

EVIDENCE BASE FOR LIFESTYLE INTERVENTIONS

for

HEALTH IMPROVEMENT

2006

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HEALTH IN LANARKSHIRE

Health is generally accepted as a state of physical, mental and social wellbeing some aspects of which can be measured objectively, both at an individual and population level. Life circumstances, lifestyle and health and social care all contribute to health, but changes in life circumstance measures, social justice indicators and lifestyle measures do not of themselves provide proof of improvement in health. They have, however, been shown to be key in leading to health improvement.

Towards a Healthier Scotland (1999)¹ and Improving Health in Scotland: the Challenge (2003)² highlighted the importance of:

- Life Circumstances,
- Lifestyle, and
- Health/Disease Topics

in improving health and Towards a Healthier Scotland recommended criteria for prioritising health/disease topics which would lead to health improvement:

- Major causes of premature death or avoidable ill-health,
- Significant scope for reducing overall health inequalities,
- Effective prevention and/or positive health promotion,
- Amenable to measurement and monitoring

and, for disease topics:

- Availability of effective treatment or at least effective palliation.

A Health Improvement Strategy must tackle all 3 arenas as recommended in Towards a Healthier Scotland in 1999¹, taking account of current health status, target levels for improvement and evidence as to how improvement can be achieved if health is to improve. Limited information is available and collected on 'health per se' and information on the most common diseases and causes of death, lifestyle factors and social justice indicators have to be used as proxy measures for health.

In Lanarkshire, life expectancy is increasing and the death rates of the main causes of death are decreasing over time, but the relative gap between Lanarkshire and Scotland is not decreasing.

Life Circumstances

Life circumstances vary and frequently reflect the inequalities inherent in the social stratification of the population which influences the choices available to people, families and communities, mainly due to their income, lower income resulting from restricted employment opportunities, poor educational status, poor housing, the impact of addictions and restricted access to services. Detail on inequalities is available in community health and wellbeing profiles³, and in summary in the Scottish Index of Multiple Deprivation⁴ which shows that Lanarkshire is the third most deprived board area in Scotland, and that Coatbridge, Wishaw and Airdrie are the most deprived areas in Lanarkshire.

Lifestyle Risk Factors

Adverse lifestyle factors include behaviours which can have short-term positive consequences, but with longer term negative outcomes for health. The negative impact is increased when these factors occur in ongoing combination.

Smoking, diets rich in fat and sugar and lack of physical activity resulting in obesity are associated with the major causes of disease and death in Scotland and are also evident in Lanarkshire. The most

recent figures from the Scottish Schools Adolescent Survey⁵ show increasing levels of risk taking behaviour by secondary pupils in Lanarkshire.

12% of Lanarkshire pupils smoke by 13 and 27% by 15 years of age.

23% of 13 year olds drank alcohol in the last week and 44% by age 15.

Over 50% eat sweets and chocolate daily.

Over 65% drink sugary drinks daily.

Less than 25% eat fruit daily.

15% had used illegal drugs at age 13 and 41% by age 15.

Less than 50% of girls are physically active on five or more days.

Eating a diet rich in fruits and vegetables, high in dietary fibre and low in fats, sugar and salt makes a significant contribution to health and to the prevention of disease. Unhealthy diets are one of the main risk factors in the development of chronic diseases and it is essential to establish good dietary habits early in life if health is to improve.

Sexual health, mental health, alcohol and drug misuse which are highlighted in the Challenge are considered along with oral health and ultraviolet radiation. Exposure to ultraviolet radiation, either from sun or sunbed use continues to occur despite the strong association with malignant melanoma, the most serious type of skin cancer.

Physical and Mental Health

The 4 main causes of death in Lanarkshire, **Cancer, Coronary Heart Disease, Stroke and Respiratory Disease** account for 72% of all deaths. The fifth main cause of death is gastro-intestinal with the most frequent number of deaths in this group, due to alcoholic liver disease. The sixth most common cause of death is dementia while accidents and self-harm including suicide is the seventh.

Five localities in Lanarkshire have premature mortality rates in the under 65s higher than the Scottish average and 7 localities in the over 65s. Only East Kilbride has a better standardised mortality ratio than the Scottish average in the under 65s.

Gastro-intestinal disorders, circulatory disease and cancer are the main causes of admission to hospital.

The commonest reason for GP consultation is respiratory disease, the second musculo-skeletal and the third mental ill health. These are primary diagnoses and mental ill health may not be sufficiently recognised if it presents as an underlying health problem.

Teenage pregnancy in 13-15 year olds is used nationally as an indicator of sexual health and while in Lanarkshire teenage pregnancy is consistently lower than the Scottish average, there has been a large increase in recent years in sexually transmitted infections suggesting more people are putting themselves at risk of contracting HIV and other bloodborne viruses.

Dental caries and periodontal disease are the 2 most important dental diseases and can be effectively prevented and treated. Only 40% of 5 year olds in Lanarkshire are caries free compared with 60% in the national target for 2010.

Scotland's health is poor compared with the 19 Western European developed countries and Lanarkshire's health and that of other West of Scotland Board areas is poor in comparison to Scotland

and has prompted detailed analysis at small area level such as postcode sector. This has highlighted marked differences in life circumstances, lifestyle, life expectancy, morbidity and mortality between the most affluent and the most deprived areas. These are clear pointers for action and have recently been used to determine the poorest 15% areas where Regeneration Outcome Agreements have been made between Community Planning Partners and Communities Scotland.

The importance of building on inter-agency work to tackle the social determinants of health and those areas with excessive inequalities is recognised. The need for agreement and prioritisation in single system working is also required if progress is to be made on improving the widening health gap between the affluent and deprived which has increased in the last 10 years. No one service organisation can resolve these issues single handed and neither should the issues be tackled singly or in isolation to each other.

Given Lanarkshire's main causes of morbidity and death, there is a need to tackle adverse life circumstances, the lifestyle factors of **smoking, diet, physical activity, mental health & wellbeing, alcohol misuse, drug misuse, sexual health, oral health and ultraviolet radiation** and to provide effective treatment for **Coronary Heart Disease, Cancer (lung, breast, colorectal, ovarian), Mental Health, Stroke and Respiratory Disease (COPD, Asthma)** if health is to improve.

The importance of ensuring that lifestyle interventions bring about the greatest improvement in health from available resources is recognised. Lifestyle interventions are generally delivered either through specific initiatives from ring fenced funds or through services provided by either CHPs or the Acute Division. A review of the recommendations, as detailed in Appendix 1, has identified that the majority can be delivered through the prioritisation of existing resources although some limited investment is identified as required to support interventions for Healthy Eating and Mental Health. Access to non recurring funds to support training is also identified as a potential requirement. These will be considered through the annual financial planning process.

A Rapid Impact Assessment was completed for each lifestyle intervention described in this evidence base and recommendations made.

The evidence base for each of the lifestyle factors is considered in the context of Lanarkshire's poor health and:

- National Policy
- Current lifestyle status
- Current service provision
- Evidence for interventions
- Recommendations

References:

1. Scottish Executive. *Towards a Healthier Scotland*. Edinburgh: Scottish Executive, 1999.
2. Scottish Executive. *Improving Health in Scotland – The Challenge*. Edinburgh: Scottish Executive, 2003.
3. Scottish Public Health Observatory. *Community Health and Well-being Profiles*. Edinburgh: Scottish Public Health Observatory, 2004. www.scotpho.org.uk
4. Lanarkshire Health Board, Director of Public Health Annual Report 2002. Hamilton, Lanarkshire NHS Board, 2003.
5. Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) 2002: Smoking, drinking and drug use among 13 and 15 year olds in South Lanarkshire, 2002. Candace Currie, Joan Fairgrieve, Patricia Akhtar, et al. Child and Adolescent Health Research Unit, University of Edinburgh, Edinburgh: Scottish Executive 2003.

SMOKING

Smoking causes the deaths of 1200 people annually in Lanarkshire through smoking related diseases, including approximately 200 from passive smoking. Fifty percent of smokers die prematurely because of their smoking. Reducing smoking has the potential to deliver significant health improvement in Lanarkshire as well as to reduce preventable demand for health and social care services.

Policy

Tobacco, Smoking Prevention, Smoking Cessation Policy and Targets

The Scottish White Paper *Towards a Healthier Scotland*¹ and *Improving Health in Scotland – The Challenge*² highlighted the importance of reducing smoking if deaths from coronary heart disease, stroke and cancer are to be reduced in the long term. The importance of preventing children from starting to smoke has long been recognised, and activities such as Smokebusters and Smoke-Free Class have been promoted since the 1980s. Harm to the unborn child and young children from smoking has also been increasingly recognised and the provision of smoking cessation for pregnant women has received particular attention.

Many smokers claim they wish to stop and the importance of effective smoking cessation services has been recognised and promoted by the Scottish Executive which funds Partnership Action on Tobacco and Health (PATH) who published *Standards for Smoking Cessation Training in Scotland* in 2003,³ and updated smoking cessation guidelines in 2004.⁴

The UK White Paper *Smoking Kills*⁵ and more recently *A Breath of Fresh Air for Scotland*⁶ have been published and the new Smoking, Health and Social Care (Scotland) Bill⁷ banning smoking in enclosed public places confirms the Scottish Executive's commitment to improving health in Scotland by taking action to reduce this the most damaging of lifestyle behaviours.

The current Scottish smoking rate targets for 2010 are:

- adults aged 16+ years 23.9%
- young people aged 12-15 years 11%
- women who smoke in pregnancy 20%

The target for young people is expected to change once the Scottish Executive has completed its current review.

For people in the 20% most deprived areas there are additional targets for 2008:

- adults aged 16+ years 32.3%
- pregnant women 32.2%

The Scottish Executive requires health boards to focus on reducing smoking prevalence in three target groups: adults in socio-economically deprived areas, pregnant women, and children and adolescents, because of the potential for greatest health gain and for reducing health inequalities.

Current Smoking Status

At least one in three Lanarkshire adults smoke. Local surveys show a reduction in smoking prevalence in adults in Lanarkshire aged 16+ years from 39% in 1992 to 30% in 2001. These are optimistic figures from self-completion surveys. Re-analysis of the 2001 survey data, taking into account its poorer response rate, gives an estimated prevalence of 35%, (156,512 smokers), the prevalence for men being 36% and for women 33% (Table 1). This is similar to NHS Health Scotland's community health and well-being profiles estimate for Lanarkshire's smoking prevalence of 36% for people aged 16-74 (147,863 smokers) when the different age range covered by the Lanarkshire data is taken into account. As expected from Lanarkshire's level of deprivation these estimates are above the most recent values for smoking prevalence in Scotland (2003) of 28% for men and 29% for women aged 16+ years.⁸

Table 1

Smokers age 16+, Lanarkshire 2004: estimated number and prevalence (%)

	Survey ASN*	
	No.	%
All	156,512	35
Men	76,062	36
Women	77,845	33
16-34	49,480	37
35-54	59,736	36
55+	44,254	30

* Lanarkshire Health Survey 2001 weighted by age, sex and differential smoking non-response to estimated 2004 population age 16+.

Both local and national data sources identify the same patterns of smoking in the Lanarkshire population:

- prevalence for men and women is similar
- younger adults have a higher prevalence because more older people are ex-smokers
- differences within Lanarkshire are moderate between local areas, ranging from 31% to 42% (based on NHS Health Scotland Community Profiles)
- prevalence is particularly high in more deprived populations and areas as shown in Table 2.

Table 2

Smokers age 16-74 by Carstairs deprivation quintile; 2004: number and prevalence (%) *

Quintile	Number of smokers age 16-74	Prevalence %
1 Least deprived	20,165	26.8
2	26,831	33.7
3	32,266	36.7
4	31,972	39.8
5 Most deprived	36,629	43.0
Lanarkshire	147,863	36.2

* NHS Health Scotland Community Health and Well-being Profiles for smoking data used in analysis

Smoking in pregnancy has decreased fitfully over the past decade (Table 3). The Scottish rate is typically around 1-2 percentage points lower than Lanarkshire's.

Local data on adolescent smoking are limited. Based on the schools' adolescent lifestyle and substance use survey (SALSUS) in 2002⁹ which covered ages 13 and 15, it is estimated that up to 5,000 young people aged 12-15 in Lanarkshire smoke: 12% of those aged 13 and 27% of those aged 15 are regular/occasional smokers. There is a sharp increase between ages 13 and 15, with the latter age group approaching adult rates of smoking. As with adult data, these are best regarded as minimum figures. Lanarkshire falls far short of the national targets.

In Lanarkshire there are at least 150,000 smokers of all ages. To continue the current average reduction in smoking of 1% per annum requires 1,500 extra quitters per year, and to achieve the national 2010 targets requires more than 3000 quitters annually. Experience in Ireland indicates that some of this will result from the implementation of the Smoking, Health and Social Care (Scotland) Bill without additional support, but many smokers will still remain and need professional help to quit.

Current Service Provision

Smokebusters

All schools are encouraged to participate in the Smokebusting Classroom initiative for Primary 6 and 7. Classes work through an 'off-the-shelf' curriculum linked resource pack covering topics such as passive smoking and the health effects of smoking. Priority is given to schools working towards achieving Health Promoting School status and schools within regeneration areas. Holytown Primary School (60+ pupils) have just completed this and Our Lady and St Joseph's in Glenboig are about to begin. This is incorporated in the Health Promoting Schools criteria and schools who identify the need for the service can access this.

Smokefree Classrooms

One of the aims is to encourage pupils to remain 'smokefree' by discouraging experimentation with tobacco. Classes commit to being smoke-free for 6 months and during this time work through an 'off the shelf' resource pack delivered as part of their personal, health and social education (PHSE) programme covering topics including the cost of smoking and the health effects of smoking. Carbon monoxide monitoring is also carried out at each visit. Priority is given to schools working towards achieving Health Promoting School status and schools within Regeneration Outcome Agreement areas. Four high schools are currently participating with 150 pupils in each first year class.

Table 3

Proportion of women from Lanarkshire smoking during pregnancy (at booking visit)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
% smoking	30.6	30.2	32.9	32.2	30.5	29.7	29.0	29.7	27.9	28.0	27.2

Data source: SMR02

No Smoking Day

A range of leaflets and resources which are available free of charge to anyone in Lanarkshire are provided each year associated with National No Smoking Day in March. Smokeline, the national telephone help line by which individuals can access advice from a smoking cessation specialist, is also promoted. Each year scores of local events in Lanarkshire build on the national campaign and include exchanging cigarettes for fruit and fitness events.

Smoking Cessation Services

Communities

All localities have smoking cessation services largely led by Smoking Cessation Co-ordinators. Further capacity is provided by Smoking Cessation Advisors, sessional staff and administrative support.

Some smoking cessation services are working with partners to empower communities to address the 'smoking epidemic':

Hospitals

Two of the three Lanarkshire district general hospitals have smoking cessation coordinators.

