GCPH Symposium

'From early understandings to new perspectives'

Thursday 28th February 2013 – The Teacher Building







From Calton to Iraq and back?

Bruce Whyte GCPH Symposium, Teacher Building, Glasgow, 28 February 2013

In Iraq, life expectancy is 67. Minutes from Glasgow city centre, it's 54

In deprived inner city area of Calton, the chance of surviving to old age is lowest in UK

Audrey Gillan

The Guardian, Saturday 21 January 2006 09.05 GMT

There are ghosts sitting in the Cottage bar in Glasgow's Calton area. The locals call them the missing generation, the men who died before their time. Sometimes the drinkers dip their heads or lift their pints to them. They may not see them but all the drinkers know they are there. Jimmy, Swifty, Davy and many more.

For here in this multi-deprived inner city area, the average life expectancy of a male is just 53.9 years. In Iraq, after 10 years of sanctions, a war and a continuing conflict, suicide bombs and insurgency, the average man has a good chance of making it into his 60s; the life expectancy of a male there is 67.49. In Iran it is 69.96, in North Korea, 71.37 and in the Gaza Strip it is 70.5.

26% of the population say their health is not good and 52% smoke, compared with 25% of Scotland's average population. Alcohol abuse admissions to hospital are way above the national average. Also eating away at Calton's life expectancy are cancer, heart attacks, diabetes, drug overdose and suicide. For here, deprivation bites into almost every home: 44% are on incapacity benefit, 37% live in a workless household and 30% of homes are occupied by a lone parent.

Such startling figures were seized upon by the Conservative leader, David Cameron, at the launch of his party's social justice policy. He attacked the chancellor, saying: "We desperately need new thinking if we're to tackle the problems of multiple deprivation ...

"Gordon Brown says that only the state can guarantee fairness. One look at his record exposes the hollowness of his claim. If life in Calton and Drumchapel is his definition of fairness I suggest he rethinks his guarantee."

Let Glasgow Flourish

Glasgow Centre for Population Health

Hanlon, Walsh and Whyte April 2006

Let Glasgow Flourish

Health Profil

Miniature Gl



0.4



Key questions

How have people used these resources?

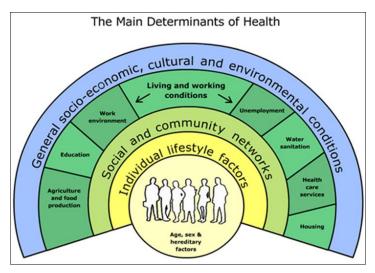
How could they be used?

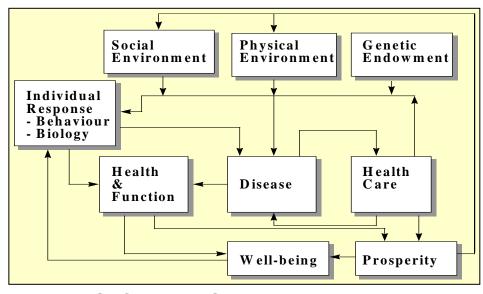
What has been learnt?

.... inequalities are an overarching theme



Underpinning – *models* and data





Dahlgren G, Whitehead M, 1991

Twelve domains of the Glasgow Indicators

Population	Poverty	Economic Participation
Births	Access to a bank account	Economic inactivity
Deaths	Child po∨erty	Employment
Population estimates	Coping financially	Unemployment
Population projections	Depri∨ation	Vacancies
Households	Low income	
	households	
Health	Lifestyle	Community Safety
Disability	Smoking	Overall Crime
Healthy life expectancy	Alcohol	Anti-social behaviour
Life expectancy	Drugs	Violence
	Diet	Unintentional injury
	Physical acti∨ity	Acquisiti∨e crime
	Obesity	

