has changed. There is now a real sense of Local Authorities, voluntary organisations and health services organisations working together. This report charts some improvements in health, provides an overview of our health promotion programmes and identifies areas where further progress is needed. We are more optimistic than ever that through joint working we can make a real difference to the health of our local people.

Acknowledgement

We would like to thank all staff within the Directorates of Public Health and Health Promotion for their work and commitment during 1998, and for their contribution to this report.

DR H BURNS
Director of Public Health

DR C TANNAHILL
Director of Health Promotion

December 1998

Introduction

Chapter 1 of this report provides selected vital statistics for Greater Glasgow Health Board (GGHB), usually with comparable data for Scotland as a whole. Chapter 2 identifies the promotion of good health as the central activity of the Health Board and describes the immense range of work in progress with various client groups in different settings and in partnership with our six local authorities.

Chapters 3 to 5 highlight the importance of cancer, coronary heart disease and stroke as the three major causes of premature death, and describe ways in which we are attempting to reduce the incidence of these diseases. Environmental and lifestyle influences are at least as important in this respect as is the provision of good quality health services.

In many ways Child Health is of even more fundamental importance than tackling cancer, heart disease and stroke - although the factors which predispose to these diseases are very much the same as those which predispose to poor health in children. Poor health in childhood is likely to lead to poor health in adulthood - and this applies at least as much (and probably much more so) to mental health as to physical health. Attempts to promote good health in adulthood are to a large extent too late: getting it right in childhood is where the main effort is required. Chapters 6 to 8 provide some insight into different aspects of this challenge.

As a health board we cannot be concerned only with adding years to life, we also need to add life to those extra years which we are attempting to create. The quality of life of older people, particularly those in institutional care, is of particular concern. Chapter 9 describes many of the difficulties experienced by older people in various settings and outlines ways in which we are dealing with these.

Apart from major life-threatening diseases, smaller but quite considerable numbers of people suffer from long-term disabling conditions which often greatly reduces their quality of life and may lead to premature death. Rheumatoid arthritis, sensory impairment, head injury, multiple sclerosis and other neurological conditions are examples. In this annual report we have chosen epilepsy as an example and describe the many ways in which different professionals are attempting to improve services for and the quality of life of this patient group (Chapter 10). Integrated systems of health and social care for patients in these groups do not exist. Designing more satisfactory pathways of care for them should be a high priority.

Chapter 11 shows that head lice infestation continues to be a vexing public health problem. Some infections such as campylobacter, food poisoning and meningitis appear to have increased considerably in 1997.

SOCIO-ECONOMIC DEPRIVATION

Throughout this report we have described socio-economic deprivation using the deprivation scores of Carstairs and Morris (1991). They calculated deprivation scores for each post code sector in Scotland based on four variables associated with lack of material wealth: overcrowding, male unemployment, low social class and car ownership. Deprivation scores are calculated into a categorised variable ranging from 1 - most affluent, to 7 - most deprived.

1 Vital Statistics

POPULATION TRENDS

Between 1996 and 2013, the GGHB population is projected to decline by 7.2%, compared with a decline of 1.6% for Scotland (Table 1). However, for the population aged 65 years and over there is a projected population decline of 8.7% for GGHB, compared with an increase of

12.3% for Scotland. For people aged 85 years and over, a small (1.5%) population decline is projected for GGHB compared with a projected increase of almost 25% for Scotland.

BIRTHS AND DEATHS

Between 1983 and 1991 the number of births each year remained fairly uniform at

Table 1
Projected percentage changes in population from base year by age group

SCOTLAND					
Age Group	BASE YEAR		% CHANGE		
	1996	2001	2006	2011	2013
0-14	961,182	-3.8	-8.8	-13.0	-13.9
15-24	663,152	-2.8	-0.9	-2.6	-4.9
25-34	820,995	-11.5	-23.6	-25.7	-23.9
35-44	728,370	9.7	10.3	-2.4	-9.6
45-54	647,803	5.3	9.7	20.5	22.5
55-64	527,036	2.6	15.1	21.6	21.1
65-74	445,873	-1.9	-1.3	2.9	10.3
75-84	254,891	3.8	7.3	9.7	12.1
85+	78,698	9.4	12.8	21.8	24.5
TOTAL	5,128,000	-0.4	-0.9	-1.4	-1.6
GGHB					
Age Group	BASE YEAR		% CHANGE		
	1996	2001	2006	2011	2013
0-14	169,738	-5.1	-11.2	-15.9	-17.0
15-24	123,215	-3.4	-2.7	-5.9	-8.9
25-34	157,833	-11.9	-25.6	-28.7	-27.4
35-44	126,918	12.2	13.3	-1.6	-9.8
45-54	101,990	6.0	16.5	31.2	33.9
55-64	91,318	-5.2	-0.7	5.8	7.8
65-74	79,543	-6.4	-11.4	-14.7	-11.3
75-84	45,667	-2.8	-4.4	-6.2	-6.2
85+	13,378	-1.4	-5.2	-1.9	-1.5
TOTAL	909,600	-2.4	-4.6	-6.5	-7.2

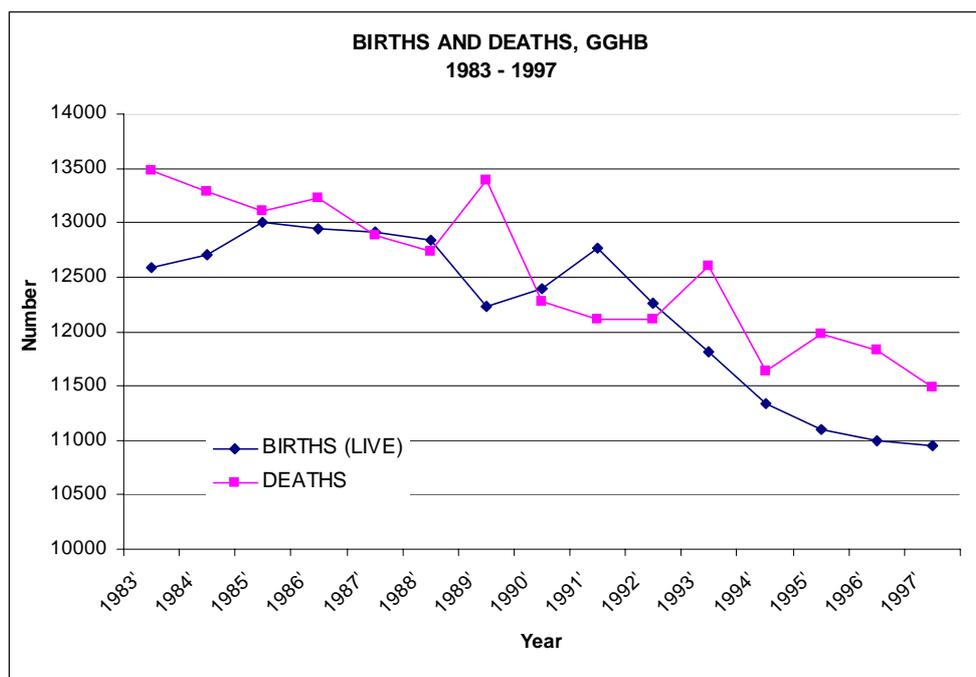
around 12,700 per year (Table 2, Figure 1). Since then the number has decreased, initially by almost 500 per annum, but more

slowly since 1994. The number of deaths each year has declined irregularly from 13,500 in 1983 to 11,500 in 1997.

Table 2
Number of Births and Deaths of GGHB residents, 1983 - 1997

YEAR	BIRTHS (LIVE)	DEATHS
1983	12,592	13,476
1984	12,709	13,289
1985	13,003	13,111
1986	12,937	13,234
1987	12,909	12,890
1988	12,840	12,730
1989	12,225	13,390
1990	12,400	12,268
1991	12,763	12,114
1992	12,266	12,110
1993	11,817	12,607
1994	11,333	11,630
1995	11,098	11,978
1996	10,995	11,832
1997	10,955	11,484

Figure 1



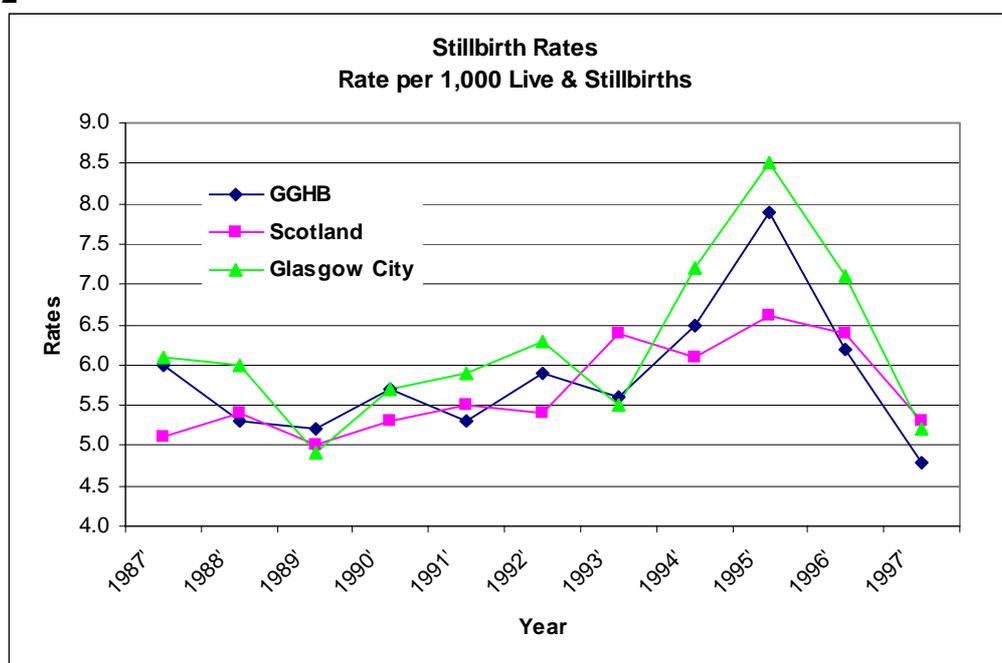
MORTALITY RATES

Infant Mortality

The stillbirth rate within GGHB was very close to the national Scottish rate until 1994 when it began to diverge significantly (Figure 2). In 1995 both the stillbirth rate and perinatal mortality rates rose significantly (Figures 2, 3). The reasons for this rise are not clear. A review of the causes of perinatal deaths within the city points to high levels of congenital abnormality as a cause in 1995/96. Most other deaths in the perinatal period were related to the conditions which are associated with low birth weight babies. This fact underlines the importance of tackling the causes of low birth weight in Glasgow children and one of the most important is maternal smoking.

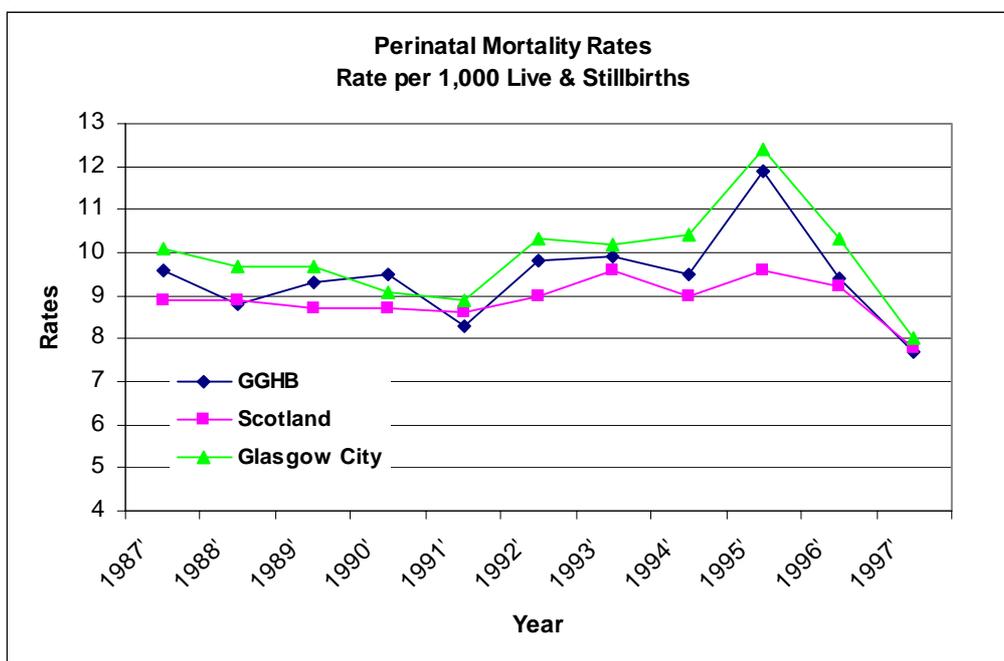
Infant mortality rates reflect deaths amongst children in the first year of life. In 1992 GGHB rates began to diverge from the Scottish rate which has continued to fall throughout the 1990s (Figure 4). There is evidence over the last two or three years that the Glasgow infant mortality rate is also falling but it is not yet clear whether the Glasgow rate will once again converge with the Scottish rate at some time in the future. One encouraging point about the infant mortality rate is that the number of children dying as a result of Sudden Infant Death Syndrome – cot death – has fallen from around 25 a year to an average of about 10 a year more recently. Infant mortality rate is often thought of as a sensitive indicator of the health status of a population. The fact that we are struggling to match Scotland in this indicator mirrors the position of the GGHB population when compared to the rest of Scotland's adult health.

Figure 2



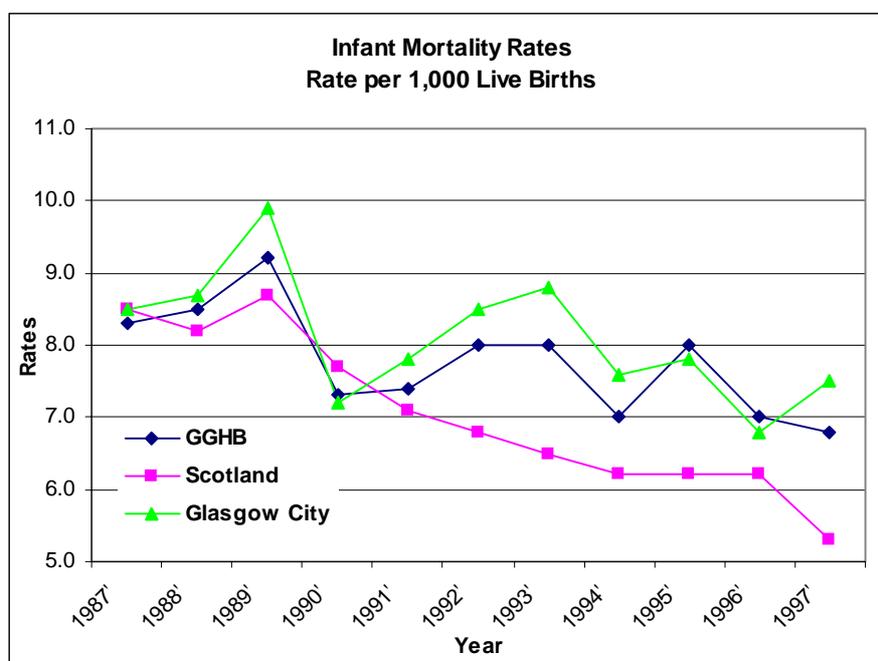
From 1 April, 1996 Glasgow City District was restructured to become Glasgow City Local Authority

Figure 3



From 1 April, 1996 Glasgow City District was restructured to become Glasgow City Local Authority

Figure 4



From 1 April, 1996 Glasgow City District was restructured to become Glasgow City Local Authority

Overall Mortality

The composition of populations differ in terms of age and sex structure. The Standardised Mortality Ratio (SMR) is a means of comparing the risk of death between populations while taking into account the different sex and age mix within each population. Table 3 and Figure 5 show the SMR for the Greater Glasgow Health Board population since 1980. We have previously reported that the SMR for both males and females in Glasgow began to rise about ten years ago; the figures began

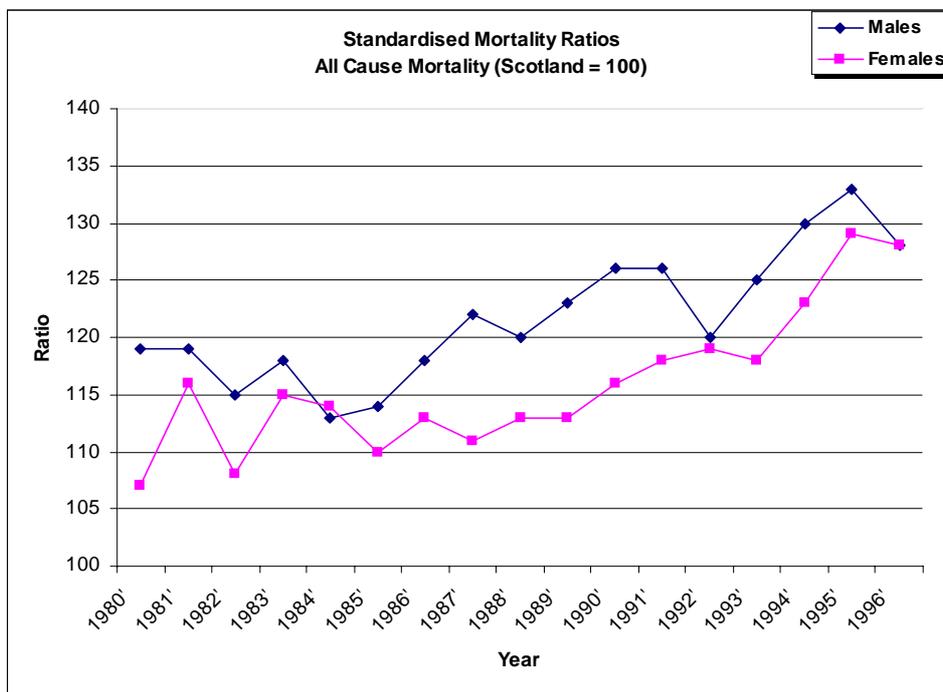
to rise in 1987 and have remained high ever since. They show that both males and females in the GGHB area were about 15% more likely to die before the age of 65 than the rest of the Scottish population,

The fact that the Standardised Mortality Ratio has been increasing does not mean that the health of the population of the GGHB area has been worsening. It simply means that the health of the rest of Scotland has been improving at a rate faster than in Glasgow.

Table 3
Standardised Mortality Ratios, (SMR) GGHB, All Cause Mortality (Scotland = 100)

YEAR	Males	Females	Both Sexes
	0 - 64 Years SMR	0 - 64 Years SMR	0 - 64 Years SMR
1980	119	107	114
1981	119	116	118
1982	115	108	112
1983	118	115	116
1984	113	114	113
1985	114	110	112
1986	118	113	115
1987	122	111	117
1988	120	113	118
1989	123	113	119
1990	126	116	122
1991	126	118	123
1992	120	119	120
1993	125	118	121
1994	130	123	127
1995	133	129	131
1996	128	128	128

Figure 5



Figures 6 and 7 show age-specific death rates in the male and female populations in Glasgow compared to the rest of Scotland. It can be seen that the risk of death amongst

males and females in the 35-64 age group has been falling in both Scottish and GGHB residents. The challenge is to ensure that these lines converge more rapidly.

Figure 6

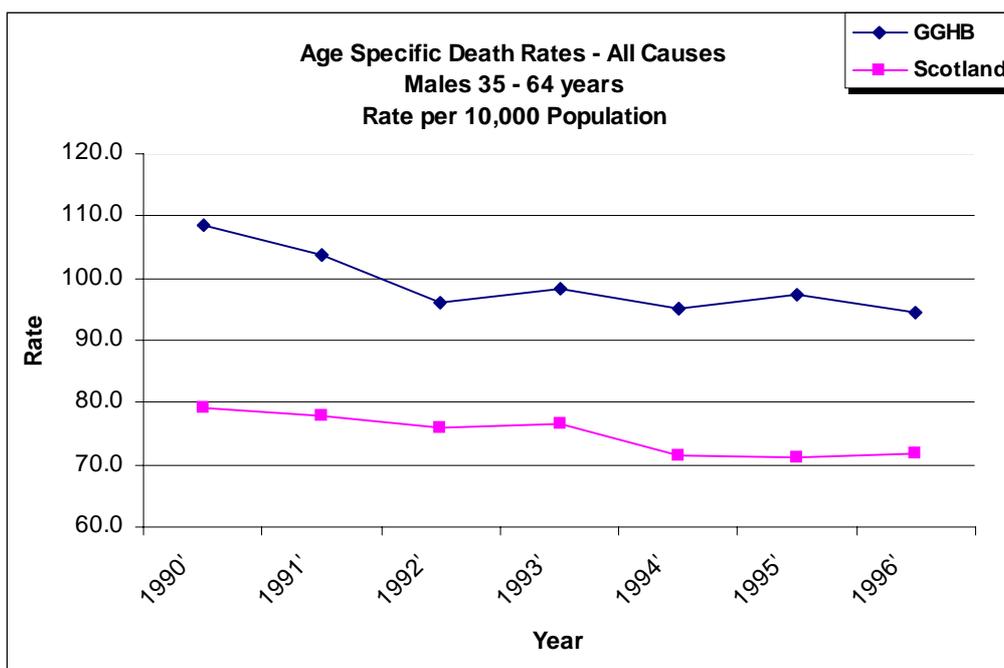


Figure 7

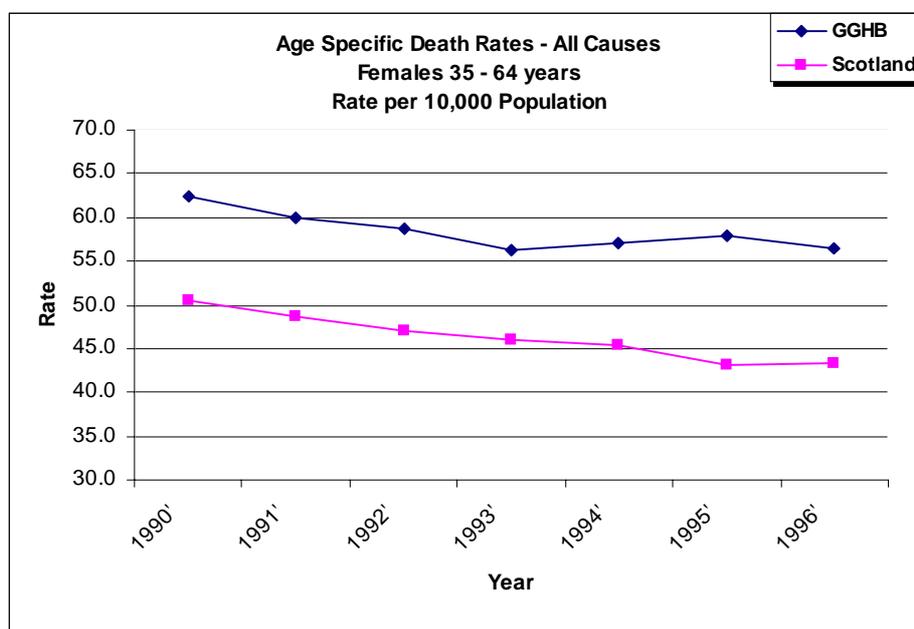
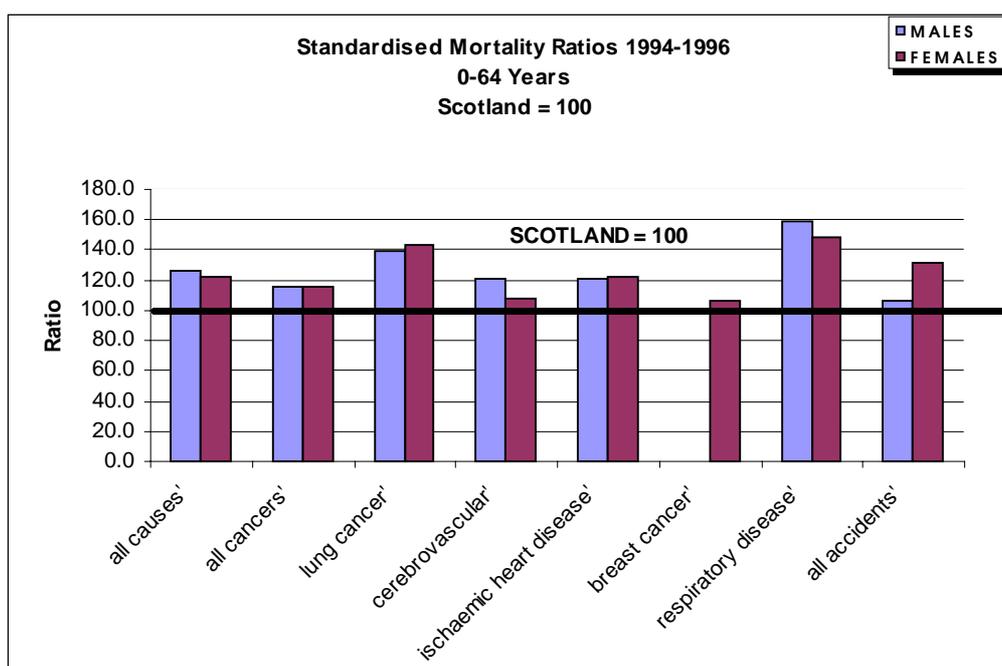


Figure 8 shows the SMR for different causes of death in the Glasgow area in the middle of this decade. The risk of premature death from each cause is set at 100 and it can be seen that the greatest excess risks of premature death for Glaswegians are from

respiratory disease and lung cancer. It is not difficult to draw the conclusion that the smoking prevalence within Glasgow is the major factor contributing to the high excess risk of death from these diseases.

