

## Duncan memorial lecture: part 2

### Dr Duncan’s legacy in Liverpool today

Ruth Hussey

Dr William Henry Duncan was, according to a recent conference on public health history, described by some of his contemporaries as a “busybody who collects statistics”—some might say public health has not changed (personal communication). The following review will describe current population and health statistics and reflect on the challenges facing Liverpool (fig 1).

The population of Liverpool, has been on a downward trend for sometime. The question for many of us is ...“has the decline stopped or will it stop soon?”. Who knows for certain?

It is interesting that we have come almost full circle in population size in the 150 years since the appointment of Dr Duncan.

What we do know with a greater degree of certainty is that Liverpool today has a population of about 470 000. The population is also changing. It is becoming older but with less of an increase in older people than predicted elsewhere (fig 2).

The projection would suggest an increase in middle years (because of the baby boom of the sixties and is a sharp contrast with the present middle years group that has been depleted because of migration out of the area). It also forecasts an increase in the very elderly. A decline in births and young people has been forecast for sometime.

Since Duncan’s time there have been many changes to health status and to the welfare

state. One could argue that the public health successes of the past century have contributed to today’s apparent problems. The CMO reported in his 1992 Report that “the average life expectancy at birth has risen from 40 years 150 years ago, to over 70 years and that most of the increase occurred in the first half of this century as a result of more effective control of infectious diseases and improvements in sanitation and nutrition”.<sup>1</sup> So having an older population could be regarded as a successful outcome for the public health movement through the improvement of living conditions of the time.

But what of the health issues today? The high levels of ill health in the city, are shown in figure 3.

I am using deaths as a proxy measure for ill health—as did Duncan. These data tell us that the gap between Liverpool and the rest of the country in deaths for all ages, all causes, has widened leaving Liverpool behind. Death rates are improving but doing so faster in the rest of the country.

The aging population means that promoting independent living and providing care when necessary for older people should be regarded as one of our challenges. However, the pattern of premature deaths confirms that this is not possible for many people.

Figure 4 shows the age standardised average years of life lost before the age of 75 years and,

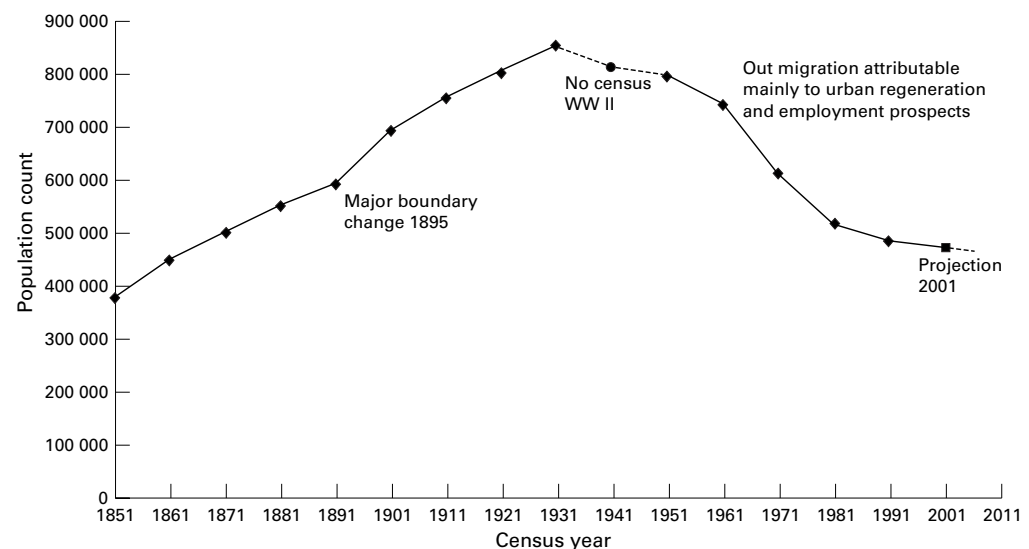


Figure 1 Decennial population of Liverpool, 1851 to 2011. Source: ONS.