Training

Training for Smoking Cessation Specialists includes the design, delivery and commissioning of services, acquiring relevant skills and topic based training, and requires regular updating. The Maudsley Update Training package was provided in December 2003. Health Promotion staff provided 'Brief Intervention' and 'Motivational Interview Training' in 2004/2005 enabling NHS Lanarkshire to maximise the effectiveness of its current staff and increase the services' efficiency. Lanarkshire's Smoking Cessation Specialists are now recognised by Partnership Action on Tobacco and Health (PATH) as trainers for 'Brief Intervention' skills.

Workplace

Scotland's Health at Work (SHAW) covers a range of health topics including smoking, healthy eating, mental health and physical activity. SHAW rewards employers at 3 levels and all levels require the employer to protect non-smokers from exposure to environmental

tobacco smoke at all times. The employer is also required to provide staff with support to quit smoking. National helplines and local smoking cessation services are routinely promoted. A number of employers go beyond this by providing access to free nicotine replacement patches or allowing staff time off work to attend smoking cessation sessions. A third (approximately 76,000 employees) of the Lanarkshire working population are employed in organisations participating in SHAW. Targets have been set for Lanarkshire by the Scottish Executive for the number of organisations and employees participating in SHAW.

Evidence for Interventions

Effective measures to reduce population tobacco use include taxation and pricing policy,¹⁰ advertising restrictions¹¹ and legislation on smoking in enclosed public places.¹² These have key roles in reducing access to cigarettes and making smoking unacceptable in society. Well-planned and resourced comprehensive strategies for preventing smoking in public places have been shown to be effective, while comprehensive, managed no smoking policies in the workplace can act as a trigger to help people decide to access smoking cessation services, as well as reducing the amount of smoking in individuals in the workplace.¹²

At a personal or group level there is good evidence for the effectiveness of various smoking cessation initiatives: individual counselling using motivational techniques,¹³ interventions in pregnancy,¹⁴ high intensity interventions with hospitalised patients,¹⁵ nicotine replacement therapy (NRT), bupropion (*Zyban*)¹⁶ and some antidepressants.¹⁷ There is no strong evidence to support any one form of NRT as superior to others - patches, gum, inhalators or sprays.¹⁶ Bupropion has a greater possibility of adverse effects than NRT.¹⁶ Acupuncture,¹⁸ hypnotherapy¹⁹ and laser therapy¹⁸ are ineffective.

Smoking abstinence rates at six months or longer range from 1-12% above levels for placebo or willpower alone depending on the individual intervention, and the effect of multiple simultaneous interventions is broadly additive.²⁰ As the effect of NRT is largely independent of other interventions the most effective is motivational techniques combined with anti-addiction medication.²⁰ Opportunistic advice by

GPs has been shown to initiate quit attempts and to increase the success rate by up to 2.5%.²¹ A review of the English smoking treatment services which combined behavioural support with NRT or bupropion, showed for smokers who set a quit date a carbon monoxide-validated quit rate at 52 weeks of 14.6%, and an overall quit rate of 17.7% for validated and non-validated quitters.²²

Recommendations

Provide an evidence-based smoking cessation service in Lanarkshire, which is cohesive and stable, with sufficient capacity to help smokers to stop, including health service personnel, and meets the 2004 national guidelines.

Ensure the smoking cessation service caters for the diversity of local populations in its marketing and service delivery, including provision for smokers whose first language is not English or who have communication difficulties such as severe deafness.

Provide smoking cessation services in each of the three district general hospitals.

Prioritise the Scottish Executive's three target groups:

- a) pregnant women
- b) young people
- c) adults on low income

while recognizing that all smokers are the potential recipients of a coherent smoking cessation service. Find ways of engaging more effectively with these target groups.

Train NHS acute and community staff in accordance with national guidelines to provide brief interventions to smokers, and maintain a database of their training and training needs.

Record smoking status routinely in primary care and hospital settings and use this as an opportunity for the provision of brief interventions by health care staff.

Provide smoking cessation services in a range of settings, thereby improving their accessibility to clients.

Monitor and evaluate the smoking cessation service and all other smoking cessation activities to ensure they are effective.

Look for training opportunities for NHS and non NHS staff to enable them to provide specialist motivational support in their work settings e.g. health visitors, school nurses, school pastoral care staff.

Develop a communication strategy to promote no smoking and to inform the public of the smoking cessation service and how to access it.

Continue smoking prevention activities in schools and on National No Smoking Day.

References

1. Scottish Office Department of Health. *Towards A Healthier Scotland: A White Paper on health, Cm4269*. Edinburgh: The Stationery Office, 1999.
2. Scottish Executive. *Improving Health in Scotland: The Challenge*. Edinburgh: Scottish Executive, 2003.
3. Partnership Action on Tobacco and Health. *Standards for Smoking Cessation Training in Scotland*. Edinburgh: Partnership Action on Tobacco and Health, 2003.
4. West R, McNeill A, Raw M. *Smoking Cessation Guidelines for Scotland: 2004 update*. Edinburgh: Health Scotland, 2004.
5. Department of Health. *Smoking Kills : a White Paper on tobacco, Cm 4177*. London: The Stationery Office, 1998.
6. Scottish Executive. *A Breath of Fresh Air for Scotland : improving Scotland's health : the challenge : tobacco control action plan*. Edinburgh: Scottish Executive, 2004.
7. The Scottish Parliament. *Smoking, Health and Social Care (Scotland) Bill [as passed]* <http://www.scottish.parliament.uk/business/bills/pdfs/b33bs2-aspassed.pdf>.
8. Scottish Executive. The Scottish Health Survey 2003. NHS Board Tables – Results. <http://www.scotland.gov.uk/Publications/2005/11/25145024/50251>
9. Currie C, Fairgrieve J, Akhtar P, Currie D. *Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) National Report: Smoking, Drinking and Drug Use among 13 and 15 year olds in Lanarkshire in 2002*. Edinburgh: 2003.
10. Townsend J, Roderick P, Cooper J. *Cigarette smoking by socio-economic group, sex, and age: effects of price, income and health publicity*. British Medical Journal 1994;309:923-927.
11. Mackay J, Eriksen M, Eds. *Legislation: Advertising Bans in The Tobacco Atlas*. Geneva: World Health Organization, 2002. www.who.int/tobacco/en/atlas31.pdf
12. Ludbrook A, Bird Sheona, van Teijlingen, E. *International Review of the Health and Economic Impact of the Regulation of Smoking in Public Places*. Edinburgh, Glasgow: Health Scotland, 2005.

13. Lancaster T, Stead LF. *Individual behavioural counselling for smoking cessation*. The Cochrane Database of Systematic Reviews 2005, Issue 2. Art. No.: CD001292. DOI: 10.1002/14651858.CD001292.pub2. www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD001292/frame.html Last accessed 21/07/05
14. Lumley J, Oliver SS, Chamberlain C, Oakley L. *Interventions for promoting smoking cessation during pregnancy*. The Cochrane Database of Systematic Reviews 2004, Issue 3. Art. No.: CD001055. DOI: 10.1002/14651858.CD001055.pub2. www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD001055/frame.html Last accessed 06/09/05.
15. Rigotti NA, Munafo MR, Murphy MFG, Stead LF. *Interventions for smoking cessation in hospitalised patients*. The Cochrane Database of Systematic Reviews 2002, Issue 4. Art. No.: CD001837. DOI: 10.1002/14651858.CD001837. www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD001837/abstract.html Last accessed 21/07/05.
16. National Institute for Clinical Excellence. *Technology Appraisal Guidance - No. 39. Guidance on the use of nicotine replace therapy (NRT) and bupropion for smoking cessation*. London: National Institute for Clinical Excellence, March 2002. www.nice.org.uk/pdf/NiceNRT39GUIDANCE.pdf Last accessed 06/09/05.
17. Hughes JR, Stead LF, Lancaster T. *Antidepressants for smoking cessation*. The Cochrane Database of Systematic Reviews 2004, Issue 4. Art. No.: CD000031. DOI: 10.1002/14651858.CD000031.pub2. www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD000031/frame.html Last accessed 06/09/05.
18. White AR, Rampes H, Ernst E. *Acupuncture for smoking cessation*. The Cochrane Database of Systematic Reviews 2002, Issue 2. Art. No.: CD000009. DOI: 10.1002/14651858.CD000009. www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD000009/abstract.html Last accessed 21/07/05.
19. Abbot NC, Stead LF, White AR, Barnes J. *Hypnotherapy for smoking cessation*. The Cochrane Database of Systematic Reviews 1998, Issue 2. Art. No.: CD001008. DOI: 10.1002/14651858.CD001008. www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD001008/abstract.html Last accessed 21/07/05.
20. West R, McNeill A, Raw M. *Smoking cessation guidelines for health professionals; an update*. Thorax, 2000; 55:987-999.
21. Lancaster T, Stead LF. *Physician advice for smoking cessation*. The Cochrane Database of Systematic Reviews 2004, Issue 4. Art. No.: CD000165. DOI: 10.1002/14651858.CD000165.pub2 www.mrw.interscience.wiley.com/cochrane/clsystrev/articles/CD000165/frame/html Last accessed 01/08/05.
22. Ferguson J, Bauld L, Chesterman, Judge K. *The English smoking treatment services: one-year outcomes*. Addiction 2005;100(Suppl.2):59-69.

HEALTHY EATING

Trends in children's and adults' dietary patterns in Scotland give cause for concern. Many children and adults regularly consume foods high in sugar, fat and salt, while few eat fruit and vegetables on a regular basis.^{1,2,3}

Dietary surveys show that the foods most commonly eaten by young children include biscuits, white bread, non-diet soft drinks, crisps, chocolate, confectionery and chips, and that up to one fifth of children's energy intake comes from foods eaten outside the home.¹

Eating a diet rich in fruits and vegetables, high in dietary fibre, and low in fats, sugar and salt makes a significant contribution to health and prevention of disease. Unhealthy diets are one of the main risk factors in the development of chronic conditions such as cardiovascular disease including coronary heart disease and stroke, diabetes, obesity and cancer.⁴ A diet high in fat, particularly saturated fat (found in animal products) is linked with raised blood cholesterol, while a diet high in salt is associated with high blood pressure. Low fruit and vegetable consumption is associated with an increased risk of coronary heart disease and stroke and some types of cancer.^{5,6} It is estimated that poor diet may contribute to the development of up to one third of cancers.⁵

Encouraging people to change their behaviour and eat more healthily is not a straightforward task, it is not enough to simply tell people what to eat and what not to eat. To improve knowledge and understanding of what a balanced diet actually means, and to be able to put this into practice, healthy eating messages must be simple, clear and consistent and promoted across all sectors of the community.

Policy

*Eating for Health - A Diet Action Plan for Scotland*⁷ made recommendations for dietary improvement across the food chain, to meet dietary targets for 2005. *Improving Health in Scotland - The Challenge*⁸ also prioritised action to improve diet. *Eating for Health - Meeting the Challenge*⁹ provided a strategic framework for further implementation of the Scottish Diet Action Plan.

In 2002, *Hungry for Success*¹⁰ set minimum nutrient standards for school lunches in all primary and special education needs schools by December 2004 and in all secondary schools by December 2006. *Nutritional Guidance for Early Years*¹¹ was published in 2005.

The importance of establishing good dietary habits early in life is further emphasised in *An Action Plan for improving oral health and modernising nhs dental services*.¹² Parents, schools and the wider community have a role to play in promoting healthy eating and in ensuring that healthier food choices are available to children in school dining facilities, vending machines and tuck shops.

NHS Lanarkshire's Food and Health Policy is being updated and recommends that, in line with *Hungry for Success*, vending machines on NHS premises should contain healthy food and drinks, and be de-branded.

The national dietary targets are:

1. More than 50% of women should breastfeed their babies at 6 weeks by 2005.
2. Increase the proportion of the population consuming increased levels of fruits and vegetables, carbohydrates, fish as defined in the Scottish Dietary Targets for 2005.
3. Increase the proportion of the population consuming decreased levels of fat, sugar and salt as defined in the Scottish Dietary Targets for 2005.

Current Dietary Status

Breastfeeding rates in Lanarkshire are the lowest in any Scottish NHS Board area, while Scotland itself has much lower rates than England and Wales. Although local breastfeeding rates have increased in the last six years, the gap between Lanarkshire and the Scottish average has not diminished.¹³ Fewer women in Lanarkshire start breastfeeding and even fewer continue until at least six weeks.

In 2004, 31% of mothers breastfed their babies in comparison to 45% in Scotland. Of those mothers who began breastfeeding, only 32.9% were still breastfeeding by 11 days compared

with 44% for Scotland, while at the age of six weeks, 25.9% of mothers in Lanarkshire continued to breastfeed compared with 35.9% in Scotland. Analysis of breastfeeding data shows a direct relationship between deprivation and low breastfeeding rates.

The World Health Organisation (WHO) recommends women should be encouraged to breastfeed exclusively for six months, although some breastfeeding mothers and babies may choose or need to be weaned earlier than six months.¹⁴ The *Infant Feeding Survey 2000*¹⁵ shows that solids are introduced earlier in Scotland, however, compared to 1995, mothers are weaning their babies at a later age. By two months 7% of mothers had introduced solids, by three months 28% had given solids and by four months 83% had given solids (in comparison to 22%, 64% and 91% in 1995, respectively). It is recommended that formula-fed babies are weaned between the age of four to six months.¹⁶

The National Diet and Nutrition Survey of school age children showed the majority of children have adequate intakes of most nutrients, however, the balance of children's diets gives cause for concern.² Over the survey week, the foods most commonly consumed were: white bread, savoury snacks, potato chips, savoury sauces, pickles, gravies, condiments, biscuits and potatoes. More than half of the children did not eat any citrus fruit or green leafy vegetables at all. Children in Scotland were less likely to have eaten different types of vegetables. Children from families where the head of the household was classed as having a manual occupation were less likely to eat fruit juice, fruit and vegetables generally. Conversely, these children were more likely to drink whole milk and carbonated drinks.

In children, overweight and obesity is increasing. By the time children in Scotland start primary school, 1 in 5 are overweight and 1 in 3 by secondary school.¹⁷ In Lanarkshire, weight is increasing in adults, with over half of the adult population either overweight or obese.¹⁸ Between 1992 and 2001 obesity in adults has risen from 9% to 16%, while overweight has risen from 32% to 36%.

The Lanarkshire Health & Lifestyle Survey of 2001¹⁸ showed that many respondents ate less

than one piece of fruit a day, 34% of men and 22% of women, but this is a considerable improvement on 1996 (46% of men and 34% of women). In 1996 only 8% of men and 16% of women ate three or more portions of fruit a day compared with 20% of men and 31% of women in the 2001 survey. This improvement is apparent in all age groups.

The consumption of vegetables is low but improving. In 2001, 18% of men and 26% of women ate three or more portions of vegetables a day, an improvement from 12% of men and 16% of women in 1996. Younger men have the lowest consumption. Low consumption of vegetables mirrored that of fruit. Wishaw and Motherwell are the areas with the lowest consumption, with more deprived areas consistently less likely to eat vegetables than more affluent areas.