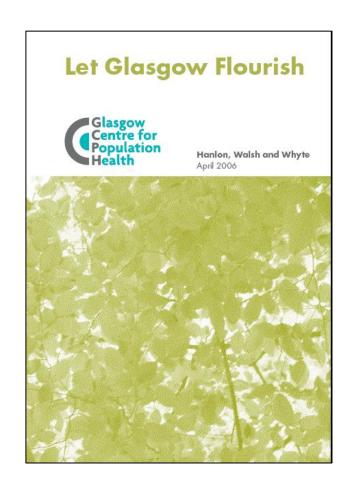
Evans RG, Stoddart GL, 1994

Education	Environment	Transport					
Destination of school	Greenspace	Traffic Volume					
leavers							
Highest educational	Proximity to derelict	Travel to work					
qualification	sites						
Qualifications of work	Housing	Travel to school					
age adults							
School attendance	Air quality	Road Casualties					
Teenagers not in	Fuel poverty	Cycling					
education.		l ,					
employment or							
training							
	Recycling						
Social Capital	Mindset	Cultural Vitality					
Social Participation	Religion	Attendance at cultural					
		events					
Social networks and	Politics	Sports participation					
support							
Reciprocity and trust	Newspaper	Presence					
	readership						
Civic participation	Satisfaction and	Support					
	happiness						
View of local area	Suicide						
	Community						
	involvement						
	Trust						
	National identity						



"Let Glasgow Flourish"

- Comprehensive report on the health & well-being of Glasgow/West of Scotland (April 2006)
- 13 chapters
- 300+ graphs

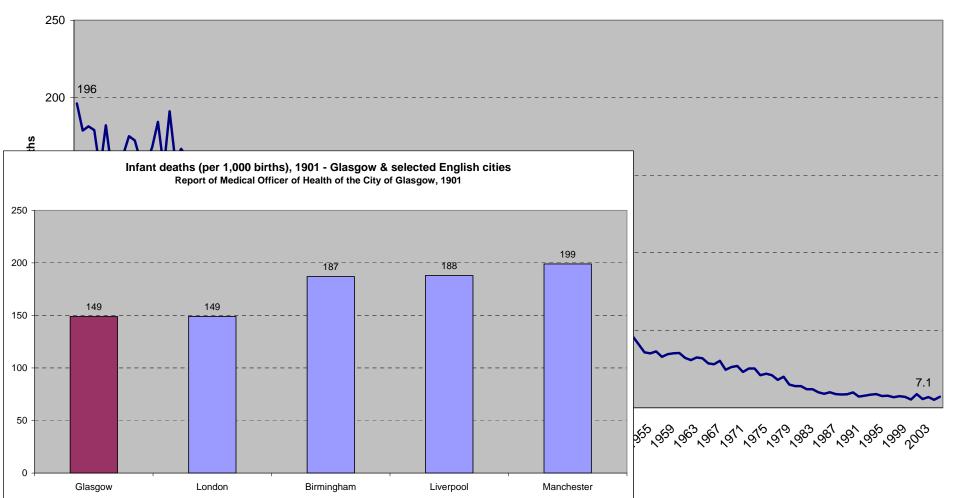


Infant deaths



Infant Deaths (under 1 year) per 1,000 births in Glasgow; 1855 - 2004

Source: Reports of Medical Officer of Health (1898, 1925,1926,1972); Registrar General of Scotland's Annual Reports (1973-2004)





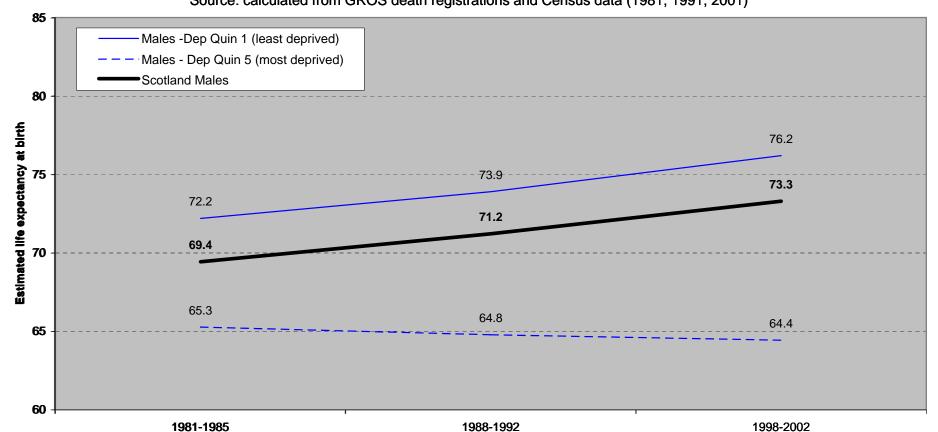
Life expectancy trend by deprivation



Estimates of male life expectancy, least and most deprived Carstairs quintiles, 1981/85 - 1998/2002 (areas fixed to their deprivation quintile in 1981)