Figure 8



Significant progress has been achieved in the past few years in reducing the risk of death from ischaemic heart disease. This is commented upon in greater detail in Chapter 4 but Figures 9 and 10 show the age-specific death rates from ischaemic

heart disease in males and females in the 35-64 age range. It can be seen that an overall downward trend is apparent in Glasgow and we will be working hard to maintain this trend.

Figure 9

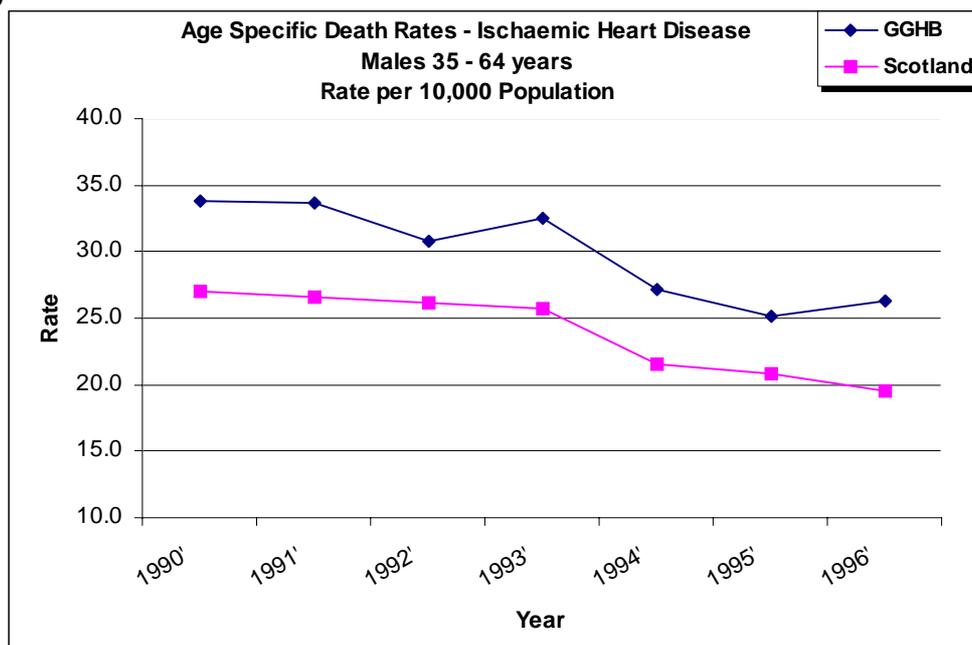
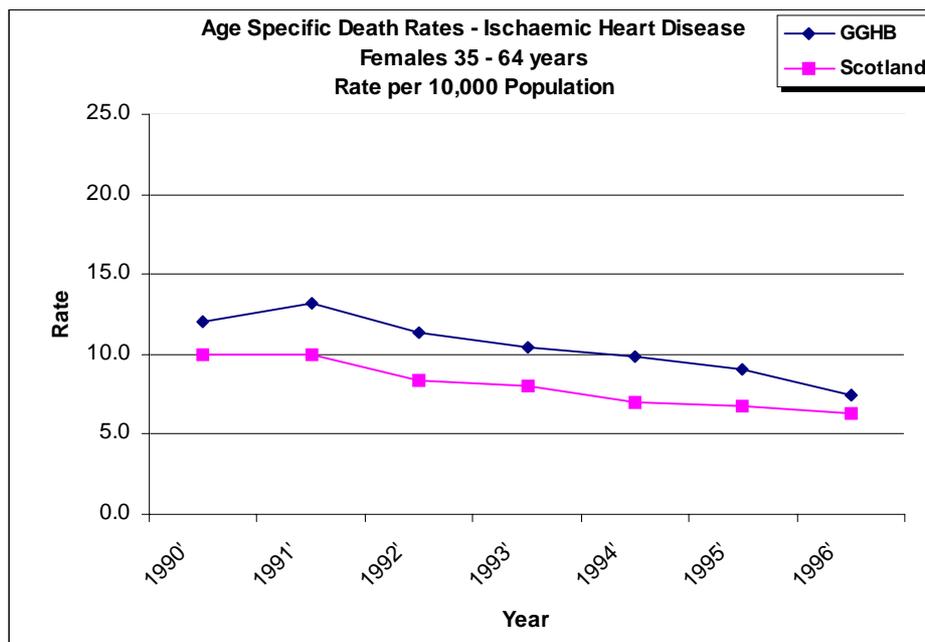


Figure 10



The risk of premature death from cerebrovascular disease is shown in Figures 11 and 12 and, once again, a real

improvement in the risk of premature death from this cause is apparent.

Figure 11

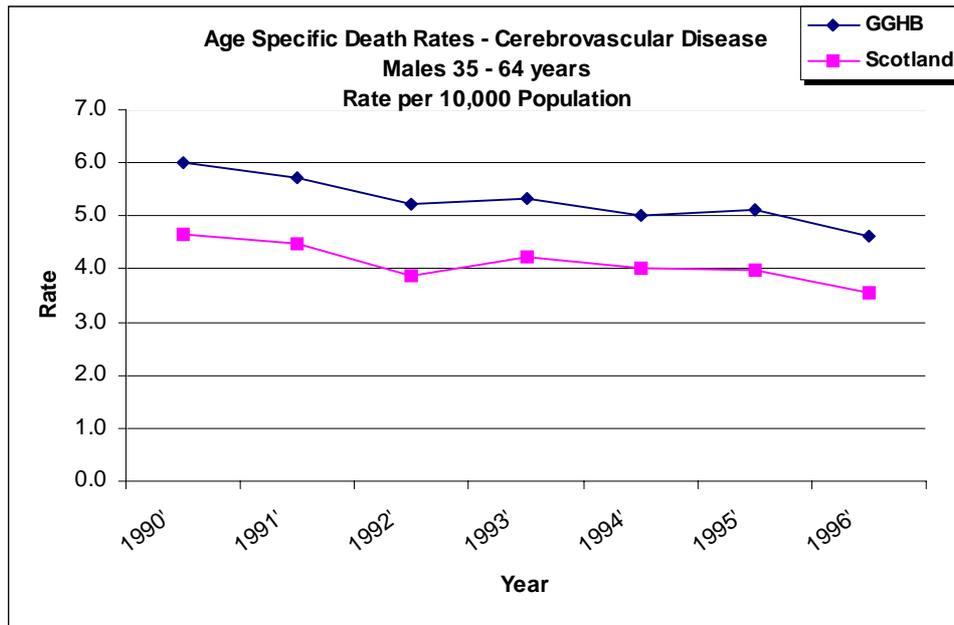
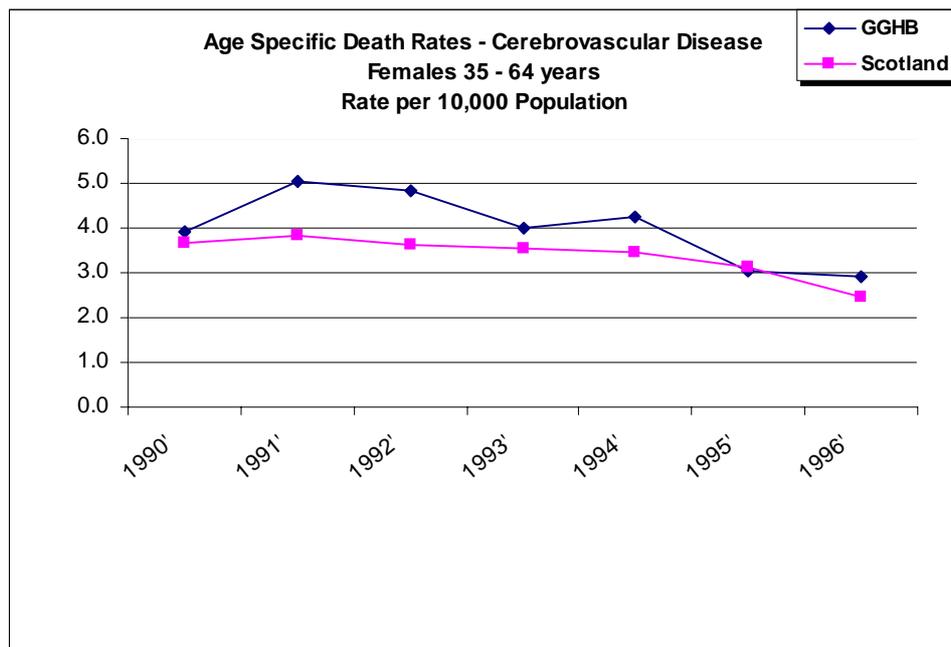


Figure 12



Cancer-related death rates have come down substantially in males but less so in females (Figures 13 and 14).

Age-specific death rates from lung cancer are shown in Figures 15 and 16. It can be seen that significant improvements in the risk of death from lung cancer have been

Figure 13

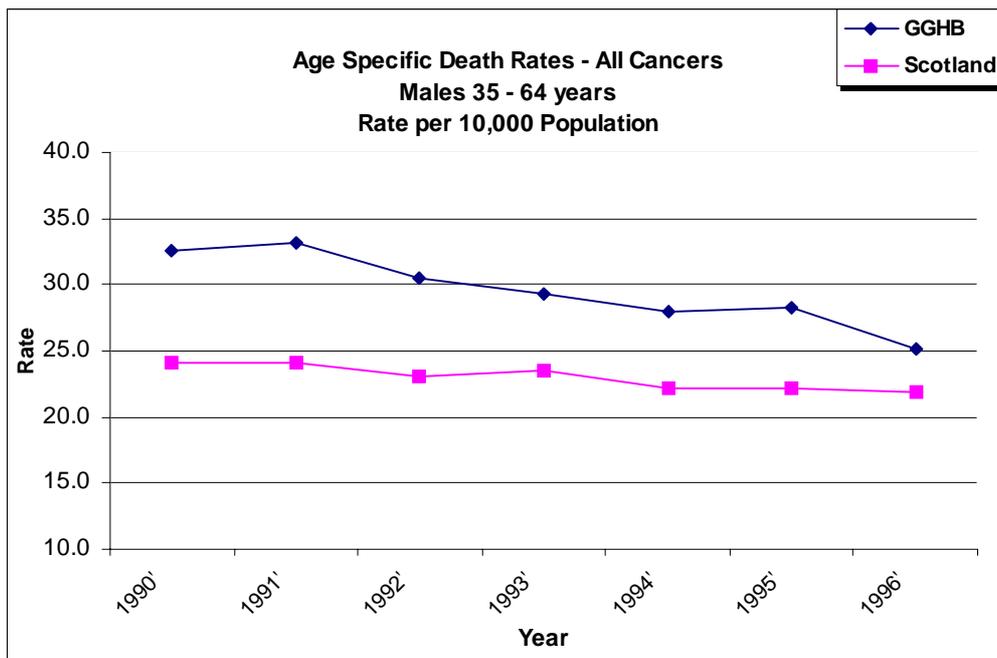
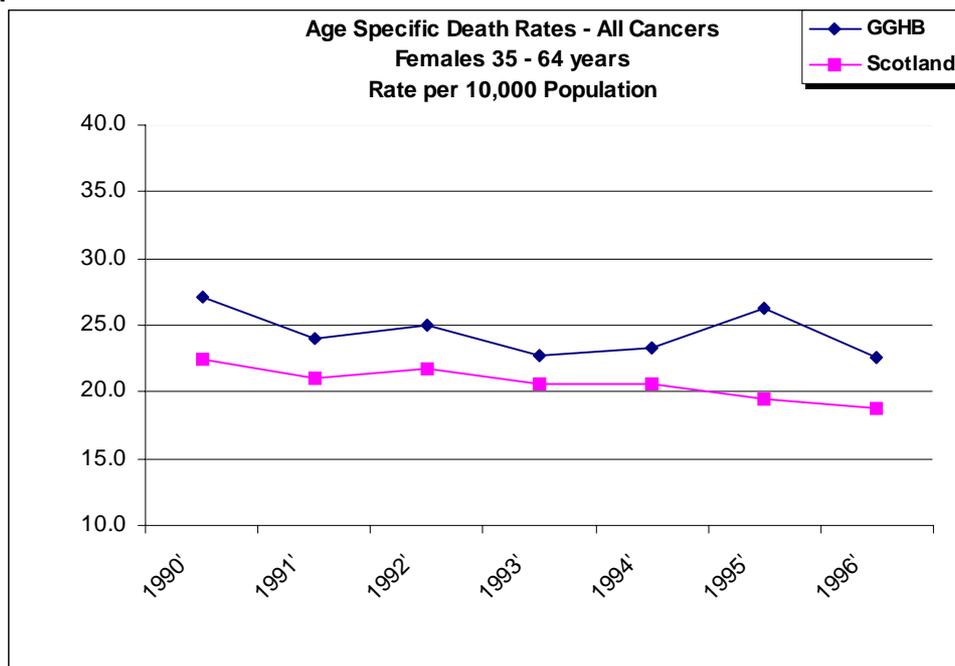


Figure 14



achieved. There is no doubt that the reduction in smoking has contributed much to the reduction in overall cancer, and

specifically lung cancer mortality. Other information on the risks of cancer in the GGHB population is presented later in Chapter 3.

Figure 15

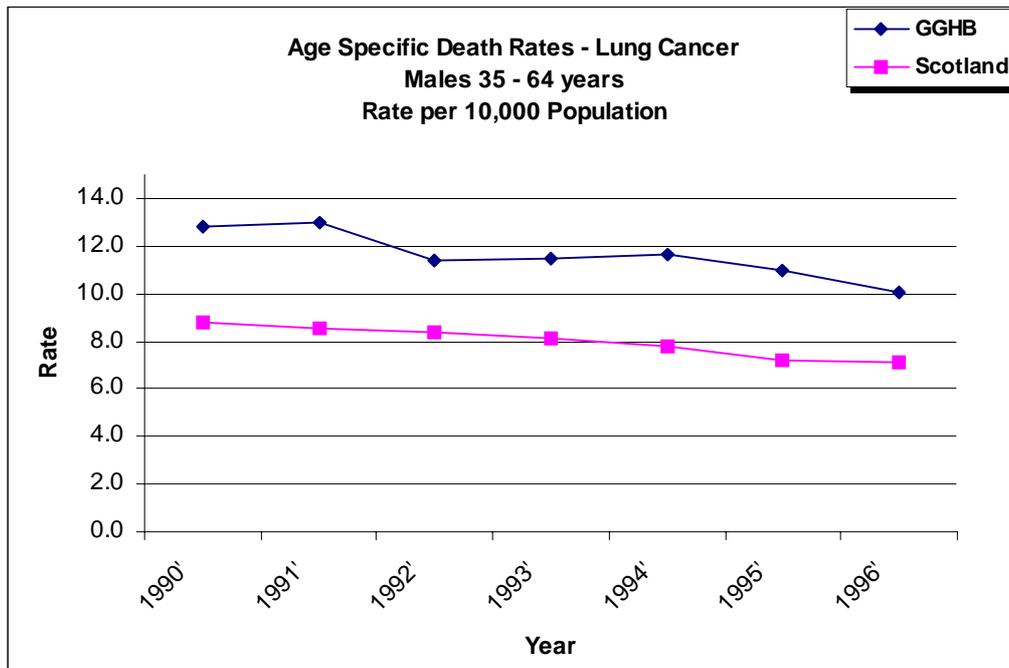
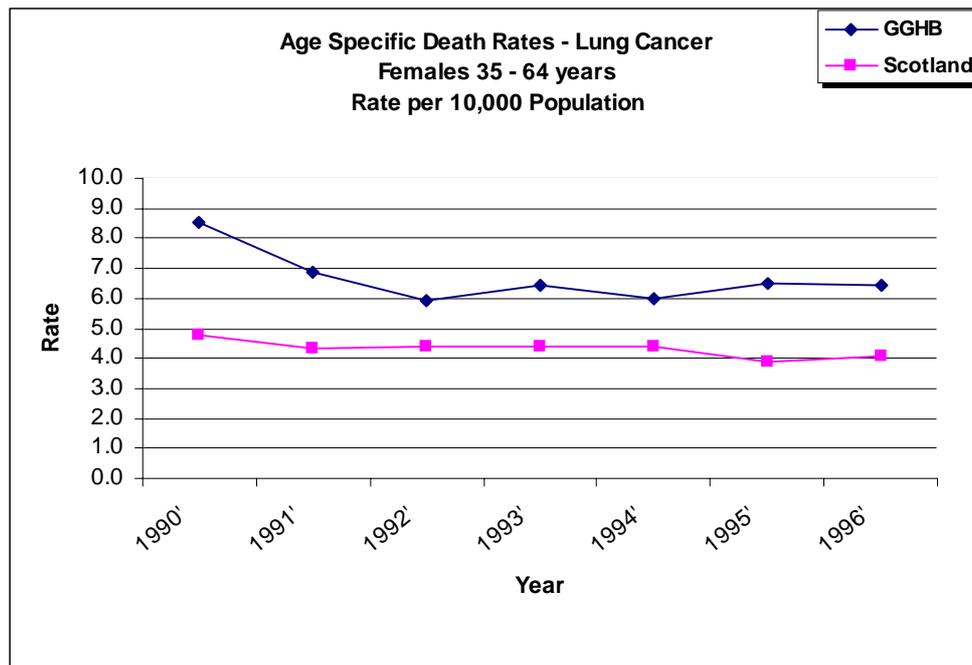


Figure 16



Two years ago this report presented a significant amount of information on mental health. We have recently completed a wide-ranging review of mental health needs in the community which is published as a separate but companion document to this report. It is, however, appropriate to make some reference to mental health status in this section. Figures 17, 18 and 19 indicate the risks of suicide amongst young people, those in middle age and the elderly in the Greater Glasgow Health Board area compared to the rest of Scotland. It can be seen that there is no significant difference between suicide rates in Glasgow and in the rest of Scotland. However, Figure 20 shows how closely the risk of suicide is related to socio-economic deprivation. A

necessary and continuing theme of successive Directors of Public Health Annual Reports has been the association between socio-economic deprivation and ill-health. For almost every significant condition this relationship holds, and we make no apology for once again drawing this relationship to the attention of the Health Board. This three-fold variation in the risk of suicide between affluent and deprived populations is presumably a reflection of the sense of hopelessness and stress brought about by poverty and a lack of opportunity. The Health Service is unable to tackle this problem without significant change in the living conditions of the most deprived members of our community.

Figure 17

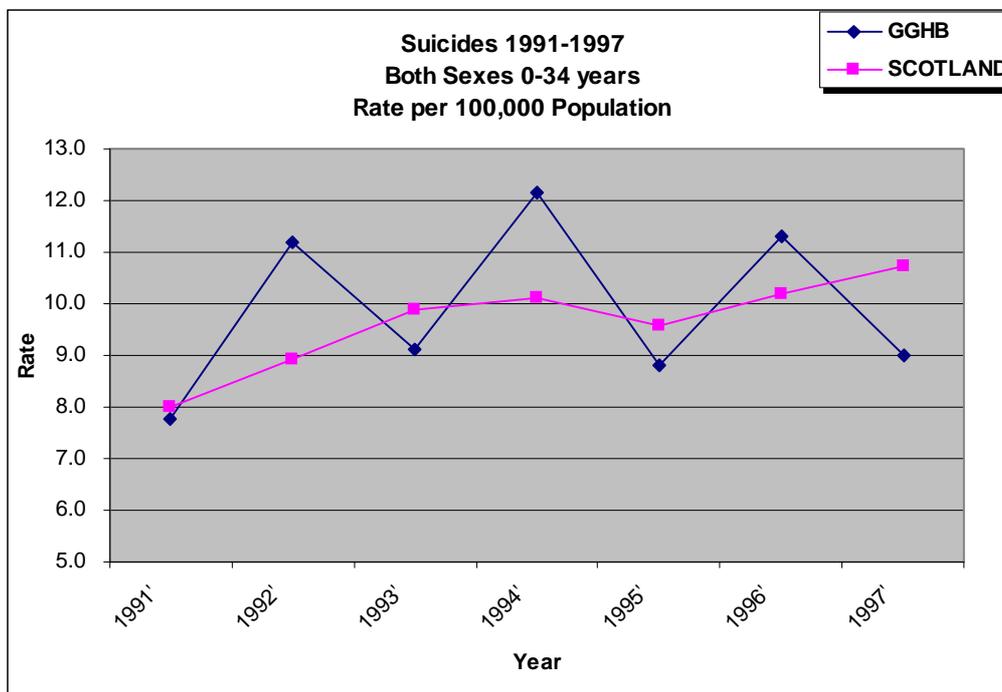


Figure 18

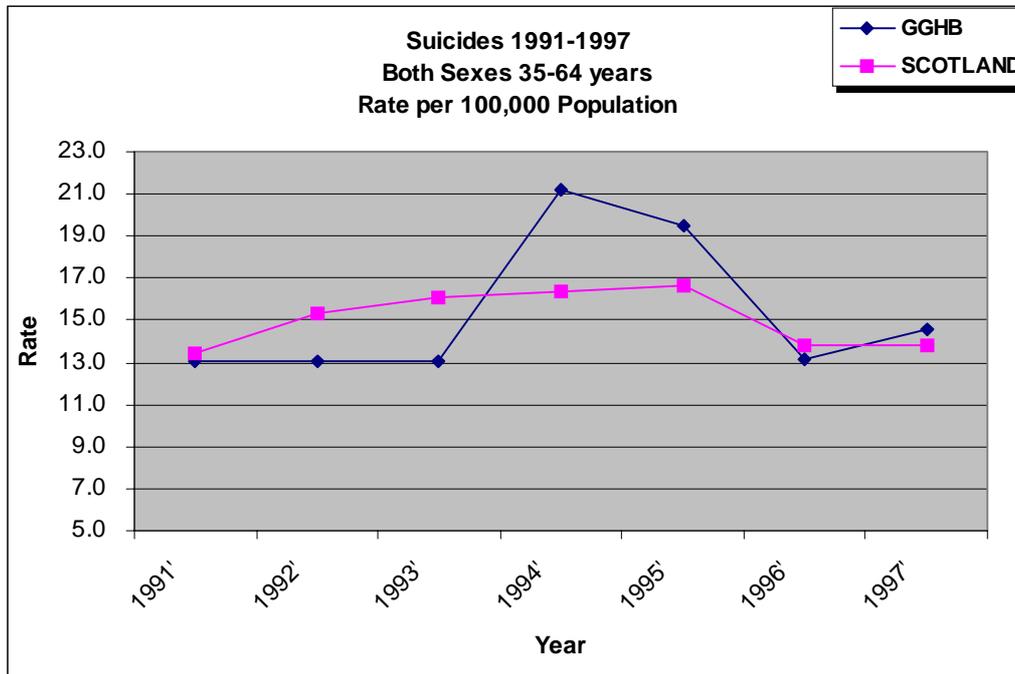


Figure 19

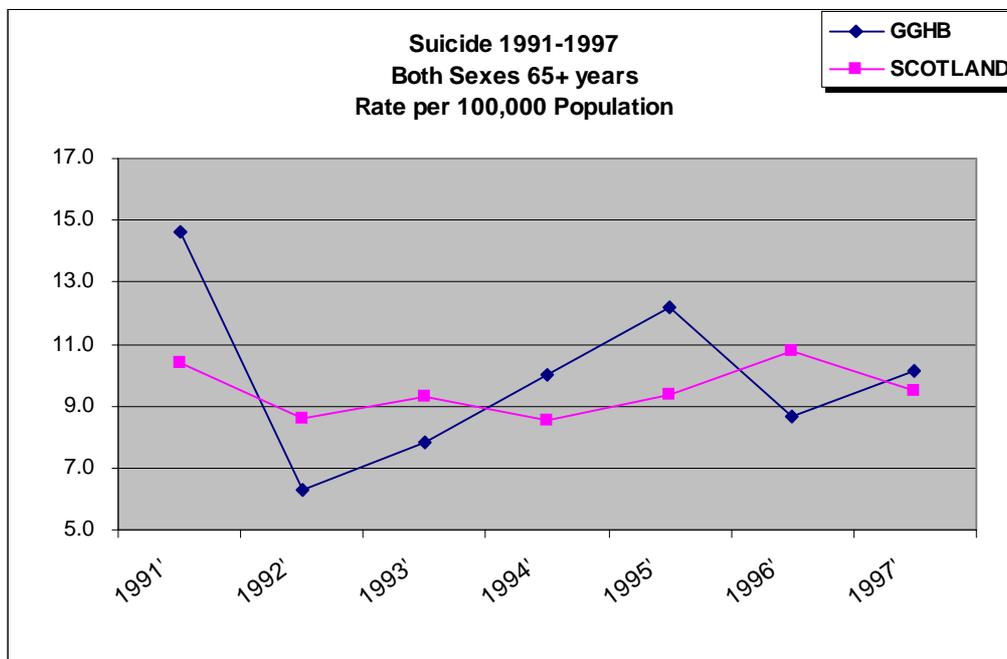
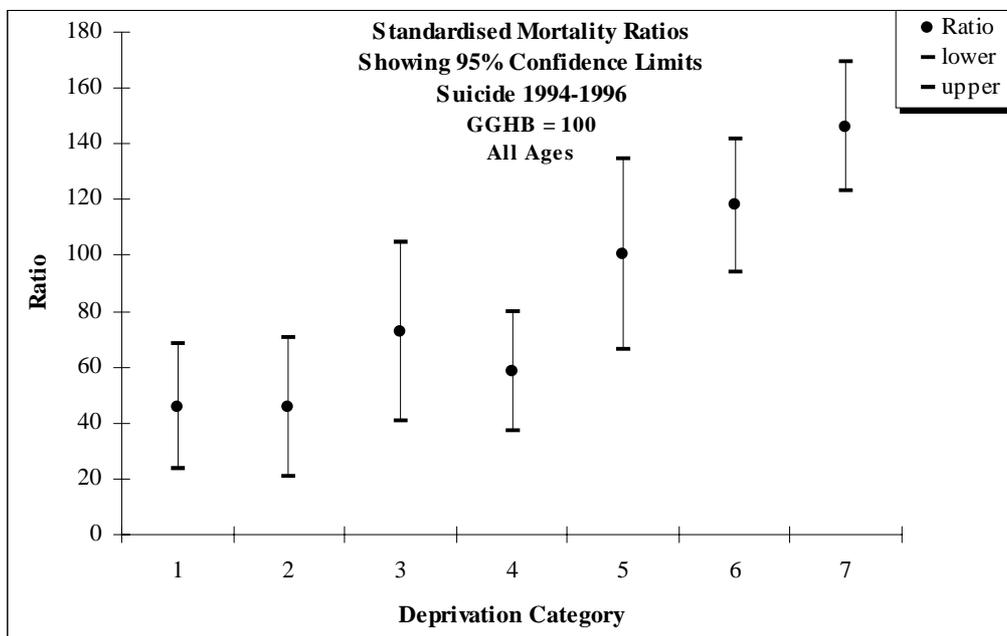