The pattern of consumption of foods that could be considered as less healthy is mixed. The decrease in consumption of full-fat milk has continued. Eighteen per cent had eaten chips on at least three days, a reduction from 24% in 1996. However the consumption of fizzy drinks changed little and the proportion of respondents eating cakes, pastries and biscuits three or more days a week rose from 25% in 1996 to 41%.

For many older people under-nutrition rather than over-nutrition is a major cause for concern. Studies show that older people living in their own homes are significantly heavier than older people living in institutional care (continuing care NHS settings and care homes/nursing homes), with only 3% of men and 6% of women living in their own homes classified as underweight compared with 16% of men and 15% of women in institutional care.¹⁹ A national audit of older people living in long-term care settings showed that under-nutrition may be related to a number of factors such as inadequate food intake, lack of appropriate nutrition screening practices and care providers failing to meet residents' individual nutritional needs.²⁰

Current Service Provision

Breastfeeding

Breastfeeding training for staff, support networks for women including peer support and the development of policies to support breastfeeding

women returning to work are ongoing along with actions required to achieve accreditation of the UNICEF Baby Friendly Initiative in Wishaw Maternity Unit and the community.

Early Years

Expertise and support is provided to enable nursery staff to promote and provide healthier food choices for children and encourage parents to continue to develop positive eating habits at home as recommended in the Nutrition and Oral Health information pack which has been circulated to all Lanarkshire nurseries.

Breakfast Clubs

A variety of breakfast clubs have been introduced in over 50 primary schools across Lanarkshire. Breakfast clubs aim to provide children with a free, nutritious start to the day and the opportunity to take part in other health improving activities such as toothbrushing and physical activity. The clubs provide structure and stability for children as well as social interaction before the start of the school day. Attendance ranges from 35-80 children each day.

Hungry for Success

All schools in Lanarkshire have registered to become Health Promoting Schools and the majority of these ensure healthier food choices are available to pupils such as free fruit for Primary 1 and 2, a healthy tuck shop and healthy vending with water, milk and fruit juice rather than fizzy drinks.

Cooking for Health

Budget cooking courses have been provided in a number of areas in North Lanarkshire, targeted primarily at parents and equip people with the practical skills and knowledge to prepare healthier affordable meals for their families.

Nutrition for Older Adults

An education and training programme on nutrition has been attended by 600 clinical support workers and over 500 trained nursing staff from the acute and primary care divisions and care homes.

Healthy Eating in the Workplace

The Scottish Health At Work Award (SHAW) scheme is used to promote healthy eating. One hundred and twenty organisations in Lanarkshire are registered with SHAW. Seven have received the Scottish Healthy Choices Award.

Community Food Initiatives

In North Lanarkshire the Federation of Food Co-ops improves access to healthy, good quality and affordable foods for low-income families and individuals. A range of healthy eating activities is ongoing within individual co-ops and the Healthy Living Centre Initiatives. These include budget cookery courses, taste and try food sessions, promotion of healthy recipes, introduction of healthier options in community cafes and drop-in sessions with various health professionals such as health visitors, smoking cessation advisers and the Coronary Heart Disease Nurse Specialist.

Evidence for Interventions

Effective actions to promote healthy eating take place at several levels, individual, group and communities and address the barriers to dietary change and the maintenance of a healthy diet. The former Health Education Authority published a series of systematic reviews on the effectiveness of interventions designed to promote healthy eating in the general population and several specific groups including infants under one year and children under 5 years.^{21,22,23}

In the primary care setting individual counselling, usually with nurses, was found to have a positive effect on dietary intake, blood cholesterol or both, which was sustained for four months to three years after intervention. In the workplace, screening and individual counselling had a greater effect on dietary outcome, such as a reduction in fat intake or blood cholesterol, rather than group activities and workplace-wide programmes. The individual counselling interventions used in both settings were relatively intense and required substantial resources.

Interventions to promote the initiation of breastfeeding and healthy feeding of infants less than one year were most successful if initiatives were multifaceted and included

training of health professionals, media campaigns and changes in hospital policies. Peer support programmes involving ante-natal and post-natal contact with peer counsellors were also effective.²²

More children are spending a larger proportion of their day in childcare and therefore, may receive a considerable proportion of their daily food intake there. It is essential that food provided for snacks and lunches is of good quality and meets an appropriate nutritional standard.¹¹

The Health Development Agency²⁴ summarised the findings of the reviews and identified successful criteria for intervention as:

- Encouraging change in people's behaviour by equipping them with practical skills, rather than relying on the provision of information alone.
- Developing a supportive environment in which healthier choices are affordable and available and in which the culture is supportive of healthy eating.
- Having programmes of sufficient intensity and duration, since community food initiatives such as food access projects take a minimum of two years to establish.
- Involving potential participants (parents, children and staff) in planning and implementation of dietary interventions.

Recommendations

Complete UNICEF based training for all midwives and health visitors.

Gain commitment to UNICEF/Baby Friendly Community Initiative in all localities.

Develop Infant Feeding Policy and Guidelines to ensure consistent, evidence-based information and advice is given by health professionals.

Provide training and support for health visiting teams to allow them to deliver practical cooking skills courses with groups of parents, thereby increasing parents' confidence and knowledge on how to prepare healthier foods.

Promote Health Promoting Nursery Award Scheme in all early years establishments.

Encourage provision of healthy snacks and lunches in preschool, primary schools and secondary schools meeting approved national standards.

Consider provision of brief intervention in primary care and in the workplace to change diet and reduce cholesterol.

Continue to support community food initiatives, such as breakfast clubs and healthy eating in nurseries and schools aimed at improving the diet of low income families.

Ensure NHS premises have healthier food choices to give consistent messages on healthy eating, not only for children, but the wider population.

Develop a childhood obesity strategy including preventive measures and potential treatment options, based on current evidence.

References

1. Gregory JR, Collins DL, Davies PSW et al. National Diet and Nutrition Survey: children aged 1½ to 4½ years. Volume 1: Report of the diet and nutrition survey. London: HMSO, 1995.
2. Gregory JR, Lowe S, Bates CJ et al. National Diet and Nutrition Survey: young people aged 4 to 18 years. Volume 1: Report of the diet and nutrition survey. London: TSO, 2000.
3. Henderson L, Gregory JR, Swan G. National Diet and Nutrition Survey: adults aged 19 to 64 years. Volume 1: Types and quantities of foods consumed. London: HMSO, 2002.
4. World Health Organisation. Global Strategy on Diet, Physical Activity and Health. Geneva: WHO, 2004.
5. Department of Health. Nutritional Aspects of the Development of Cancer. London: TSO, 1998.
6. Department of Health. Nutritional Aspects of Cardiovascular Disease. London: TSO, 1994.
7. Scottish Office. Eating for Health – A Diet Action Plan for Scotland. Edinburgh: HMSO, 1996.
8. Scottish Executive. Improving Health in Scotland – The Challenge. Edinburgh: Scottish Executive, 2003.
9. Scottish Executive. Eating for Health – Meeting the Challenge. Edinburgh: Scottish Executive, 2004.
10. Scottish Executive. Hungry for Success: A Whole School Approach to School Meals in Scotland. Edinburgh: Scottish Executive, 2003.

11. Scottish Executive. Nutritional guidance for early years – food choices for children aged 1-5 years in early education and childcare settings. A Consultation Document. Edinburgh: Scottish Executive, 2005.
12. Scottish Executive. An action plan for improving oral health and modernising NHS dental services in Scotland. Edinburgh: Scottish Executive, 2005.
13. NHS Lanarkshire. Taking Stock and Moving Forward – A Review of the Lanarkshire Breastfeeding Strategy, Hamilton, NHS Lanarkshire, 2004.
14. World Health Organisation. Report of the Expert Consultation on the Optimal Duration of Exclusive Breastfeeding. Geneva: WHO, 2001.
15. Hamlyn B, Brooker S, Oleinikova K et al. Infant Feeding Survey 2000. BRMB International, 2002.
16. Department of Health. Weaning and the weaning diet. Report of the Working Group on the Weaning Diet of the Committee on Medical Aspects of Food Policy. London: HMSO, 1994.
17. Clinical Outcome Indicators Group. Health Indicators Report – A Focus on Children. Edinburgh: NHS QIS 2004.
18. Lanarkshire Health Board. Health & Lifestyle Survey. Hamilton: Lanarkshire Health Board, 2001.
19. Ministry of Agriculture, Fisheries and Food, Department of Health and Social Security. National Diet and Nutrition Survey: people aged 65 years and over. Volume 1: Report of the diet and nutrition survey. London: The Stationery Office, 1998.
20. Clinical Resource and Audit Group (CRAG). The nutrition of elderly people and nutritional aspects of their care in long-term care settings. Edinburgh: Scottish Executive, 2000.
21. Roe L, Hunt P, Bradshaw H et al. Health promotion interventions to promote healthy eating in the general population: a review. London: Health Education Authority, 1997.
22. Tedstone A, Duncie N, Aviles M et al. Effectiveness of interventions to promote healthy feeding in infants under one year of age: a review. London: Health Education Authority, 1998.
23. Tedstone A, Aviles M, Shetty P et al. Effectiveness of interventions to promote healthy eating in preschool children aged 1 to 5 years: a review. London: Health Education Authority, 1998.
24. Health Development Agency. Cancer prevention: a resource to support local action in delivering the NHS Cancer Plan. London: Health Development Agency, 2002.

PHYSICAL ACTIVITY

Physical activity is a broad term used to describe a movement of the body that uses energy. There are many types of physical activity: exercise, sport, play, dance and active living such as housework and gardening. It can be as simple as walking. Increased levels of activity have been shown to have a preventive effect especially on coronary heart disease, diabetes, osteoporosis and colon cancer.¹

Conversely, the health effects of an inactive life are serious. The proportion of chronic disease attributable to physical inactivity is similar to that of smoking, which contributes to over a third of deaths from heart disease and threatens progress in reducing morbidity and mortality from coronary heart disease. Inactivity results in obesity and can also lead to hypertension, both factors which themselves increase the risk of chronic disease. Added to this is the disability and poor mental health that is associated with growing levels of obesity and lack of physical strength.

Physical inactivity has been called 'the silent killer of our time' and research shows that inactive people have:

- twice the risk of coronary heart disease compared with active people;
- higher blood pressure - a major risk factor for coronary heart disease and stroke;
- higher risk of colon cancer - 3.6 times more at risk than active people;
- higher risk of developing type II diabetes - regular activity can reduce the risk of diabetes by 50%;
- lower bone density leading to a greater risk of osteoporosis and thus to fractures - regular activity reduces the risk of hip fractures by up to 50%;
- greater risk of being overweight or obese - which also increases the risk of other types of cancer as well as osteoarthritis and back problems;
- more injuries and accidents.

Physical inactivity is also linked to the adverse life circumstances that underpin much of Scotland's pervasive health inequalities.

Policy

In response to the government's White Paper *Towards a Healthier Scotland*² Scottish Ministers set up a Physical Activity Task Force in June 2001. The task force considered the scale of inactivity in the Scottish population and its health, social, environmental and economic consequences and made a number of recommendations calling on the Scottish Executive and its agencies to provide leadership, co-ordination and resources for a strategic approach. This resulted in the launch of *Let's Make Scotland More Active*³ in 2003. The World Health Organisation commended the report of the task force as "an excellent example of how policy makers can adopt an integrated and multi-sectoral approach to improve public health and reduce chronic disease".

Let's Make Scotland More Active aimed to produce moderate increases in activity among the majority of individuals who are currently participating in low levels of physical activity, coupled with a targeting of those high risk, often hard to reach, individuals who undertake little or no physical activity. The report used the Ottawa Charter framework for health promotion: building healthy public policy, creating supportive environments, strengthening community action, developing personal skills and directing health services to those who need them most. Priority groups for increasing physical activity include children and young people, adults, and adults in later life. These, complemented by the themes identified in improving Health in Scotland: the Challenge⁴: early years, teenage transition, the workplace and communities, provide the framework for implementing effective interventions among the general population as well as high risk groups.⁵

National Targets

Let's Make Scotland More Active recommended the following internationally accepted targets for physical activity.

- Adults should accumulate (build up) at least 30 minutes of moderate activity (using 5-7.5 calories/min) on most days of the week with 50% of all adults to be active by 2022.

- Children and young people should accumulate (build up) one hour of moderate physical activity on most days of the week. The target is for 80% of all children to be active by 2022.

Current Physical Activity Status

The Lanarkshire Health Survey (2001)⁶ reported self-rated activity levels of people aged 16 years and over. Forty nine per cent of men and 40% of women reported being moderately or vigorously active at least 5 days per week over the last six months.

The Scottish Health Survey 2003⁷ reported that only 36% of men and 26% of women in Lanarkshire were active enough to meet the current physical activity recommendations. The level of participation in physical activity for men and women is the lowest of any NHS board in Scotland.

Nationally, 42% of men and 30% of women were active enough to meet the physical activity recommendations, a significant improvement on the previous survey in 1998. Seventy-four per cent of boys and 63% of girls were active enough to meet the recommendations. Boys' activity levels did not vary to any great extent by socio-demographic factors. In contrast there was a tendency for girls' activity levels to increase as household income decreased, and as area deprivation decreased.

The most common form of activity type among men was sports and exercise (50%), followed by housework (40%) and walking (34%). For women the most common form of activity was heavy housework (59%) followed by sports and exercise (40%) and walking (26%).

The survey showed that participation in physical activity among adults decreased with age and was lower in those who were obese. There was an association between income and physical activity, with people in the lowest income group least likely to do a minimum of 30 minutes of moderate or vigorous activity on at least 5 days a week. A similar association was shown between the most deprived areas in Scotland and activity.

For the first time, the survey collected information on a major form of inactivity: the amount of time spent at home in front of a TV

or other type of screen. Thirty-nine per cent of men and 35% of women spent 4 hours or more in front of a screen at home on weekdays; on days at the weekend, the figures increased to 47% of men and 38% of women.

Current Service Provision

NHS Lanarkshire works with North and South Lanarkshire Councils and other key partners (Community Planning Partnerships) to implement interventions that aim to improve levels of physical activity among Lanarkshire residents. The Lanarkshire approach is consistent with the Scottish strategy, using evidenced based interventions to improve the general levels of physical activity in Lanarkshire, particularly among the most sedentary populations such as the older age groups.