Greater Glasgow

Source: calculated from GROS death registrations and Census data (1981, 1991, 2001)





TUESDAY APRIL 18, 2006

Bank's internet service cras

CAMERON SIMPSON and DAVID CLEGG

dale's online service went permanently "unavailable".

er weekend after the Clydes- for two days but had found it on business. He was unable to He said: "A hold screen on to whether the system had The service went offline on the site refers to 'essential been backed or whether any Priday evening preventing cus-maintenance' but a somewhat customers' personal informatomers from logging into their panic-stricken young man I tion or funds were at risk."

CB's engineers could access One customer told The Her- anyone's account details and THOUSANDS of bank cus- ald he had been trying to no-one had any idea when tomers were hit over the East- access the bank's online service anybody might be able to carry give a response to my query as



Deaths set to double in epidemic' of drink abuse

Strategy failing Glasgow but health is improving

HELEN PUTTICK

HEALTH CORRESPONDENT helen puttick@theherald.co.uk

DEATHS linked to drinking

second worst European coun- the answer is alcohol bec try for the disease overall for less a feature of all our liv

women and third worst for would need to have a w

sis deaths in Europe. It is the abuse epidemic be overce

What did we say in conclusion?

"Past and current strategies have not worked/are not working"

"Glasgow needs a new approach"

"Report calls for a so-called 'civic conversation' to find a new approach"

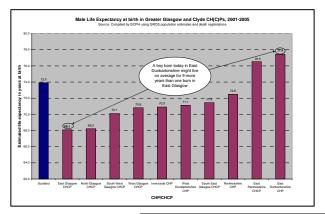


Community Health Profiles

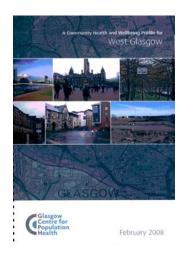




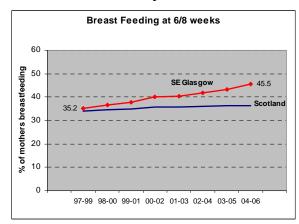
Highlight health and social inequalities



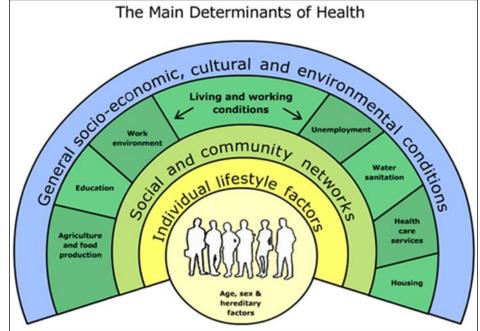
Provide CHP/CHCPs and communities with up-to-date and locally-relevant public health intelligence



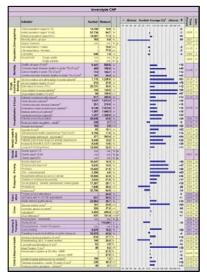
Show trends in key indicators



Developing knowledge and understanding of the complexities around health and health inequalities



Provide local level information to aid priority-setting and the targeting of resource