Figure 20



2 Health Promotion

INTRODUCTION

The aim of this chapter is to provide an overview of the Board's health promotion activities during 1997/98. The starting point for our health promotion programmes is the profile of health needs described in other chapters of this report, together with some additional needs assessment work on particular issues, or involving specific communities. In particular, the disparity in health experience between groups and between communities within the health board area is a major influence, reflecting as it does the significance of life circumstances as determinants of health.

The successful reduction in health inequalities within Greater Glasgow requires intensive and sustained action within local communities, in a range of settings, and in partnership with local people and other agencies. It requires work with individuals, groups and whole communities; improvements to services and facilities; and action to ensure policy and cultural changes to support health. It is underpinned by an interest in the health of the population as a whole. The Health Board, therefore, needs to be concerned not only with the quality and quantity of health care services, but also with activities in local communities and partnerships with other agencies. There has been a significant shift during 1997/98 throughout the organisation with staff in all Directorates being involved in these areas of work, and this is a trend that looks set to continue.

Although by no means a comprehensive description of all of the Board's health promotion activities, this chapter provides an overview of the work and gives a flavour of the diversity of activity being implemented.

WORKING IN PARTNERSHIP

The Health Board has strengthened its commitment to working in partnership with other agencies and local communities, and now plays a major role in local regeneration partnerships across Glasgow city, in West Dunbartonshire and in South Lanarkshire. Partnerships with the other local authority areas within Greater Glasgow exist through the Board's liaison mechanisms with each council.

The Glasgow Healthy City Partnership was established in 1988 with the explicit purpose of securing improvements in the health of the city. Glasgow is one of four UK cities, and the only Scottish city, currently designated to the World Health Organisation's (WHO) Healthy City Network. The second phase of activity of this network drew to a close in 1997/98, and Glasgow was recognised as having successfully met all of the WHO requirements. In particular, the Glasgow Healthy City Partnership is regarded as being particularly strong in relation to community-based activities (through the work of our community health projects, community conferences, and community-based initiatives); and to have made much valued contributions to the international network. A submission has been made to WHO for Glasgow to be

designated as a Healthy City for the next phase of the network, and we await notification of the outcome of that submission.

A new Development Plan for the Glasgow Healthy City Partnership has now been agreed by all partners, and provides a strategic framework for the period 1997-2002. Much of the work of the partnership is progressed through its subgroup structures, which expanded during 1997/98 to include attention to issues of housing, food, physical activity, and regeneration and health. Considerable thought is being given to maximising the Healthy City Partnership's role in tackling health inequalities in Glasgow, particularly through its work with key population groups (including children, black and ethnic minority communities, and women) and in reducing the impact of poverty on health.

Also within Glasgow City, there is a considerable amount of partnership activity directed at urban regeneration and improving the quality of life of all citizens. The Glasgow Regeneration Alliance was relaunched as The Glasgow Alliance, with a focus on securing improvements across the city as a whole as well as in its most deprived areas,

and with a commitment from all partners to develop a co-ordinated strategy with clear priorities for action. The Health Board has played an active role in the development of the Alliance and its strategy, working both with its city-wide mechanisms and its local partnerships. During the year, formal partnership structures operated in Castlemilk, Greater Easterhouse, the East End and North Glasgow, and some of the Health Board contributions to these are listed in Figure 21.

The Health Board is also a member of the West Dunbartonshire Partnership. Although the Partnership area is wider, our concern is particularly with Clydebank. The work here has a strong foundation in the community, and the Clydebank Health Issues Group provides a crucial focus. Major pieces of work carried out include contributions to the Partnership's baseline survey to describe people's circumstances and needs, and development work to establish a CAF! (Community Action on Food) in Faifley. Clydebank residents have identified asbestos-related disease as a particular concern in their area, and the Board is working closely with the community to respond to this concern.

Figure 21
Examples of Greater Glasgow Health Board contributions to Priority Partnerships in Glasgow

- Establishment of youth health service in Castlemilk.
- Implementation of Greater Easterhouse drugs audit.
- Development of Alternatives Stress Centre for east End.
- Introduction of physical activity sessions in residential homes in Easterhouse and North Glasgow.
- Contribution to home safety project in North Glasgow and East End.

South Lanarkshire Council's Access and Opportunity strategy has provided the framework for our partnership working in the Rutherglen/Cambuslang area, particularly with regard to the impact of poverty on health. During the year a Fruit Barra project was established to provide more readily accessible and affordable food in the area, and continuation funding was secured. Opportunities were also taken to work with staff in the Bonus Ball Resource Centre to increase the range of healthy options available in the café and to extend the physical activity programme available within the centre. At a more strategic level, inputs were made to the council's Youth Commission and poverty working party, and joint planning was carried out together with Lanarkshire Health Board for a South Lanarkshire Health Alliance.

IMPROVING THE HEALTH OF CHILDREN

An emphasis on the health of children was a feature of our work this year, and will be strengthened further in future years in line with the new priority being given to this issue by the Scottish Office and the government. As indicated in other chapters of this report, health inequalities are evident even among young children - and it is being recognised increasingly that poor health in childhood contributes significantly to the poor health experienced by the adult population. It is clear that if we are to improve Glasgow's health, we need to improve the health of its children.

Building on the recognised success of the lay breastfeeding support worker model piloted in previous years within Easterhouse, this approach was extended to a further five

areas. More than twenty lay volunteers have now been trained, and the approach is being implemented in the Bridgeton, Townhead, Govanhill, Gorbals and Parkhead areas in addition to Easterhouse. In other localities rather different community-based approaches have been established, and we are alert to the fact that one model will not suit all communities. Recognising that a range of other activities also need to be put in place if we are to reach the national and local target of 50% of mothers breastfeeding at 6 weeks after their baby's birth, work was carried out to revise the Board's breastfeeding strategy and this was then distributed for consultation.

Another issue for which there are striking inequalities among children is dental and oral health (see Chapter 8). Possilpark had been identified as an area with particularly poor oral health, and over several years a number of approaches have been introduced to establish a comprehensive set of interventions. These include the provision of oral health promotion advice within primary care settings to carers of children under 5 years of age and the establishment of a breakfast club in the area. Epidemiological results are now beginning to show a favourable impact on childhood dental decay of the combined oral health promotion initiatives in Possilpark.

Breakfast clubs were introduced in a number of areas during the year. Each is slightly different with regard to its target group, purpose, running arrangements and setting. However, what is quite clear is that there is an enormous 'appetite' for this type of initiative. Moving in to the 1998/99 year, an evaluation study is being planned in

conjunction with the Health Education Board for Scotland (HEBS) to assess the processes and impacts of these different breakfast club initiatives.

In relation to healthy eating, the message to which we are giving particular emphasis locally is the importance of increasing intake of fruit and vegetables. Translating this into approaches that appeal to children is challenging. However, following a successful pilot study, we have worked during the year to extend the provision of fruit in nurseries - to encourage parents to purchase fruit as a snacking item for their children, by increasing availability and cutting costs. By the end of the financial year, 20 nursery units were involved in the scheme.

There is increasing recognition of the importance of intervening with primary school children to raise awareness and understanding of issues to do with addiction, risk-taking and health. A major component of our tobacco control strategy is the Smokebusters Club, membership of which exceeded 10,000 children this year. Newsletters are issued regularly and members take part in a programme of summer events. Support for the Smokebusters concept remains high in both smokers and non-smokers, and following awareness-raising among Smokebusters, some families are now setting aside smoke-free rooms in their homes.

Focusing more on illicit drug use, the "I don't want to be like that" pack, which was developed by GGHB staff together with representatives of the Glasgow City Council's Education Department, Glasgow

Drug Prevention Team and the community arts organisation, Fablevision, was distributed to all Glasgow City Council primary schools and the live performance funded in a further thirty-two schools in 1997. An evaluation of this work was completed. Over eighty primary teachers were trained in the content and techniques used in the pack between January and May 1997, with a rolling programme of training planned for 1998/99. Distribution in other council areas has begun, with West Dunbartonshire offering this resource to all primary schools. A cross-curricular approach has been established in West Dunbarton, using the pack as a bridging resource between primary and secondary schools.

Children's safety has been another area of priority for the Health Promotion Department. About half of children's accidents occur in the home, and most of these are to children under five years of age (see Chapter 7). We have supported the establishment of six Home Safety Equipment Schemes as part of our strategy to reduce accidents in the home. These schemes offer low cost safety equipment in areas of perceived need, to help prevent burns, scalds and falls to children under five years of age.

A number of other child safety activities have been supported during the year, including the Children's Traffic Club, and Safe Kids experiential learning projects. In addition, the Board launched a new campaign to increase awareness of the risks from accidental ingestion of medicines by children, and to promote safe storage and disposal of medication.

WORKING WITH YOUNG PEOPLE

Young people have been recognised as a very important target group for health promotion within Greater Glasgow for many years. Teenage and post-school years are times during which many formative decisions are made and circumstances established which have an impact on young people's health now and in the future. Issues such as substance misuse, teenage pregnancies and sexual health are easily identified as priority issues for this population group. Mental health, weight, nutrition and physical activity are also major issues - and underpinning all of these topics is a need to ensure that individuals are given the support and opportunity to develop fundamental lifeskills, and that the necessary range of support services and facilities are available and accessible. Our approach has been to prioritise those areas and groups with the highest level of need, which are generally those living in the most challenging life circumstances. It is important to emphasise, however, that for many of the lifestyle issues the striking inequalities across social class that exist within the adult population are not nearly so systematically apparent among young people. Many other factors, such as peer group, image and future expectations, are very important.

Work with secondary schools has included a number of city-wide developments, such as an audit of 'health-promoting school' activity and the development of a whole-school approach to enhance the mental health of young people. These types of initiatives are relevant to all secondary schools, and the aim is to work towards widespread coverage across the Board's area.

In addition, several more targeted projects have been developed with specific schools. Within Drumchapel High School, the Health Club, Drop-in and DASH clinic (Drumchapel Advice on Sexual Health) involved health service and other professionals in providing a range of health-related support services to young people in that area. This integrated package of services was supported and developed as a HEBS Health Promoting School Demonstration Project.

Five schools in the south sector of Glasgow have established School Nutrition Action Groups (SNAGs), each looking at a different approach to promote healthy eating in the school setting. Holyrood Secondary school has made significant progress with its Active and Safer Routes to School project. Pupils have identified their safety concerns, designed safe routes, and taken action on a number of issues including double-parking in the school proximity.

Working with a group of young people, health promotion staff have developed a CD-ROM package called *The Day the Sun Came Out*, to increase young people's understanding about skin cancer and safety in the sun. A substantial teachers' pack was also developed, and these resources were distributed to schools throughout Greater Glasgow.

Work outwith the formal education settings is equally important, and enables a wider range of approaches to youth health promotion. For example, a week-long Drugs and Driving radio campaign was implemented in August, in conjunction with Ayrshire and Arran Addiction services and CSV (Clyde Action). As a direct

consequence of this, over 1800 callers received information packs about the effects of drugs (including prescribed and over-the-counter medicines), their impact on driving, and the relevant legislation. A related initiative, implemented throughout the year, was the distribution of New Drivers packs through the driving test centres in Glasgow, thereby ensuring that new drivers receive a package of information about safe driving (including the impact of drink and drugs).

The Board's mental health promotion activity focuses primarily on adolescent mental health. During the year, local research highlighted the need for clarification about the roles and 'workings' of the various services for children and adolescents with mental health problems. Consequently, a new information resource was developed and distributed to all GP Principals in Greater Glasgow. Other materials developed during the year were a resource to encourage effective communication between parents and young people (*'Parents and teenagers talking'*), and a leaflet for young people which provides information on coping strategies and support agencies available for those with mental health concerns and problems.

A wide range of agencies and groups look for new, interesting and unthreatening ways to discuss the issues of sexual health and drugs. The 'More than a Game Pack', developed by health promotion staff in previous years, continued to be in great demand. Those using the pack during 1997/98 included prison officers from a young offenders institution and a range of social-work related projects. During the year the pack was reviewed to consider its appropriateness and application to young

people from black and ethnic minority communities.

HEALTH PROMOTION WITH THE GENERAL POPULATION

Health promotion with the 'adult' population is developed and implemented through the main settings where people live (the community), work (the workplace) or access services (hospitals, primary care settings, and other non-NHS services). Programmes in these settings were supported throughout the year by campaigns in the media, which increase the visibility of health issues across the Board area and raise awareness of key health messages.

Increasingly our community-based work is being developed in the context of the regeneration partnerships described above, and their strategies. As a foundation for this, however, there is a need to maintain community-based infrastructures which support and respond to local communities' health concerns. Hence, during the year, health promotion staff have worked with local domestic violence forums, drugs forums, health forums, community safety forums, women's groups, community health projects, and many others. An important milestone was the Drumchapel Community Health Project's success in securing continuation funding.

A new programme of work was initiated to begin to address the health promotion needs of members of the deaf community within Greater Glasgow. To this end, an initial consultation event was held in June, well-attended by members of the deaf community and by service-providers, which identified

the main priorities for action. A deaf health promotion officer was recruited in 1998 to establish this programme.

Work with a number of other priority groups was also extended during the year. For example, health promotion support and resources were provided to staff working with people with learning disabilities; and new projects were initiated for people who are homeless. The established programme of work with black and ethnic minority communities continued, with its emphasis on ensuring improved communication with these communities and better availability of health information in minority ethnic languages.

Eastbank Health Promotion Centre provides a unique set of health promotion, information and training facilities within the East End. All of the courses are fully-booked and well attended - so much so that the Centre had to introduce its own 'waiting list initiative' during the year. Numbers taking part in physical activity sessions increased by 40% over the year. The resource and information library at the Centre was enhanced, bringing an increase in the number of workers and members of the public using the facility. The principal focus of the Centre's activities is on primary prevention. However, during the year a new 'Back to Back' group was set up for clients who had recently had treatment for cancer. Group members learnt techniques for relaxation and stress management, discussed issues with the Macmillan nurse, and used the other facilities and activities in the Centre. All clients attending the first programme, in 1997, signed-up for further activities. 'Back to Back' has now become an established

programme within Eastbank.

Work is an important influence on health: and a healthy workforce is an important asset for any employer. Health promotion programmes delivered in the workplace setting can encourage healthy lifestyle changes within a workforce, tackle workplace influences on health, and also help to create links between workplaces and the wider community. An increasing number of employers are recognising these benefits and are keen to establish health promotion programmes for their staff.

By the end of the year, 48 organisations in Greater Glasgow were registered with the Scotland's Health at Work (SHAW) scheme, bringing the total number of Greater Glasgow employees involved in participating companies to 81,218. These organisations include the largest employer in Glasgow, Glasgow City Council, which worked steadily towards its bronze level award. Overall, 18 bronze and one silver award were attained by local organisations.

The health service in Glasgow was also active in its role as a healthy employer, with the majority of Trusts working actively for SHAW awards, and strengthening their Trust health promotion working groups. The Glasgow Dental Hospital and School worked towards achieving the first gold award in the Glasgow area. The Health Board itself enrolled with the SHAW scheme, and during the year held a number of events and seminars to increase staff awareness of and participation in health issues. By the end of the year we had achieved the requirements for the bronze award.

Another strong focus within the NHS related to the implementation of nutrition policies and alcohol policies for all workplaces. Previous work had established consistent approaches across NHS organisations, and during the year implementation of these policies was strengthened through a substantial programme of training (on alcohol awareness) and the introduction of an award scheme (for good practice in relation to the food policy).

Primary Care services are utilised in one way or another by the majority of the population each year, and primary care practitioners have been shown to be highly effective in supporting people to make changes in their behaviour. The importance of the general practice setting for encouraging patients to quit smoking, and achieving success in smoking cessation cannot be underestimated. Success, however, requires not only commitment but also a systematic approach, implemented by trained staff, over a sustained period of time. During the year, a new project involving 10 practices in the north and east sector of the city set about establishing such an approach. This project will run for a further year at which stage its impact will be evaluated.

Primary care teams were also involved in establishing a new exercise referral scheme within Glasgow. The scheme is a joint venture between GGHB and the City Council. By the end of 1997/98 the scheme was operational in seven localities within the city and employed six specialist exercise counsellors. One hundred and sixty GP's referred more than 1000 patients for advice and support from the counsellors. Plans for

1998 involve expanding the scheme to cover all of Greater Glasgow and providing access for patients with established coronary heart disease.

Whilst large numbers of people use general practice services, community pharmacies have many more client contacts during a year. Within Greater Glasgow a substantial health programme has been established to enhance the health promotion contribution of pharmacies. This programme is implemented through a pharmacy health promotion facilitator network and involves substantial pharmacy support for events and campaigns (90% of pharmacists were involved in no-smoking day), a programme of training (by the end of the year over 100 pharmacists had received health promotion training), and the development and distribution of a revised health promotion resource manual specifically designed for use by pharmacists.

Health promotion for elderly people is not a topic that has received much attention in Greater Glasgow in previous years. During 1997/98 there were, however, some significant developments. Working with nursing home staff and dieticians, the Board developed food policy guidelines for nursing homes, and launched these at a seminar for nursing home managers. The purpose of the guidelines is to ensure that all residents of homes achieve the recommended nutritional intake. In addition, we commissioned the provision of physical activity classes within five nursing homes in the north of the city, thereby enabling residents to take an appropriate level of exercise.

A study looking at accidents among the elderly was completed. This highlighted how common home accidents are among this population group, and also the reticence of elderly people to call out health services. An implementation plan to improve home safety will be developed, building on this study's recommendations.

In support of all of this work, a number of mass media campaigns were implemented, to raise the profile of particular issues and to support specific services or initiatives on the ground.

Two new campaigns were developed during the year: on fire safety and passive smoking. The fire safety campaign was run in conjunction with Strathclyde Fire Brigade, and highlighted the increased dangers of fire associated with smoking and drinking alcohol. In addition to the use of mass media, campaign messages were distributed within particular communities known to have higher rates of house fires, on 'take away' cartons and beer mats. The passive smoking campaign was based wholly on mass media communication (buses and adshells), and emphasised the discomfort that cigarette smoking causes to non-smokers. This campaign formed the backdrop to some initial work with bus companies to strengthen their tobacco control policies.

A series of themed campaigns was once again implemented to raise awareness of safer sex messages. In particular, people travelling abroad on holiday were targeted through the summer protection campaign; and over the festive period Christmas crackers with an HIV/sexual health education

message were distributed in clubs and hotels.

A mass media campaign was also implemented to enhance uptake of the breast screening service. As the mobile breast screening van moved into the Maryhill area, the campaign was launched by Maria Fyfe, the local MP, who emphasised the importance of the screening service and reinforced the campaign messages about the friendliness of the service and the ease of the screening process.

NEW HEALTH PROMOTION MATERIALS AND RESOURCES

The work described above, plus the large amount of health promotion activity implemented by other professionals and workers in Greater Glasgow, involves the use of support materials (training packs, videos, leaflets, computer programmes, etc).

Most of these materials are purchased from the Health Education Board for Scotland, or other organisations. However, where no suitable material is available from elsewhere, or there is a specific local need, new materials are developed by the Health Promotion Department. During 1997/98, these included:

- information leaflets to raise awareness of the breast screening service.
- breast self-examination cards (for use in the shower). These cards were distributed through sports centres, women's groups and some retailers. (Developed in conjunction with Lanarkshire Health Promotion Department.)

- posters, flyers, fact sheets, stickers, shelf wobblers, banners and window stickers, legionnaires hats, colour-in sheets, and puzzles to raise awareness of protecting children under 5 from the sun.
- a new resource dealing with issues such as drug tolerance, access to services, basic first aid and mixing drugs – targeted at prisoners about to be released.
- an information leaflet targeting parents and young people to enhance their communication with each other.
- diaries to support the minimal intervention training of staff in primary care and hospital settings.
- a CD-ROM for use in schools to raise awareness of skin cancer in children.
- a series of posters and leaflets to promote healthy breakfast.
- physical activity leaflets in key ethnic minority languages.
- 'Women Talking' magazines to raise awareness of women's issues. These are also produced in key ethnic minority languages.
- three editions of the Mosaic Newsletter.
- a short leaflet on sensible drinking to inform the public of the government's

recommended daily benchmark message.

- heart health posters to increase awareness and understanding of risk factors for heart disease.
- a tobacco policy pack and no-smoking signs for educational settings.

The health promotion resources catalogue is regularly updated and distributed to our 1680 users across Greater Glasgow.

SUMMARY

This chapter has provided an overview of the health promotion activity carried out during the 1997/98 financial year. The importance of this work to improve people's life circumstances and lifestyles was emphasised in the Government's public health Green Paper *Working Together for a Healthier Scotland*, which was launched at Eastbank Health Promotion Centre in February. In addition, new government initiatives such as New Community Schools, Healthy Living Centres, Community Planning, and the New Deal for Communities will bring considerable demands and opportunities for health promotion. It is clear that the agenda will continue to grow, but we believe that in Greater Glasgow we have a sound basis of skills, experience and evident successes on which to build.