The Health, Wellbeing and Care Corporate Group of North Lanarkshire and the Health and Care Partnership in South Lanarkshire established a Physical Activity Task Force and a Physical Activity Working Group respectively whose remits are:

- To identify priorities for action based on local needs and to develop proposals for consideration ultimately by the Community Planning Partnerships in North Lanarkshire and South Lanarkshire.
- To oversee the implementation of projects/initiatives prioritised by the Community Planning Partnership, ensuring that the respective providers monitor and evaluate actions and recommendations detailed in the Joint Health Improvement Plans.^{10, 11}

Physical activity is provided in several health care and non health care settings:

Education Establishments

- Health Promoting Nurseries.
- Health Promoting Schools - Integrated Community Schools.
- Active Schools Programme

Health care

- Coronary Heart Disease Exercise Rehabilitation Programme (200 patients completed programme in first 8 months of 2005, 150 partially completed).

- LEG IT in East Kilbride - GP exercise referral programme for people with type 2 diabetes.

Communities

- Physical Activity Access - 'up for it' and 'junior up for it'.
- Healthy Living Initiatives in Shotts and Douglas and Nethan Valley.
- Walking Support Schemes and Local Authority Ranger-Guided Walk Schemes.
- Streetbase, Alternative Activities for Saturday Night, Football League.
- North Lanarkshire Sport and Recreation Service and South Lanarkshire Leisure provide a range of services.

Older adults

- South Lanarkshire physical activity plan 'LIFE'.
- Clydesdale Walking programme.

Evidence for Interventions

Despite the well-known potential for improved levels of physical activity to affect health, the evidence as to those interventions that can produce improved levels of physical activity is variable. Accordingly, a number of high quality systematic reviews aiming to identify evidenced based effective interventions have been undertaken, most recently by the Health Development Agency (HDA).⁸ These reviews show that there is good evidence for the effectiveness of the following interventions to improve levels of physical activity:

Schools

- A whole school approach to physical activity promotion has been shown to be effective.
- Appropriately designed and delivered PE curricula can enhance physical activity levels.

Health care

- Brief physical activity advice from health care professionals supported by written materials can have a modest short-term effect.

- Referral to an exercise specialist can have longer-term (greater than 8 months) effects.
- Promotion of moderate intensity physical activity (especially walking) has a short-term effect in the sedentary population.

Work place

- The evidence of effectiveness of workplace interventions is inconsistent but walking and cycling to work have been shown to increase actively through well designed interventions.

Communities

- Interventions targeting individuals in community settings produce short and possibly mid to long-term changes.
- Interventions based on theories of behavioural change, that teach behavioural skills and are tailored to individual needs produce long-term changes.
- Interventions that promote non-facility dependent moderate physical activity, particularly walking, produce long-term changes.
- Interventions, which involve regular contact with an exercise specialist, produce long-term changes.

Older adults

- A range of interventions restricted to adults aged 50 years and over produce short and possibly long term changes, no one approach is superior.
- Interventions that use individual based or group based behavioural or cognitive approaches with a combination of group or home based exercise sessions can produce changes in physical activity.
- Interventions that promote moderate intensity, non-endurance activities can change physical activity levels.
- Interventions that provide support and follow-up produce changes in physical activity.

The HDA found a lack of evidence of sufficient quality on the effectiveness of physical activity policy interventions or for

improving physical activity levels through changes in the built environment. However, a US based systematic review found strong evidence for the use of ‘point of decision prompts’ (notices suggesting use of stairs rather than lifts), and creation of enhanced access to places for physical activity.⁹

Recommendations

Evidence of the effectiveness of physical activity interventions across a range of settings and life stage groups have been examined and the following are recommended:

- Ensure proactive, multi-faceted approach, maximising the impact on general levels of physical activity as well as among those at greatest risk or ‘hard to reach’.
- Support whole school approach to promotion of physical activity including appropriately designed P.E. curricula.
- Ensure that front line health care professionals can provide physical activity advice supported by written materials and that they are helped to deliver such advice.
- Promote and expand the use of exercise referral schemes.
- Promote the use of behavioural models such as the stages of change model to teach individuals behavioural skills to improve their levels of physical activity.
- Use established links to implement effective interventions to improve levels of physical activity across the range of groups in the community.
- Promote walking or other non-facility dependent physical activity, particularly in the sedentary population, such as the ‘green gyms’.
- Introduce ‘point of decision prompts’ (use stairs rather than lifts) in public environments.

References

1. Public Health Institute for Scotland CVD Guide - Chapter 3 Physical Activity
www.phis.org.uk/projects/default.asp?p=FBDB.
Last accessed 18/10/05
2. Scottish Office Department of Health Towards a Healthier Scotland Edinburgh: The Scottish Office, 1999.

3. Scottish Executive, Physical Activity Task Force, Let's Make Scotland More Active- A Strategy for Physical Activity, Edinburgh, Scottish Executive 2003.
4. Scottish Executive, Improving Health in Scotland: the Challenge, Edinburgh Scottish Executive 2003.
5. NHS Executive. National Service Framework for coronary heart disease (NHS Executive, 2000.)
<http://www.dh.gov.uk/PolicyAndGuidance/HealthAndSocialCareTopics/CoronaryHeartDisease/fs/en>.
Last accessed 18/10/05
6. Lanarkshire Health Board, Health & Lifestyle Survey, Hamilton, Lanarkshire Health Board, 2001.
7. Scottish Executive. Scottish Health Survey – 2003 Results.
<http://www.scotland.gov.uk/Publications/2005/11/25145024/50251> Last accessed 21 April 2006.
8. The Guide to Community Preventive Services: What Works to Promote Health? Task Force on Community Preventive Services, Edited by Stephanie Zaza, Project Co-Director, Peter A. Briss, Project Co-Director, and Kate W. Harris, Managing Editor, all at the Centres for Disease Control and Prevention, USA Oxford University Press 2005.
9. North Lanarkshire Council Social Work Dept. North Lanarkshire Joint Health Improvement Plan 2003/04 to 2007/08. Motherwell: North Lanarkshire Council, 2004.
10. South Lanarkshire Council Corporate Communications and Public Affairs. Stronger together for health: South Lanarkshire Joint Health Improvement Plan 2003/04-2006/07. Hamilton: South Lanarkshire Council, 2003.
11. Prochaska JD, Di Clemente CC. In search of how people change: application to addictive behaviours. *American Psychologist* 1992; 47 (9): 1102-1114.

MENTAL HEALTH

Mental health is a term used to describe emotional and psychological wellbeing.

For individuals, mental health is how a person thinks, feels, and acts when faced with different situations. It includes how people look at themselves, their lives, and the other people in their lives; evaluate their challenges and problems; explore choices; how they handle stress, relate to other people and make decisions.

The degree of mental health that an individual, group or community experience is qualitative, varies with time and may range across a spectrum from poor to good.

Good mental health includes a positive sense of wellbeing, good self-esteem and a sense of self-worth; a sense of mastery and coherence, the ability to initiate, develop and maintain mutually satisfying relationships and the ability to cope with adversities.¹

Many factors influence mental health and wellbeing - housing, employment, transport, the environment, social and lifestyle factors such as diet, exercise, physical health, family and friends.

As well as specific actions to improve the mental health and wellbeing of Lanarkshire's residents, mental health and wellbeing affects many aspects of factors necessary for wider health improvement. An explicit link between the physical and mental health of people in a number of groups is required: children and young people, families, adults, older adults and the most isolated and marginalised members of our community. Local services, organisations and the wider community all have a part to play in promoting positive mental health and preventing mental ill-health.

Policy

*Towards a Healthier Scotland*² highlighted the role of life circumstances and lifestyles in influencing mental health and prioritised the reduction of inequalities in mental health. *Partnership for Care and Improving Health in Scotland - The Challenge*³ emphasised the importance of promoting positive mental health and measures to prevent mental illness.

The Scottish Executive's National Programme for Improving Mental Health and Wellbeing⁴ Action Plan highlighted six priority areas and four key aims in: infant mental health, the mental health of children and young people, mental health and wellbeing in employment and working life, mental health and wellbeing in later life, community mental health and wellbeing, and mental health promotion and prevention by local services.

The four key aims are:

- Raising awareness and promoting mental health and wellbeing
- Eliminating stigma and discrimination
- Preventing suicide
- Promoting and supporting recovery

The Mental Health (Care and Treatment) (Scotland) Act 2003⁵ placed a new duty on Local Authorities and their partners to develop services for people with mental health care needs that promote wellbeing, social development and recovery.

The national target is to reduce the national suicide rate by 20% by 2013.

Current Mental Health Status

It is estimated that 110,000 adults, one in four of all adults in Lanarkshire will have mental health care needs at some point in their life. 70,500, (16% of all adults) will have experienced a neurotic disorder such as anxiety or depression in the last week⁶ and 5,000 (1%) are living with severe and/or enduring mental health care needs.⁷ Approximately 75% of the Lanarkshire population will know someone personally who has had mental health care needs. An average of 79 Lanarkshire residents per year committed suicide between 1994 and 2004, with suicide being the greatest cause of death in young adult males. Of an estimated 6,700 children aged between 5-15 years, 10% have mental health care needs.⁸ People who have mental health care needs are known to be more likely to be disadvantaged, discriminated against, socially excluded, at increased risk of suicide and

experience higher rates of physical disorder than the general population.

Current Service Provision

Raising awareness and promoting mental health and wellbeing

Awareness-raising seminars, events and training take place regularly: during annual Scottish Mental Health Week; mental health and wellbeing in the workplace seminars, stress awareness workshops, and training on mental health promotion and mental health literacy.

Eliminating Stigma and Discrimination - 'See Me'

A coalition of 20 organisations including NHS Lanarkshire, North Lanarkshire Council, South Lanarkshire Council, voluntary sector organisations, service user and carer groups and Motherwell Football Club have pledged their support to, and are working with the "See Me" national campaign⁹ to eliminate stigma and discrimination in Lanarkshire. A local action plan has been jointly resourced and is being implemented.

Choose Life Suicide Prevention Strategy¹⁰

Partnership steering groups have been formed in response to the national strategy in North and South Lanarkshire have developed local action plans in order to deliver on the priority areas and objectives of the strategy.¹¹ Choose Life Co-ordinators have been appointed by North and South Lanarkshire Councils and Applied Suicide Intervention Skills Training (ASIST) is being delivered throughout Lanarkshire.

Doing Well by People with Depression¹²

Lanarkshire is a development site for the Scottish Executive's Centre for Change and Innovation Programme and is developing a number of initiatives for people with depression, including self-help, training, integrated care pathways, vocational interventions and information on prescribing.

Lanarkshire Mental Health and Wellbeing Information web site¹³

This site has been developed in response to the identified needs of service users, carers, professionals and the general public in order to

improve access, availability and usability of mental health and wellbeing information for people living and working in Lanarkshire.

Health improvement through services

Mental health services and other health and social care services provided by NHS Lanarkshire, North and South Lanarkshire Councils and the voluntary sector play an important role in improving mental health and wellbeing. A framework has been developed to support the implementation of the mental health components of the new General Medical Services (GP) contract¹⁴ including the development of diagnosis initiatives, targeted smoking cessation programmes and a range of activities to promote healthy lifestyle. The resource network model of community mental health services implemented across Lanarkshire facilitates support, care and treatment. However further work is required to respond to people's housing, employment, leisure, culture and wider social needs to improve their mental health.

Evidence for Interventions

Mental health is affected by factors that promote or demote people's sense of wellbeing either individually or at population level.¹⁵ Mental health improvement is an umbrella term that may include action to promote mental health and wellbeing, to prevent mental health problems and to improve quality of life for people with a diagnosis of mental illness.

Mental health improvement takes place at three levels and at each level is relevant to the whole population, individuals at risk, vulnerable groups and people with mental health problems.¹⁶

- Strengthening individuals - by increasing emotional resilience through interventions designed to promote self-esteem, life and coping skills, such as communicating, negotiating, relationship and parenting skills.
- Strengthening communities - by increasing social support, social inclusion and participation, improving community safety, neighbourhood environments, promoting childcare and self-help networks, developing health and social services, which support mental health, improving mental health

within schools and workplaces such as through anti-bullying strategies and mental health strategies.

- Reducing structural barriers to mental health - through initiatives to reduce discrimination and inequalities and to promote access to education, meaningful employment, housing, services and support for those who are vulnerable.

The body of evidence about the effectiveness of mental health improvement interventions is growing.^{17,18} There is strong evidence to support the importance of the role of early experience and the benefits of a positive relationship with at least one significant adult. Deprivation is a risk factor for poor mental health and therefore measures that tackle poverty will reduce factors that demote mental health. Evidence supports interventions that improve life circumstances, for example health promoting schools and Scotland's Health at Work; and strengthening social capital, that focuses on life events such as changes in personal and social circumstances, bereavement, stigma and bullying, and encourage healthier lifestyles such as increasing physical activity.

People with mental health problems can and do recover with effective care and treatment that includes receiving the right help, at the right time, in the right place. As well as this, the key elements that are known to promote recovery are having a sense of hope that things can improve, having a meaningful role, meaningful relationships, community connections and having a sense of control over one's illness and life circumstances. Stigma and discrimination are known to be strong barriers to recovery.¹⁹

There is increasing evidence that social stigma, deprivation, fragmented social networks and poor housing contribute to people's severe and/or enduring mental health care needs as well as having poorer access to physical health care. Evidence from the USA suggests that patients with schizophrenia are less likely to report physical symptoms spontaneously and systematic questioning is effective in revealing physical illness in this group also.²⁰

Recommendations

Implement the four key areas of the National Programme for improving Mental Health and

Well-being of infants, children and young people, those in employment and those in later life, as well as including the most isolated and marginalised members of our community by:

- Continuing to raise awareness of mental health and wellbeing and promote through training, seminars and development of resources. Supporting partners to implement evidence-based practice, including the planning, monitoring and evaluation of mental health improvement initiatives.
- Continuing to reduce stigma and discrimination experienced by people who have mental health care needs, through the Lanarkshire See Me Partnership.
- Continuing to implement the two Lanarkshire Choose Life Suicide Prevention Action Plans, including training, development of resources and awareness raising activities. Contributing to the development of the next phase of the Action Plans, taking account of local needs and the additional Choose Life funding allocated to Local Authorities to hold on behalf of their Community Planning partners for 2006/7 - 2007/8.
- Promoting recovery from mental ill health by further developing services that are designed to promote wellbeing, social development, social inclusion and recovery for people with mental health care needs.

Develop a Lanarkshire Mental Health Improvement Strategy.

Continue to develop and promote the Lanarkshire Mental Health and Wellbeing Website.

Further implement the mental health indicators of the new General Medical Service Contract to improve the physical health, co-ordination of care and medication management of people with mental health care needs.

Support the development of Community Health Partnerships in the promotion of good mental health, the prevention of mental illness and the provision of effective services that promote recovery.

Ensure that work to advance the diversity and equality agenda is incorporated as an integral

part of developments in the promotion of mental health and provision of mental health care.

Take account of developments in the National Programme, such as the evidence into practice agenda, evaluation, keeping people informed and sharing and learning, all key National Programme support activities.

