

elsewhere. Eleven percent of carers provided care to someone with a mental health difficulty. Over two thirds of those with a mental health difficulty lived with their carer.

Providing informal care for a relative or friend can affect the carer's own mental wellbeing. The Survey also reported much higher levels of stress and worry in both male and female carers compared to non-carers (Table 2(i)). It is important that the impact of caring on a carer's mental health is recognised and that appropriate measures are in place to support them.

Table 2(i)

Levels of stress in carers and non carers

Level of Stress	Male Carer	Female Carer	Male Non Carer	Female Non Carer
No Worry or Stress	15%	8%	22%	15%
Just a Little	39%	40%	51%	50%
Quite a Lot	32%	33%	20%	24%
A great deal of worry or stress	13%	19%	6%	11%

Source: Health and Wellbeing Survey 1997

Conclusion

To meet the local mental health needs of the community we must continue to develop in many areas. A Review of Mental Health Legislation, Policy and Provision is being carried out and will take approximately two years to complete. This Review will make recommendations on the various services, as well as the broader issues such as social inclusion, equality and human rights, and will highlight priorities for the future.

Chapter 3 Coping with Chronic Disease

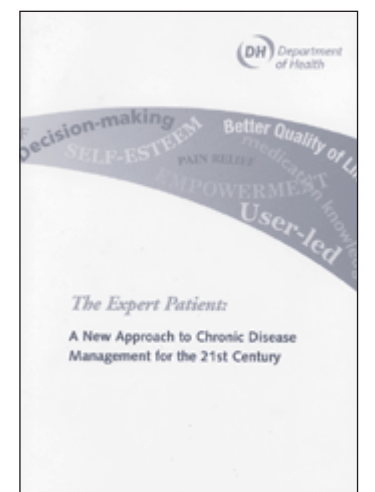
Introduction

The second half of the 20th century and the beginning of this new century have seen many more people living into their seventies, eighties and beyond. This greater longevity has brought with it an increased burden of chronic diseases, such as cancer, heart disease and diabetes. As well as the physical manifestations of these illnesses, the psychological impact can lead to a reduction in quality of life and a feeling of social exclusion.

The Expert Patient

Many patients, particularly those with chronic illness, develop an expert knowledge of their own disease. It is increasingly recognised that this understanding can play a crucial role in improving their health and quality of life. The concept of the expert patient was recognised in the Department of Health report in 2001, 'The Expert Patient: A New Approach to Chronic Disease Management for the 21st Century'. Through the introduction of self-management programmes, patients with chronic disease can develop knowledge and skills to manage their own condition better and enhance their quality of life. Specific benefits that are envisaged include the ability for people with chronic disease to:

- Have the skills to cope with the emotional impacts of disease;
- Be able to access services more appropriately;



- Make greater use of training and employment opportunities;
- Be better informed about the disease and medication and empowered in relationships with health care professionals;
- Manage particular aspects of disease;
- Be able to act as counsellors, information workers and advocates for others.

Diabetes

It is estimated that there are between 30,000 and 50,000 people with diabetes in Northern Ireland. Projections indicate that this number could double within ten years as levels of obesity increase and people lead less physically active lives. Good co-ordination between health care professionals and their relationships with the individual with diabetes is essential.

Self-management approaches have been shown to be effective in the field of diabetes and patient education is widely acknowledged as being vital in the management of this disease. Empowering people by giving them the knowledge and skills to manage their disease is even more important for people with diabetes as it is a lifelong progressive disease that impacts upon almost every aspect of life. Diabetes is associated with a number of long term complications which include circulation disorders, eye disease and kidney disease.

The recent Report of the Northern Ireland Task Force on Diabetes supported the need to develop further 'patient centred care' as the model for diabetes care. In this model high quality care is provided by professionals to people with diabetes who have the knowledge, skills and attitudes to manage their own disease.

One important aspect of the condition which requires more attention is the psychological impact of the condition on the

individual. The initial diagnosis can be a 'traumatic' event. Depression and anxiety are commoner in people with diabetes, with estimates of 20% to 30% of them experiencing significant depression. This level is considerably higher than in the general population. Timely psychological intervention can help individuals cope better with their condition and lead to improved quality of life, better diabetic control and fewer long term complications.