3 Cancer

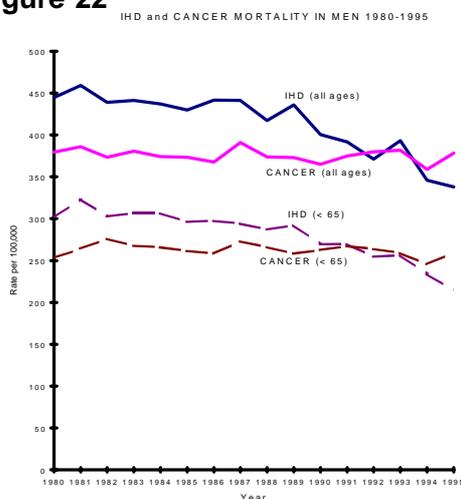
The public in the West of Scotland have become accustomed to thinking of heart disease as the commonest cause of death. For the past two years we have had to face the reality that cancer, not heart disease, is the commonest cause of premature mortality in both men and women at all ages and in men aged less than 65 years. (Figure 22).

In the Glasgow area there were 5,425 new cases of cancer diagnosed in 1996. We estimate that there are 28,000 citizens living with cancer and perhaps in excess of 60,000 spouses, children, friends and other family caring for patients.

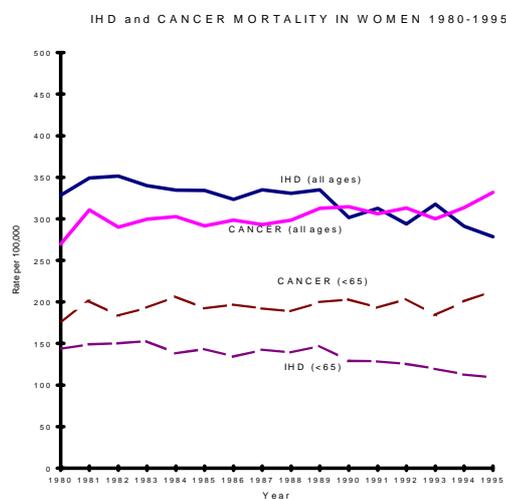
coronary artery bypass operation for a heart disease patient. In a patient with cancer, this sum might buy only temporary relief of symptoms and might not prolong life by more than a few weeks.

Much attention has been given recently to new advances in our understanding of the genetics of cancer but cancer is overwhelmingly not an inherited disease. Rates of breast cancer in migrants from the Asian subcontinent are now statistically equivalent to those who have lived here for generations, indicating the importance of environmental influences such as diet on the risk of breast cancer.

Figure 22



Cancer takes on many forms. Every organ in the body can be affected and every specialty in medicine has some role in diagnosis and treatment. Cancer treatment receives much attention because it can be dramatic involving the most complex and expensive technologies in medicine. The cost of drugs for one patient can be more than £10,000, a sum which would fund a



Fear of cancer stoked by the media concentrating on environmental hazards which might affect tiny numbers of people can often deflect attention from the fact that the way we live our lives largely determines how we will end it. The major risk factors in cancer; cigarette smoking, diet, alcohol, sex, sun exposure can all be modified by personal commitment. This is easier for

some than others and brings into focus a fundamental fact often referred to in these reports but which scientifically we have done little to investigate systematically. Namely that socio-economic factors affect Greater Glasgow much more than in any other part of UK. (Table 4)

implicated in every chronic disease affecting major organs including the heart, lungs, brain and liver. We neither understand fully how risk factors interact with each other and with socio-economic influences to cause disease, nor can we wait to find out before we act, but, with every other organisation

Table 4
Percentage of population living in areas of differing deprivation

Deprivation	England & Wales (%)	Scotland (%)	GGHB (%)
1 (affluent)	22	6	10
2	30	14	8
3	22	22	11
4	15	26	9
5	8	15	12
6	3	11	23
7 (deprived)	1	7	27

Can we buy our way out of cancer as we did out of infection? Better housing and nutrition contributed more than medical intervention to the reduction in mortality from tuberculosis. New housing developments in the post war era in Glasgow radically altered the risk of TB before effective treatments came into use and the incidence of TB in Glasgow was at its lowest for 100 years when the first anti-TB drugs were introduced. A single solution to the problem of cancer in Glasgow is unlikely to be found but if we can bring increased understanding of the problems to all the agencies in society which have a role to play in changing the factors that lead to cancer, we can start together.

The risk factors mentioned earlier, cigarette smoking, alcohol, diet are far from being specific risk factors for cancer. They are

involved in creating health, we can make this start by assembling information from the data we routinely collect and from the research we carry out to define the present position.

Information on the number of new cases of cancer in Scotland comes from the Scottish Cancer Registry, on hospital inpatients, from death certificates and from screening programmes for breast and cervical cancer. These data are collected by the Registrar General for Scotland and by the Common Services Agency for Scotland.

This means the first steps in an effort to reduce the cancer burden have already been taken because data are now collected in the same way. The responsibility of the Health Board is to consider the validity of the

data and to interpret them for evidence of effectiveness of services which the Health Service can provide.

Were it not for lung cancer which dominates all others in Glasgow (Figure 23), our risk of

the major cancers lies firmly in the middle range of incidence of 150 locations worldwide with comparable data (Figure 24). Lung cancer is now mainly a disease of the socially disadvantaged (Table 5). They not only smoke more, but the Glasgow and

Figure 23

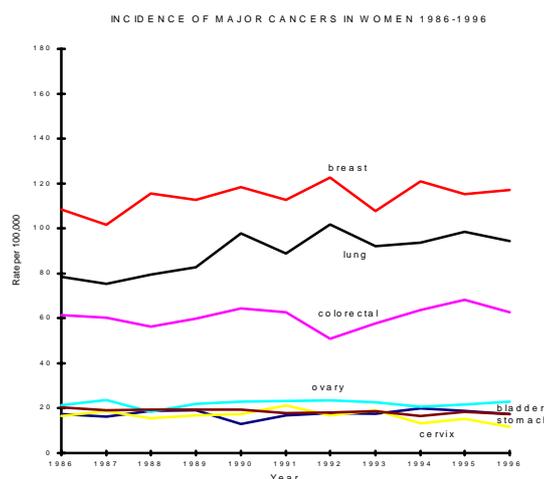
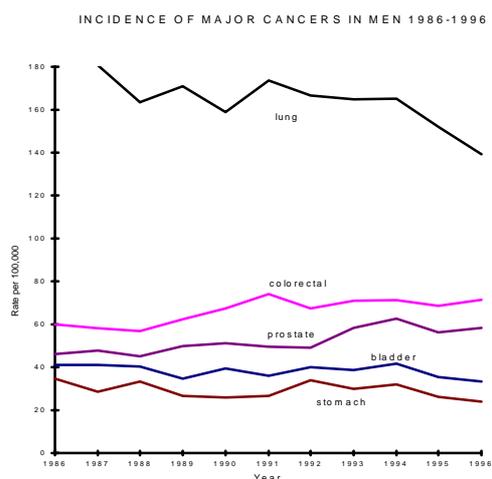
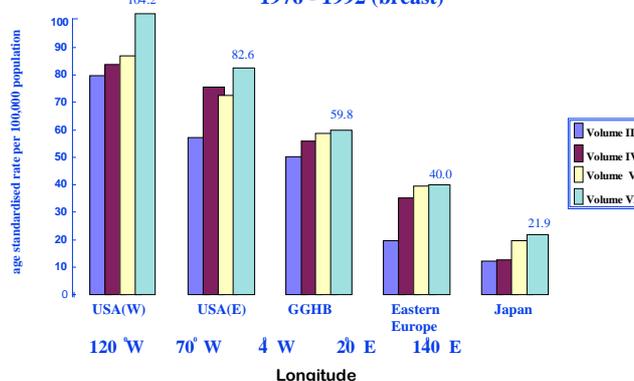


Figure 24

Trends in Incidence of Cancer around the World 1976 - 1992 (breast)



Extracted from 'Cancer Incidence in Five Continents' Volumes III-VI 1976-1992 IARC

Table 5

Most common cancers in affluent and deprived women

DEPRIVATION CATEGORY 1	NUMBER OF CASES	DEPRIVATION CATEGORY 7	NUMBER OF CASES
1. Breast	826	1. Lung	987
2. Skin	511	2. Breast	716
3. Colorectal	370	3. Skin	596
4. Lung	298	4. Colorectal	434
5. Ovary	145	5. Cervix	183
6. Melanoma	114	6. Stomach	159
7. Bladder	92	7. Ovary	147

(based on West of Scotland data 1990-6)

(West of Scotland) smoker develops more than twice as much lung cancer from smoking equal numbers of cigarettes compared to people in other cohort studies (Figure 24a). All the evidence we can find shows that asbestos exposure, atmospheric pollution and passive smoking do not account for this difference. The evidence

which is most compelling and which most explains the difference comes from comparing the patterns of lung cancer risk in manual and non manual workers. Manual workers pattern of risk resembles that of the Glasgow and West of Scotland smoker as illustrated. Rates for non manual workers were much the same as these in the other studies illustrated (Figure 25).

Figure 24a

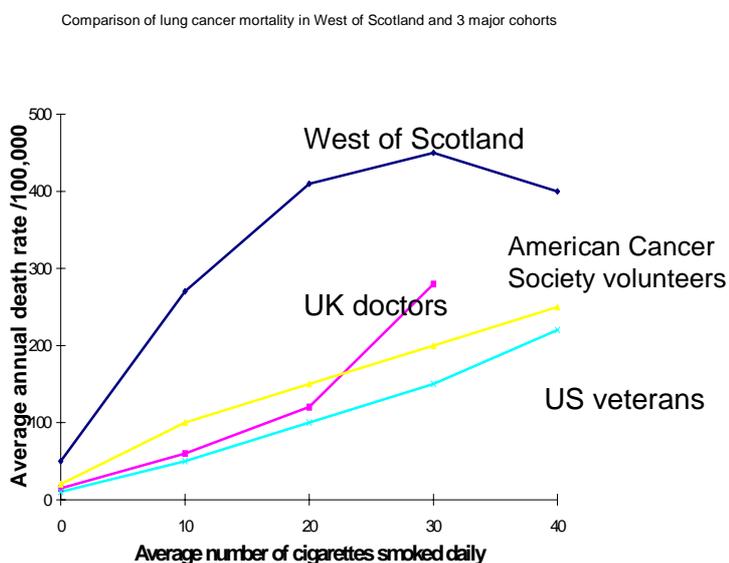
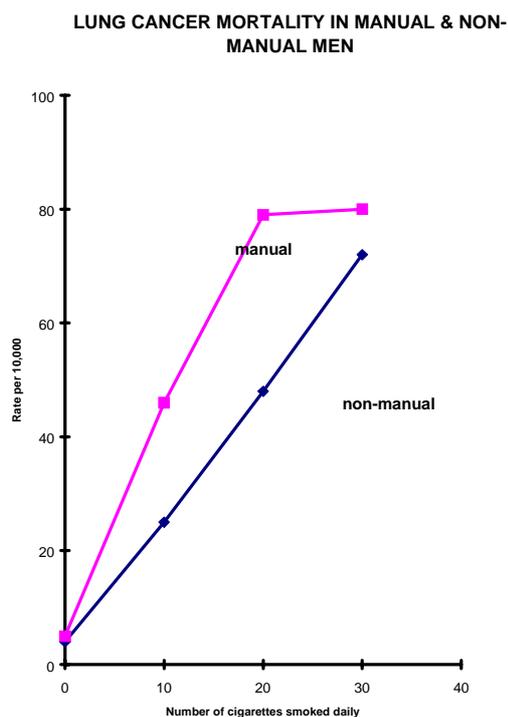


Figure 25

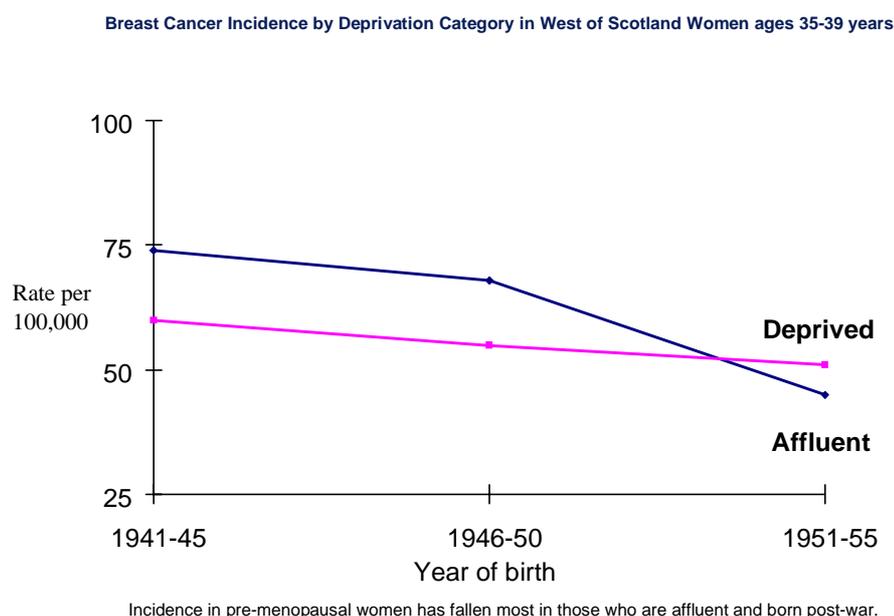


In contrast, breast cancer affects the affluent more than the deprived but mortality rates are the same in both socio-economic groups. This means that the affluent survive better. There has been a fall in breast cancer incidence in pre-menopausal women in the last 15 years in Glasgow and the West of Scotland. The first group of women to benefit were those who achieved menarche after the end of the Second World War and subsequent food rationing. The benefit is confined to the affluent (Figure 26). This pattern is also found in ovarian cancer but

not in colon cancer suggesting a pattern of risk we do not yet understand.

These results are worth mentioning because they illustrate how little we understand of the mechanisms of cancer causation, detection, prevention and care and the patterns of socio-economic deprivation and affluence in our community. We have already referred to social inequality in survival from breast cancer. The most extreme examples of socio-economic inequalities in survival differences are for patients diagnosed with

Figure 26



melanoma and Non Hodgkin's lymphoma. In contrast there are little differences in survival in lung, pancreatic or laryngeal cancer (Table 6). Survival differences of this nature compel attention because it is known that in breast cancer the stage at which women present to the surgeon when they first experience symptoms of breast cancer is the same in the affluent as the poor (Figure

27). We also know that in Glasgow socially deprived women have as much access to specialist treatment as the affluent. If it is the spread of malignancy of tumours that kills, are the affluent more resistant to this for some cancers? The answers to these questions are not known but they require urgent study if means of lightening the cancer burden are to be found.

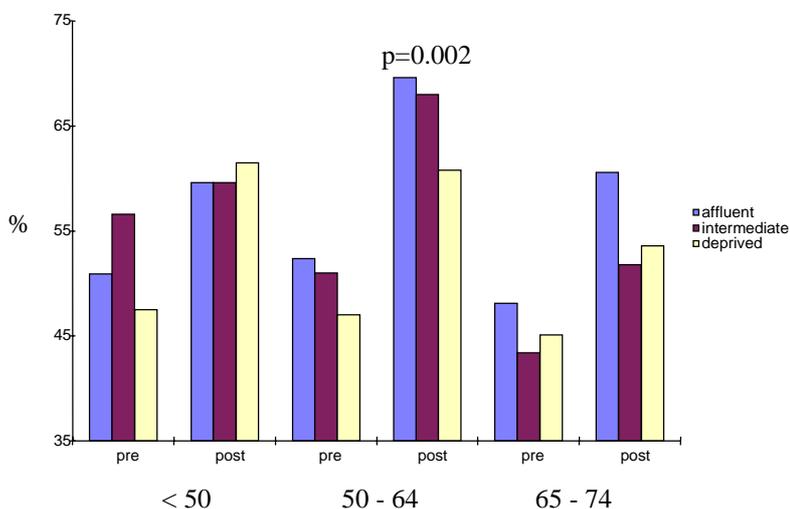
Table 6
Survival by deprivation category for a selection of cancers

Site	Five year survival (%)		
	Affluent	Deprived	Difference
Melanoma	83.0	66.5	16.5
NH Lymphoma	54.0	40.9	31.1
Head/neck	47.9	37.1	10.8
Breast	65.1	55.7	9.4
Testis	89.0	79.6	9.4
Colorectal	39.2	32.3	6.9
Ovary	31.0	25.8	5.2
Cervix	57.8	52.8	5.0
Endometrium	75.9	71.8	4.1
Leukaemia	35.8	32.0	3.8
Lung	9.7	7.3	2.4
Larynx	58.7	57.7	1.0
Pancreas	3.8	4.1	-0.3

(cases aged less than 65 years, diagnosed 1975-1989)

Figure 27

BREAST CANCER - % of women presenting with tumours 2 cms or less by age and screening period

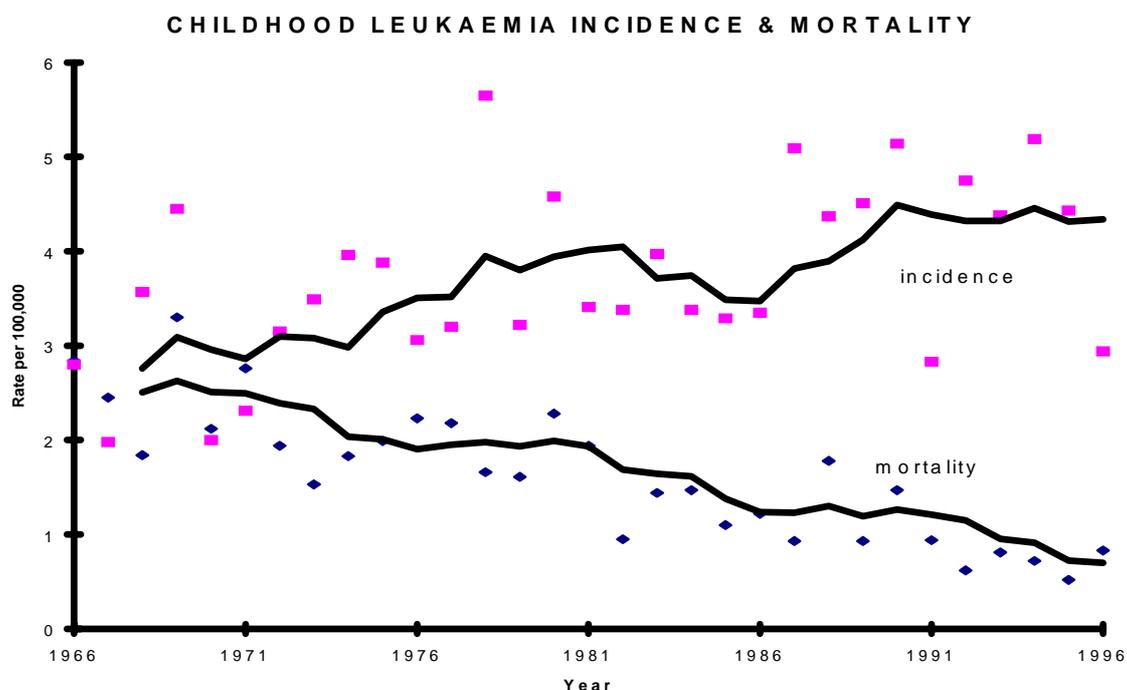


Much in current cancer therapy has been learned from the treatment of children. The early clinical trials of therapy in childhood leukaemia lacked current rigour. They were more like guidelines. However by 1972 it was clear that children on any arm of a clinical trial survived better than those not included. This has provided the justification for entering as many patients as ethically possible to current trials of therapy. The lessons of childhood leukaemia are hard to ignore. As treatment became more complex, many hospitals realised they could no longer deliver it safely and referred cases to specialist centres with a consistent decrease in mortality (Figure 28). In some countries an inquiry is held if mortality from this or other childhood cancer increases.

This approach to improving cancer outcomes by ensuring that patients are treated by clinicians with special interests and experience is one that GGHB is pursuing through the creation of networks of specialists. Public Health has a key role in achieving this change for it can exploit its clinical neutrality and use its basic science, epidemiology, to define the characteristics of optimal care and assess how it can best be delivered within a geographically defined population.

This board looks forward to sharing the task of reducing the cancer burden through learning from and stimulating more health services research, from working with other relevant agencies in society, and not least, with the public.

Figure 28



4 Coronary Heart Disease

MORTALITY

There is evidence of continued reduction in risk of death from Coronary Heart Disease (CHD) in the GGHB population over the last few years (Table 7). This trend is encouraging and some satisfaction can be taken from the figures. However, the rates remain above the Scottish level and we need to work even harder over the next few years to narrow the gap between ourselves and the rest of Scotland. Despite the fall, the proportion of all deaths in GGHB residents under the age of 65 years which can be attributed to CHD is still 23%.

Although mortality from CHD is falling, there is little evidence to suggest that the level of morbidity in our population is also falling. The level of morbidity is a measure of the number of people in the population who suffer from the symptoms or complications of a disease. In the case of CHD, this might mean patients with chronic problems such as angina or heart failure. The prevalence of angina has been measured accurately in North Glasgow as part of an international

study of heart disease and it appears to be rising in the 55-64 year age group. This is not a problem peculiar to Glasgow and its surroundings. Across the developed world the prevalence of heart failure also seems to be rising. This may be due, for example, to the more widespread use of treatments such as thrombolysis which improve survival after a heart attack. As a result, more people with severe heart disease are surviving longer and hence the prevalence of the disease is rising.

ANGINA

GGHB has been fortunate in the past in having a series of coronary risk factor surveys carried out in North Glasgow City as part of the World Health Organisation MONICA Project. In 1992, this survey showed that the prevalence of people reporting that a doctor had diagnosed angina was high and rose with age. It was greater in men than in women (Table 8). The findings have been confirmed in the Scottish Health Survey.

Table 7
Deaths from CHD in GGHB and Scotland – men and women aged 25-64 years

YEAR	MEN				WOMEN			
	GGHB		SCOTLAND		GGHB		SCOTLAND	
	NUMBER	RATE/ 10,000	NUMBER	RATE/ 10,000	NUMBER	RATE/ 10,000	NUMBER	RATE/ 10,000
1990	512	33.7	2390	27.1	196	12.0	924	10.0
1991	512	33.7	2353	26.7	214	13.1	929	10.0
1992	467	31.8	2320	26.1	184	11.4	778	8.4
1993	493	32.5	2320	25.7	170	10.5	754	8.0
1994	417	27.2	1966	21.5	161	9.9	670	7.0
1995	389	25.2	1928	20.9	149	9.1	654	6.8
1996	410	26.4	1822	19.5	123	7.5	613	6.3

Table 8
Prevalence of self-reported angina by age and sex. North Glasgow (1992)

	Age				
	25-34	35-44	45-54	55-64	65-74
MEN	0%	2.4%	11.7%	17.5%	20.1%
WOMEN	0.6%	1%	6.1%	13.7%	19.9%

Source: MONICA data.

HEART FAILURE

Heart failure is a consequence of CHD. It is a deadly, disabling and costly syndrome which reduces quality of life more than stroke and cancer. In the UK today, the commonest cause of heart failure is CHD, whereas previously it was hypertension. The Heart Scan study – a study based on the Glasgow MONICA population survey of 1992 showed the high prevalence of the disease and the age related rise (Table 9).

RISK FACTORS

Recently there has been evidence from the international MONICA study indicating that, at a population level, there is a poor relationship between risk factor changes

and the rate of myocardial infarction and coronary death. A limited number of risk factors were measured – smoking, blood pressure and cholesterol. For individuals, there continues to be benefit in reducing coronary risk by stopping smoking, controlling blood pressure, maintaining a reasonable Body Mass Index (BMI) and managing lipid levels. Changing population levels of these risk factors will also still be an important plank of health promotion although we will, in the light of the MONICA study data, be giving consideration to other aspects of risk. At least one of these is deprivation and the Public Health Department has a long standing and well known interest in this area. The Glasgow MONICA study has shown the socio-economic variation in rates of myocardial

Table 9
Prevalence of heart failure by age and sex. North Glasgow (1992)

	Age				
	25-34	35-44	45-54	55-64	65-74
MEN	0%	0.7%	2.8%	5.7%	6.4%
WOMEN	0%	0%	2.4%	2.0%	4.9%

infarction (Table 10).