References

1. Scottish Executive Health Department. *Mental Health Improvement 'concepts and definitions': Briefing paper for the National Advisory Group* 2004. <http://www.wellontheweb.org/well/files/conceptsbriefing-final.doc>
2. Scottish Executive Health Department. *Towards A Healthier Scotland*. Edinburgh: Scottish Executive, 1998. <http://www.scotland.gov.uk/library/documents-w7/tahs-00.htm>
3. Scottish Executive Health Department. *Improving Health in Scotland - The Challenge*. Edinburgh: Scottish Executive, 2003. <http://www.scotland.gov.uk/library5/health/ihs-00.asp>
4. The National Programme for Improving Mental Health and Wellbeing. <http://www.scotland.gov.uk/Publications/2003/09/18193/26508>.
5. Scottish Executive. *Mental Health (Care and Treatment) (Scotland) Act 2003*. Edinburgh: 2003 <http://www.scotland.gov.uk/legislation/scotland/acts2003/20030013.htm>.
6. Jenkins R, Lewis G, Bebbington P, Brugha T, Farrell M, Gill B, et al. *The National Psychiatric Morbidity Surveys of Great Britain: initial findings from the household survey*. *Psychological Medicine* 1997 Jul;27(4):775-89.
7. NHS Lanarkshire. *Annual Report of the Director of Public Health 2002*. Hamilton: Lanarkshire NHS Board, 2003.
8. Office for National Statistics. *The health of children and young people*. March 2004.
9. ¹<http://www.seemescotland.org/>
10. Scottish Executive Health Department. 'Choose Life', a National Strategy and Action Plan for Preventing Suicide in Scotland.. Edinburgh: Scottish Executive. 2002.
11. www.chooselife.net
12. Scottish Executive's Centre for Change and Innovation's Doing Well by People with Depression Programme. http://www.cci.scot.nhs.uk/cci/cci_display_np.jsp?pContentID=1864&p_applic=CCC&p_service=Content.show&.
13. elament – elanarkshire mental health resources. <http://www.lanarkshirementalhealth.org.uk/>.
14. nGMS Contract . <http://www.dh.gov.uk/assetRoot/04/08/86/93/04088693.pdf>
15. MacDonald G, O'Hara K. *Ten Elements of Mental Health, Its Promotion and Demotion: Implications for Practice*. London: Society of Health Education and Health Promotion Specialists, 1998.
16. Department of Health. *Making it happen: a guide to delivering mental health promotion*. London: DoH, 2001. www.doh.gov.uk/index.htm.
17. World Health Organisation. *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Geneva: World Health Organisation, 2004.
18. Mentality. *Mental Health Improvement: What Works? A briefing for the Scottish Executive 2003*.
19. <http://www.scottishrecovery.net>.
20. Jeste DV, Gladsjo JA, Lindamer LA, Lacro JP. Medical co-morbidity in schizophrenia. *Schizophrenia Bulletin* 1996; 22:413-27.

ALCOHOL

The World Health Organization (WHO),¹ reporting on the global burden of disease highlighted alcohol-related death and disability as accounting for 4% of the world total and alcohol was ranked as the fifth most detrimental risk factor of 26 examined. In developed countries, alcohol was the third most detrimental factor accounting for 9.2% of the burden of disease.

Problems – medical, social, legal and human², occur following excessive consumption - that is drinking too much, too often. In practice ‘too much, too often’ may simply be getting drunk once and then driving; or ‘too much’ may be repeated and excess consumption over many years leading to illness and/or family break up. Alcohol problems do not affect a single body system and there is no single solution to them.

The cost of the wide-ranging consequences of alcohol misuse is huge. The most recent available estimate (2002/03) for Scotland is £1.13 billion, an increase of 5% on the preceding year, of which £111 million was borne by the NHS.³

Policy

In recognition of the burden of alcohol misuse in Scotland, the Scottish Executive published its *Plan for action on alcohol problems*⁴ which was followed by practical advice in the *Alcohol problems support and treatment services framework*.⁵ The need for action was further emphasised in *Improving Health in Scotland -- The Challenge*⁶ in which the Scottish Executive identified alcohol as one of the risk factors that must be addressed if health in Scotland is to improve. Recent reports have highlighted the need for services for specific groups affected by alcohol misuse and other drugs: people with co-occurring mental health problems⁷, those with alcohol related brain damage⁸, and children who misuse alcohol and/or suffer from the effects of alcohol or drug misuse in others⁹.

These reports emphasise the need for raising awareness, better data gathering, improved information sharing; better problem identification, support and intervention. They are being taken forward by the development and supported implementation of cross agency protocols.

The current national targets for alcohol misuse are to:

- reduce the incidence of males aged 16 years or more exceeding a weekly limit of 21 units to 29% by 2010
- reduce the incidence of females aged 16 years or more exceeding a weekly limit of 14 units to 11% by 2010
- reduce the frequency and level of drinking of 12-15 year olds to 16% by 2010⁴.

Current Alcohol Status

The National Alcohol Information Resource¹⁰ estimate that in Scotland one in five male and almost one in ten female drinkers have been drunk at least once a week in the previous three months. In the UK in 2003 those who drank spent enough to average £822.12p a year for each adult in the UK.

The pattern of alcohol consumption reported in the Lanarkshire 2001 Health Survey¹¹ changed little from the 1996 survey.¹²

Table 1
Proportion who drink weekly

	1996	2001
Men	63%	62%
Women	36%	39%

Table 2
Weekly drinking by wealth

affluent	55%
mid-rank	49%
deprived	48%

Table 3
Drinking nothing in the previous week

	1996	2001
Men	28%	23%
Women	48%	48%

Table 4
Drinkers exceeding the guidelines

	1996	2001
Men	56%	64%
Women	83%	71%

The proportion exceeding guidelines equates to over 40,000 men and 20,000 women in Lanarkshire putting themselves at risk each week.

The Motherwell area had the highest proportion of respondents reporting excess drinking (20%), with Airdrie (13%) and Clydesdale (14%), having the lowest.

The behaviour of young people in relation to their consumption of alcohol and other drugs remains a persistent concern. In the latest Lanarkshire SALSUS survey¹³, 23% of 13 year olds and 44% of 15 year olds claimed to have drunk alcohol in the last week; with 18% of 13 year olds and 37% of 15 year olds claiming to drink alcohol every week. In particular, 8% of 13 year olds and 20% of 15 year olds who had ever drunk alcohol had been drunk on more than ten occasions.

In 2002 there were 215 deaths registered in Lanarkshire where alcohol was a known underlying or contributing cause of death. Between 2000 and 2002 there has been an increase in the number of alcohol-related deaths each year. Males have accounted for the majority of alcohol-related deaths each year and 17% are under 45, 25% over 65 and 58%, 45-64 years old.

Older people are more susceptible to the insidious effects of long-term consumption of alcohol. Admissions of people aged 65 or more with alcohol related problems are twice the number of those under 25 years and when admitted to hospital, they stay longer.

Up to half of patients with mental health problems may also have an alcohol problem and this is more likely among those who report certain mental health problems, especially neurotic problems.⁷

Current Service Provision

Training and Resource Development

Health promotion staff work with Alcohol and Drug Action Team (ADAT) partners to tackle alcohol related problems, raising awareness and supporting education and preventive efforts. Core activities include policy development, training and production of local resources. Training programmes delivered since 2004 include motivational interviewing training, alcohol and older people training, alcohol and young people training and in-service alcohol training for North Lanarkshire Council school staff. Health Promotion staff also co-ordinate the provision of

alcohol related training from Scottish Training on Drugs and Alcohol (STRADA) in accordance with needs identified locally.

Schools

In recent years, Lanarkshire schools have gone beyond a **just say no** message for both drugs and alcohol, in favour of an approach aimed at enhancing healthy living skills and promoting better life choices, utilising schools based information packs such as **'What's the Score'**. Alcohol education is an important component of personal, social and health education programmes, which are core to the Health Promoting Schools agenda.

Workplace

Scotland's Health At Work (SHAW), has been incorporated in the Healthy Working Lives programme and promotes sensible drinking through the promotion of alcohol policies in the workplace.

Communities

NHS Lanarkshire continues to host Street Base, a community safety initiative, aimed at engaging with young people outwith school and providing constructive alternatives to drinking and other antisocial behaviours. ADAT works with community planning partners in relation to licensing.

Lanarkshire Alcohol and Drugs Service (LADS)

LADS is a multidisciplinary NHS service that supports and provides treatment in the community for those with alcohol and drugs problems. The complexity of associated problems that many clients have is one of the reasons why the service is being developed into an integrated service with Lanarkshire's local authorities and the voluntary sector.

Evidence for Interventions

Alcohol problems are frequently multi-factorial so that effective interventions for an individual may come from many sources and complex cases may require multi-disciplinary integrated interventions. However, alcohol problems can also be viewed at a population level amenable to population based interventions.

As in other studies, *Alcohol: no ordinary commodity: research and public policy*¹⁴ showed that overall consumption can be moderated by fiscal and legal policies aimed at reducing availability. It also recommended increased early identification and treatment, while noting that education programmes on their own may increase knowledge and change attitudes but fail to impact on consumption. The World Health Organization produced further evidence in favour of public policy interventions, especially price, in 2004.¹⁵

In 2002 the Scottish Executive published a literature review: the findings¹⁶ contributed to its *Plan for Action on alcohol problems*.⁴ This review also concluded that making alcohol harder to obtain, using price and licensing law, would lead to lower consumption and less alcohol related problems. Stricter enforcement of drink driving legislation was also recommended. At the individual level, health service use of effective screening tools and the availability of detoxification services were advocated. More research on the effectiveness of outpatient and home detoxification in Scotland was recommended.

The Scottish Intercollegiate Guidelines Network (SIGN)¹⁷ in *The management of harmful drinking and alcohol dependence in primary care* showed that when alerted by clinical state or physical signs the opportunistic use of appropriate questionnaires in primary care, A&E, pre- and antenatal settings can be used to identify alcohol dependence and those at risk, and thereby facilitate early treatment and/or specialist referral. They also showed that brief intervention using motivational interviewing techniques in primary care has a significant effect on reducing alcohol consumption among hazardous drinkers and recommend the training of primary care staff in this technique. A similar approach is also effective in antenatal and A&E settings.

For those dependent on alcohol the Health Technology Board for Scotland (HTBS)¹⁸ showed that relapse in alcohol dependence could be prevented by psychosocial interventions but that brief interventions were less effective.

The expert group on alcohol-related brain damage set out the growing need for earlier identification of alcohol-related brain damage to enable earlier intervention and is particularly important in the

UK where cases are often not identified until after 50 years of age and often not until 60-64 compared with 35-54 year olds elsewhere.

School-based programmes are more likely to be successful if they include interactive delivery and have peer, parental or community involvement.¹⁶

Recommendations

Culture change

Raise awareness among the local media as well as individuals of the harm caused by excess alcohol consumption. For all too many, drinking to get drunk is too readily accepted.

Prevention and Education

Encourage the further development of national policies moderating access to alcohol and levels of consumption: fiscal policies, liquor licensing practices, alcohol and driving policies.

Ensure effectiveness of school-based preventative educational programmes by making certain they are interactive and involve peers, parents and community.

Support 'Street Base' which has been successful in engaging young people in alternative activities that do not include alcohol consumption and which also makes communities safer, and extend to other areas in Lanarkshire.

Support the development of other Community Safety/Community Learning Initiatives with detached youth workers.

Train GPs, practice nurses, obstetricians and A&E staff to identify signs and symptoms of alcohol misuse and manage people with needs related to alcohol use using motivational interviewing techniques to ensure that those in need can be referred without delay for the relevant treatment.

Target the workplace, which provides access to young adults with disposable income. Encourage workers who do not consider themselves ill or even at risk to consider how their lifestyle might impact on their health.

Reduce the impact of alcohol-related brain disease by encouraging the development of a test for earlier identification of patients with

this condition, and encourage the routine early use of thiamine in their treatment.

Encourage evaluation and regular audit of all interventions in order to improve services.

Protection and Controls

Support ADAT who are working with Community Safety Partnerships and Licensing Boards in each Local Authority area to support the implementation of the Licensing Principles, aimed particularly at reducing availability and restricting excessive alcohol consumption, especially in the young.

References

1. World Health Organization. *The World Health Report, 2002 – Reducing risks, promoting healthy life*. Geneva: WHO, 2002.
http://www.who.int/whr/2002/en/whr02_en.pdf
2. Catalyst Health Economics Consultants Limited. *Alcohol misuse in Scotland: Trends and costs: Final report*. Prepared for Scottish Executive, October 2001.
http://www.alcoholinformation.isdscotland.org/alcohol_misuse/files/Catalyst_Full.pdf
3. Health Economics Unit, ASD: HD, Scottish Executive. *Cost to society of alcohol misuse in Scotland. An update to 'Alcohol misuse in Scotland Trends and Costs (Scottish Executive, October, 2001)'*. Edinburgh: Scottish Executive, 2004.
<http://www.Scotland.gov.uk/Resource/Doc/35596/0012562.pdf>
4. Scottish Executive. *Plan for Action on alcohol problems*. Edinburgh: Scottish Executive, 2002.
http://www.alcoholinformation.isdscotland.org/alcohol_misuse/Al_MainPage.jsp?pContentID=2054&p_application=CCC&p_service=Content.show&
5. Scottish Executive Health Department. *Alcohol problems support and treatment services framework*. Edinburgh: Scottish Executive Health Department, 2002.
<http://www.scotland.gov.uk/Resource/Doc/46737/0013962.pdf>
6. Scottish Executive. *Improving Health in Scotland: The Challenge*. Edinburgh: Scottish Executive, 2003.
<http://www.scotland.gov.uk/Resource/Doc/47034/0013854.pdf>
7. Joint Working Group of Scottish Advisory Committee on Drug Misuse (SACDM) & Scottish Advisory Committee on Alcohol Misuse (SACAM). *Mind the gaps: meeting the needs of people with co-occurring substance misuse and mental health problems. Report of the Joint Working Group*. Edinburgh: Scottish Executive, 2003.
<http://www.scotland.gov.uk/Resource/Doc/47063/0013752.pdf>
8. MacRae R, Cox S. *Meeting the needs of people with alcohol related brain damage: A literature review on the existing and recommended service provision and models of care*. Stirling: University of Stirling, 2003.
http://www.alcoholinformation.isdscotland.org/alcohol_misuse/files/ARBD_MeetingNeeds.pdf
9. Public Health Institute of Scotland. *Needs assessment report on child and adolescent mental health: Final report, May 2003*. Glasgow: Public Health Institute of Scotland, 2003.
<http://www.phis.org.uk/pdf.pl?file=publications/CAMH1.pdf>
10. NHS National Services Scotland. *Alcohol Statistics Scotland, 2005*. Edinburgh: NHS National Services Scotland, 2005.
http://www.alcoholinformation.isdscotland.org/alcohol_misuse/files/AlcoholStatisticsScotland2005.pdf
11. Livingston M, Gordon D. *Smoking, alcohol, drugs, sexual health: Lanarkshire health survey 2001: Report 3*. NHS Lanarkshire, unpublished report, revised 2005.
12. Health and Lifestyle Working Group. *Lanarkshire health & lifestyle survey 1996 : Preliminary report 3 : Alcohol*. Hamilton: Lanarkshire Health Board, 1996.
13. Currie C, Fairgrieve J, Currie D, Akhtar P. Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) 2002: Smoking, Drinking and Drug Use among 13 and 15 year-olds in Lanarkshire, 2002. Edinburgh: Scottish Executive, 2003.
<http://www.drugmisuse.isdscotland.org/publications/abstracts/salsus/Lanarkshire.pdf>
14. Babor T, Caetano R, Casswell S, et al. *Alcohol: no ordinary commodity: research and public policy*. Oxford: Oxford University Press, 2003
15. World Health Organization. *Global Status Report: Alcohol Policy*. Geneva: World Health Organization, 2004.
http://www.eurocare.org/btg/policyeu/pdfs/2004_whoglobalap.pdf
16. Ludbrook A, Godfrey C, Wyness L, et al. Effective and cost-effective measures to reduce alcohol misuse in Scotland: A literature review. Edinburgh: Scottish Executive, 2002.
<http://www.scotland.gov.uk/health/alcoholproblems/docs/lire.pdf>
17. Scottish Intercollegiate Guidelines Network. *74 : The management of harmful drinking and alcohol dependence in primary care*. Edinburgh: Scottish Intercollegiate Guidelines Network, 2003.
<http://www.sign.ac.uk/pdf/sign74.pdf>
18. Slattery J, Chick J, Cochrane M, et al. *Prevention of relapse in alcohol dependence : Health Technology Assessment Report 3*. Glasgow, Health Technology Board for Scotland, 2003.
<http://www.nhshealthquality.org/nhsqis/files/Health%20Technology%20Assessment%20Report%20Full%20version.pdf>

SEXUAL HEALTH

An individual's sexual health affects their well being as a whole and is an important aspect of some of the most important and lasting relationships that people have.¹ Promoting and protecting sexual health is a priority not just for the health service, but also for other statutory and voluntary organisations as well as the general public. Increasing sexually transmitted infections are a cause for concern throughout the United Kingdom² and infertility is an increasing problem.