Chronic Kidney Disease

Chronic end stage kidney (renal) disease is a serious condition which primarily affects older people. Consequently the number of people affected will increase as people live longer. It is estimated that the number of people in Northern Ireland with this disease, which is fatal if not treated by either dialysis or a kidney transplant, will double over the next 10 years. Other countries throughout the world are experiencing a similar increase. Although Northern Ireland has a very well developed renal service, there have been concerns about its capacity to cope with the expected increase in numbers. Over the last year intense efforts have gone into planning and redesign of facilities to give the population a high quality service to 2010. The planning has covered both adult and children's services and included a large number of health professionals who are involved in delivering their care.

Planning for this service is difficult because of the many factors that are involved in predicting the numbers of patients who will need haemodialysis. This needs to be done far enough in advance to ensure that appropriate facilities are provided at appropriate times in as convenient a location as possible. Figure 3(i) shows how patients have to move through the different forms of treatment when their kidneys fail.

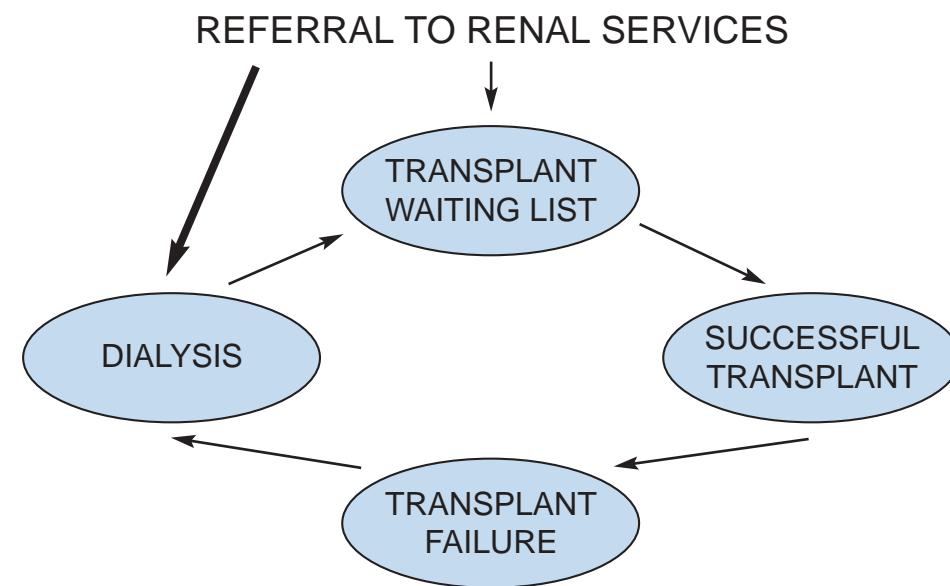


A healthy diet helps prevent many chronic diseases

Up to 50,000 people in Northern Ireland have diabetes

Figure 3(i)