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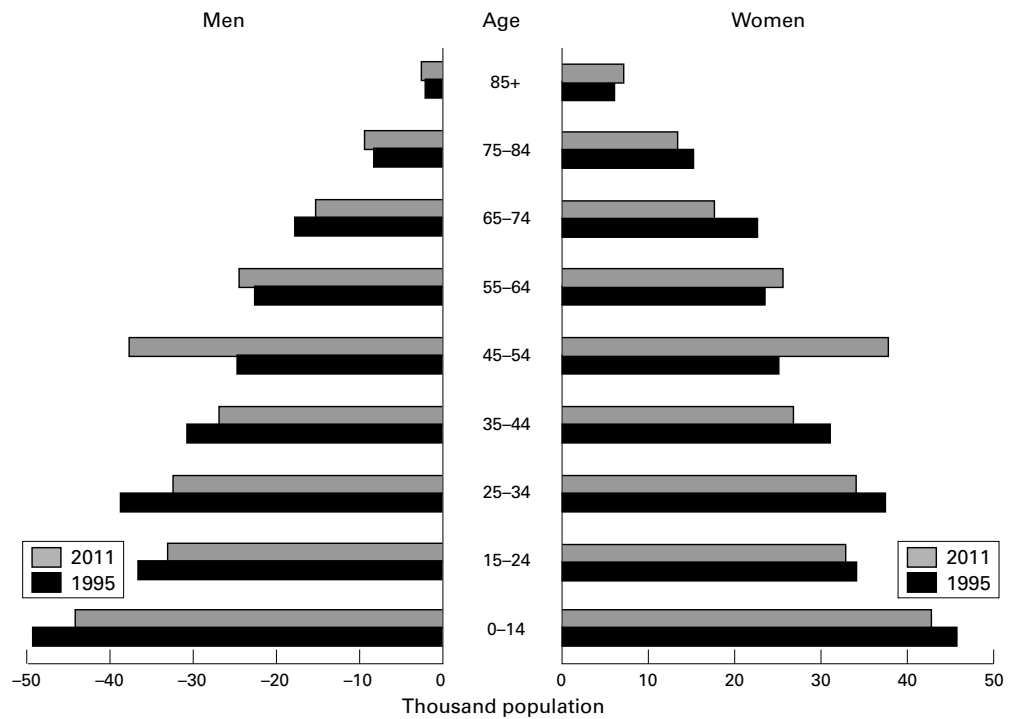


Figure 2 Population pyramids to show age distribution of Liverpool population, 1995 to 2011. Source: ONS.

as with most health statistics for Liverpool, there is a concentration of premature death in the inner city and outer electoral wards reflecting the distribution of poverty in the city.

However, the focus of the health debate has moved to include a reduction in ill health, and even further to the promotion of well being. In

other words the model of health is changing towards a more holistic model of health not illness. Prevention of premature death remains important but so does achieving optimum quality of life.

We should be moving from measures of illness to measures of health—there are meas-