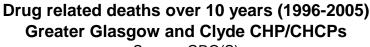


Bishopbriggs North and Kenmure Hillhead								
Indicator	Number	Measure	- Above/Below Scottish Average (%) ¹ - 70-60 -580 -30-20-10 0 +10+20+30+40 +50+60+70	Indicator	Number	Measure		- Above/Below Scottish Average (%) ¹ +70.60 -580 -30:20:10 0 +10+20+30+40 +60+60+70
Child population (aged 0-15)	1,000	17.7 %			894	22.5		+2!
Adult population (aged 16-64) Elderly population (aged 65+)	3,340 1,318	59.0 % 23.3 %	-1	[2,514 564	63.3 14.2		4-13
Minority ethnic groups	212	3.7 %	+8		35	0.8		- 61
Asylum Seekers	n/a	- %		Asylum Seekers	n/a	0.0	% G	<u> </u>
Life expectancy - males	-	77.8 yrs	++		-	69.3	yrs	-6
Life expectancy - females	-	83.2 yrs	++		-	77.1		3
Live births	36	0.6 cr	-4	Live births	62	1.6	cr	+44
Households - Single adults	n/a	% (Households - Single adults	n/a		% G	
Single parents	n/a 216	563.9 sr		Single parents Deaths all ages (5 yrs) ²	n/a 244	007.0	% G	
Deaths all ages (5 yrs) ² Ischaemic heart disease in under 75s (5 yrs) ²	8	21.9 sr			244	997.8 121.2		+27
Cancer in under 75s (5 vrs) ²	42	105.2 sr	-2		46	252.7		+7:
Cerbrovascular disease in under 75s (5 yrs) ²	7	14.7 sr	3		5	26.4		+9
Alcohol related and attributable hospital patients ³	30	394.0 sr	<u> </u>	Alcohol related and attributable hospital patients ³	53	1,343.8	sr	+14
Alcohol related deaths (over 5 years) ²	4	9.4 sr	-6	Alcohol related deaths (over 5 years) ²	11	59.6		+12
Estimated smokers	650	14.1 %	<u> </u>		1,154		%	+2!
Drug related hospital patients ³	1-4	18.3 sr 0.0 cr2	-7	Erda related nosbital ballents	1-4	87.0	sr cr2	+13
Drug related deaths (over 10vrs) ⁴ Patients registered with cancer ³	28	359.9 sr	-10	Didd folded doding toyor folias	24	492.9		-10
Coronary heart disease patients ³	43	513.0 sr	-	ationis registered with carles	43	896.0		+20
Cerbrovascular disease patients ³	14	149.7 sr	-2	COTOTION HOUSE GISCOSO DOLIOTES	12	249.9		+30
Emergency medical admission patients ³	289	4,085.6 sr	3		340	7,625.8		+23
Multiple admission patients ³	57	740.9 sr	-3		68	1,453.1		+19
Unintentional Iniury patients ³	39	531.5 sr	4	CHINECHEO I GALLONIO	49	1,169.8		+16
Road traffic accident casualties - adults ³	11	8.0 cr3	4		9		cr3	43
Assault discharges ³	1-4	0.3 cr3 8.8 sr	-7	7.55ddit discridides	7		cr3	+13
Suicide ² Self assessed health (classified as "Not Good")	413	7.1 %	1 1 3	Suicide ² Self assessed health (classified as "Not Good")	623	13.9		+3
First hospital admission - psychiatric ³	7	119.1 sr	-5		19	443.2		+7:
Incapacity Benefit & SDA Claimants	140	4.4 %		Incapacity Benefit & SDA Claimants	390	16.0		+60
Long-term limiting illness	912	15.8 %	-2		1,122		%	+24
Clients aged 0-15	15 57	1.5 % G		<u> </u>	98 286		% G % G	
Clients aged 16-64 Clients aged 65+	129	9.8 % G			147		% G	
Income deprived'	240	4.3 %	-6	-	1,138		%	+10
'Employment deprived'	183	5.8 %	-5	·	569		%	+8
Workless	180	5.6 %	-6		670		- %	+8
JSA - Unemployment	20	0.6 %	-7	JSA - Unemployment	125		%	+83
Households without access to car/van	312 76	14.4 % 5.9 %	-5		944 395		%	+4*
Children in workless households Social grade E - benefit, unemployed, lowest grade	817	17.8 %	-2				%	+48
Workplaces	83	26.5 cr3	-5		55		cr3	-58
Employees ⁵	1,635	52.2 cr	3		565	23.1	cr	-69
Primary school attendance	-	95.7 %	+	Primary school attendance	-	91.3		-4
S4 Pupils with 5+ GCSE equivalents	69	88.5 %	+ +5		32	52.5		9
Adults without qualifications Serious assault	1,046	24.4 % 4.7 cr4	-2		1,370 9	44.5	% cr4	+34
Domestic abuse incidents	9	4.7 cr4 16.0 cr4	-0	Domestic abuse incidents	52	128.1		+50
Vandalism	94	166.2 cr4 ∝	3		145		cr4 ∞	
Drug Offenders	12	20.7 cr4 ×	-7		47	116.6		+16
Housing type - tenements	n/a	% (Housing type - tenements	n/a		% G	
House prices	-	187,909 £	+4	House prices	-	84,530		
Housing tenure - Owner Occupiers	n/a 79	% (Housing tenure - Owner Occupiers	n/a	40.0	% G	
Overcrowding Travelling to work by foot/bike or public transport	1,472	3.6 % 41.1 %		Overcrowding Travelling to work by foot/bike or public transport	326 1,303		%	+42
Smoking during pregnancy (3 vrs) ²	1,472	5.8 %	-7		59	33.7		+30
Breastfeeding (at 6 - 8 week review)	20	56.5 %	+5	Official administration (Co. 813)	6	12.6		-65
Low birth-weight babies (3 years) ²	1-4	1.0 %		Low birth-weight babies (3 years) ²	1-4	2.6	%	+7
Immunisation uptake at 24 mths - MMR	-	90.8 %	+	Immunisation uptake at 24 mths - MMR	-	88.6		-2
Immunisation uptake at 24 mths - all excl. MMR		96.7 %	<u> </u>		-	98.9		+3
Dental Hospital admissions for children ³	8	0.8 cr3	-2	D STILL TO SET GIANT GOT GOT GOT GOT GOT GOT GOT GOT GOT GO	17		cr3	+50
Teenage Pregnancy - 13-15 years olds (3 yrs)4	9	0.1 cr 2.0 cr3	+2	Toolidado i Todilatios To To todilo oldo to tio	6 18		cr cr3	+20
Road traffic accident casualties - children ³	3	2.0 (03	70 -60 -540 -30-20-10 0 +10+20+30+40 +50+60+70	Road traffic accident casualties - children ³	10	4.0	1010	70-60 -540 -30-20-10 0 +10+20+30+40 +50+60+70