Many risk factors for CHD are present at a higher level in the GGHB population than in other parts of Scotland. The Scottish Health Survey has shown that GGHB currently has the highest rate of smoking

among various Scottish Regional Groups. GGHB also has a more than average level of deprivation. The Scottish Health Survey also confirms that smoking prevalence varies by social class and gender (Tables 11, 12).

Table 10
Age adjusted relative risk of myocardial infarction/coronary death, by sex. North Glasgow population (1985-91), aged 25-64

SOCIAL ECONOMIC QUARTERS		MEN	WOMEN
Most affluent	Q1	1	1
	Q2	1.35	1.67
	Q3	1.57	2.00
Least affluent	Q4	1.74	2.34

Source: MONICA data

Table 11
Self-reported cigarette smoking status, Scottish men and women aged 16-64 (Registrar General Classification of Social Class)

	SOCIAL CLASS					
	RG I	RG II	RG IIINM	RG IIIM	RG IV	RG V
MEN	17%	24%	27%	38%	46%	58%
WOMEN	16%	24%	35%	40%	47%	54%

Source: Scottish Health Survey 1995

Table 12
Self-reported smoking status, men and women aged 15-64

	MEN		WOMEN	
	GGHB	SCOTLAND	GGHB	SCOTLAND
Current cigarette smoker	38%	34%	41%	36%
Never smoked at all	28%	32%	38%	38%

Source: Scottish Health Survey 1995

Other risk factors also vary by social class. Obesity is commoner, exercise less common and diet poorer in the GGHB area than in other parts of Scotland (Tables 13, 14).

35-64 years). Over the 10 years 1986-1995 there has been an age standardised average fall in male smokers of 1.2% per year and in female smokers, around 0.8% per year. In addition, a fall in blood pressure

Table 13
Age standardised frequency-intensity activity levels. Men and women aged 15-64

	MEN		WOMEN	
	GGHB	SCOTLAND	GGHB	SCOTLAND
Levels 3-5*	38%	45%	33%	36%
Level 0**	31%	21%	31%	26%

Source: Scottish Health Survey 1995

* = 3 occasions of moderate or vigorous physical activity per week (includes work and leisure)

** = no occasions of moderate or vigorous physical activity per week (includes work and leisure)

Table 14
Frequency of eating fresh fruit. Men and women aged 15-64

	MEN		WOMEN	
	GGHB	SCOTLAND	GGHB	SCOTLAND
>1 per day	8%	14%	16%	22%
Once per day	23%	25%	29%	30%
5-6 days per week	5%	5%	5%	5%
2-4 days per week	23%	23%	23%	22%
Once per week	14%	13%	10%	9%
1-3 times per month	12%	10%	7%	6%
Rarely or never	13%	11%	10%	7%

However, although there is cause for concern at the levels of various risk factors in GGHB there is also cause for optimism. There have been large changes in the population prevalence of risk factors. The international MONICA study has shown that North Glasgow has had among the largest reductions in risk factors of the international study populations (men and women aged

in men and a fall in total cholesterol in both men and women contributed to an overall fall in the total risk score in North Glasgow. This was one of the greatest reductions in risk score observed in the population studied in the MONICA Project.

Complacency is not justified by these figures. Starting from a high level of risk

means that Glasgow is still near the top of the league for risk factors and so although things are improving there is a long way to go.

In addition to improving risk factors, there is evidence that there has been improvement in the management of the

acute event with a quick uptake in Glasgow hospitals of the newer, evidence based therapies which improve survival. Services are being developed to improve secondary prevention (prevention of further heart problems in those who have already had it diagnosed). The diagnosis of new heart disease will be the subject of a future report.

5 Stroke

DEFINITION

A stroke is defined as "a clinical syndrome of rapidly developing clinical signs of focal or global disturbance of cerebral function, lasting more than 24 hours or leading to death, and of no apparent cause, except vascular". Stroke is an important cause of both acute and chronic ill health. It results from two principal types of pathological process, the formation of blood clots in, or bleeding from, arteries to the brain. Clinical features depend on the part of the brain affected. The most important types of stroke are described below.

- **Thromboembolic stroke.** In patients with thromboembolic stroke, brain damage results from blockage of an intracranial or extracranial artery. The blockage may result from local thrombosis or from an embolus, a clot formed elsewhere in the body but carried in the circulation to lodge in the brain.
- **Haemorrhagic stroke.** In patients with haemorrhagic stroke, brain damage results from rupture of a cerebral artery and leakage or haemorrhage of blood into cerebral tissue. Subarachnoid hemorrhage is a specific type of haemorrhagic stroke. Haemorrhage occurs from weakness in the wall of the artery at the base of the brain into the subarachnoid space.
- **Transient ischaemic attack:** A transient ischaemic attack is a stroke-like episode in which the clinical features resolve

within 24 hours. It is important that patients who have had a transient ischaemic episode be identified and treated. After an episode of transient cerebral ischaemia, the risk of a major stroke is 12% in the first year and 7% in subsequent years.

In western countries, approximately 80% of new strokes are thromboembolic, 10% result from primary intracerebral haemorrhage and 5% from subarachnoid haemorrhage. In the remaining 5% of cases, the type of pathology may be uncertain. The overall mortality at 30 days in patients who have had a first stroke is 19%. It is much greater in patients with haemorrhagic stroke than in those with thromboembolic stroke. Mortality increases with increasing age and in those with pre-existing dependency.

INCIDENCE OF STROKE AND TRANSIENT CEREBRAL ISCHAEMIA

Incidence is a measure of the risk of stroke in the population. The incidence of stroke in Glasgow has been estimated to be 3.3 per 1,000 per year. About 3,000 new episodes of stroke occur in Glasgow annually. The importance of stroke is reflected in the numbers of deaths and admissions to hospital associated with the disease. Stroke accounts for about 1,200 deaths (Table 15) each year in Glasgow, and for 2,000 emergency admissions (Table 16). Both the mortality and morbidity rates associated with stroke increase markedly with increasing age.

The incidence of transient cerebral ischaemia in Glasgow is unknown, and is difficult to estimate. Many patients whose symptoms resolve completely do not seek medical advice. According to the incidence rates established in the Oxfordshire Stroke Study, the expected annual number of cases in Glasgow would be 388. In the study, only patients who sought medical advice were included. For this reason, 388 cases is likely to be a substantial underestimate of the annual number of events in Glasgow.

PREVALENCE

Prevalence is a measure of the burden of stroke in the population. The prevalence of stroke in Glasgow has been estimated to be 12.2 per 1,000. According to this estimate, 11,097 people who had survived a stroke would be expected to be alive in Glasgow at the present time. In these patients, the level of disability will range from minimal, in patients who are almost entirely independent, to gross levels of disability in very dependent patients.

Table 15
Mortality associated with stroke in GGHB in 1997, by age group and sex

Age-group (years)	Numbers			Rates		
	Male	Female	All	Male	Female	All
15 – 44	16	15	31	0.1	0.1	0.1
45 – 64	73	56	129	0.8	0.6	0.7
65 – 84	280	390	670	5.7	5.2	5.2
Over 84	86	322	408	27.3	30.8	30.3
All	455	783	1238	1.3	2.0	1.7

Table 16
Emergency admissions to hospital because of stroke, GGHB residents only, 1997, by age group and sex

Age-group (years)	Numbers			Rate		
	Male	Female	Total	Male	Female	Total
15 – 44	48	25	73	0.2	0.1	0.2
45 – 64	272	177	449	2.9	1.7	2.3
65 – 84	530	675	1,205	10.6	8.8	9.5
Over 84	75	209	284	25.5	20.2	21.4
Total	925	1,086	2,011	2.1	2.3	2.2

RISK FACTORS

Definition of risk factors is important in determining the natural history of disease and in formulating strategies of primary prevention. Although the risk factors for all types of vascular disease are similar, the relative importance of each factor is different for stroke than for ischaemic heart disease or for peripheral arterial disease. In individuals who have more than one risk factor, the risk of stroke will depend on the combination of factors.

Age is an example of a risk factor for stroke which is non-modifiable. The most important modifiable risk factors for stroke are

hypertension, atrial fibrillation, smoking and history of transient cerebral ischaemia.

CHANGES IN EPIDEMIOLOGY

There is substantial evidence that the mortality associated with stroke has declined in most western countries in the last few decades. In Glasgow, the overall mortality associated with stroke fell from 1.5 to 1.4 per 1,000 between 1990 and 1997. The decline was greatest in the population aged 65 to 84 years. In this population, the mortality rate in males fell from 6.4 to 5.7 per 1,000 (Table 17), and in females, from 6.4 to 5.2 per 1,000 (Table 18).

Table 17
Mortality rate (per 1,000) associated with stroke, males, GGHB residents only, by year and age group

Year	Age group					Overall
	0-14	15-44	45-64	65-84	Over 84	
1990	0.0	0.0	0.8	6.4	28.9	1.1
1991	0.0	0.1	0.8	6.6	28.0	1.1
1992	0.0	0.1	0.8	7.8	30.6	1.3
1993	0.0	0.0	0.8	7.0	30.3	1.2
1994	0.0	0.0	0.8	6.9	33.5	1.2
1995	0.0	0.1	0.7	7.0	29.3	1.2
1996	0.0	0.0	0.7	5.9	28.8	1.0
1997	0.0	0.1	0.8	5.7	27.3	1.1

Table 18
Mortality rate (per 1,000) associated with stroke, females, GGHB residents only, by year and age group

Year	Age group					Overall
	0-14	15-44	45-64	65-84	Over 84	
1990	0.0	0.0	0.5	6.4	29.9	1.8
1991	0.0	0.0	0.7	6.3	34.5	1.9
1992	0.0	0.0	0.7	6.3	30.4	1.8
1993	0.0	0.1	0.6	6.9	38.3	2.1
1994	0.0	0.1	0.5	6.0	35.8	1.9
1995	0.0	0.0	0.5	5.7	37.5	1.8
1996	0.0	0.0	0.5	6.1	30.3	1.7
1997	0.0	0.1	0.6	5.2	30.7	1.7

Several explanations have been advanced to account for the decline in stroke mortality. Firstly, there is evidence that the detection and management of hypertension improved over the period of falling mortality. Secondly, it has also been suggested that the reduction in mortality is attributable to a reduction in incidence, which in turn reflects changing patterns of risk factors. Lastly, there is evidence that the case-fatality in patients with acute stroke has fallen, reflecting either a reduction in the severity of stroke or improvement in management of acute disease. The relative importance of each of the three factors in determining the decline in mortality is uncertain. Evidence for a decline in the incidence of stroke has been found in a large community study carried out in North America. It is likely that the decline in mortality reflects, at least in part, a decline in the incidence of stroke.

OPPORTUNITIES FOR HEALTH GAIN

There is scope for improving health gain in several aspects of stroke care, including primary and secondary prevention, and acute management and rehabilitation.

- *Secondary prevention:* the opportunities for health gain associated with secondary prevention of stroke are considerable, and include use of pharmacological and surgical interventions. Patients who have had minor strokes or transient ischaemic episodes undergo assessment at rapid access neurovascular clinics, now established at each of the five major Trusts in Glasgow.
- *In-patient care and rehabilitation:* organised in-patient care is effective in reducing the mortality of patients with acute stroke. Models of organised care have been implemented at each of the five Trusts. The main aims of organised care are to provide rapid assessment, to prevent complications and to minimise disability.
- *Primary prevention:* primary prevention can be achieved either by modifying risk factors in patients at high risk, or by reducing the prevalence of risk factors in entire populations. In Glasgow, protocols are in preparation for the management of two of the most important risk factors for stroke, namely hypertension and atrial fibrillation. The population strategy underpins the activities which have been designed to regenerate several deprived communities in Glasgow.

6 Child Health

“The best chance to reduce future inequalities is to focus on families with children”.

Acheson, Independent Inquiry into Inequalities in Health, 1998

“There are now many studies linking health in early life with disease in middle age. Differences in mortality rates between deprived and affluent areas are evident from birth and for a wide variety of causes”.

Watt, Health Bulletin, 1993

“At a time when there is increasing concern about environmental hazards, it is important to record that for current generations of adults there is no single environmental issue which has affected so many people and cast such a long shadow on their future health as the circumstances in which they were born and brought up as children”.

Watt, Health Bulletin, 1993

“It is no comfort that 40% of households with children aged 1-15 years in Glasgow currently receive Income Support, nor that this proportion has doubled in the last decade. Over 50% of families with children living in council housing are exposed to conditions of dampness and condensation as a result of poor building design and the relative cost of fuel. 49% of primary school-children in Glasgow receive financial assistance to buy shoes and clothing”.

Watt, Health Bulletin, 1993

Improvements in both maternal and child health are fundamental pre-conditions for more general reductions in inequalities in health. There is a growing consensus that good parenting can prevent many of the adverse effects of material deprivation. Hoghughu has extended this argument to assert that “parenting is probably the most important public health issue facing our society”. The association between the health and well being of children and the health and well-being of their parents, especially the mother, has provoked the Royal College of Paediatrics and Child Health to promote strategies that target inequalities in the health

of teenage girls and young women.

Fifty-two percent of children in Glasgow grow up in circumstances of material deprivation. In addition more extreme social marginalisation threatens both the good health and access to health services of some groups of children. Examples of these particularly vulnerable groups of children include those looked after and accommodated by the local authority, those whose parents suffer from mental illness or are addicted to drugs or alcohol, those who have suffered physical or sexual abuse or neglect and those who are homeless.

In 1996 a National Commission of Inquiry reported on prevention of child abuse. The Commission supported a broad definition of child abuse and concluded that most of the abuse which children suffer is preventable. Child abuse was defined as anything which individuals, institutions or processes do or fail to do which directly or indirectly harms children or damages their prospects of safe and healthy development into adulthood. This therefore covers a wide spectrum of damage from actions resulting in criminal convictions to the broader effects of poverty and deprivation. The Commission recommended a framework for prevention of abuse, the key components of which are:

- an appropriate effective child health surveillance programme.
- universally available day care.
- a school health service working collaboratively with teachers to implement child protection procedures, school behaviour policies and personal and social education.
- information and advice for patients and children.
- family support services.
- a strong multi-agency child protection service.
- counselling and treatment services.

Being looked after by the local authority is also an important risk factor of future poor physical and mental health and educational failure. Children are looked after by the local authority for different reasons but in approximately 74% of cases the child is at

risk of abuse or neglect and in about 26% the main reason relates to the child's behavioural difficulties. Estimates of the prevalence of mental health problems in this group suggest rates of between 50 and 90%. Approximately 50% of these children grow up to experience homelessness and to receive further involvement with health and social agencies in forensic and mental health services. The Who Cares Trust has shown that looked after young people receive poor access to health information and health care. In Glasgow City there are approximately 2,800 children being looked after with 880 being placed away from home. There are approximately 50 children under the age of 12 in residential placements.

Child health indicators which may influence future health include birth weight, breastfeeding, immunisation and maternal smoking. Routine data show that in GGHB there have been some encouraging reductions in the differentials in child health between the socio-economically most advantaged and most deprived post code sectors. Primary immunisation uptake is now over 95%, breast feeding rates have begun to rise slowly in more deprived areas and differentials in hospital admission rates in children in relation to deprivation have reduced.

INFANT AND PERINATAL MORTALITY

There is still an approximately two-fold difference in infant and perinatal mortality between the most and least deprived areas, and this is reflected in a consistent difference in the incidence of low birth weight.

BIRTH WEIGHT AND BREAST-FEEDING

Low birth weight has been associated with poorer health and earlier death. This disadvantage is further compounded by the inequalities in rates of breastfeeding. For the whole of Greater Glasgow Health Board, 7.7% of babies were born less than 2.5 kgs in 1997 and 43% of babies were breastfed.

This latter statistic shows an increase from 1983 when only 33% of babies were breastfed. Figure 29 presents the percentage of babies born with weight less than 2.5 kgs by deprivation areas. The data

show a difference between 5% in the most advantaged areas to almost double that rate in the most deprived postcode sectors.

Figure 30 shows the difference in breastfeeding rates by deprivation status. In Carstairs category 7 (most deprived), just over 20% of babies are breastfed in comparison to 70% in Carstairs category 1, (most affluent). It is encouraging to note that breastfeeding rates, (defined as any attempt to breastfeed) in the most deprived areas have risen to their present level from 12% in 1991.

Figure 29

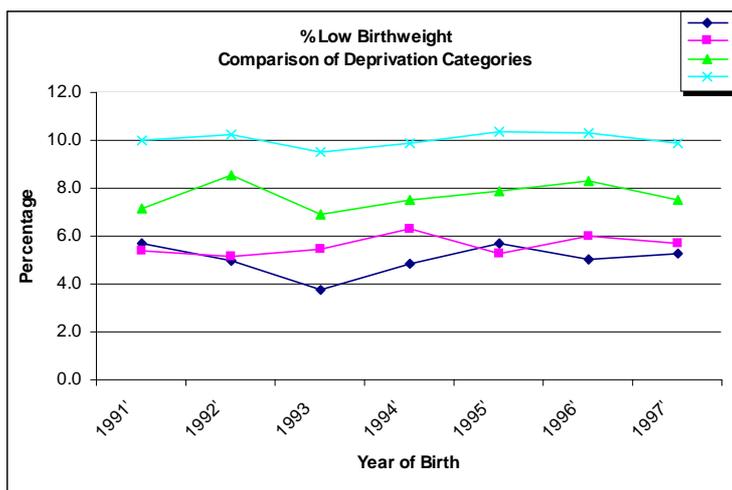
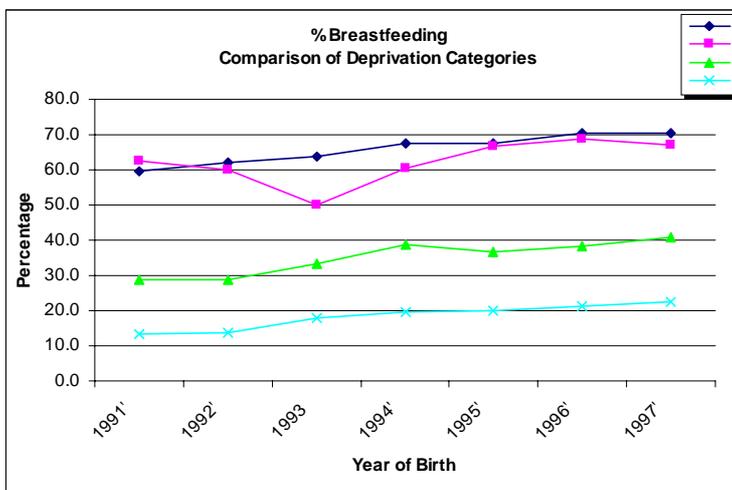


Figure 30



The percentage increase uptake of pertussis immunisation has increased overall in Glasgow from 72.4% in 1983 to 97% in 1996 (Figure 31). We saw similar improvements in the uptake of Mumps, Measles and Rubella (MMR) but this dropped to 91.9% in 1996 (Figure 32). This is likely to be due to adverse media publicity surrounding links between

MMR and autism. Research evidence does not confirm this claim and we continue to believe that the risks to children from not receiving MMR outweigh any risk of the immunisation itself. Diphtheria, tetanus and polio immunisation remains high throughout Glasgow with uptake of more than 98% (Figure 33).

Figure 31

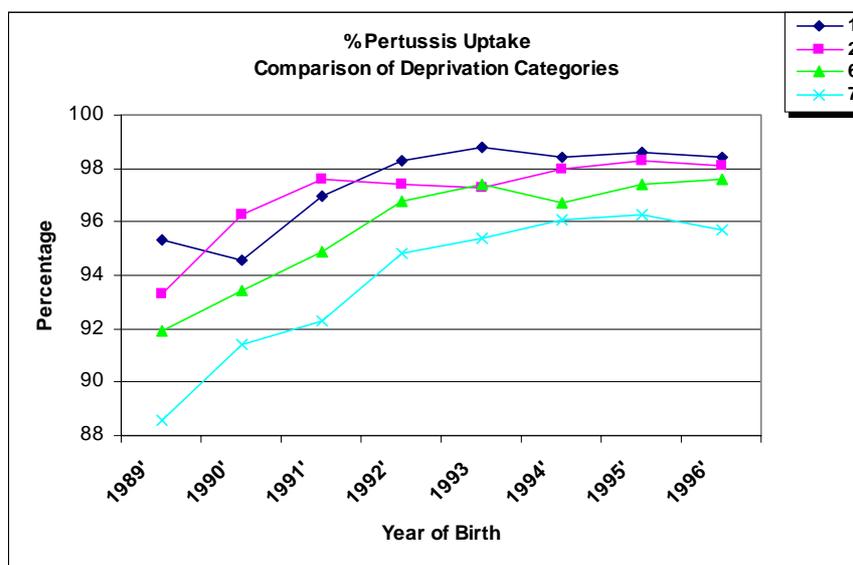


Figure 32

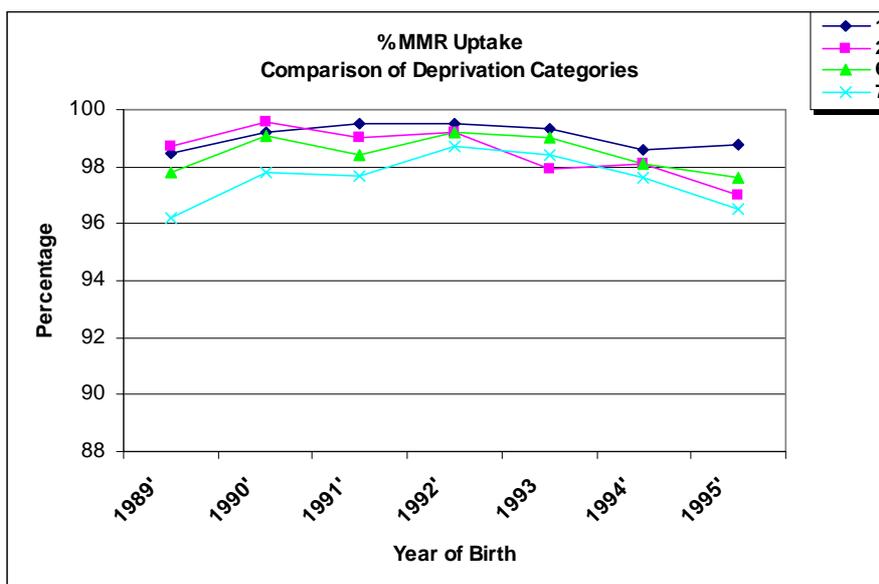
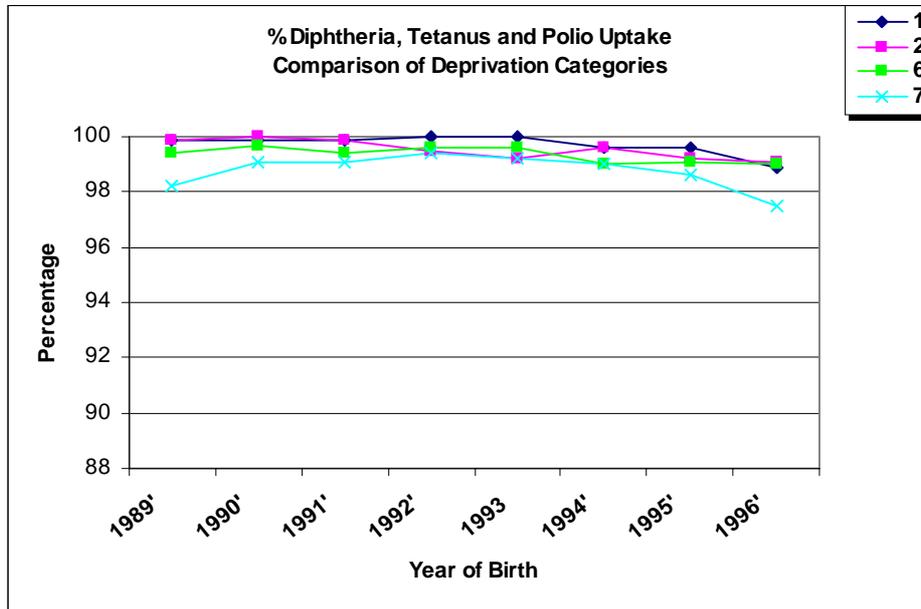


Figure 33

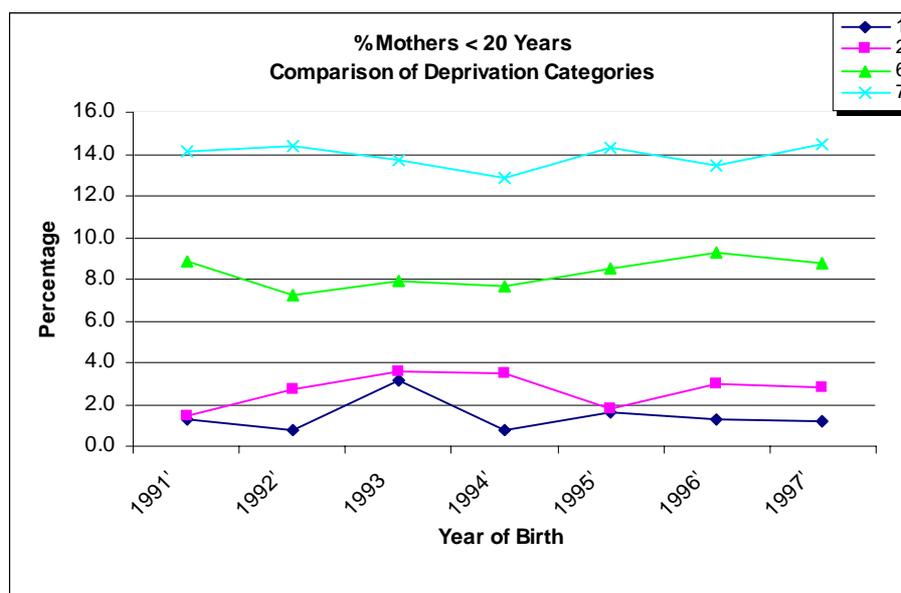


YOUNG MOTHERS

There are more young mothers in the least advantaged areas of Glasgow. Figure 34 below shows the percentage of mothers

less than 20 years of age by deprivation status. In postcode sectors with the highest levels of deprivation (7), over 14% of mothers were under the age of 20 years in 1997 compared with 1% in the most advantaged areas.