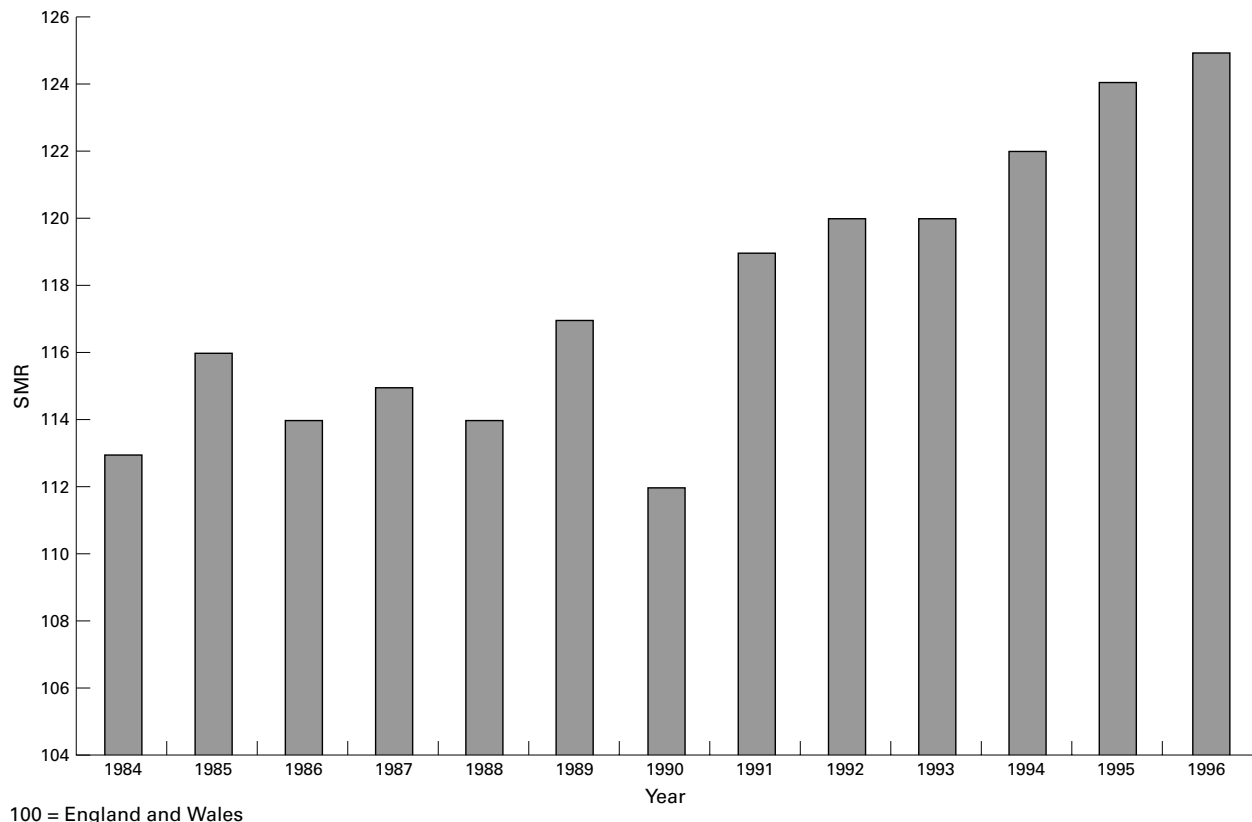


Figure 3 Liverpool, SMR all ages, all causes (male and female). Source: ONS.

ures that can be used to quantify well being both on an individual basis and interestingly on a community basis. This is an emerging area