Policy

Sexual health has been recognised as a priority by the Scottish Executive and 'Respect and Responsibility - Strategy and Action Plan for Improving Sexual Health' was published in January 2005.³ While policy in the past tended to focus on specific groups such as gay men, the sexual health needs of the wider population are now being addressed, with increasing recognition of the cultural, ethical and spiritual components, which impact on an individual's sexual health.

Lanarkshire's sexual health strategy and action plan¹ describes the importance of both social and medical models of health and highlights the need for strategy to be relevant to individuals, at an interpersonal level, and also for communities and the general public. It recognises the importance of being needs led, person-centred and evidence-based.

The national target for sexual health in *Improving Health in Scotland - The challenge* is 20% reduction in teenage pregnancies among those aged 13-15 years by 2010.⁴

Current Sexual Health Status

While specific surveys⁵ show that many enjoy positive sexual relationships there is no universal measure of positive sexual health and no routine data collection. There has been, however, an alarming increase since the 1990s in sexually transmitted infections across Scotland. In Lanarkshire, the number of people with HIV remains low compared with other parts of Scotland, however, the increase in other sexually transmitted infections suggests that there is more unprotected sex and therefore an increasing risk of contracting HIV and other blood borne viruses in Lanarkshire.

The number of teenage pregnancies is also low and the rate of teenage pregnancy has changed little in the last decade. While some young people may make a positive decision to have a teenage pregnancy, unintended teenage pregnancy for others is often associated with poorer educational attainment and employment opportunities as well as psychological consequences.^{6,7,8} The most common age for starting a family in areas of high deprivation is 12 years younger than those in more affluent areas. It is also worth noting that up to 25% of looked after young girls have a child by the age of 16, and 50% by the age of 18. Fifty per cent of such young people have a child within 18-24 months after leaving care. Higher levels of deprivation are associated with earlier sexual activity, less consistent use of contraception, and an increased risk of contracting sexually transmitted infections.^{9,10}

The most recent local lifestyle survey¹¹ suggests that fewer people are concerned about contracting sexually transmitted infections. In 1996, 16% of men reported that they had changed their sexual lifestyle because of concerns about HIV compared with 9% in the 2001 survey who had done so because of concerns about sexually transmitted infections, including HIV. The same pattern was seen for women: 12% in 1996 reducing to 8% in 2001. This might reflect consolidation of earlier lifestyle changes, however, a decreasing level of condom use suggests that complacency might offer more of an explanation.

The survey also showed that fewer people were protecting themselves from sexually transmitted infections. Of those who were sexually active in 2001, 72% of men and 77% of women rarely or never used a condom, an increase from 69% of men and 73% of women in 1996, though still better than the 78% of men and 80% of women in 1992. There was a reduction in the proportion of younger people – an 'at-risk' group - who *sometimes* use a condom, from 15% in 1996 to 9% in 2001. The proportion who always use a condom has changed little.¹¹

The proportion of respondents not worried about contracting a sexually transmitted disease (including HIV) rose to 77% compared with 71% in 1996. Fewer now worry a little (14%

vs 21%) while those worrying quite a lot or a lot are unchanged (9% vs 8%).¹¹

The majority of those with sexually transmitted infections are between 15 and 30 years with a median age of 24 in females and 26 in males.⁹ However, almost one quarter of females attending genito-urinary medicine clinics are under 20 years of age.² There are also a significant number of over 30s who have come out of long-term relationships and meet new partners. Protection against sexually transmitted infections is important for this group also since their experience of only requiring contraceptive use in previous long-term relationships may discourage them from protecting themselves with new partner(s).

Over the last 20 years there has also been a significant change in the pattern of infections with fewer bacterial infections, partly due to more effective treatment and the emergence of less easily treated viral infections. There has, in particular, been a dramatic increase in the incidence of Chlamydia since 1997 and the increase in diagnosis in females under 16² is of particular concern. This increase is partly due to greater availability of testing and the availability of a more sensitive test. However, increases in gonorrhoea and syphilis among gay men strongly suggest an increase in the frequency of high-risk sexual behaviour in this population.

Current Service Provision

Condom Distribution Schemes

There are 3 condom distribution schemes in Lanarkshire. These schemes aim to help reduce the spread of HIV, other sexually transmitted infections and the number of unintended pregnancies by: increasing the availability and accessibility of condoms for the general public, including key target groups; reducing the barriers of financial cost and embarrassment in obtaining condoms; and, providing information on sexual health matters.

'C' Card is a universal scheme that provides free condoms for anyone living or working in Lanarkshire. The scheme is delivered through 53 'C' Card centres (health centres, GP practices and pharmacies) across Lanarkshire and there is no need to be registered as a patient to access the scheme. Credit sized 'C'

cards and leaflets are displayed in dispensers in 'C' Card centres and clients hand over the card to a receptionist having ticked the type of condoms they want as explained in the leaflet. Condoms are handed over the counter in a discrete package. The 'C' card leaflet also contains information on other local sexual health services including how to access emergency contraception.

Free Condoms - Just Ask is a targeted scheme that entails the provision of free condoms to local workplaces and agencies, particularly those who work with vulnerable or at risk groups. It is accessed by over 50 organisations including Drug and Alcohol services, Social Work services, Mental Health services and Colleges.

Get Rubbered is a scheme for males who have sex with males. Free condoms are made available by post, on registration with PHACE, Scotland, who administer the scheme on behalf of NHS Lanarkshire. The scheme is promoted locally through the 'C' card leaflet and social marketing campaigns.

Training and Education

Sexual Health and Relationships Education in North and South Lanarkshire schools

A two-day training course has been developed to support teachers to deliver sexual health and relationships education (SHRE), in accordance with the 'Sex Education in Scottish Schools' guidelines.^{12,13}

A two-year post of SHRE tutor was created in partnership with the local authorities to support schools develop and deliver their SHRE programmes. Along with teachers, the tutor has developed curricular frameworks for primary and secondary schools.

Further Training and Education

A variety of training and education activities are supported and delivered targeting key groups, such as young people living in supported accommodation and the staff who work with them.

Following on from the blood borne viruses and sexual health training needs assessment, a training plan is being developed to address the

needs of staff in NHS Lanarkshire and partner organisations.

Information and Resource Development

An extensive web site www.lanarkshiresexualhealth.org and variety of leaflets have been developed to ensure everyone living and working in Lanarkshire has easy access to relevant sexual health information.

Young Person Friendly Sexual Health Services

Young person friendly sexual health services were introduced in Lanarkshire in 2002 with three pilot clinics in Airdrie, East Kilbride and Motherwell. Staff provide a range of information about relationships, sexuality, contraception, pregnancy and sexually transmitted infections as well as a limited screening service. Young people can be fast tracked to the next genito-urinary medicine clinic if required for further investigation and treatment. The South Lanarkshire Regeneration Partnership has provided a similar service for the past two years.

Sexual Health Services

Clinical sexual health services play an important role in promoting positive sexual health and preventing spread of sexually transmitted infections.

Universal HIV testing has been introduced in antenatal clinics and antenatal assessment provides an opportunity to discuss sexual health issues with pregnant women.

Sexual health advice and partner notifications are a key component of preventing the spread of sexually transmitted infections at the five genito-urinary medicine clinics which run weekly in Lanarkshire in five different main town locations.

Thirteen family planning clinics provide a service for 25,000 patients each year in Lanarkshire with little or no waiting time. They provide opportunities for sexual health improvement and these are likely to increase as family planning becomes more integrated with sexual health services. They also undertake screening for sexually transmitted infections and partner notification.

Evidence for Interventions

The effectiveness of consistent and correct condom use in preventing the spread of HIV and other sexually transmitted infections is strong. Consistent condom use is associated with an 80% reduction in risk of heterosexual transmission of HIV.¹⁴ However, condoms that are sold commercially may be priced beyond the reach of many potential users and programmes for the provision of condoms, free of charge at a range of public access points is recommended.

The effective use of condoms along with other contraceptive methods have also been shown to be successful in preventing unplanned pregnancy and is particularly important in the under 19 year old population.¹⁵ School based sexual health and relationships education, particularly linked to contraception services, youth development services and community-based education have been shown to help reduce unwanted teenage pregnancies.¹⁶

Many studies have been undertaken reviewing the effect of sexual health education programmes aimed at reducing teenage pregnancy and/or improved sexual health among children and young people and confirm that the provision of comprehensive school based sex and relationships education does not lead to early, or earlier, sexual activity, a particular concern of many parents who assume that knowledge will lead to earlier sexual activity.¹⁷ While much of the evidence on interventions on unintended pregnancy focuses on young people, lessons can be learned for those outwith their teens.

Some encouraging findings have recently emerged from studies that examined the economic and educational factors associated with increased risk of pregnancy or risky sexual behaviour and the benefit of education in such communities.¹⁸ Research is currently being conducted in Glasgow and Edinburgh that may provide information about sex workers in Glasgow and Edinburgh, some of whom are likely to reside in Lanarkshire.

An integrated approach to promoting sexual health and reducing ill health has been recommended.³ The provision of information on sexual health matters which is accessible, readily available, up-to date and evidence

based is a pre-requisite for self-management.³ Such information is not always available. Web sites and CD roms have proved useful with younger age groups but a wide range of methods are required, such as bus and taxi-cab adverts which convey messages to all ages and help to promote wide discussion.

Recommendations

Provide accessible, readily available current information on sexual health using a range of tested methods.

Support the appropriate training of teachers and other professionals working in schools who have an obligation to provide sexual health and relationships education ensuring young people receive appropriate information in a relevant format. Pay particular attention to vulnerable young people such as those who are 'looked after and accommodated' and school non-attenders.

Respond to cultural, ethical and spiritual needs in developing and delivering sexual health education and services, including information on the consequences of sexually transmitted infections.

Develop the skills of parents and carers to discuss sexual health matters.

Develop and implement a training plan to meet the needs of staff in NHS Lanarkshire and partner organisations identified in the BBV and Sexual Health Training Needs Assessment.

Further develop plans for integrating sexual health services comprising sexual health promotion, family planning and genito-urinary medicine, including self-referral in line with national policy.

Promote positive sexual health through the 'Healthy Working Lives' strategy and other workplace initiatives such as employment training schemes and Return to Work schemes.

Continue to provide condoms through distribution schemes at a range of access points, free of charge.

Ensure the provision of sexual health services in the community for those who may be discriminated against including lesbian, gay,

bisexual and transgender people. Ensure sufficient information is available on the sexual health needs and outcomes for those who belong to minority ethnic communities. Take account of the different perspective of faith groups. Provide services which meet the needs of people with a learning or physical disability.

Take account of results of research about sex workers currently accessing services in Lanarkshire.

References

1. Lanarkshire Sexual Health Strategy and Action Plan 2005-2008. NHS Lanarkshire, June 2005.
2. Fenton K, Korovessis C, Johson A, McCadden A, McManus S et al. Sexual behaviour in Britain; reported sexually transmitted infection and prevalent genital Chlamydia trachomatis infection. *Lancet* 2001; 358; 1851-4.
3. Scottish Executive. *Respect and Responsibility: Strategy and Action Plan for Improving Sexual Health*. Edinburgh: Scottish Executive, 2005.
4. Scottish Executive, *Improving Health in Scotland - The Challenge*. Edinburgh: Scottish Executive, 2003.
5. Observer. *Pleasure, what it is and how to find it*. December 2005, 16.
6. Ermisch J, Pevalin D. *Who has a child as a teenage?* ISER working paper 2003-30, Colchester, Institute for Social and Economic Research, University of Essex, 2003.
7. McLeod A. Changing patters of teenage pregnancy: population based study of small areas. *British Medical Journal* 2001; 323:199-203.
8. ISD Scotland. *Teenage Pregnancy in Scotland 1991-2001*. www.isdonline.org; 2003.
9. Biehal N et al. Leaving care in England: a research perspective. *Children and Youth Services Review* 1995; 16:231-54.
10. Corylon J, McGuire C. *Young Parents in Public Care*. London National Children's Bureau, 1997.
11. Lanarkshire NHS Board. *Lanarkshire Health Survey 2001*.
12. Scottish Executive. *The report of the working group on sex education in Scottish Schools*, (McCabe report). Edinburgh: Stationery Office, 2000.
13. SEED. *Circular 2/2001: Standards in Scottish Schools etc Act 2000: Conduct of Sex*. Edinburgh 2001.
14. Healthy Respect. *A review of specialist sexual health services for young people: a short report (All I Want)*, Edinburgh: Healthy Respect, 2003.
15. Swann C, Bowe K, McCormick G, Kosmin M. *Teenage pregnancy and parenthood: a review of reviews*. Evidence briefing. London: Health Development Agency, 2003.