Figure 34



SMOKING

There are large differences in smoking rates between areas. Maternal and paternal smoking habits will have implications for children's health. When the health visitor

makes her first visit post-natally, over 50% of mothers and fathers are smoking in the most deprived areas compared with less than 10% in the most advantaged areas (Figures 35, 36).

Figure 35

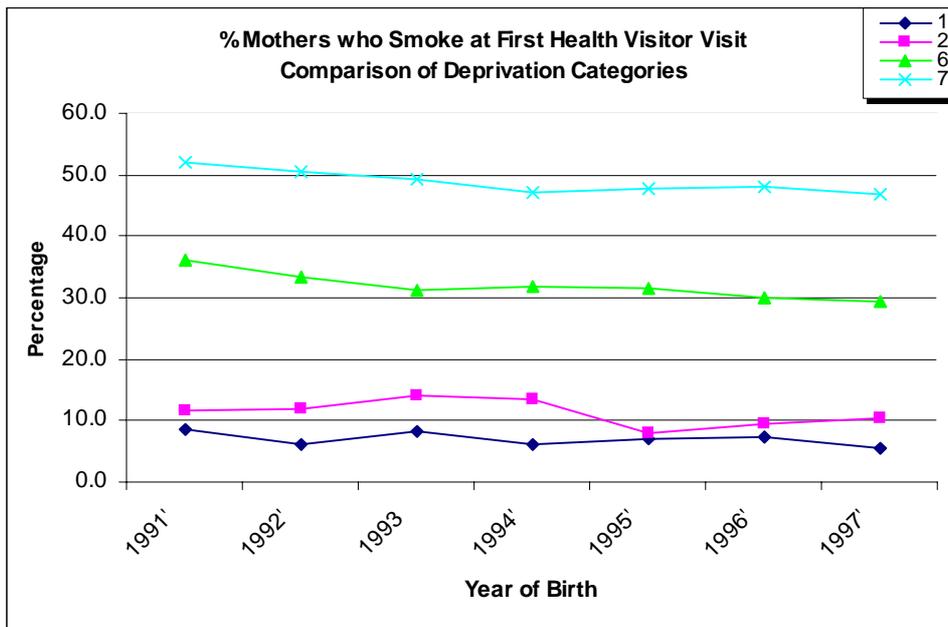
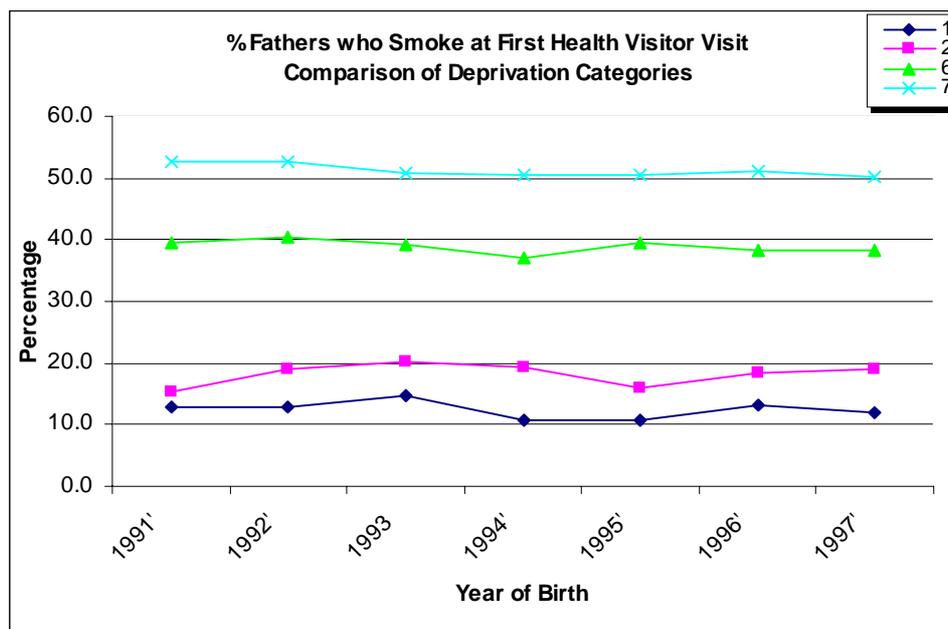


Figure 36



The former Chief Medical Officer, Sir Donald Acheson has recently published the report of his Independent Inquiry into Inequalities in Health. Some of the recommendations of that report which are relevant to children's health include:

- policies aimed at improving health and reducing health inequalities in women of childbearing age, expectant mothers and young children.
- further development of high quality pre-school education so that it meets, in particular, the needs of disadvantaged families.
- further measures to improve the nutrition provided at school, including: the promotion of school food policies; the development of budgeting and cooking skills; the preservation of free school meals entitlement; the provision of free school fruit; and the restriction of less healthy food.
- policies which reduce poverty in families with children by promoting the material support of parents; by removing barriers to work for parents who wish to combine work with parenting; and by enabling those who wish to devote full-time to parenting to do so.
- identify and address the physical and psychological health needs of looked-after children.
- further reductions in poverty in women of childbearing age, expectant mothers, young children and older people, for example by increasing benefits in cash or in kind to them.
- policies which will increase the availability and accessibility of foodstuffs to supply an adequate and affordable diet.
- policies which increase the prevalence of breastfeeding.
- fluoridation of the water supply.
- further development of programmes to help women to give up smoking before or during pregnancy, and which are focused on the less well off.
- further development of the role and capacity of health visitors to provide social and emotional support to expectant parents, and parents with young children.

There is good evidence that if these policies are implemented, the health of children, their mothers and families will improve. The Health Board and local authorities in the area should work towards implementation of these policies.

7 Accidents in Childhood

EPIDEMIOLOGY

Accidents are an important cause of morbidity and mortality in children. Important categories of accidents include falls, pedestrian road traffic accidents and accidental poisoning. Accidents are more common in children who live in more deprived areas. Information about accidents in children is collected at the Paediatric Epidemiology and Community Health Unit at the Royal Hospital for Sick Children (RHSC). The incidence of accidents is

underestimated because only patients who attend the Accident and Emergency Department at the RHSC are included in the Study.

In Glasgow in 1997, there were 11,384 childhood accidents (Table 19). Of these, 59% were in boys and 41% in girls. Thirty-seven per cent of all accidents were in children aged 4 years or less. Similar proportions of accidents occurred in children aged 5 – 9 and 10 – 14 years (Table 20).

Table 19
Accidents in childhood, 1997 by sex

Sex	Number of Patients	%
Female	4,684	41.2
Male	6,700	58.9
Total	11,384	100.0

Source, CHIRRP Data

Table 20
Accidents in childhood, 1997 by age group

Age (years)	Number of Patients	%
0 - 4	4,126	36.5
5 - 9	3,564	31.6
10 - 14	3,574	31.6
15+	30	0.3
Total	11,294	100.0

Source, CHIRRP Data
(Data missing in 90 cases)

There was a wide variation in the severity of injury. In 8.8% of cases, the accident was so minor that no injury could be detected, and in a further 40% of cases, the injury was a haematoma, abrasion or cut (Table 21). In 17% of cases, a dislocation or fracture was present, and in 2.2%, a burn or scald.

Accidents most commonly occurred at home, on a public road or at school (Table 22). The patient was admitted to hospital in about 15% of cases, and in a further 14%, a period of observation in a short-stay ward was required (Table 23).

Table 21
Accidents in childhood, 1997

Injury Type	No.	%
Haematoma/bruising/superficial abrasion	2,380	20.9
Cut/laceration	2,184	19.2
Fracture/dislocation	1,877	16.5
Inflammation/oedema	1,306	11.5
Sprain	1,052	9.2
Foreign body	319	2.8
Burn/scald	251	2.2
Miscellaneous	1,016	8.9
No injury detected	999	8.8
Total	11,384	100

Source, CHIRRP Data

Table 22
Accidents in childhood, 1997 by place of injury

Place of Injury	Number of Patients	%
Public road/footpath	2,242	19.7
Private home (other)	613	5.4
Private home (own)	4,953	43.5
Public playground	575	5.1
School	1,269	11.1
Sports arena	476	4.2
Unknown	445	3.9
Other	811	7.1
Total	11,384	100.0

Source, CHIRRP Data

PREVENTION

The epidemiology of childhood accidents is important in designing interventions for prevention. Three of the Board's projects for prevention are described below.

HOME SAFETY EQUIPMENT SCHEMES

Six Home Safety Equipment schemes have been established over a three year period in selected areas of Glasgow. The schemes have been fully evaluated, and a North East pilot project developed, funded by partnerships and managed by Heatwise, part of the Wise Group. Safety equipment has been fitted in approximately 900 homes in a twelve month period. The aim of these schemes is to reduce the incidence of accidents at home in very young children by supplying families on low incomes or benefit with safety equipment. An interim evaluation of this pilot scheme will be disseminated in November, 1998.

SAFER AND ACTIVE ROUTES TO SCHOOL PROJECT

The Safer and Active Routes to School project was an intervention funded by the Health Education Board and carried out at one secondary school in Glasgow. The main aim of the project was to promote active commuting to school, for example by cycling and walking. Barriers to active commuting and possible solutions were identified. The outcomes of the project included the implementation of structural changes to roads and improved safety procedures at stations. The results of the study will be disseminated to schools and other Boards.

CHILDREN'S TRAFFIC CLUB

Greater Glasgow Health Board plays a crucial role in supporting the Children's Traffic Club, a national programme aimed at raising awareness of road safety amongst children and their parents. The Health Promotion Department supports the Glasgow City Council Road Safety Unit in its work to promote uptake of the scheme by promoting the club in nurseries and primary care settings in the city.

Table 23
Accidents in childhood, 1997 by outcome

Age	Number of Patients	%
Admitted to hospital	1,718	15.1
Advice only	1,694	14.9
Short stay observation	1,614	14.2
Treated, other referral	1,624	14.3
Treated, referred to family doctor	1,541	13.5
Treated, referred to outpatients	1,572	13.8
Treated, sent home	1,621	14.2
Total	11,384	100

Source, CHIRRP Data

8 Dental Health

A DECADE OF DENTAL DECAY 1987-1997

Each of Scotland's fifteen health boards has participated in a series of annual surveys of children's dental health during the past ten years. This is referred to as the Scottish Health Boards' Dental Epidemiological Programme (SHBDEP).

The first SHBDEP survey was conducted in the autumn of 1987 when a random sample of Greater Glasgow's 5 year old school entrants were examined by specially trained examiners. Similar surveys of randomly selected samples of 5 year olds have been conducted in alternate years in

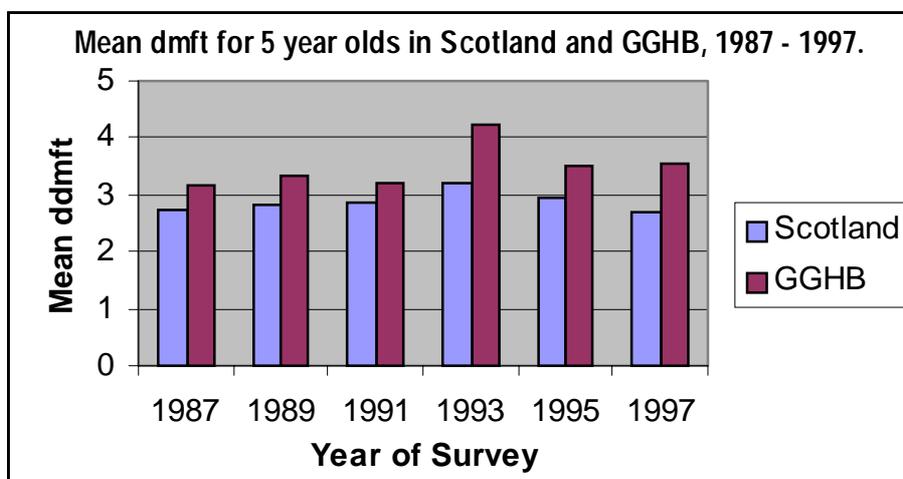
this nationally co-ordinated programme. The results of these surveys allow trends in the dental health of 5 year olds to be tracked over time and between health authority areas in Scotland and the UK.

Sadly, the dental health of 5 year olds in Greater Glasgow has deteriorated in the past 10 years. In 1987 Glasgow's dental health was ranked as the thirteenth best out of Scotland's fifteen health board areas; in 1997 Glasgow was ranked fourteenth in Scotland. The average number of decayed, missing and filled teeth (dmft) in GGHB in 1987 was 3.17 and in 1997 this had increased to 3.56. (Table 24, Figure 37)

Table 24
Mean number of decayed(d), missing(m) and filled(f) deciduous teeth (t) for 5 year old children in GGHB and Scotland

Year of Survey	Mean dmft GGHB	Mean dmft Scotland	Range for Health Scotland's Boards	% difference GGHB c.f. Scotland	Relative ranking* for GGHB
1997	3.56	2.69	1.70 – 3.69	↑ 32%	14
1995	3.50	2.93	2.16 – 3.5	↑ 19%	15
1993	4.25	3.20	2.11 – 4.25	↑ 33%	15
1991	3.22	2.88	1.68 – 3.34	↑ 12%	13
1989	3.33	2.82	1.88 – 3.65	↑ 18%	14
1987	3.17	2.73	1.86 – 3.4	↑ 22%	13

Figure 37



In 1987, only three out of ten children in Glasgow had no clinical evidence of decay, whether treated or untreated. The percentage of children with treated or untreated decay at the age of 5 years has remained unchanged in Glasgow at 35%, persistently poorer than the 43% recorded for Scotland.

WATER FLUORIDATION

The oral health strategy for GGHB (1998) includes targets for the prevalence of dental decay in the years 2000 and 2002. Children aged 5 years should have on average no more than 3 decayed, missing or filled deciduous teeth by 2000 and 45% of 5 year olds should have no fillings, cavities or extractions by the year 2002.

Experience over the past 10 years suggests that any significant improvement in dental health will be difficult to attain without changes in toothbrushing habits or, more likely, the fluoridation of public water supplies to the optimum level of 1 part per million fluoride.

Water fluoridation has been demonstrated to be the single most effective method of reducing the prevalence of dental decay. The impact of water fluoridation on tooth decay, since its introduction in the United States in 1945, in some parts of the UK in the mid 1950s and in many other countries, has been closely observed. The benefits accrue to all age groups within fluoridated communities and the most dramatic benefits are experienced by children. The prevalence of dental decay can be reduced by approximately a half in fluoridated communities drinking fluoridated water.

Furthermore, just as the distribution of dental decay is not uniform, being associated with deprivation i.e. the least affluent have the most decay, the benefits of water fluoridation are not uniform - those with the greatest risk of developing tooth decay benefit most from this public health measure. Thus, this will also reduce inequalities in dental health.

Small projects within Glasgow have been shown to have a positive effect on dental

health and in promoting behaviours which are associated with improved dental health. However, these are limited to their ability to address more than a small number of individuals. The fluoridation of a single public water supply in the west of Scotland has the potential to benefit several thousand individuals with minimal revenue consequences.

Critics of water fluoridation have cited various objections on the grounds of safety to water fluoridation to the level of 1 part per million. These claims have not been substantiated in the course of careful examination of numerous scientific papers. Although there is some evidence that dental fluorosis may be more prevalent in fluoridated areas, this is most probably attributable to the excess swallowing of fluoride toothpaste by young children. Similar increases in cases are reported in non-fluoridated areas.

It is of particular interest that in one study of 14 year olds in Manchester, mild levels of dental fluorosis were not only associated with a lower risk of dental decay but were considered by teenagers to have a more acceptable appearance. It is therefore essential that a balanced view is taken of the relative benefits and risks of water fluoridation.

Dental caries is the commonest reason for administration of general anaesthesia to children. At this time when decay rates in Glasgow appear to be stubbornly high and the option of removing children's painful teeth under general anaesthesia has been severely restricted by General Dental Council Guidelines, it is essential that this Health Board reconsiders water fluoridation with a view to achieving acceptable standards of dental health.

9 Improving Care for Older People

Quality of life and quality of care for older people are not currently areas of high priority. However as a health service our business should be to add life (of good quality) to years as well as striving to add years to life. This means that we have a responsibility to ensure that people in old age receive the best possible standard of care which can be provided within the resources which are available.

Most older people of course are perfectly healthy, living quite independent lives. People in the 65 to 74 year age groups are often enjoying a fairly vigorous retirement and are not looking for unsolicited attention from health service professionals. Seventy-five years is probably therefore a realistic minimum age for considering a person to be in the older or elderly age group.

Within the 915,000 or so people who live in the Greater Glasgow Health Board area, there are some 60,750 or 6.6% of the population aged 75 years and over. About 750 of these are permanently resident in hospital and other health service facilities, about 4,000 in private nursing homes and 2,500 in local authority residential homes. In addition, a few people who have been in hospital, for some reason, remain there inappropriately because they are unable to return home and a suitable alternative placement cannot be found. The great majority (88%) of people aged 75 years and over therefore continue to live in their own homes.

It is important to understand the needs of older people in whatever setting they happen to be. The quality of life of people in institutional care, particularly in nursing homes, is a major concern. However we also need to address the needs of frail and disabled elderly people living at home. Unless they and/or their carers receive sufficient support, premature or inappropriate admission to institutional care is likely to result. People who are misplaced in hospital are also an important group - firstly because they occupy expensive beds in acute hospitals which are required for other purposes, and secondly because these beds are not suitable for the needs of older people who need encouragement (and facilities) to enable them to remain or become as independent as possible.

SOME OF THE PROBLEMS WHICH OLDER PEOPLE EXPERIENCE

Services for people living at home

A principal objective of the Community Care Act of 1996 was to enable older people to continue to live at home for as long as reasonably possible, by making home care a practical and economically viable alternative to residential and nursing home care. High quality assessments were to be "the cornerstone" of the process of designing precisely what forms of care individuals with substantial care needs should be offered. Unfortunately there has not been a great deal of success in achieving either of these objectives.

Attempts have been made, in collaboration with various local authorities, to set up comprehensive or augmented home care schemes which provide considerably more hours of support at home (including nursing care) than traditional home help services. These schemes however are very expensive, and it is not financially possible to provide anything approaching full time (168 hours per week) support except for very short periods or in a very few cases.

There are several reasons for the lack of success in shifting the balance of care for frail elderly people from institutional care to care at home. These include difficulty of making the complex arrangements to care for someone at home on a full-time basis, compared with the relatively simple procedure of admission to an institution; the usually much greater cost of providing care on a one to one basis at home compared with one carer or nurse for perhaps six more people in a nursing/residential home; rates of pay for care assistants in nursing/residential homes in general being less than for those working in the domiciliary setting; and difficulty in supervising and ensuring satisfactory standards in the domiciliary setting. It will not be possible to provide an economically viable domiciliary alternative to full-time nursing/residential home care unless some of these anomalies are addressed, or an alternative method is developed for providing domiciliary care.

Progress in establishing reliable assessment procedures which are agreed between health and social work and between the different professionals involved - thus avoiding duplication and other bureaucracy - has also been disappointing. The reasons

for this include lack of clarity and agreement over criteria for admission to nursing and residential homes; emphasis on provision of care (what people can't do) rather than exploiting their functional potential (what they can do).

Services for people in nursing and residential homes

There is a clear difference between these two types of institutions. Nursing homes are for people who need long-term nursing and/or medical care of a complexity or volume which could not economically be provided at home. Residential homes are for people who are unable to continue to look after themselves at home and who need support of a domestic nature; any nursing, medical or pharmaceutical care required would be provided by primary care and community services in exactly the same way as are provided for people living at home. It is a major concern that the differences between nursing and residential homes are not always understood. As a result considerable numbers of people who have little or no requirement for nursing care are admitted to nursing homes. This is not only expensive and wasteful of resources, but is often detrimental to residents themselves because in general nursing homes - in contrast to residential homes - encourage dependency rather than independence. It is interesting in this respect that the balance of nursing to residential home places in Scotland (three nursing to every two residential homes) is almost exactly the converse of that in England (two nursing to every three residential homes).

A second major concern with nursing and residential homes is quality of life. We know very little about the real needs of residents because we rarely if ever ask them. There are two important aspects to this. Firstly health: whether steps are taken to minimise any problems relating to - for example - hearing, vision, communication, dental care, continence, medication and terminal care. Secondly the homes themselves: for example, are residents encouraged to do things for themselves, is there sufficient meaningful daytime activity, do staff have time to talk to residents?

A third concern is the opposite of the first. There are some nursing homes whose residents appear to be very much more dependent and/or to have much more complex needs than the average for all nursing homes. Since these extra and sometimes apparently excessive needs are not at present compensated for by additional funding, there must be a possibility that staffing levels may be inadequate to cope - especially at times of particular stress such as mealtimes, getting up etc.

People who are inappropriately placed in acute hospitals

The main function of acute hospitals is to provide the medical and nursing interventions required during acute episodes of illness. In the case of older people recovery is not always complete, and it may not be suitable for them to return home. Because of the difficulties in arranging a suitable placement in institutional care there is often a delay during which patients remain, inappropriately, in an acute hospital bed - with the disadvantages referred to above. Also,

if stay in hospital is prolonged for this or any other reason, then relatives or the patient may come to prefer remaining in institutional care rather than returning home. Similar difficulties may be experienced in geriatric assessment wards.

HOW WE ARE ENDEAVOURING TO RESOLVE THESE PROBLEMS

The availability of Government funding for initiatives to reduce pressure on hospital beds during the winter period provided the opportunity to establish and to assess the value of a number of projects. These included:

Alternatives to hospital admission for certain patients

- Providing facilities in a nursing home for general practitioner care as an alternative to admission to hospital.
- Providing assessment facilities in for example, hospital accident and emergency departments: patients who after assessment were found not to require admission to hospital were provided with social support and, if necessary, health care (mainly nursing) in their own homes. This service was provided in two hospitals, comprising structured social work liaison, rapid response, homecare services and a flexible budget for equipment etc, and was generally successful.
- A rapid response nursing team to which general practitioners directly referred patients whose medical needs could be met at home if immediate nursing care and social support could be made available.

Facilitating discharge from hospital

- 'Superdischarge service', with a discharge coordinator - an occupational therapist (OT), discharge pharmacist and augmented home support. The OT was highly successful in promoting early discharge and the pharmacist was similarly successful in reducing problems with medication.
- Extended occupational therapy service in general medicine, rheumatology, vascular surgery, A & E and day hospital. This led to a marked reduction in waiting times.
- Early supported discharge for orthopaedic patients involving specialist nurse, OT and access to social support.
- Intensive home support service to allow early discharge service for patients with chronic obstruction airways disease. This was successful.
- Extended physiotherapy service in orthopaedics (not evaluated)
- Use of low-dependency 'discharge wards'.
- Out-of-hours CT scanning service.