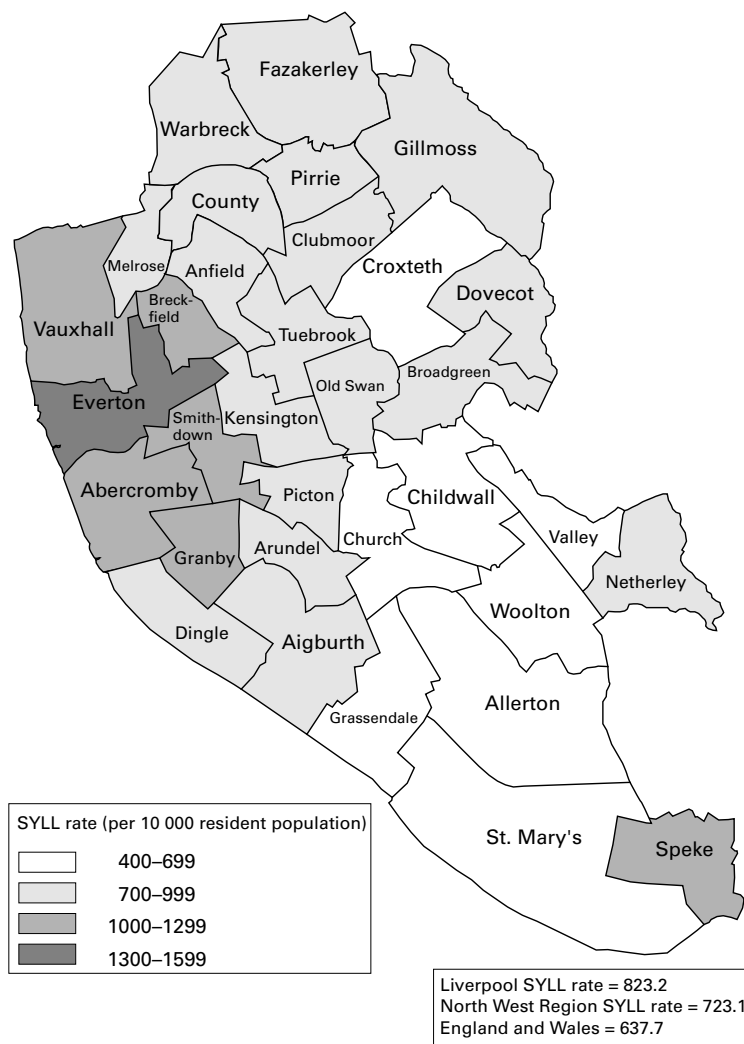


Figure 4 Age standardised average annual years of life lost per 10 000 resident population under 75 years (SYLL rate)—all causes.

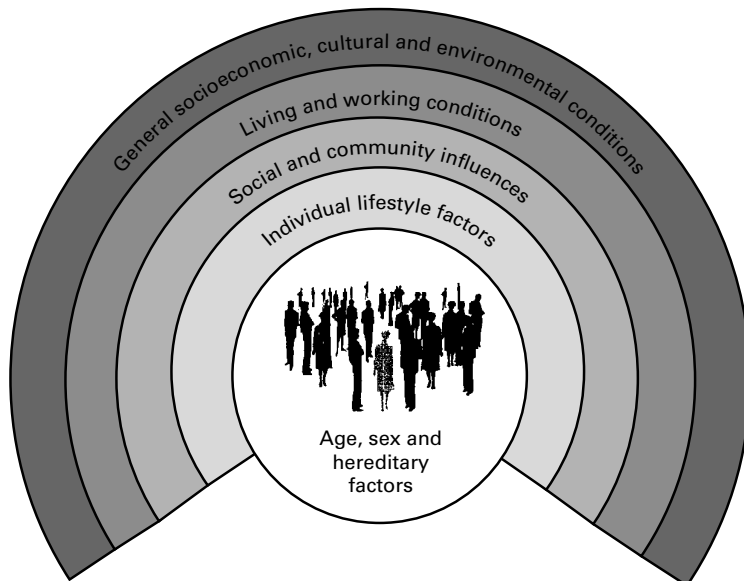


Figure 5 Layers of influence on health.

1	Excellent condition	8895
2	In good condition	3486
3	In average condition	6395
4	In poor condition	18 615
5	In very poor condition	8283
Total number of dwellings		45 674

Figure 6 Housing stock, Liverpool 1997. Source: Liverpool City Council.

and one that could hold the key to successful urban regeneration by assessing whether or not there is a collective sense of well being in a community.

Such a measure is currently being piloted in one part of the city and in other countries by the John Moores University and I hope will help policy makers assess the impact of economic and social regeneration initiatives.

**Causes**

Turning to the causes of this ill health, the model by Dahlgren and Whitehead (fig 5) illustrates the important influences on our lives.<sup>2</sup> Any solutions to the ill health in the city must recognise the influences on health and their interdependent nature.

Of fundamental importance is the wealth of the individual and of society. Wilkinson has suggested that it is not the richest societies that have the best health, but those that have the smallest income differential. He goes on to suggest that the reason for this is that they have communities that are more socially cohesive and are therefore healthier.<sup>3</sup>

Looking at the rest of the model it is worth reflecting on some aspects such as living and working conditions and lifestyle.

**LIVING IN THE CITY**

The housing conditions of today are a great challenge. There are several public agencies involved in developing better housing but data from just one, the City Council, show that there is still a considerable amount of housing that is unfit for use (fig 6).

Category 5 includes structural problems, re-roofing, new windows and internal and external improvement. Problems exist in the quality of private sector housing also. A further problem is that the available housing does not match the changing social circumstances and needs of the population.