16. MacDowall W, Garrasu M, Nanchahal K, Wellings K. Analysis of NATSAL 2000 data for Scotland: a report to the Health Education Board for Scotland. Edinburgh: Health Education Board for Scotland, 2002.
17. Walker JL. A qualitative study of parents' experiences of providing sexual education for their children: implications for health education. *Health Education Journal* 2001; 60(2): 132-146.
18. UNICEF. A league table of teenage births in rich nations. Innocenti report Card No. 3. Florence, UNICEF Innocenti Research Centre, 2001.

ORAL HEALTH

The oral health of the people of Lanarkshire remains poor and while it is true that some improvements have been seen over recent years across the population, the prevalence of dental disease and oral cancer remains a problem and is now significantly skewed to those from socio-economically deprived areas.

Oral health means more than 'good teeth' - it is integral to general health, is essential for wellbeing and is a determinant of quality of life. Having good oral health is necessary for speaking smiling, kissing, touching, tasting, chewing, and swallowing. Conversely, oral diseases restrict activities and lead to significant time lost in school and in work. In addition, the psychological impact of poor oral health can diminish the quality of life.

Policy

In March 2005 the Scottish Executive launched *An Action Plan for Improving Oral Health and modernising NHS Dental Services in Scotland*.¹ This plan emphasised disease prevention and has far reaching consequences for oral health promotion and the delivery of dental services. It provides a framework for oral health improvement over the next 5-10 years.

The action plan identifies a series of oral health improvement initiatives that require to be achieved. Health Boards are required to ensure they have in place:

By 2006 the core programmes:

- Oral health contact/health promotion with distribution of preventive packs toothbrush and toothpaste and associated literature on diet and oral care to:
 - every new born child
 - every child (parent) in the first year of life
 - all infants aged 1-3 years in areas of deprivation
 - children starting nursery
 - children starting school.
- Daily nursery toothbrushing in all nursery years (3.5-4 yrs).

- Daily toothbrushing in targeted primary schools with the most disease - 25% to 30% of schools in Scotland.
- National Dental Inspection Programme fully implemented to national standards with inspection of all 5 yr olds on starting school.
- The above programmes linked to health promoting programmes such as "Hungry for Success", Health Promoting School and pre-school promotion of healthy foods and drinks.

By 2007 progress towards the development of:

- a pre-school comprehensive care programme for children in most need to include early contact with dental services, on referral by a health visitor or other child care service within the first 3 years of life.
- identification of initially 20 child friendly dental practices, both salaried and non-salaried to receive the above referrals and offer prevention oriented programmes mainly led by dental nurses.

By 2008:

- achievement of all public health actions outlined in the dental action plan.¹

National Targets

Sixty per cent of 5 year olds to have no experience of dental decay by 2010.

Ninety per cent of all adults with some natural teeth by 2010.

Reverse current declining trends in oral cancer 5 year survival in males by 2015.

Current Oral Health Status

The National Dental Inspection Programme² introduced in 2003, provides anonymised aggregated data for local authorities and the NHS to inform service planning and oral health promotion activities. The inspection data places children into 3 risk categories and the number of 5 year olds at risk are shown below:

- A) Children with acute problems (abscess or gross caries) who require an urgent appointment with a dentist.
- B) Children with obvious tooth decay or who are at an increased risk of getting tooth decay require a routine appointment with a dentist.
- C) Children with no obvious oral health problems, who are encouraged to attend the dentist to ensure that they can benefit from ongoing preventive advice and treatment.

Risk A - 727 (12%)

Risk B - 2,810 (47%)

Risk C - 2,434 (41%)

By the time children leave primary school, at 12 years, 66% have suffered dental decay of their adult teeth.

By the time Lanarkshire children are 14, 77% have suffered dental decay.

Clydesdale and East Kilbride have the greatest number with the healthiest teeth, whereas Airdrie and Coatbridge areas have high concentrations of children requiring urgent dental care.

The number of natural teeth that people have is related to age and the Lanarkshire Health and Lifestyle surveys³ showed that only 20% of those aged 55+ have more than 20 teeth compared with 93% of 16-34 year olds. About 47% of those aged 55+ have no teeth but only 1% of 16-34 year olds.

Those from more deprived areas have a higher percentage of respondents with 20 or fewer teeth compared with the more affluent, but the association with deprivation is not strong. There is a stronger association with housing tenure. Nearly half of respondents who rent their accommodation (49%) have 20 or fewer natural teeth compared with 34% of owner-occupiers. Educational qualifications are strongly associated with the number of natural teeth; only 21% of those with a degree have 20 or fewer natural teeth compared with 67% of those without qualifications. In part, this reflects age differences; since younger people are more likely to be graduates and to have most of their teeth.

Current Service Provision

Oral Health Promotion

Nursery toothbrushing programme

All nursery schools have been given the opportunity to participate in the nursery school toothbrushing programme and currently 95% take part, involving over 14,000 children brushing every day.

Since 2002, over 27,000 free toothbrush and toothpaste packs have been distributed to pre-school children. These packs are available for all children aged 8 months and targeted to those from deprived communities until the age of 4.

Primary Care Dental Services

Seventy-three percent of respondents to the Health and Lifestyle survey reported that they were registered with a dentist, with 7% indicating that they did not know if they were registered. Older people were less likely to be registered with a dentist than either younger or middle-aged respondents (58% compared with 80% and 79% respectively). Respondents in more deprived areas were less likely to be registered with a dentist (69% compared with 78% in the most affluent). A higher percentage of owner-occupiers were registered than those in rented accommodation (77% compared with 64%). Educational qualifications were also associated with dental registration 63% of those with a degree compared with 61% without qualifications).

Data collected from general dental practitioner returns show broad agreement with these trends but indicate overall a lower dental registration than respondents indicated. Statistics show that 61% of adults are registered with a general dental practitioner and whilst there will be some patients attending as private patients this is unlikely to account for the difference. The explanation for the differing statistics is more likely to be that the public are unaware of their true registration status.

Nearly 59% of respondents reported having visited a dentist in the last year with 43% in the last six months. Younger (16-34) and middle aged (35-54) females were more likely to have visited their dentist in the last six months than were their male counterparts (55% and 56% compared with 44% and 43% respectively).

Most respondents (79%) indicated that they had no difficulty in visiting the dentist. The most common difficulty was cost (11% of respondents).

Evidence for Interventions

Oral Health Promotion

A Cochrane review⁴ concluded that the use of fluoride toothpaste was effective in reducing dental decay in adults and children. Evidence also shows that the younger children are when they start to brush the more likely they are to have good oral health.⁵

Health education programmes aiming to increase knowledge are successful but their value in changing behaviour was uncertain.⁶ Programmes therefore need to be combined with a structured programme of fluoride toothpaste application.

Dental caries and periodontal disease, the two most important oral diseases can both be effectively prevented and treated, but have to be considered in the context of the strong relationship with socio-economic factors. There is also a relationship between oral health and general health with oral disease and non-communicable chronic disease having many common risk factors. Future activities should be targeted to population groups and priority areas including pre-school children, school children, older adults and vulnerable groups and in communities and in the workplace.

Recommendations

Pre-school and Primary School Children

Continue toothbrushing and diet programmes with pre-school children. Provide training in oral health issues to the wider NHS and to parents/carers and other non-NHS workers who are involved with pre-school children.

Integrate oral health into the activities of School Nurses and Health Promoting Schools with toothbrushing programmes targeted at primary schools and support Local Authorities' dietary initiatives in schools.

Teenage transition

Expand Health Promoting School activities in secondary schools to ensure that oral health is a key component of activities as young people move from childhood to adulthood, are subject

to major external influences and require support to avoid and resist health-damaging behaviours. Support Local Authorities to provide healthy diet in schools

Older adults

Appoint an oral health coordinator to take forward training for health care staff and other care workers who care for older people. Include an oral health component in Single Shared Assessment tools. Provide individual care packages for older adults with special needs.

Vulnerable groups

Meet oral health needs of adults with special needs, minority ethnic groups, homeless people, prisoners and those taking methadone as harm minimisation.

Communities

Create supportive environments conducive to oral health promotion in communities where factors such as food poverty, smoking and access to dental services lead to poor oral health. Develop an Oral Health Information Communication Strategy for communities across Lanarkshire.

Workplace

Provide supportive environments that are conducive to promoting oral health in the workplace. Support Local Authorities and the NHS to provide healthy food including health vending machines in all NHS and Local Authority establishments.

References

1. Scottish Executive, An Action Plan for Improving Oral Health and Modernising NHS Dental Services in Scotland. Edinburgh: Scottish Executive, 2005.
2. Scottish Dental Epidemiological Coordinating Committee 2003. Scotland's National Dental Inspection Programme 2003. Dundee: The Dental Health Services Research Unit, 2003.
3. Lanarkshire Health Board, Health and Lifestyle Surveys, Hamilton 1996, 2001.
4. (Cochrane Review) The Cochrane Library, Issue Chichester, UK: John Wiley & Sons Ltd.
5. Hinds K, Gregory, J. National diet and Nutrition Survey: Children aged 1½ to 4½ years. Volume 2 Report of the Dental Survey. London: HMSO, 1995.
6. Kay E, Locker D. Is dental health education effective: a systematic review of current evidence, Community Dentistry and Oral Epidemiology 1996; 24(4) 231-5

DRUGS

Illegal drug use continues to be a serious public health issue for NHS Lanarkshire. A problem drug user is defined as any person who experiences social, psychological, physical or legal problems related to intoxication and/or regular excessive consumption and/or dependence as a consequence of his/her own use of drugs or chemical substances.¹ The term encompasses varying degrees of drug use from 'one-off' dabbling with drugs to long-term addiction, often over years or even decades. Drug use tends to be a chronic relapsing condition and individuals need support and treatment throughout the time they misuse drugs. The health and social consequences of drug use are profound: ranging from increased risk of skin and blood borne virus infections (HIV, Hepatitis C or B), mental health problems to increased risk of premature death. The family and wider community are also affected: crime, prostitution, family breakdown and homelessness are all common consequences of drug use.

Drug use is associated with socio-economic deprivation: most drug users are unemployed; many are roofless, live in hostels or have been in prison. There is a high prevalence of other health problems among drug users, particularly mental health problems and other addictive behaviours such as alcohol use, gambling and smoking.

Policy

Various policy documents on the impact of drug use have been published over the last ten years.^{2,3,4} More recent reports also take account of the harm to children affected by parental substance use.⁵

The current policy is one of harm minimisation, aiming to reduce the harm drugs cause to society-communities, individuals and their families focussing on the most dangerous drugs, the most damaged communities and those individuals to whom drugs pose the greatest risk.

A multi-faceted approach is recommended which aims to prevent young people using drugs, reduce the prevalence of drugs on the streets and reduce the number of individuals with drug use problems through effective treatment ranging from harm reduction and

substitute prescribing to rehabilitation and integration back into the community. Interventions are required from a wide range of agencies including the police, criminal justice system, education, health and social services. Health and social services are focussed on reducing the demand for drugs by reducing the number of new drug users, by helping those already using drugs to stop and by reducing the health impact of problems associated with drug use. Health related targets have been set as follows:

- Reduce the proportion of under 25's reporting use of illegal drugs in the last month and previous year substantially, and heroin use by 25% by 2005.
- Increase the number of drug users in contact with drug treatment and care services in the community, by at least 10% every year.
- Increase the number of drug users successfully completing treatment.
- Increase the number of drug users moving on to training, education and employment.
- Reduce waiting times for drug treatment and rehabilitation services.
- Reduce drug related deaths by 25% by 2005.

The majority of drug national targets detailed above were for 2005. An additional target was to increase the numbers of drug users entering treatment by 10% by 2008.

Current Drug Use Status

The best estimate of overall prevalence of drug users (opiate and/or benzodiazapine) among individuals aged 15-54 in Lanarkshire is 3806 current drug users or 1.27% of the Lanarkshire population, compared with an estimated prevalence of 1.84% for Scotland.⁶ An estimated 1146 (0.38% of the Lanarkshire population) are assumed to have injected drugs, compared to an estimated 0.67% of the Scottish population.

In the NHS Lanarkshire area, 67% of new clients reported as using drugs in 2004/2005

used heroin, with over 50% reporting a history of injecting.⁶ Of those individuals reported to have injected in the past month, over 60% gave a history of ever sharing needles/syringes and over 80% had a history of ever sharing spoons/water/filters/solutions.

The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)⁷ showed that in Lanarkshire, 8% of 13 year olds and 25% of 15 year olds had used drugs in the month prior to the survey. Prevalence was not significantly different from the reported national prevalence for either age group.

Drug use often leads to hospitalisation: 45 per 100,000 general acute inpatient discharges had a primary or secondary diagnosis of drug use in Lanarkshire in 2004/2005 using the European age standardised rate per 100,000, compared with a Scottish rate of 103 per 100,000. The vast majority of these involved the use of opioid drugs, were emergency rather than planned admissions, and the length of stay in hospital was usually for less than one week. Admissions were most commonly to general medicine, general surgery or communicable diseases specialities. Drug use may also lead to psychiatric admissions: 28 per 100,000 psychiatric inpatient discharges in Lanarkshire in 2002/2003 had a diagnosis of drug use. Opioids were the drugs most often involved in these admissions.

In NHS Lanarkshire the age of new individuals attending services ranged from under 15 years to 40 years and over, with a median age of 28. Around two thirds were male.

There were 27 drug related deaths in Lanarkshire in 2004.⁸ Heroin and diazepam were the drugs most commonly implicated. Deaths were typically men aged 25-34, many had a history of imprisonment and an excess number occurred in the Airdrie area.⁹

The number of hepatitis B infected injecting drug users reported per year in Lanarkshire is low, with 4 reported in 2004. Similarly, HIV diagnoses among injecting drug users is low, with a cumulative total of 20 HIV infected injecting drug users reported between 1985 and 2004. Fourteen are still alive. In contrast, 527 Lanarkshire residents are known to be Hepatitis

C antibody positive with injecting drug use as the probable/possible route of transmission.

Current Service Provision

The Lanarkshire Alcohol and Drug Action Team (ADAT) is responsible for local planning and action on alcohol and drug use. This multi-disciplinary partnership includes representatives from NHS Lanarkshire, both local authorities, police and voluntary services.

While agencies such as the police, tackle the supply of drugs, health and social care aim to reduce the demand for drugs and the health impact of drug taking by:

Prevention

A drug and alcohol education teaching pack "What's the Score?" has been developed and is used in schools.

'Choices for Life' is a national annual multi-agency event sponsored by Strathclyde Police aiming to provide young people with information on local leisure alternatives to drug and alcohol use.

Outreach work such as Street Base with young people aged over 12 takes place at "non traditional" times in the evenings and weekends, offering activities such as music, dancing, and sport which provide an alternative to drug use.

A peer education project 'Landed' works with young people at risk of problems with alcohol and drugs to recruit, train and support such young people to become peer educators who promote positive and healthier lifestyles.