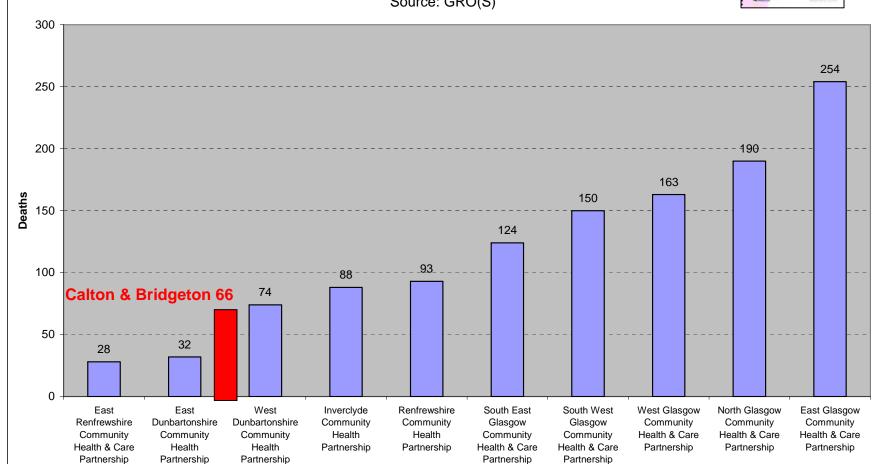


Drug related deaths





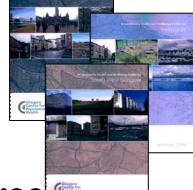
Source: GRO(S)



Greenspace map of East Glasgow Public parks and gardens Private gardens or grounds Amenity greenspace Children's playspace Sports areas Green corridors Natural / semi-natural greenspace Open water Other functional greenspace



Evaluation



- Confirmed that profiles are a valued resource
 - particularly as a source of health intelligence for local
 Areas
 - and to identify neighbourhood priorities
- Widely used as evidence in planning reports, for targeting resource, for prioritisation, etc.
- Format seen as accessible and easily understood.