The 'paramedical' nursing/residential home team

A peripatetic 'paramedical nursing/residential home team' was established in 1997. Its functions were to advise managers and care staff in aspects of good practice associated with each discipline; to train staff to

recognise when residents need more specialised care from each service; to incorporate training into day to day practice, and encourage staff to maximise and capitalise on improvements made; to advise on how to improve or modify aspects of the environment; to encourage appropriate referrals to 'mainstream' community paramedical and other services; to reduce the number of admissions to hospital; and to educate and support residents, general practitioners, and friends/relatives of residents.

The team now comprises two physiotherapists, an occupational therapist, a hobby therapist, a speech and language therapist, a dietician and a chiropodist together with aides to therapists and administrative/clerical support staff. Members of the team normally visit nursing and residential homes in turn for a one-week period. Discussions are held with nursing staff and care assistants as well as with managers. Interviews with individual residents do not usually take place, but the team facilitates the development of individual care packages where these are required. After initial interviews, team members provide the nurses and care assistants with training packages in the various paramedical disciplines. The team ensures that its training packages and the advice and support which it provides are kept up to date by maintaining close liaison with other health professionals, social work, secondary care services and other agencies.

Scottish Care Resource Utilisation Groups (SCRUGS)

The Scottish Health Resource Utilisation Groups (SHRUGs) measure, devised by a group comprising geriatricians, nurses and the Information & Statistics Division (ISD), is used to describe the characteristics of elderly people in all forms of continuing care. The measure comprises three categories of care need and three categories of dependency. Care needs are described in terms of needs for special care, clinically complex treatments and behaviour; dependency is described in terms of feeding, toileting and transferring position. Supplementary information includes clinically complex conditions, continence, visual and hearing impairment and problems of communication for the individual resident. The method has now been developed in association with social work interests to incorporate social care parameters (SCRUGs).

Staff are asked by trained interviewers to provide a profile of each resident based on observations over the past seven days. Responses are scored for each resident, taking approximately 90 minutes for 20 residents. Individuals are grouped to small numbers of care categories, which are each described in terms which would be readily understood, e.g. the patient 'has behavioural difficulties and low dependency'. The resource costs of the categories has a range of nearly three from the highest to the lowest. The SHRUGs/SCRUGs categories provide a relatively cheap method of estimating resource use. They also provide a basis for dialogue about the nature and quantity of services provided, including unmet need and changes over time.

Multi-disciplinary assessments for nursing home admissions

Admission to a nursing home is a major life event for most people. It is very important therefore to ensure admission of only those people who require nursing care at a level which cannot economically be provided at home. Although social work departments have responsibility for making and funding placements in nursing homes, a medical assessment is required to inform this process. This is normally obtained from the general practitioner. In two local authority areas (Clydebank in West Dunbartonshire and Rutherglen/Cambuslang in South Lanarkshire) a trial has commenced in which day hospitals are used to provide a more detailed and multidisciplinary assessment of the needs of each old person living at home who is being considered for institutional care.

Unified assessment procedures

There is increasing realisation that an assessment culture has become established to the detriment of actually providing services. 'Assessments' have not been shared between agencies, and even within the health service and social work repeated assessments are often made by different individuals. This wastes very considerable amounts of professional time and generates masses of paper from which it is usually impossible to extract information which is being sought. When people are admitted to nursing/ residential homes for example it is often the case that very little, if any, useful information is transferred with the person. In order to resolve some of these problems, health and social work

professionals in Clydebank are developing a common core data set based on SCRUGS, to which different professionals in health and social work may add and which would be built up as a continuous record over the lifetime of each elderly person.

Other innovations

These include establishing joint Health Board – Social Work equipment stores; district nurse assessments for equipment commonly required by elderly people living at home being accepted by social work occupational therapists; and the process of small budgets for emergency use, e.g. for key-cutting.

Health Board/Social Work collaboration

Almost all of the above initiatives have been established jointly – or at least in discussion with – social work departments. Considerable progress has been made towards jointly developing a health and social care service for older people. Progress has been particularly encouraging in some of the smaller local authorities where a smaller population size and simpler management structure has facilitated a number of innovatory developments which might have been difficult to achieve in different circumstances.

WHAT ELSE NEEDS TO BE DONE?

Some important areas of concern which remain to be addressed are as follows:

- 1 to determine which of the initiatives to minimise hospital utilisation described above are cost effective, to promote

these in hospitals where they have not been tried, and if possible to make them still more cost-effective.

- 2 to promote understanding that acute hospital facilities are for the provision of treatment and care during the acute phase of illness only. Functional deterioration is likely to result from prolongation of stay in hospital of patients who are medically fit for discharge. In addition, family carers and possibly patients may come to favour nursing/residential home care as an alternative to the patient returning home, and patients are in danger of becoming institutionalised.
- 3 to make greater efforts to develop domiciliary care as an economically viable alternative to nursing/residential home care. Possible ways forward include making existing 'comprehensive' home care schemes less expensive to administer, developing more imaginative provision of overnight and full time home care, and using sheltered and other housing complexes to provide on-site 24-hour support for a number of old people (including those with dementia).
- 4 to take steps to remove the perverse incentive whereby to get help elderly people need to demonstrate what they can't do rather than what they can do. Independence should be seen as the goal, and more resources directed towards prevention and early intervention to help keep people in their own homes.

- 5 to recognise rehabilitation as an essential component of any system of care for older people. In combined 'geriatric assessment/rehabilitation' wards the emphasis now is very much on providing acute care rather than on rehabilitation, and rehabilitation in the community remains underdeveloped and underfunded. Failure to achieve optimal rehabilitation reduces quality of life, increases the need for home support, may increase morbidity (e.g. due to falls) and risks avoidable institutional care.
- 6 to encourage the use of day hospitals for elderly people as centres for assessment and particularly rehabilitation in the community.
- 7 to improve anticipatory care so that the current approach of plunging in with a battery of expensive resources before arranging (cheaper) institutional care becomes a last resort, not the preferred option. The 75+ primary care health check may be an appropriate vehicle for this.
- 8 to improve the quality of life for residents in nursing homes and other continuing care facilities. For example, no residents should be handicapped because of potentially remediable problems with medication, hearing, eyesight, continence and dental care. Many residents also need to be able to engage in some meaningful daytime activity and efforts should be made to create these. Another possibility is to incorporate in nursing homes some external activities – an example being an initiative by Westminster Health Care plc in which a creche has been created within a nursing home: this is run as an independent commercial venture, but it provides a focus of interest and occasional involvement for elderly residents.
- 9 to make serious efforts to find out what residents of continuing care facilities (and their families/carers) think and want.
- 10 to recognise and somehow address the problems created by high staff turnover in nursing homes.
- 11 to create a better understanding amongst both professionals and the public of the differences between nursing and residential home care and to promote the use of nursing homes only for those who need more nursing care than can reasonably be provided in their own homes; also, the criteria for admission to nursing home care need to be more clearly defined.
- 12 to ensure that the nursing/residential home paramedical team is operating as effectively as possible. It is important that staff in these homes have the opportunity to discuss the needs of residents with members of the various paramedical and other health professions, to receive appropriate training, and are made aware of their availability to help out with questions or difficulties which may arise. Extension of the team to include a nurse practitioner, community psychiatric nurse an audiometrician, optician and

pharmacist should also be considered.

- 13 to use protocols and improved training of staff in an attempt to reduce admissions to hospital from nursing homes. Failure to maintain best nursing practices and lack of specialist knowledge is likely to lead to unreasonable demands being made on the health service.
- 14 to continue to develop, analyse and interpret the use of the SCRUGS measure of dependency, and to promote understanding of the need to ensure that the resources available in nursing homes and other continuing care facilities are

sufficient to meet the needs (in terms of dependency and other characteristics) of residents.

- 15 to consider the need for redistribution of the balance between hospital, nursing and residential home care.
- 16 to review the nature of the contractual arrangements for community pharmacists who provide advice to residential and nursing homes, and assess the scope for greater involvement in medicines management, in partnership with general practitioners and nursing personnel.

10 Services for People with Epilepsy in Glasgow

INTRODUCTION

Epilepsy is a common condition. In the GGHB population of about 900,000 people about 8,000 will have the condition (only slightly less than those who have diabetes).

It is not possible to determine precisely the number of people in the Greater Glasgow Health Board area newly diagnosed with epilepsy each year. There are specific epilepsy clinics for adults at the Southern General Hospital (SGH) and at the Western Infirmary Glasgow (WIG). The number of people attending these clinics for the first time during 1997 was 290 and 724 respectively. Of these, 113 and 504 respectively were GGHB residents. However in addition an unknown number of people will be newly diagnosed as having epilepsy at general neurology clinics at the SGH and the Royal Infirmary, Glasgow (GRI), and a few may also be diagnosed at general medicine clinics in these and other hospitals. An unknown number of children will be diagnosed at neurological and possibly other clinics at the Royal Hospital for Sick Children.

DIAGNOSIS

Epilepsy is difficult to diagnose, to treat and to live with. When it is diagnosed wrongly, then patients are quite likely to be subjected to a lifetime of medication which is not only unnecessary but which will almost certainly have a number of possibly serious side-effects. Epilepsy is also highly stigmatising: people in general do not understand the condition; many are fearful of it and unhappy

about forming relationships or working with those who have epilepsy. In order to ensure accuracy of diagnosis, epilepsy should be diagnosed only by a specialist - usually a neurologist or a clinical pharmacologist with a special interest in the condition.

MANAGEMENT

At least 16 different drugs are available for the treatment of epilepsy, clearly indicating that there is no ideal or recognised front-runner. It may be necessary to try several medications before satisfactory anticonvulsant control is achieved, and in some cases a combination of drugs may prove most effective. If medication does prove to be effective in eliminating seizures, then gradual reduction, under medical supervision, may be attempted, in the hope of eventually being able to stop medication altogether. However many patients, particularly drivers and others whose occupation depends on their being seizure-free, are unwilling to pursue this possibility.

People with epilepsy therefore have two major sets of difficulties to contend with. Firstly there is the unpredictable nature of the disease itself - the possibility of an embarrassing and possibly life-threatening seizure with little or no warning at any time. Secondly, and equally threatening are the attitudes which others inflict on people with epilepsy which are not only objectionable in themselves (aggression, avoidance etc) but which also result in a number of unnecessary restrictions in the lifestyle of people with epilepsy, for example in relation

to employment, driving insurance, recreational pursuits and other social activities

The difficulties faced by people with epilepsy have prompted a number of initiatives. For example clinical nurse specialist posts in epilepsy have been developed (two or three hospital based, one general practice based and one specialising in the mental health problems of people with epilepsy). Also, projects have been set up to meet the particular needs of people with learning disability who also have epilepsy, and GGHB has provided funding for the Epilepsy Association of Scotland (EAS) to improve access to information. Most of these initiatives are short-term, usually for a period of only one year. The EAS and equivalent organisations in England have also published detailed specifications for services for people with epilepsy, and there is a recent guideline from the Scottish Intercollegiate Guideline Network (SIGN) on the care of people with epilepsy. Others are involved in the development of 'Integrated Care Pathways'. There is therefore a great willingness to improve epilepsy services on the part of health service professionals, people with epilepsy and the voluntary organisations which represent them. This interest and enthusiasm now needs conversion to a system for the care of people with epilepsy which meets their needs to the fullest extent possible within available resources. The emergence of 'managed clinical networks' and of 'disease management programmes' may provide the necessary platform for these developments.

HOSPITAL BASED INITIATIVES

(a) Western Infirmary

Special programmes have been set up for teenagers, the elderly, first seizures, patients with refractory epilepsy, and those with learning disabilities. An epilepsy motherhood programme is also offered. A support clinic for teenagers, pregnant and pre-pregnant patients, and those with learning disabilities takes place under the auspices of nurse specialists in epilepsy. Information leaflets on a range of educational matters relating to epilepsy and its treatment are provided free to all patients. A telephone "hot-line" has been installed to allow general practitioners rapid access to medical staff.

(b) Institute of Neurosciences, Southern General Hospital

Patients with seizure disorders are referred to most and possibly all of the neurology clinics held in the Institute of Neurological Sciences. There is also a weekly clinic run by a consultant who specialises in this disorder; the consultant is supported by a nurse specialist in epilepsy.

PRIMARY CARE INITIATIVES

(a) Clinical nurse specialists in epilepsy

A nurse specialist in epilepsy was employed for 18 months to work with 20 general practices. Many unrecognised problems of clinical management were identified, and in many cases resolved (eg poor compliance, unreported seizures, misunderstanding of treatment). Patients and families were also helped to cope by providing information, support and by referral to other sources of help. The nurse specialist worked closely with the Epilepsy Association of Scotland

(EAS) and with hospital specialists in order to maintain her knowledge and skills at a high level. Patients received very considerable benefit from the services provided by EAS, and the practice nurses became much more aware of the needs of people with epilepsy and of the sources of help which were available to them.

(b) Collaboration between community pharmacists, general practitioners and the Epilepsy Association of Scotland

This project aims to examine the effects of education and information, together with feedback to GPs, on the management of people with epilepsy in the North of Glasgow. People with epilepsy will be identified at community pharmacies through repeat prescription requests.

(c) Epilepsy audit

This proposal is to develop a GP epilepsy audit package: the first time that GPs throughout GGHB will be able to apply for funding to help them carry out epilepsy related work. The package will include individual data collection sheets for patient case-notes; summary data collection sheets for practice use and for submission as reports for GP Audit Committee; EAS produced information sheets for patients to be given to each patient with contact names and addresses; list of all local epilepsy services and specialists plus EAS information for GPs; and information about the practice nurse epilepsy course in Glasgow.

EPILEPSY ASSOCIATION OF SCOTLAND (EAS)

The EAS provides a wide range of services for people with epilepsy and their families/

carers, for example a national helpline; an excellent range of literature; training in the management of epilepsy; support, advice and counselling; an advocacy service; clinical liaison in epilepsy clinics in certain hospitals; community support and day services; organising FOCUS groups for people with epilepsy and their various subgroups (eg elderly, women, surgery etc); family support; lobbying (both locally and nationally). The future of a day centre for people with learning disability is uncertain.

SCOTTISH INTERCOLLEGIATE GUIDELINES NETWORK (SIGN)

The aim of this national guideline is to assist individual clinicians, primary health care teams, hospital departments and hospitals to produce local protocols for the diagnosis and management of epilepsy in adults in primary and secondary care. The recommendations are derived from a graded systematic review of the literature. The guideline covers the following topic areas: diagnosing epilepsy in adults; investigations; when to start treatment; choice of first drug; when to stop treatment; failed monotherapy; referral and shared care; advice and monitoring outcomes. The guideline does not consider childhood epilepsy, management of status epilepticus, epilepsy in pregnancy, or assessment for neurosurgery.

BRITISH EPILEPSY ASSOCIATION AND NATIONAL SOCIETY FOR EPILEPSY

These English based organisations provide a similar range of services to the Epilepsy Association of Scotland (EAS). In addition they have published a number of documents on standards, service specifications and

good practice. The EAS maintains communication links with these organisations through the Joint Epilepsy Council and also with Europe and globally through the International Bureau of Epilepsy (IBE) and the International League against Epilepsy (ILAE).

EPILEPSY IN PEOPLE WITH LEARNING DISABILITY

From January 1997 a six month trial post of Community Learning Disability Epilepsy Liaison Nurse was established to evaluate the potential for development. Her responsibilities included liaison with psychological services; liaison with pharmacological services; liaison with Department of Neurology; advice and counselling to clients, carers and families; liaison with, advice and education to Community Learning Disability Teams. The nurse specialist was able to ensure that people with learning disability and epilepsy were able to take full advantage of available services and in particular to receive a specialist treatment for their seizure disorder.

MENTAL HEALTH PROBLEMS IN PEOPLE WITH EPILEPSY

At present the mental health provision for patients with epilepsy in Glasgow is often inadequate. Proposals are being formulated to obtain one-year funding to employ a community psychiatric nurse (CPN) who is also a nurse specialist in epilepsy to help to improve this service. The CPN would receive intensive training in epilepsy and subsequently take part in the Epilepsy Unit's out patient clinic one day a week. The nurse specialist would have a primary care liaison

role with general practitioners, community pharmacists and practice nurses. The nurse specialist would also educate families and carers about the mental health problems associated with epilepsy, as well as liaise with voluntary sector bodies already involved in this area, and would participate and advise in the care of patients with epilepsy and co-existing mental health problems, with the exception of learning disability.

EVIDENCE FROM LOCAL FOCUS GROUPS

Over the past 4-5 years the Epilepsy Association of Scotland has organised annual focus groups, inviting people with a broad spectrum of epilepsy experience. Groups have included men and women of different age groups, social backgrounds and types of epilepsy, both poorly and well-controlled, epilepsy on its own and with other disabilities, and people who have been or are about to be treated surgically, along with carers and relatives. Individuals are normally invited to attend three times. The meetings are informally structured and non-directive, group members being encouraged to share freely their epilepsy-related experiences and perceptions.

VIEWS OF PROFESSIONALS IN RELATION TO EPILEPSY

About 70 doctors (general practitioners and a variety of hospital specialists), nurses, pharmacists, paramedical health service professionals, and representatives of the EAS participated in a meeting (September 1998) in which nine groups - each led by someone with a special interest in epilepsy - identified what they considered to be the

main concerns relating to epilepsy and its management. These concerns were as follows:

Medication: lack of review, side effects, inadequate knowledge, poor compliance, drug interactions.

Misdiagnosis: resulting in unnecessary medication; difficulty in establishing seizure type; particular problems for people with learning difficulty; difficulty in obtaining reliable witnesses; case notes from past sometimes unreliable; difficulty in differentiating from seizures of psychogenic origin.

Impact on lifestyle: stigma; social isolation; difficulty in achieving potential; employment; driving; effects on carers; interference with learning; loss of independence.

INFORMATION PROJECT AT THE WESTERN INFIRMARY GLASGOW (WIG)

The objective is, for one medical condition – epilepsy, to ensure that as many as possible of the 900 – 1,000 patients each year who are newly diagnosed at the epilepsy clinics at WIG receive the information they need about their condition, their particular circumstances and about sources of help and support. Epilepsy has been chosen because it is common and because it is distressing, unpredictable, difficult to manage and stigmatising.

INTEGRATED CARE PATHWAYS AND EPILEPSY

Work is in progress between one member of the Epilepsy Unit in Glasgow and the

Integrated Care Pathway team at the WIG. The aim is to develop an integrated approach which professionals, patients themselves and voluntary organisations can use to record the contributions made by each person involved in the management of the patient. It will also make it clear to everyone in the network of epilepsy care how well that care is being managed and what omissions and deficiencies there might be.

OUT OF SHADOWS'-GLOBAL CAMPAIGN

In order to improve knowledge, awareness and understanding of epilepsy, to improve attitudes to and acceptability of epilepsy, and to promote better services, an international campaign “out of the shadows” has been launched. This is a joint global initiative by the International League Against Epilepsy (ILAE) (comprising professional experts), the International Bureau for Epilepsy (IBE) (the equivalent lay organisation) and the World Health Organisation. The EAS became a signatory to this campaign in October 1996, Scotland being the sixth country to participate.

CONCLUSIONS

During recent years a number of health professionals from different disciplines have almost independently developed special interests in the care of people with epilepsy and particular subgroups (eg people with learning disability, young people, mental illness). The Epilepsy Association of Scotland has also been successful in promoting epilepsy as a condition of national and local concern, in providing information for the public and professionals, in developing relationships with health services

and social work and in providing direct services. We are now well-placed to begin to integrate these various activities into a cohesive network of care in which people with epilepsy and voluntary organisations which represent them play a full role. This process should be facilitated by an international initiative 'out of the shadows' which is clarifying objectives and raising the profile of epilepsy locally and nationally, by

the emergence of 'managed clinical networks' in the health service, by advances in communication and information technology and by 'integrated care pathways' which make explicit to all (including people with epilepsy themselves) what the problems are, and what services and other opportunities exist for resolving them.

11 Communicable Diseases and Environmental Health

INTRODUCTION

The control of communicable disease and the health aspects of environmental hazards are a statutory function for which responsibility is shared by the Health Board and six Local Authorities within the Health Board area. Effective control involves the close collaboration between a number of individuals and organisations. The Department of Public Health receives reports about infectious diseases from doctors who have made the clinical diagnosis and from doctors who find evidence of infection in specimens sent to the pathology laboratories. Through this notification system the Department of Public Health continually monitors the epidemiology of infectious diseases in Greater Glasgow Health Board area. Depending on the nature of the individual disease concerned, further investigations are carried out by the Consultants in Public Health Medicine (CsPHM), in collaboration with other relevant colleagues, who initiate action on a day to day basis to prevent outbreaks of diseases in the population. This is a short summary of how the infection control structure is organised in Greater Glasgow.

THE AREA CONTROL OF COMMUNICABLE DISEASE COMMITTEE

This is a Health Board Committee. The Committee advises the Chief Executive through the Director of Public Health on all aspects of infection and formulates standards for effective infection control according to the best contemporary advice.

The membership of the Area Committee includes the CsPHM (Communicable Diseases and Environmental Health), the Area Infection Control Nurse, the Chairpersons of Trust Infection Control Committees, representatives of the Regional Virus Laboratories, the Regional Infectious Diseases Unit, Glasgow Occupational Health Services, the Nursing Adviser to the Health Board, the Community Liaison Pharmacist, Area Medical Committee and the Environmental Services Departments. The function of the Committee is to act as the point of expertise and reference in the control and containment of infection in all environments throughout the Health Board area.

THE TRUST CONTROL OF INFECTION COMMITTEES

Each Trust has its own Control of Infection Committee, comprising of people from various departments within the Trust. These Committees advise the Chief Executives on all matters relating to infection control within the Trusts. The remit of these committees is to keep a close watch on infections within the Trust hospitals and to liaise closely with the Area Committee.

INFECTION CONTROL IN THE COMMUNITY

This is co-ordinated by the Department of Public Health. The CsPHM (Communicable Disease and Environmental Health) work very closely with the Environmental Health Officers and members of the Primary Care

Teams. Infection control advice to GPs, Dentists, Nursing and Residential Homeowners and to the general public is available from the Department of Public Health.

NOTIFIABLE AND REPORTABLE DISEASES

Table 25 shows the total number of notified or reported diseases to the Department of Public Health in 1997 and compares this with the figures from previous years.

Food poisoning notifications including infection due to campylobacter continues to increase. Most cases occur in the home and these are preventable by the application of good food hygiene and personal hygiene practices. It is therefore essential that food handlers in the community have adequate food and personal hygiene knowledge to prevent family and community outbreaks. All confirmed cases of food poisoning cases are either visited by an Environmental Health Officer (EHO) or a member of the Public Health Communicable Disease team. The

Table 25
Cases of Notified Infectious Diseases in Greater Glasgow Health Board

Notifiable Diseases	1993	1994	1995	1996	1997
Campylobacter	385	448	589	632	719
Chickenpox	4909	4445	3802	4048	4149
Cholera	0	0	0	1	0
Cryptosporidium	198	98	71	51	110
Dysentery	49	52	34	21	25
E. coli O157	10	16	7	44	18
Erysipelas	13	14	20	10	12
Food Poisoning	336	710	696	691	756
Giardiasis	50	44	35	49	34
Legionellosis	2	1	3	5	5
Leptospirosis	1	0	0	1	0
Lyme Disease	3	1	1	2	0
Malaria	23	25	21	32	12
Measles	292	1369	273	249	184
Meningitis – others	9	6	10	9	6
Meningococcal Infection	33	36	34	31	58
Mumps	54	86	50	59	34
Paratyphoid	2	1	5	2	2
Puerperal Fever	2	0	0	0	0
Rubella	317	542	239	413	177
Scarlet Fever	86	105	91	107	60
Tetanus	0	0	0	1	0
Tuberculosis pulmonary	127	145	132	142	122
Tuberculosis non pulmonary	25	45	34	42	30
Typhoid Fever	2	8	5	1	0
Typhus Fever	0	1	0	1	0
Viral Hepatitis	72	43	45	28	22
Whooping Cough	77	52	27	20	80

EHO, with the aid of a questionnaire, takes a full history about symptoms, duration and possible source of the infection. The EHO also gives general advice about the ways in which infection spreads from one person to another, and the precautions which should be taken to prevent spread in the home and at work.