Flow of Patients Receiving Treatment for Kidney Failure

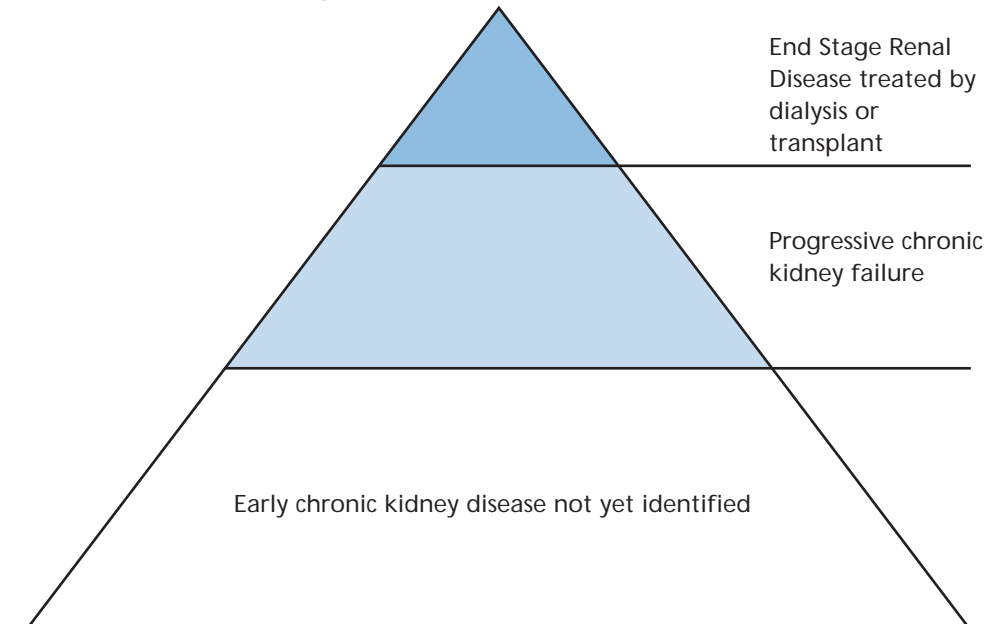


One of the areas requiring development is the provision of patient education and counselling. This is an important element of treatment for patients. It can help them come to terms with the implications of chronic kidney disease. Providing counselling at various stages of the illness can reduce fears and anxieties.

It is thought that there are many in the community with kidney disease who have not been identified and appropriately treated. Individuals, at the bottom of the pyramid (Figure 3(ii)) may have significant kidney disease which is very difficult to detect, as they do not have obvious symptoms or abnormalities on laboratory tests. Those in the middle group may have progressive disease but for a variety of reasons have not been identified and treated accordingly. This leaves a relatively small number at the top with severe kidney failure who are identified and treated.

Figure 3(ii)

Levels of Chronic Kidney Disease



Prevention

Kidney disease is often a complication of other diseases such as diabetes and high blood pressure. Between 20% and 40% of people with diabetes develop kidney complications, this can be reduced or minimised through careful attention to control of blood sugar. Similarly good control of blood pressure, stopping smoking and maintaining a healthy lifestyle have been shown to reduce the likelihood of developing kidney failure.

LIFESTYLE FACTORS TO PREVENT KIDNEY DISEASE INCLUDE:

- Stopping smoking;
- Healthy diet;
- Good control of blood sugar for people with diabetes;
- Good control of blood pressure for people with high blood pressure.

Cancer

A diagnosis of cancer can have a major psychological effect on patients. The nature of this psychological impact varies at different stages of the illness, from early symptoms and first diagnosis to the later stages. Complications of the cancer itself or its treatment may also influence a patient's mental state.

The way in which information is given to patients at the time of the diagnosis is important in determining future psychological distress. After the individual deals with the initial trauma of diagnosis, depression or anxiety may be a feature.

Among newly diagnosed cancer patients, the level of serious depressive illness is about 5% and therefore not significantly higher than the general population. However, clinically significant depressed mood is much commoner and occurs in up to a quarter of cancer patients. Depression is frequently underdiagnosed in cancer patients because key symptoms like loss of appetite and insomnia may be attributed to the malignant disease or treatment when in fact they are due to depression. Anxiety is easier to recognise and occurs in about 10% of cancer patients.

Cancer services in Northern Ireland have been reorganised following the publication of the Campbell Report in 1996. Cancer units have been established and cancer care is now provided by multidisciplinary specialist cancer teams, which include clinical psychologists. This team approach is intended to ensure a more holistic approach to the total care, including psychological care, of the cancer patient. Clinical psychologists can help promote better adjustment and psychological health thereby working with the rest of the team to improve quality of life and possibly impact on disease course.

Voluntary organisations such as Action Cancer and the Ulster Cancer Foundation as well as more recently established groups like Cancer Lifeline in North Belfast, and some support groups

for specific cancers, are actively involved in counselling patients with cancer and their families. This work complements the work of the health and social services and makes an important contribution to the care of cancer patients.

Cardiac Rehabilitation

Having a heart attack, or being told you need cardiac surgery, is a very major event. Initially those affected will usually have a strong commitment to improving their lifestyle habits such as stopping smoking, diet and exercise. All are aimed at reducing the risk of further heart disease. Unfortunately for many this behaviour change is not sustained. Many also feel depressed and anxious on discharge from hospital and access to cardiac rehabilitation is important in aiding their recovery. Psychological support has been recognised as an essential component of effective cardiac rehabilitation.