Health and wellbeing profiling is well established now as a way of providing *health intelligence for communities*



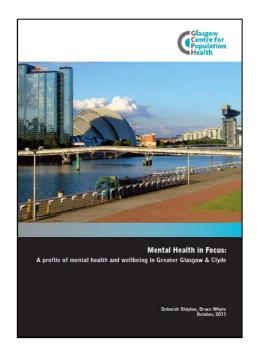
Evaluation

But, we also know there are issues that limit their use:

- Dissemination
- Information overload
- Currency of health intelligence
- Capacity and skills within PH workforce

Some solutions:

- Closer working between producers and users
- Support and dissemination



Miniature Glasgow

Glasgow has a diverse population with many new "Glaswegians."

It has emerged from its industrial past to become a 21st century European City.

If the city of Glasgow was a village of 100 people, it would look something like this....





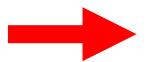


Feedback....



- 'a first class tool in explaining the mix of Glasgow's population in an easily understood manner to a disparate audience.' Service Director
- '...even for those of us who like to think we have a good understanding of some of the issues in the city, it threw up a few surprises.' Policy and Research Manager, Culture and Sport Glasgow
- 'this is an impressive bit of work, very relevant to our current focus on inequalities and the crisis' Director, DG Sanco

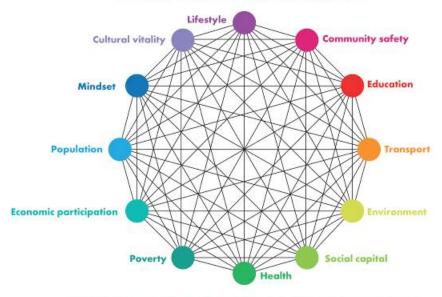
 1 have used it within my lectures on health inequalities and epidemiology with students and it has evaluated very well' Lecturer







Understanding Glasgow



www.understandingglasgow.com



Key Features

A **basket of indicators**, rather than one index, representing a dynamic interlinked view of the city

Focus on **themes** that are clear priorities for the city

Providing a strategic overview

Trends to be monitored over time

Inequality, or difference, within the city to be monitored

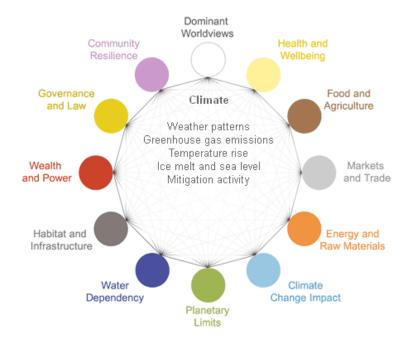
Comparisons to be made to other comparator UK cities and to European cities where possible



news

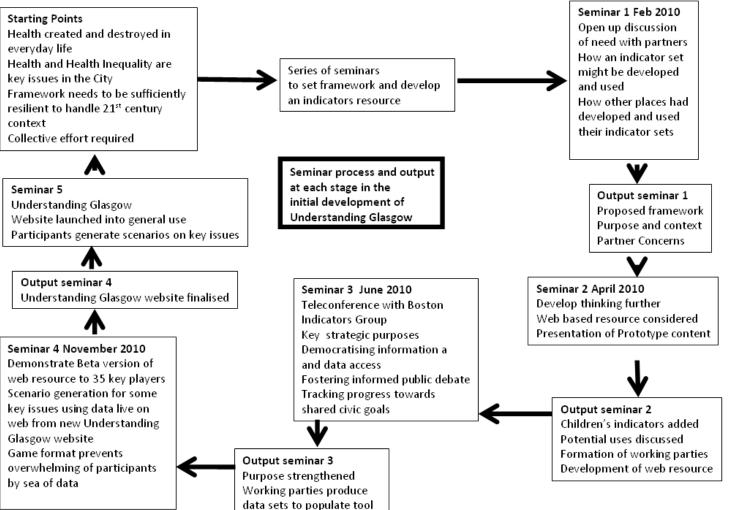
World Model

who





Understanding Glasgow



Website design



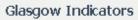












- Population
- Economic participation
- Poverty
- Health
- Social capital
- ► Environment