In terms of education, measures of attainment such as the percentage of 17-24 year olds receiving mandatory education awards show a large disparity between 24.2% of young people in Woolton (relatively affluent) and 1.9% in Speke (relatively poor).

Similar variation is seen in measures of environmental quality. For example, a fairly basic measure such as percentage of residential properties with occupiers or neighbours complaining about pests, such as rats, mice and cockroaches, shows 2.1% complaining in Woolton (relatively affluent) and 21.8% in Abercromby (relatively poor).

Anti-Poverty Strategy
Community Development Strategy
Economic Development Strategy
Local Partnerships Strategy
City Health Plan
Community Safety Strategy
Housing Strategy
Community Care Strategy
Children's Services Strategy
Equal Opportunities Strategy
Objective 1 Strategy : Driver 5 (Action for People)

Figure 7 City Council Strategies. Source: Liverpool City Council.

#### WORKING IN THE CITY

Unemployment, as measured by the percentage of economically active people who are unemployed and claiming benefits, currently ranges from 36.7% in Granby in the inner city, to 8.5% in Woolton and yet of the 180 000 jobs in the city 90 000 are in the city centre—an area surrounded by the highest levels of unemployment.

A further problem is to ensure that when jobs are created they promote health by having sound health and safety policies and good management practice.

#### LIFESTYLES IN THE CITY

It is well documented that higher rates of certain lifestyles can be found in Liverpool—such as smoking, alcohol misuse or use of illegal substances—and that this difference starts in childhood. It is also reasonably well established that these lifestyle differences go hand in hand with poor socioeconomic circumstances.

The final part of the Dahlgren and Whitehead model relates to hereditary factors. Genetics was the subject of a fascinating Duncan Lecture in 1996—there is no doubt that, as science unfolds the genetic infrastructure of our lives, we will need to understand the balance between genetic influences and social and environmental influences on health.

The challenge will be to retain a sense of proportion about where to invest resources to achieve greatest health benefit.

#### Action

What is the action needed for the situation we face today?

It is clear that we need to tackle the inequality in health between the affluent and the poor, both within the city and between Liverpool and the rest of the country. It is also clear that we need to tackle underlying causes, lifestyles and environments together. In Duncan's time it was said that Liverpool had a visionary Town Council. Fraser writes in his biography of Duncan "...that the borough of Liverpool became a leader and a pioneer in the sphere of

sanitation was partly due to the civic pride and local patriotism of the Town Council and partly to the overwhelming need for an improvement in the circumstances under which such a large proportion of the population lived in the courts and cellars of the industrial quarters of the town".<sup>4</sup>

I would suggest that Liverpool again has not only a council that recognises the importance of creating health as an outcome but also recognises the clear links between health and its approach to economic regeneration. However, there is a need to ensure that environmental issues do not become secondary to economic issues. Both can be improved without compromising the desired outcome.

Affordable housing that meets one's needs remains an elusive goal for thousands of people and is an area of public policy that requires significant investment. Much of the strength of Liverpool's position with regard to its commitment to health improvement comes from its pioneering decision to join the World Health Organisation's Healthy Cities Project 10 years ago. This has supported the development of the City Health Plan for which Liverpool has been applauded on the European and international stage. But underneath that success there are two principles that, though not new, are crucial to maintain and further develop the movement towards improved health.

The WHO describes them as intersectoral collaboration and community participation.

The City Health Plan looks at the major health problems and promotes solutions by tackling the underlying causes of ill health, improving lifestyles and ensuring access to high quality health services, with reducing inequalities at the heart of the plan. The plan was produced by officers and local people. While the process of developing the plan could have been improved, it did set a new standard in furthering the two principles espoused by the WHO.<sup>5</sup> Alongside this plan many other plans have been developed that encompass the action required to address issues that have a bearing on health (fig 7).

The main challenge now, to use management jargon, is implementation. As with any change there are forces for and against change that can be strong in both directions. While it may be good to hear in Europe that Liverpool is leading the way—would one find evidence in every agency of a shared commitment to health improvement, equity and community participation?

The answer is probably no—but...

Although not all attributable by any means to the presence of the City Health Plan, there is a growing body of experience of joint working.