Most cardiac rehabilitation programmes are run as group activities, where people gather regularly over a period of weeks or months. The support and companionship of others who have had similar health problems can be beneficial and can assist patients in addressing lifestyle issues. There is no doubt that cardiac rehabilitation has significant benefits. Many programmes exist throughout Northern Ireland and everyone affected by a heart attack or heart surgery should ideally be offered the opportunity to participate in one.

Conclusion

The increasing availability of health information has led to more informed and empowered patients. Finding new ways to harness this in helping them cope with the physical and psychological effects of increasing levels of chronic disease will be an important element of care in the future.

Chapter 4 Environmental Health

Introduction

The link between health and our wider environment is well established. Many factors in our environment can affect health both directly and indirectly. The air we breathe, the water we drink, the food we eat and the conditions in which we work and live determine health. This chapter explores some environmental issues that are known to impact on health.

Noise

Sound in the environment is a feature of everyday life. Noise is unwanted sound and is a major problem for many people. It can have an adverse effect on their health and quality of life. Noise can irritate and annoy, interrupt sleep, increase stress and disrupt concentration at school and at work. Prolonged exposure to very loud noise can cause permanent damage to hearing. There is also thought to be a link between domestic noise complaints and mental health problems.

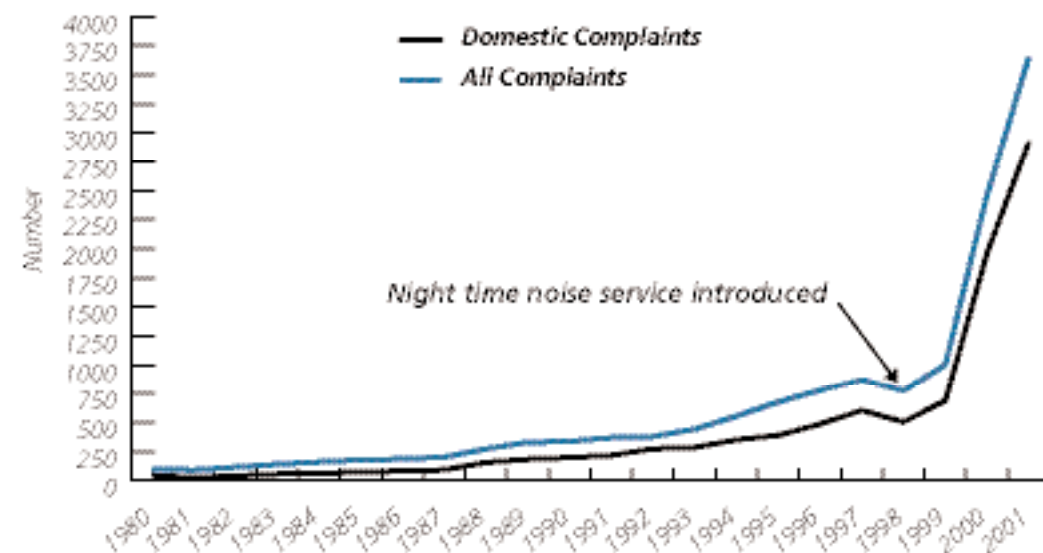
Some noise is inevitable but more needs to be done to minimise nuisance noise and its potential adverse effects on health. Much can be achieved through more appropriate standards, more effective controls and greater understanding of the health risks.

Figure 4(i) illustrates how the number of noise complaints to the Belfast City Council have increased in the last 20 years. A night time noise service was set up by the Council in 1998 to provide a response to noise complaints occurring outside

normal working hours. Following its introduction, the Council experienced a significant increase in the number of complaints, the vast majority of which were domestic complaints.

Figure 4(i)

Noise Complaints to Belfast City Council 1989 - 2001



Source: Belfast City Council

Research suggests that children may be a group particularly vulnerable to the effects of noise. A project, undertaken by the University of London examined the effects of chronic aircraft noise exposure on children. It found that children exposed to higher levels of aircraft noise suffered higher levels of annoyance and did less well on the more complex learning tasks. Although the findings were not conclusive, they should be borne in mind when deciding on noise exposure limits, school environments, buildings and when planning future transport developments.

Further research in this area is now being taken forward on a European basis through an EC project known as **RANCH** - Road traffic and Aircraft Noise exposure and Children's cognition and Health. The study will look at the impact of road and aircraft noise on children's health and learning abilities. The research will be completed by the end of 2003.