Credit card sized leaflets give details of local drug services for a number of areas within Lanarkshire.

The Last Night Theatre Show has been performed in over 40 High schools across North and South Lanarkshire. This is a participative performance for 4,000 pupils focussing on drugs and alcohol awareness supporting the curriculum in education for 'Personal and Social Development'.

The Choices DVD is primarily aimed at secondary school pupils. It is an interactive resource portraying real life experiences of drug and alcohol users and their families/ friends/ carers.

Training

The delivery of the Scottish Training on Drugs and Alcohol (STRADA) programmes is co-ordinated by Health Promotion staff. The programme addresses universal issues such as training in motivational interviewing to the more specific needs of specialist staff, covering blood borne viruses, working with drug users with mental health problems and understanding drug and alcohol issues in minority ethnic communities. Cocaine addiction has risen in Scotland by fifty percent in the last year and training programmes on cocaine and crack cocaine have been provided recently. More than sixty specialist substance use staff have been trained in Lanarkshire to enable them to work more effectively with clients who are using cocaine and/or crack cocaine.

Training of front line staff (teachers, social workers and health visitors) aims to reduce the harm to children affected by substance using parents ensuring the principles of child protection articulated in 'Getting Our Priorities Right'⁵ are observed.

Harm minimisation

Needle exchange services are provided by specialist clinics, outreach and community pharmacies. Over 300,000 needle/syringes were distributed in Lanarkshire in the year 2004/2005.

'A73' is an outreach project targeting hard to reach drug users in the Clydesdale area and provides needle exchange, harm reduction advice and brief interventions.

Vaccination of drug users and their families against hepatitis B was introduced in 2001. 941 persons have had at least one of the course of three vaccinations, and 76% have completed the course.

Pregnant Drug User Services

Pregnant drug users represent a significant challenge with the need to protect children. These women may often avoid contact with statutory services, be irregular attenders and book late or not at all for maternity beds. Methadone checklists and awareness training for midwives and others has been introduced and a post at Wishaw General has been jointly

funded with Local Authorities to facilitate the necessary interagency working.

Evidence for Interventions

Research indicates that interventions focused on drug use alone have little effect. More success is gained when drugs education is part of a lifestyle approach. Peer Education Programmes have also been shown to be effective.

The Centre for Drug Misuse Research in the University of Glasgow carried out research on the experiences of drug education in schools and recommended the use of participative and interactive methods.

There is substantial evidence that needle/syringe exchange provision has helped to control HIV transmission among injectors⁹ and thus reduce the health impact of drug misuse. Prescribed methadone has also been shown to reduce the frequency of injecting and sharing among recipients.¹⁰

The situation is less clear-cut for hepatitis virus. Forty five percent of injectors who commenced injecting after the introduction of needle/syringe exchanges schemes were found to be hepatitis C virus antibody positive.¹¹ The sharing of other injecting equipment such as spoons, water, and filters has been implicated; however, definitive evidence of effectiveness of the provision of such items is lacking.

The Effective Interventions Unit (SEHD) reviewed the effectiveness of treatment and care services for drug using young people up to the age of 16. There was strong evidence of the effectiveness of behaviour therapy, culturally sensitive counselling and family therapy reducing drug use and improving the psychological wellbeing of young drug users.¹³

Recommendations

Provide drugs education as part of a wider lifestyle programme using peer educators where possible.

Continue to provide needle/syringe exchanges. Evaluate current service and make recommendations to enhance the existing service.

Continue to prescribe methadone as a safer alternative to heroin.

Ensure that staff are trained and supported to provide behavioural therapy, culturally sensitive counselling and family therapy to improve psychological wellbeing of young drug users, motivational enhancement, brief intervention, cognitive behavioural therapy and group psychotherapy for drug users.

References

1. National Waiting Times Information Framework. ISD Scotland, 2003.
2. Scottish Executive, Ministerial Drugs Task Force Report. Edinburgh: HMSO, 1994.
3. UK White Paper. *Tackling Drugs to Build a Better Britain*. Edinburgh: HMSO, 1998.
4. Scottish Executive. *Tackling Drugs in Scotland Action in Partnership*. Edinburgh: Scottish Executive, 1999.
5. Scottish Executive *Getting our Priorities Right: Good Practice Guidance for Working with Children Affected by Substance Misuse*. Edinburgh: Scottish Executive, 2003.
6. Hay G, Gannon M, McKeganey N, Hutchison S et al. *Estimating the National and Local Prevalence of Drug Misuse in Scotland*. Edinburgh: Scottish Executive Report. 2005.
7. Currie C, Fairgrieve J, Akhtar P, Currie D. *Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) National Report: Smoking, Drinking and Drug Use among 13 and 15 year olds in Lanarkshire in 2002*. 2003.
8. McAuley A. Drug Related Deaths in Lanarkshire 2001-2005. www.LanADAT.org.uk.
9. Frischer M, Taylor A, Goldberg D, Elliott L. Direct evaluation of needle and syringe exchange programmes, *Lancet* 1966, 347, 16 March, page 768.
10. Hutchison SJ, Taylor A, Gruer L, Barr C, et al. One-Year Follow-up of opiate injectors treated with oral methadone in a GP-centred programme, *Addiction* 2000, 95 (7): 1055-68.
11. McIntyre PG, Hill DA, Appleyard K, Taylor A et al. Prevalence of antibodies to Hepatitis C virus, HIV and human T-cell leukaemia/lymphoma viruses in injecting drug users in Tayside, Scotland 1993-7, *Epidemiology & Infection*, 126 (1): 97-101, 2001
12. Scottish Executive. Effective Interventions Unit. www.drugmisuse.isdscotland.org/eiu

ULTRAVIOLET RADIATION

Ultraviolet radiation from exposure to sun is a major risk factor for skin cancers including malignant melanoma¹ and the incidence of skin cancer has increased steadily over recent decades in most countries.² Melanoma, especially when diagnosed at an advanced stage, can cause serious morbidity and may be fatal despite treatment.

Risk factors for skin cancer have been defined as: fair skin which burns easily and tans poorly; personal or family history of skin cancer; history of intense or prolonged sun exposure; higher than average number of moles.²

The findings of one systematic review suggested irregular unaccustomed exposure was a more significant factor than age at sunburn³ whilst another concluded that exposure during childhood was a strong determinant of risk but that exposure in adulthood was also significant.⁴

Rates of incidence and mortality show malignant melanoma to be more prevalent amongst higher socio-economic groups particularly women.⁵ This association has been attributed to the affordability and frequency of holidays abroad amongst this group of the population as research has found that, on average, melanoma patients have had longer or more holidays at Mediterranean or similar resorts.⁶

Due to changes in social and economic conditions, however, holidays abroad have become commonplace for people from lower socio-economic groups. Research has suggested people from lower socio-economic groups tend to be less knowledgeable than their more affluent counterparts with regard to how to reduce the risks of skin cancer and are more likely to be diagnosed with advanced stage tumours.^{7,8,9} Further, outdoor workers, who are more at risk of developing squamous cell carcinomas,² tend to be from lower socio economic groups.

There is also increasing evidence for a positive relationship between UVA (e.g. tanning beds) and melanoma.¹⁰ A recent population based case controlled study found use of tanning devices was associated with a 2.5 times increased risk of developing squamous cell skin cancer and a 1.5 times increased risk of developing basal cell skin cancer.¹¹

Policy

The Scottish Executive's White Paper *Towards a Healthier Scotland (1999)*¹² denotes cancers of the skin as amongst those cancers that should be reduced by preventive measures. This is reiterated in the Scottish Intercollegiate Guidelines Network guideline on Cutaneous Melanoma (2003) which states that 'Prevention of the disease, or failing that, minimizing its consequences by early detection, are key goals'.¹⁰

The national target for cancer is a 20% reduction in age standardised mortality rate in people aged under 75 by 2010.¹²

Current Status

As elsewhere in Scotland, skin cancer, including non-malignant melanoma, in Lanarkshire has risen dramatically in recent years from 137 in 1975 to 721 in 2002, representing an increase of 426% over this time period.

Skin cancer affects older people and 51% are over 70 years of age. However, malignant melanoma affects younger people with 54% under 60 years of age. More females are affected than males as has been found elsewhere and two peaks occur in Lanarkshire women, one in 40 year olds and in 70 year olds.

Tanning establishments also pose a risk and the availability and use of sun beds in the commercial sector is on the increase and, most alarmingly, there has been anecdotal media reports of use of sun beds by children.¹³ Local research undertaken in the Wishaw area shows a significant number of primary school children reported using tanning devices either in the home or in commercial premises.¹³

North Lanarkshire Council have withdrawn sun beds from their premises. However South Lanarkshire Council continues to offer tanning facilities.¹⁰

Current Preventive Activities

Tanning facilities

NHS Health Scotland and the Department of Health advise that sun beds should not be used for cosmetic tanning. Local authorities were

encouraged by the Health Education Board for Scotland and the Confederation of Scottish Local Authorities to phase out or remove sun beds from their premises and to introduce Public Entertainment Licenses for premises that offer tanning facilities in order to regulate their use. In 2003, the Chartered Institute of Environmental Health issued a statement asking all councils to remove sun beds and artificial tanning devices from their leisure centres. The Department of Public Health has advised South Lanarkshire Council to re-examine its policy in this respect and has also urged both Councils to consider introducing Public Entertainment Licenses for privately owned tanning facilities. South Lanarkshire Council is now pursuing this approach.

Campaigns

The Sun Awareness Project began in the Hamilton/Blantyre area and aimed to train health professionals in sun awareness and skin cancer prevention. A multi-agency steering group has been developed with Community Planning partners in order to raise the issue of sun awareness and skin cancer prevention in a number of settings and amongst other professionals and members of the community, such as within schools and with environmental health officers. A sun awareness pack, an accompanying leaflet and training on sun awareness and skin cancer prevention is now freely available to NHS staff and Community Planning Partners.

Work is also underway with North Lanarkshire Education Department to develop a sun awareness storybook for local nursery schools.

Evidence for Interventions

Much of the evidence base for skin cancer interventions is drawn from the Sun Smart Campaign in Australia. Australia has the highest incidence and mortality rates for skin cancer in the world, but has witnessed a decrease in the melanoma mortality rates in recent years.^{14,15}

This downturn has been attributed to both primary prevention and early detection initiatives that have resulted in changes in attitudes and behaviour.¹⁶

The Health Development Agency (HDA) highlights three main components of skin cancer prevention in the U.K.

- promotion of sun safe behaviour
- environmental measures and
- early detection²

Promotion of sun safe behaviour

The SIGN guideline for *Cutaneous Melanoma*¹⁰ reviewed the evidence for preventive measures and concluded that there is indirect evidence that either avoiding the sun or using protective measures is likely to reduce the risk of melanoma. The review found the evidence for the use of sunscreens to be inconclusive and therefore recommended that other more physical measures that avoid exposure of the skin to sunlight (e.g. seeking shade, wearing protective clothing) to be more important. This stance was endorsed by the HDA who recommended that, in order to be inclusive, interventions should be of lower cost and more effective physical behaviour changes made before promoting sunscreen use.

The review concluded that public education measures should be adopted to promote primary prevention. The use of non-alarmist brochures and leaflets were advocated and it was suggested that interactive computer based learning programmes may have more impact than those which are non-interactive.

Environmental measures

The HDA² noted that it is important to consider whether the local environment is conducive and supportive of sun protection in terms of providing access to shade. The provision of shade may be natural, through for example trees, or manmade permanent or temporary structures. The HDA recommend that the provision of shade is considered in planning and upgrading arrangements and should be linked to other strategies such as Agenda 21.

Early Detection

The SIGN guideline for *Cutaneous Melanoma*¹⁰ recommends that healthcare staff should be aware of the risk factors for melanoma and that individuals identified as being at higher risk

should be advised appropriately by staff with regard to protection and self examination.

Recommendations

Continue to work with key partners to raise awareness of the risk factors for skin cancer and melanoma, drawing on the evidence-base developed in Australia and elsewhere.

Work with local authorities and other key partners to consider whether the local environment provides appropriate access to shade and sun protection and influence relevant policies accordingly.

Work with South Lanarkshire Council to discourage use of sun beds and, where used, to regulate under Public Entertainment License.

Continue to offer awareness raising sessions for health professionals and community planning partners.

Develop guidance in the form of protocols detailing referral criteria for early detection of skin cancer for General Practitioners.

References

1. Cancer in Scotland: Action For Change. Scottish Executive Health Department, Edinburgh: The Stationary Office, 2001.
2. Health Development Agency. Cancer Prevention: A resource to support local action in delivering the NHS Cancer Plan. London: HAD, 2003.
3. International Agency for Research on Cancer. IARC monographs on the evaluation of carcinogenic risks to humans. Volume 55: solar and ultraviolet radiation. Lyon: International Agency for Research on Cancer, 1992.
4. Elwood, J. M., Jopson, J. Melanoma and sun exposure: an overview of published studies. *International Journal of Cancer*, 1997, 73: 198-203.
5. MacKie RM, Hole DJ. Incidence and thickness of primary tumours and survival of patients with cutaneous malignant melanoma in relation to socioeconomic status. *British Medical Journal*, 1996; 312, 1125-1128.
6. Skinner E. Skin cancer: a brief review of incidence and causes. London: Health Education Authority, 1994.
7. Rainford L, Mason V, Hickman M et al. Health in England 1998: investigating the links between social inequalities and health. London: The Stationary Office, 2000.
8. Geller AC, Miller DR, Lew RA et al) Cutaneous melanoma mortality among the socio-economically disadvantaged in Massachusetts. *American Journal of Public Health*, 1996; 86(4), 538-543.
9. Giles et al. Has mortality from melanoma stopped rising in Australia? Analysis of trends between 1931 and 1994. *British Medical Journal*, 1996; 312, 1121-1125.
10. Scottish Intercollegiate Guidelines Network No.72. Cutaneous Melanoma. Edinburgh: Royal College of Physicians, 2003.
11. Karagas MR, Stannard VA, Mott LA, Slattery MJ, Spencer SK, Weinstock MA. Use of tanning devices and risk of basal and squamous cell skin cancers. *Journal of National Cancer Institute*, 2002; 94 (3), 224-226.
12. Scottish Office Health Department. Towards a Healthier Scotland. Edinburgh: The Stationary Office, 1998.
13. Hamlet N, Kennedy K. Reconnaissance study of sunbed use by Primary School Children in Lanarkshire. Hamilton: Lanarkshire Health Board, NHS Lanarkshire, 2002.
14. Australian Institute of Health and Welfare website www.aihw.gov.au
15. Sinclair C, Dobbinson S, Montague M. Can a skin cancer control programme make a difference? A profile of the Sun Smart programme in Victoria. *Radiation Protection Dosimetry*. Nuclear Technology Publishing, 2000: 91(1-3), 301-302.
16. English D, Armstrong B, Kricger A et al. Sunlight and cancer. *Cancer Causes and Control*, 1997; 8, 271-283