Ranging from the area of urban policy for Merseyside to joint commissioning for health in the joint mental health strategy. There are many other examples. At a local level the Liverpool East Area Partnership has put health firmly on its map by developing its own approach to health improvement.

In the Health Service, the Health Authority has recognised its part and contributes actively to influencing directly and indirectly the health

circumstances of the population. However, it is fair to say that a number of health professionals have retained a sense of scepticism about the initiatives to improve health. Understandably, they want to see evidence of benefit sooner rather than later as they carry the daily pressure of treating the high levels of ill health in the city.

Developing health services in Liverpool is the work that the Health Authority is undertaking in collaboration with other Health Authorities and clinical colleagues to look at the long term needs of the city from a health care perspective, and attempts to match services with needs. Many would argue that the NHS could do with more resources and I would agree. However, as needs change and technology such as new drugs or new equipment become available so will the priorities for funding change. Whatever resources are available choices will have to be made.

Further impetus for joint working will come from a government initiative to establish Health Action Zones (HAZ), which are designed to enable the NHS to work in partnership with local government and other agencies to tackle the root causes of ill health and improve care. It is said that the HAZ will have freedoms to cut through red tape. There is an opportunity to reconsider how primary and secondary care come together to improve health and it is vital that doctors and other health care workers can take part in this process.

It is obvious that there is a growing body of experience of joint working between many sectors. While there will be differences between organisations on the way, Liverpool has a firm base to build on.

### **But what of the other half of the WHO ideal namely, community participation?**

One thing the City Health Plan did was forge new ways of involving the public. The idea of involving people in planning is not new but it is still surprising how little time is devoted to informing communities about the choices open to them. Some organisations in the city are exemplary, others like the idea but want it done overnight. The benefits of investing time in sharing knowledge and information are enormous.

Examples in the NHS are to be found in primary care—such as in Vauxhall and Everton where communities have taken a central role in shaping their own health services and health. I can still recall the meeting in Everton where the obstacles to appointing a GP were being discussed—by the end the community members knew virtually everything that there was to know about the rules regarding the appointment of GPs. Equally, those from the Health Authority had a lot of information about expectations regarding health services in the area. Yet ways were found to overcome the obstacles and now there is a new practice in the area. It is about exchanging one type of knowledge for another—both are vital to creating effective services. The key is sharing information, not only telling people but also listen-

ing and giving a response as to why the idea can or cannot be acted upon. The missing ingredient to a successful communication is often feedback.

One of the residents of Vauxhall describes her experiences of influencing health in her community.

#### VAUXHALL RESIDENT

“I have always been very interested in health in Vauxhall because I have seen so many members of my own family die young with a whole range of diseases, etc. So when a notice came through the door saying that there was going to be some meetings around the area to look at the health of the people in Vauxhall, I thought here is an opportunity to go along and hear what's to be said and to see what contribution I could make.

So I went along to the meeting and I was amazed to see that the Health Authority representatives were actually talking about helping local people to improve their health, but not just to help them, but to actively take note of their concerns and how they could make a contribution to their own health as well, so it wasn't going to be a one-sided thing and I was quite excited by that.

As for the meeting that I went to in the local school, people were standing up and shouting out a whole range of concerns, there was the pollution, because at that time everybody was complaining about their washing being covered in black dust which was coming from the coal dust in the area and also from the demolition that was taking place, which wasn't exactly negative, because they were having marvellous houses built at that time, but nevertheless there was a lot of pollution through the demolition and the coal dust.

Other people complained about what they thought to be the rise in asthma amongst school-children, and we now know from statistics that was perfectly true, that the asthma was increasing in the local school population.

Other concerns were the traffic, the amount of traffic that came through Vauxhall when so few people own cars and they were concerned that they were having to live with other people's pollution.

Other concerns were the numbers of young, unemployed men who were suffering from breakdowns from mental stress and all those kind of associated problems.

There was concerns particularly about women's health. The number of women who just didn't take up cervical screening and didn't take up the information and advice that was offered for women because it simply wasn't offered in a way that they would take it in. It wasn't couched in the right vocabulary I felt ...”