Noise can have a negative effect on health

Climate Change

There is growing and widely accepted evidence that the earth's climate is changing, in part due to human activity. It is also becoming clear that climate change will effect health. The likely impact on health of variables such as increased temperatures, increased storminess and raised sea levels, are detailed in the box.

CLIMATE CHANGE – SOME KEY PREDICTIONS

- A decrease in cold related winter deaths;*
- An increase in heat related summer deaths;*
- New diseases likely to arrive from warmer countries;*
- An increased risk of major disasters caused by severe winter gales and coastal flooding;*
- An increase in injuries resulting from more road accidents as a result of more frequent storms and wet weather;*
- Increased rain and relative humidity may promote infectious disease transmission;*
- An increase in skin cancers and cataracts;*
- Insect-borne and water-borne diseases may increase;*
- An increase in food poisoning.*

Source: Health Effects of Climate Change in the UK – DoH Report

Work was commissioned by the Department of the Environment to investigate the impact of climate change on the environment, economy, and natural resources of Northern Ireland. It accepted that climate change may bring both benefits and threats to the health of people in Northern Ireland, however, the balance of harmful and beneficial effects is currently unknown. More work is required at both national and local level to refine these initial analyses on the impact of climate change on our health.

Air Quality

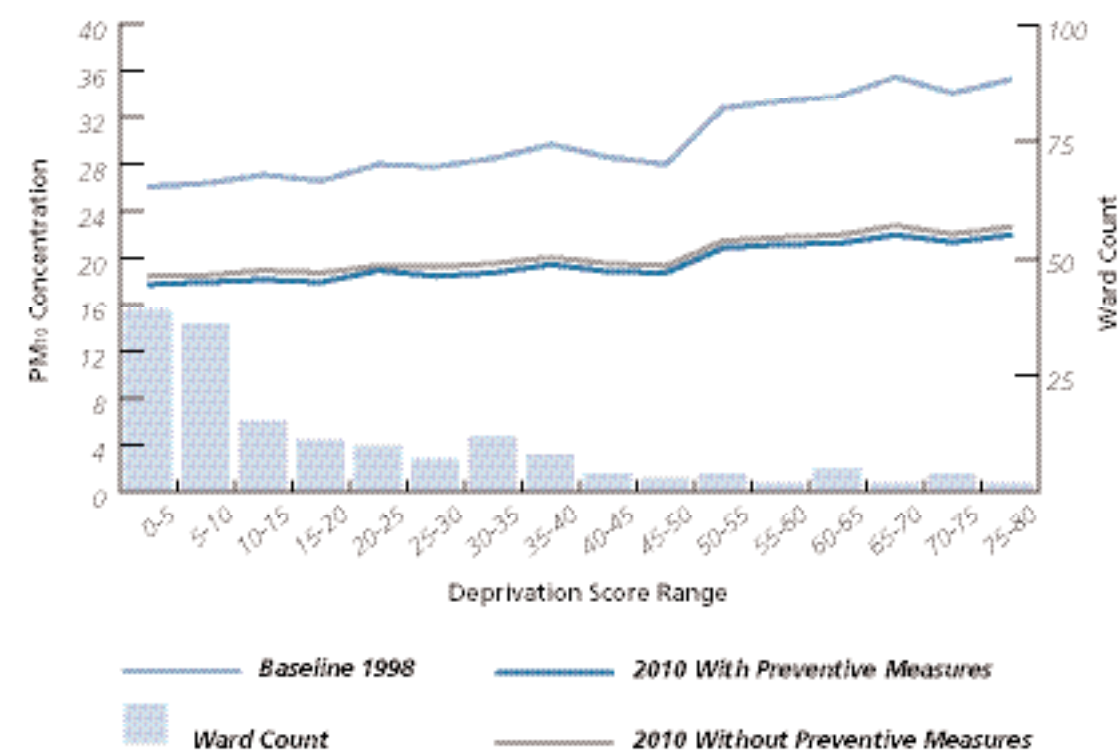
Air quality has improved dramatically over the last 50 years through the use of smoke control programmes and through progressively tighter regulation of emissions for industry and for vehicles. Fortunately, most of the time, air pollution levels across Northern Ireland are low. However, on the occasions when air pollution levels are high, they can trigger increased admissions to hospital and contribute to premature death. Those at greater risk are people with respiratory diseases or heart conditions. Air pollution is also likely to affect health over the longer term and experts suggest that cutting long term exposure could increase life expectancy. More needs to be done to tackle the main causes of outdoor air pollution - particularly our high dependence on solid fuel for domestic heating and emissions from motor vehicles.