The number of notified meningococcal infection cases has increased markedly in Glasgow in 1997. This is in keeping with a generalised increase throughout Scotland since 1996. Anecdotal evidence however suggests that over the last couple of years the threshold for suspecting and/or reporting invasive meningococcal disease has been lowered by clinicians. The communicable disease team scrutinised the case records of all notified cases during 1997 and validated their results by checking with the results from the Meningococcal Reference Laboratory. The results of this investigation are shown in Table 26.

Currently notified invasive meningococcal infections are categorised into confirmed,

probable or possible cases. The distinction between probable and possible cases is largely subjective and therefore open to interpretation. Many of the probable cases reported to this Health Board would have presented with a fever and a purpuric rash and some of these might have been suffering from viral infections such as coxsackie and echovirus. As a routine the laboratories in Glasgow do not test for evidence of these infections and therefore it is likely that meningococcal infections may be erroneously implicated as the cause of these admissions.

If possible cases are not supported by subsequent laboratory evidence, they should be eventually denotified on the grounds that they were probably not genuine disease. Currently the CsPHM (CD&EH) are discussing with clinical and virology colleagues from Yorkhill Hospital the design of a pilot study to identify the cause of these probable and possible cases in Glasgow. This should provide us with better quality and more informative surveillance data to inform public health strategy both locally and nationally.

Table 26
Meningococcal Notifications during 1997

Meningococcal Notifications	n	%
Confirmed	32	55
Probable	10	17
Possible	11	19
Non-invasive meningococcal	5	9
Total	64	100

IMMUNISATION

The immunisation uptake rates in GGHB remain at a high level (Table 27). It is important that this high level of uptake is maintained in order to prevent further epidemics of these infections. Uptake for MMR and pertussis in GGHB is slightly lower than the national average. It is the intention of the communicable disease team to scrutinise these data in detail in an attempt to improve the uptake rates even further.

HEAD LICE

In 1997, approximately 30,000 prescriptions were written by GGHB General Practitioners for head lice products. When consideration is given to the significant number of such products which are purchased “across the counter” in community pharmacies, it is clear that the control of head lice represents a significant public health problem in the Greater Glasgow area. Following the traditional treatment approach, GGHB has followed a rotational policy for head lice products where a single drug is promoted as the treatment of choice amongst GPs, community pharmacists, practice nurses,

health visitors and school health personnel. A community based partnership approach is necessary to ensure the success of this policy.

A new policy was implemented in August 1997 which advocates the pyrethroids as the treatment of first choice for a 3 year period. The goal of such policies is to minimise the potential for resistance to emerge against the head lice products. Recent research evidence has challenged this viewpoint. Consequently, a revised Head Lice Information Leaflet has recently been introduced to highlight the need for changes to clinical practice. This recommends a repeat course of treatment as routine, 1 week after the first application. GGHB now advocates a “mosaic approach” to head lice treatment which still promotes the pyrethroids as first choice but recognises the need to select an alternative head lice product (e.g. malathion) should the initial treatment prove ineffective. A dedicated GGHB “Head Lice Help Line” has been established to handle questions from parents, teachers and health care professionals. The impact of these initiatives will be subject to evaluation.

Table 27
Primary immunisation uptake rates. Children born between 1 January-31 December 1995

% Coverage at 24 months	GGHB	Scotland
Diphtheria	98.0	97.8
Tetanus	98.0	97.8
Pertussis	96.1	96.5
Polio	98.0	97.8
Haem Influenza	98.1	97.7
Mumps/Measles/Rubella	93.9	94.5

School nurses were withdrawn from the routine screening of children's hair in 1995. It has been known for many years that this practice was not effective at detecting or preventing the spread of head lice. However, in recognition of the need to provide additional support to parents and teachers with recurrent head lice problems, three nursing assistants have been employed as part of the School Health Service.

12 Access to Hospital Services

Greater Glasgow Health Board is concerned that all its residents have equal access to health care. The purpose of this paper is to examine how services are delivered to people of different socio-economic backgrounds for some hospital based procedures.

Information is available about a number of fairly common procedures which when carried out do much to improve a patient's quality of life. The procedures considered here are:

- Trans Urethral Resection of Prostate (TURP) and open Prostatectomy
- Hip Arthroplasty
- Cataract replacement
- Primary hernia
- Coronary artery by-pass graft (CABG)
- Angioplasty.

Carstairs (1991) has described an index, which classifies areas into categories of deprivation. Data are available to describe the length of time patients wait for treatment in these different categories. Comparisons are shown here between the top two (most affluent) and the bottom two (most deprived) categories.

The length of time patients wait for these procedures is shown in Figures 38 - 43. With the exception of CABG (Figure 41) and Arthroplasty (Figure 43) the curves for all the groups follow similar (almost coincident) curves. For CABG and Arthroplasty the curves show fairly wide variation but in neither case do they appear to be related to deprivation.

Figure 38

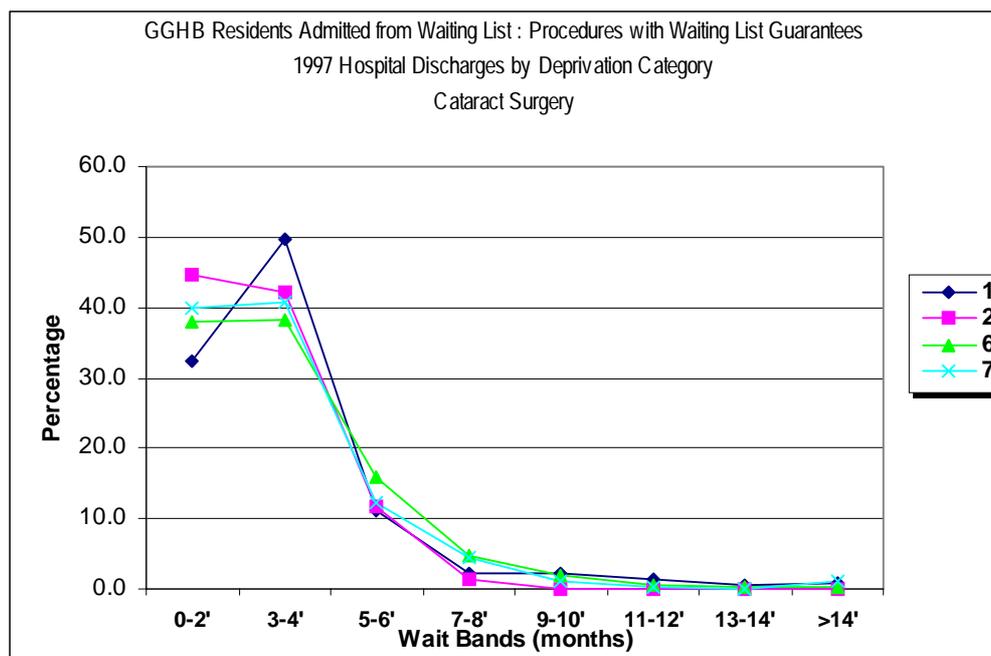


Figure 39

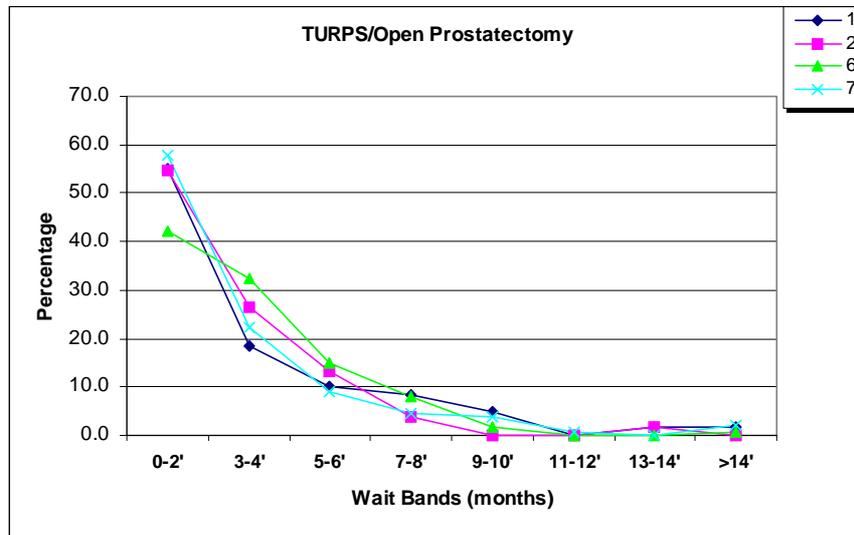


Figure 40

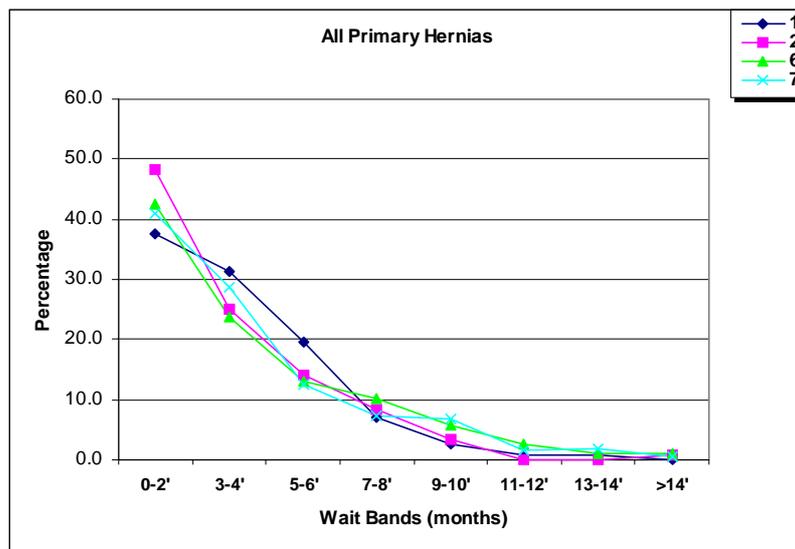


Figure 41

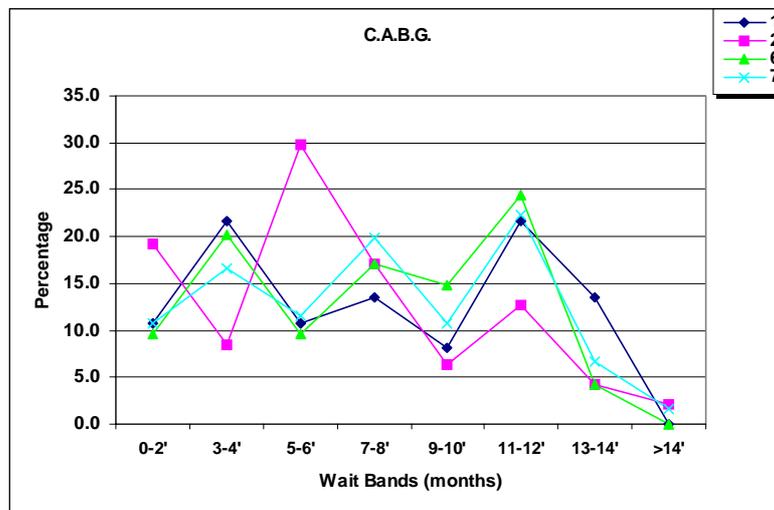


Figure 42

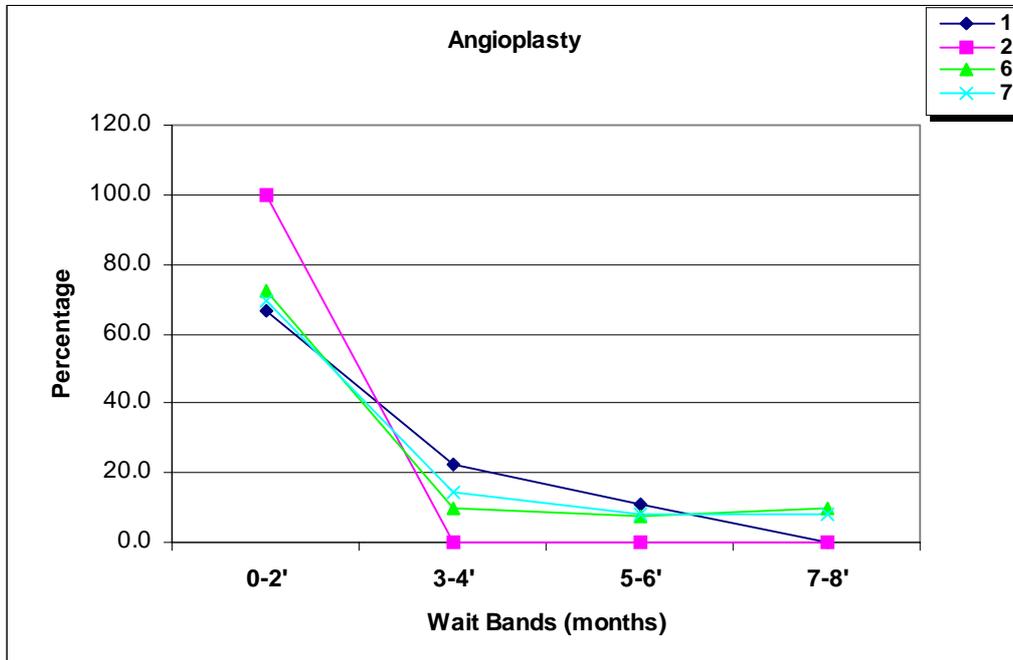
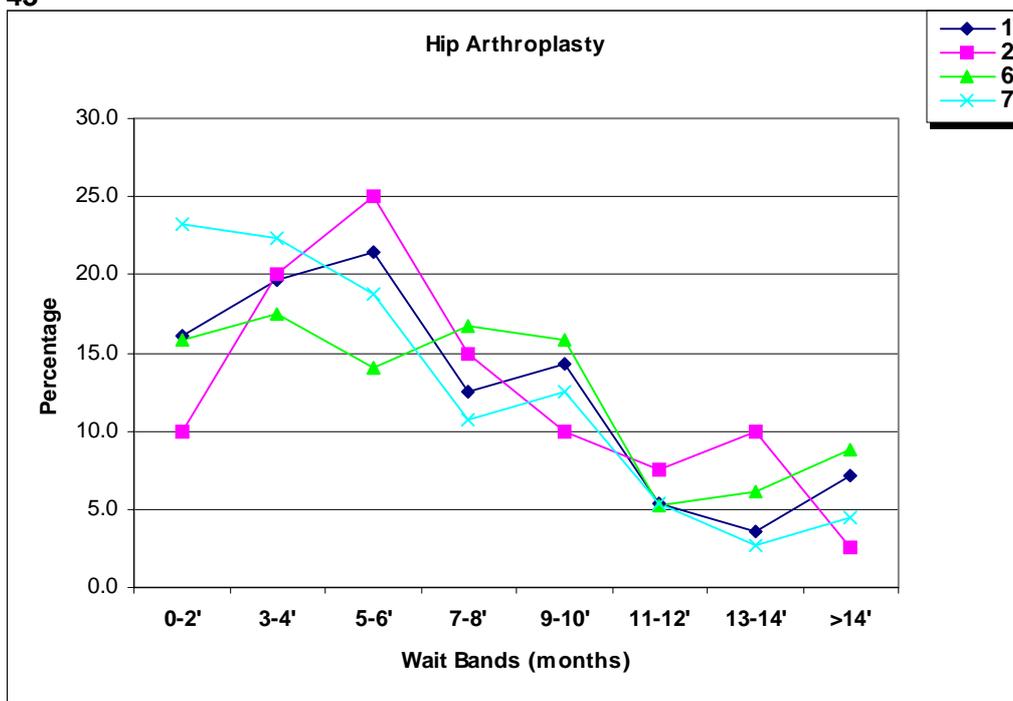


Figure 43



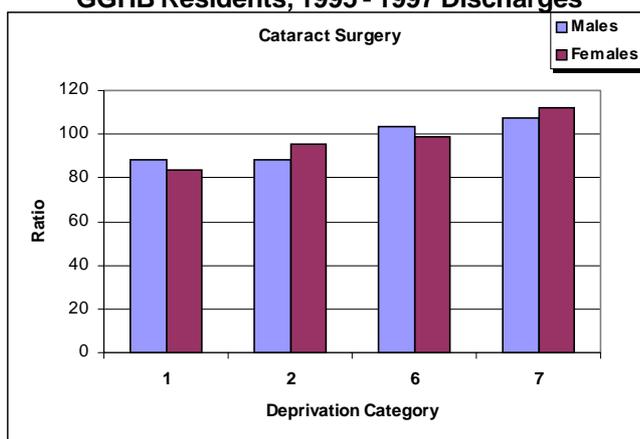
Figures 44 - 49 attempt to establish that, on a hypothesis of equal need, the proportion of patients seen is consistent across the deprivation groups.

For prostatectomy (Figure 45) the figures show the rate per 10,000 men aged >50 in each deprivation category who received the procedure during the period 1995-97 and no significant difference between the groups can be identified.

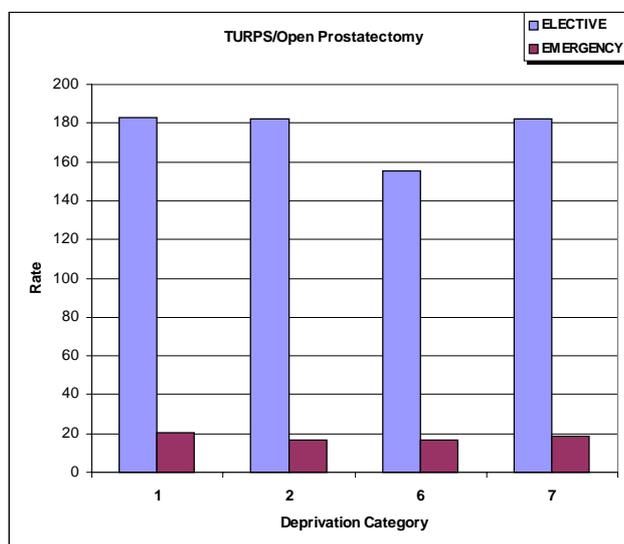
For the other procedures the histograms show a Standardised Admission Ratio

(SAR) (standardised for age in four age groups) for both men and women to allow for the different age structures of the deprivation groups. For men, primary hernia (Figure 46) and CABGs (Figure 47) show no relation to deprivation category whilst relationships do appear for the other procedures of Angioplasty (Figure 48) and Hip Arthroplasty (Figure 49). For women, there would appear to be trends for all procedures with the exception of primary hernia (Figure 46).

**Figure 44 Standardised Admission Ratio by Deprivation Category
All Ages, Standardised by Age - GGHB = 100
GGHB Residents, 1995 - 1997 Discharges**



**Figure 45 Hospital Admissions by Deprivation Category
GGHB Residents, 1995 - 1997 Discharges
Rate per 10,000 Population (Males 50+ yrs)**



For both men and women, there are fewer hip replacements than would be expected on the basis of equal need. Within the deprived population there is a greater risk of heart and respiratory disease. A possible explanation for this observation, then, is the fact that patients from deprived areas may not be fit to undergo complex joint surgery. As noted above, with the exception of CABG in men, the trends suggest that rather more patients from the more deprived groups receive treatment than would be expected. In the case of angioplasty (Figure 48), there is a well defined relationship between deprivation category and heart disease which may well account for part if not all this excess. While this would be expected for CABG (Figure 47) it is interesting that the trend is only displayed for women. For both

of these procedures, however, it is possible that the use of private medical facilities by those in the more affluent groups distorts this picture. The same may be involved in the trend for cataract surgery (Figure 44) which reaches a SAR of approximately 100 in the most deprived category.

There is no evidence that waiting time for any of these procedures is related to the deprivation area. While there do appear to be relationships between the deprivation areas and the proportions being treated, the 'excesses' appear to be to the benefit of those from the deprived areas and may in fact be related to other attributes of the patients from these areas rather than simple availability of resources.

Figure 46

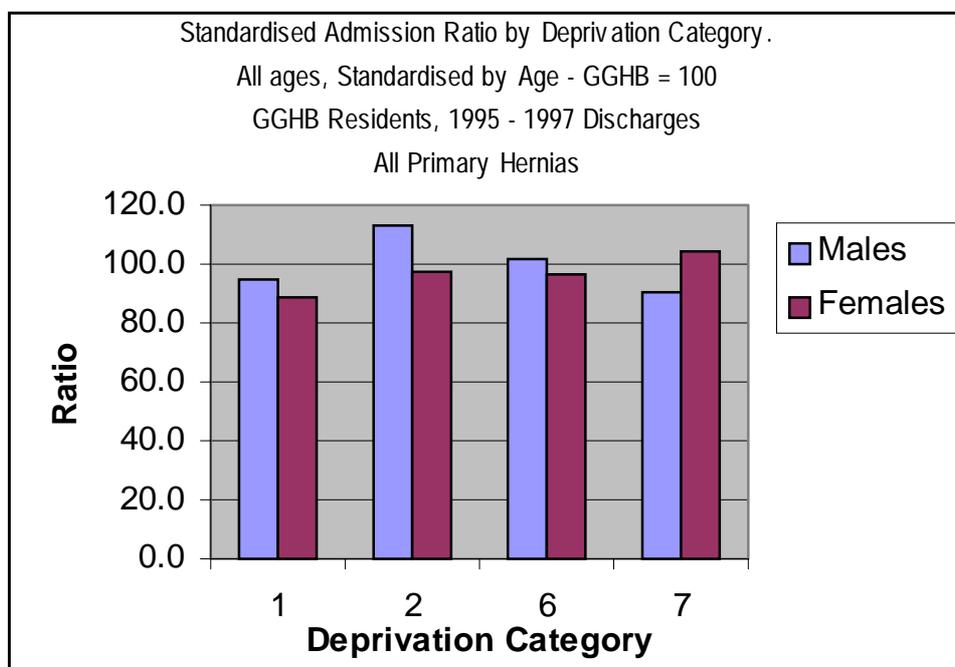


Figure 47

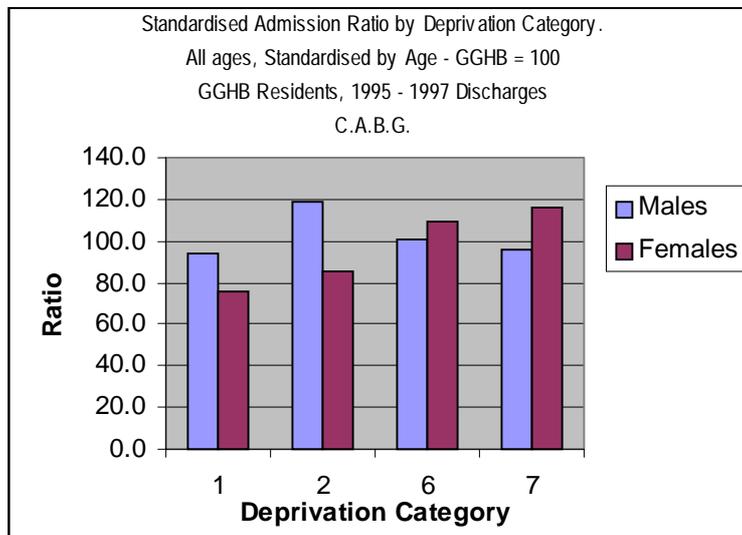


Figure 48

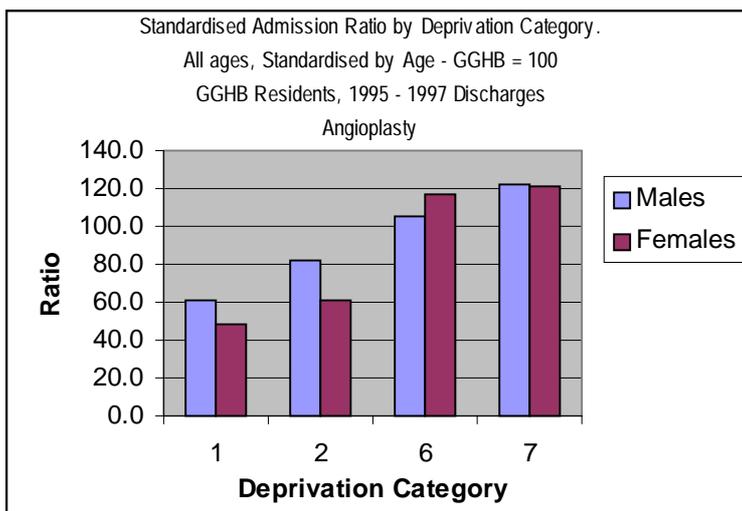


Figure 49