#### VAUXHALL RESIDENT

“... What we wanted was to have the chance, and at that time it was a very radical demand, as a Health Forum, that we had the chance to actually select GPs who we felt were going to empathise with local people. Surprising we had that opportunity so we met and we went through the usual process of thinking about the qualities that we wanted in GPs and we met

and we selected them and interviewed the GPs and we came up with two women doctors who job-shared ...

... It certainly wasn't a smooth process and I think it's healthy that it wasn't. I think the process that we went through as local people working with professionals was one that is automatically, I feel, going to have a conflict, there was going to be a base of conflict there because we had certain ideas and concepts of how we wanted the Health Forum and doctors to work together. The FHSA had different ideas. Sometimes we managed to work through this process, and it was a very positive one, I thought, because we did as a local group have to thrash out some of our disagreements and we finally came to some kind of resolution ...

... I would say that the whole thing was about learning about ourselves and what our capabilities were and learning about the professionals and how often we knew a lot more than the professionals ..."

These are not isolated examples. There are many groups within the city often linked in to the Local Area Partnerships, which were established to support the regeneration of specific parts of the city using European monies. There is much more scope for improving our approach to community involvement both in health but also in health care by creating an environment where it is the norm to involve the public but also by ensuring that it is done in a way that supports and strengthens the democratic process.

As the graduates of the new medical curriculum here go out into practice it is hoped that they will be equipped to work effectively in the community. To complement this approach by health professionals there is a need for the public to accept personal responsibility to improve health and when using the health service.

### What of public health professionals themselves?

1997 has marked the achievements of Dr Duncan and his colleagues but what does the future look like? Public health has been through many transformations.

If we take the broad definition of public health, which is "the science and art of preventing disease, prolonging life and promoting health through the organised efforts of society", this suggests that there is a set of skills that helps to "inform then organise or influence society".

While I have no doubts that those skills are required the debates about who should offer those skills—that is, public health doctors or non-medical public health specialists—added to should Health or Local Authorities employ them, all helps to deflect from the real issue—which is to use the skills to inform change. If we focus on outcomes the territorial debates become relegated to their rightful place. What is clear is that there is room for many different

models not a single prescriptive solution. The Chief Medical Officer's report on the Public Health function should lead to high quality public health capability becoming more freely available by developing skills with a range of professionals and lay people not one specialist group.

### What of the future for Liverpool?

As far as anyone can tell the population may be stabilising, though this is still hotly debated!

The perception of Liverpool does seem to be changing. Sir Brian Wolfson is quoted in the University of Liverpool magazine "The Recorder" in September 1997 as saying... "I think the city's future is looking brighter now than it has been for a long time. The population has shrunk back to less than two thirds of its size but I think that is now a sustainable base. Before you can start growing you've got to stabilise and reach a sustainable level, and maybe it doesn't need to grow. Size isn't only what it is about, its about quality of life. As a regular visitor to the city, that quality of life seems to be improving, when I go back to the city it's more upbeat today than it has been for a long time: there's a buzz about the place".<sup>6</sup>

The Mersey Partnership is doing much to improve the image of Liverpool and Merseyside to the outside world but we must also focus inside Merseyside. More needs to be done to encourage opportunities to make us proud of the area but also to allow us to express our pride.

Duncan's legacy is a city trying to tackle the health problems of a decline in size. He would find commitment and enthusiasm for change in many, but not all organisations. He would find one noticeable difference—residents of the city playing an increasing part in that change and regeneration. The solutions for the next century will entail structural change. In the same way that investments were made in sanitation so will investments be needed in the transport and environmental infrastructure of the city. But the big difference is the active involvement of the people of Liverpool. Increasing this involvement must be a key goal.

I hope that when Liverpool celebrates its 800th anniversary in the year 2007 we will be able to say with meaning on that occasion, Liverpool is a healthy city.

Many people have contributed to the work in Liverpool. Specific thanks in preparing for the lecture go to Grindl Dockery, Julia Taylor, Nigel Bruce, Barbara Blanche and Mike Jones.

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- 6 The Recorder. Liverpool: University of Liverpool, September 1997.