Air pollution is more common in inner urban areas. These places are also often characterised by other indicators of disadvantage. The Acheson Report on Inequalities in Health and recent research on air quality and social deprivation have highlighted the causal link between air pollution and death or illness from respiratory disease. Research which included Belfast as one of a number of study areas, described a positive correlation between socially deprived wards and poor air quality.

Figure 4(ii) shows the average pollutant concentrations of particulate matter (PM₁₀) by deprivation score range in Greater Belfast in 1998. PM₁₀ concentrations increase with deprivation scores. Using the 1998 baseline, the figure also shows projected levels of PM₁₀ for 2010 with and without preventive measures being put in place.

Figure 4(ii)

PM₁₀ Concentrations by Deprivation Score in Greater Belfast - 1998



Source: National Environmental Technology Centre

The Investing for Health strategy reflects the public health significance of local air pollution in the key target 'to reduce levels of respiratory and heart disease by meeting the health based objectives for the 7 main air pollutants by 2005'. District councils have begun a systematic review of local air quality and most have recently installed new monitoring equipment to help identify where limits are being, or are likely to be exceeded. In the future district councils and public

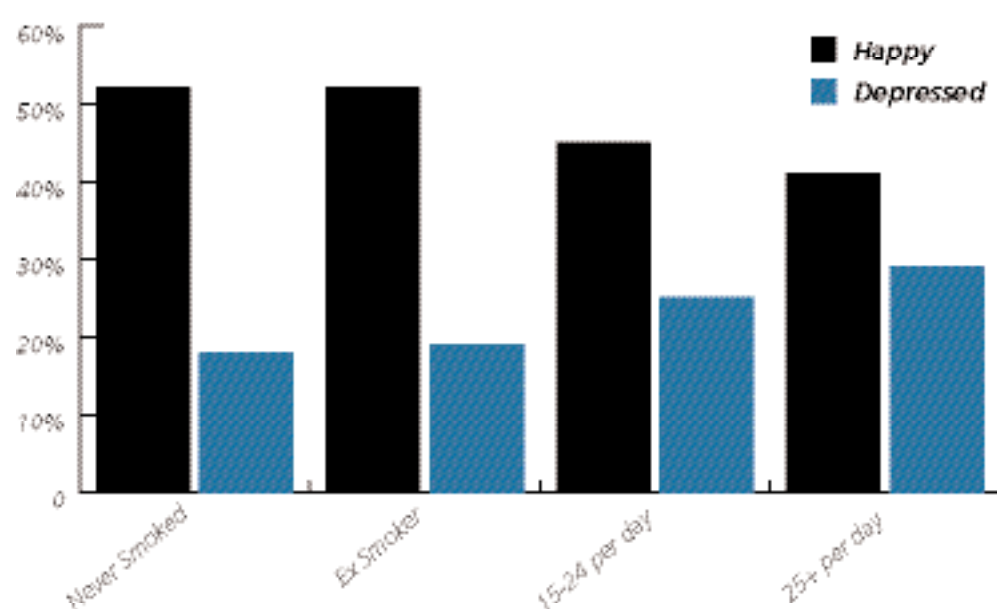
bodies will be required to have action plans to improve air quality where health based objective limits are being exceeded.

Smoking

Smoking has already been highlighted as a major preventable cause of premature death and ill health. The health of non-smokers and unborn babies can also be affected through exposure to environmental tobacco smoke. Links between smoking and mental health problems are also well established. The 2001 Annual Statement from the Government's Scientific Committee on Tobacco and Health (SCOTH) reported a strong association between cigarette smoking and impaired psychological well being. This is supported by findings from the 2001 Northern Ireland Health and Wellbeing Survey (Figure 4(iii)) where levels of depression were found to be higher in smokers than in non smokers.

Figure 4(iii)

Mental Health Status in Smokers and Non-Smokers



Source: Health and Wellbeing Survey 2001

SCOTH has recommended that research is needed on the links between impaired mental well being and smoking. Studies are also needed to examine the best ways of helping people with acute mental health problems to stop smoking.

The need to address the levels of smoking in Northern Ireland has been recognised as a priority. In March 2001, an inter-sectoral Tobacco Working Group was established 'to develop and oversee the implementation of a comprehensive action plan to tackle tobacco use within specified timescales'. A five-year Tobacco Action Plan which focuses on preventing young people from taking up smoking, helping smokers to quit, and addressing the issue of environmental tobacco smoke has been developed. The plan provides a framework for collaborative working across Government departments, the statutory and voluntary sectors, as well as with business and in local communities. Consultation on the document ended in November 2002.

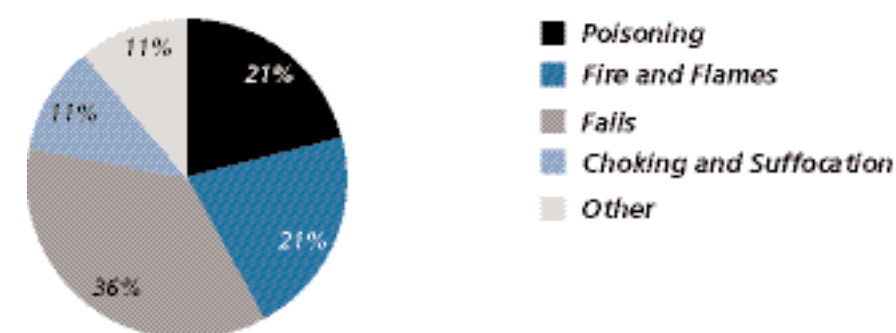
Non smokers are much happier than smokers

Accidents in the Home

The home is one of the most common places where accidents occur. Home accidents are a major cause of death and injury and contribute substantially to potential years of life lost. Deaths, as a result of accidents in the home, are most commonly caused by falls, fire and flames, and poisoning.

Figure 4(iv)

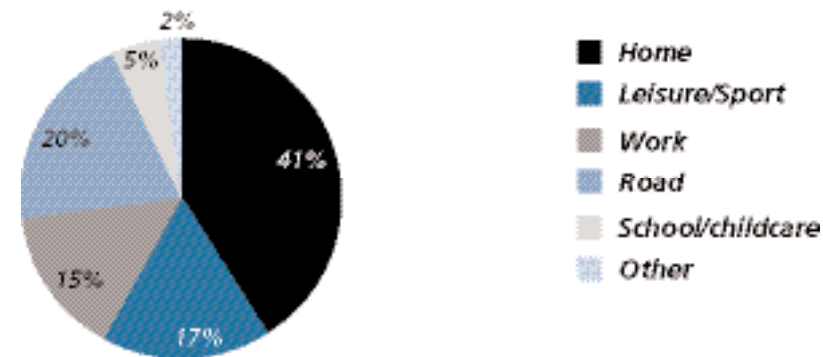
Cause of Death from Accidents in the Home



Source: NISRA

Figure 4(v)

Place where Accidents Requiring Treatment at A & E Occur



Source: DHSSPS (Survey 2001)

A survey of 16 Accident and Emergency (A&E) departments conducted in 2001 found that more accidents occurred inside the home than at work and on the roads put together (Figure 4(v)).

The benefits of accident prevention are clear and quantifiable in both health and economic terms. Prevention can:

- Save lives;
- Improve quality of life;
- Reduce the cost of hospital care;
- Reduce the cost of continued community support required after hospital discharge;
- Enhance people's contribution to the economy.

A Home Accident Prevention Strategy which aims to reduce the number of accidental deaths and serious injuries in the home has been issued for consultation. Successful implementation of this plan will require input from a number of government departments as well as from others in the statutory, voluntary and community sector. This will contribute to achieving the target in Investing for Health.

INVESTING FOR HEALTH TARGETS

To reduce the death rate from accidents in people of all ages by at least one fifth between 2000 and 2010.

To reduce the rate of serious injuries from accidents in people of all ages by at least one tenth between 2000 and 2010.

Conclusion

The impact which the environment can have on both physical and mental health is well established. Efforts must continue to ensure that the negative effects on health are minimized as far as possible.