Transport

- Education
- Community safety
- ▶ Lifestyle
- Cultural vitality
- Mindset



Search site

Search the entire site

2 S

Home

About the project

Resources



Glasgow Indicators

- Population
- Economic participation
- ▶ Poverty
- ▶ Health
- Social capital
- Environment
- Transport
- Education
- ▶ Community safety
- ▶ Lifestyle
- ▶ Cultural vitality
- Mindset

Children's Indicators

- ▶ Health
- Learning
- Lifestyle
- Poverty
- Wellbeing

- tors Children's Poverty
 - Overview
 - n 🕒 Children in poverty
 - Children in workless households
 - Children living in a family with a disabled adult
 - Children in households with financial difficulties
 - Births to vulnerable groups

▶ Targets and strategies

- Resources
- Notes on data

Targets and strategies

Growing up in poverty can have a profound and lasting impact on children's outcomes. Children from disadvantaged backgrounds are more likely to have poorer levels of health, emotional difficulties, poorer educational attainment, difficult family and social relationships, lack of access to material goods, poorer quality/inadequate housing, and lack of access to leisure and out-of-school activities.

Glasgow is committed to doing all it can to address child poverty and reduce the inequalities that result from poverty and have included a commitment to reducing the proportion of children in poverty in its **Single**Outcome Agreement.

NHS Greater Glasgow and Clyde has established a Financial Inclusion Group and developed an action plan and has piloted a number of financial inclusion initiatives, one of which is the **Healthier**, **Wealthier Children Project**.

Scottish Government

The Scottish Government's **Child Poverty Strategy** sets out the measures being taken to tackle child poverty in Scotland. The main aims are to (a) reduce income poverty and material deprivation by maximising household resources and (b) improving children's wellbeing and life chances by tackling the underlying social and economic determinants of poverty and improving the circumstances in which children grow up. The three key policy frameworks to deliver these outcomes are:

Achieving Our Potential: A Framework to Tackle Poverty and Income Inequality in Scotland

The Early Years Framework



So what have we learnt...

- Local health intelligence, which is well-presented, relevant and from credible sources, will be used
- In an increasingly diverse digital age the methods we use to present, discuss and influence with our outputs need to continually evolve
- We need to be aware of:- potential for information overload, capacity issues, tailoring/summarising our findings for users with users

in relation to Understanding Glasgow (the Glasgow Indicators project):

- ...has been described as an initiative for 'democratising information' and 'a one-stop shop' for information
- The collaborative process of creating the UG indicators has facilitated their adoption and use

BUT

- The Glasgow Indicators project is still at an early stage and the challenge now is:
 - to develop this resource
 - to embed use of the Glasgow Indicators as a focus for engagement and debate

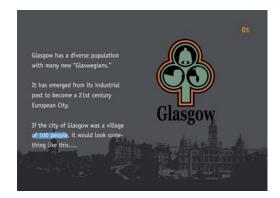


Films for Understanding Glasgow

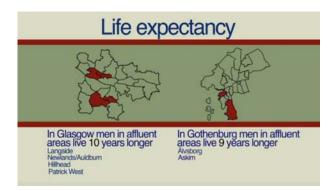
Views of Health in Glasgow - Video



Miniature Glasgow



Miniature Cities - Glasgow and Gothenburg



Glasgow Voices: A *series* of short films, through which we hope to reflect the voices, views and lived experiences of Glaswegians

Coming soon: Working men, Sense of Place and Young mothers





GCPH Symposium

'From early understandings to new perspectives'

Thursday 28th February 2013 – The Teacher Building







Seeking to understand 'excess' mortality in Glasgow and West Central Scotland

David Walsh



GCPH 2004 - 2013

(er, and beyond...)



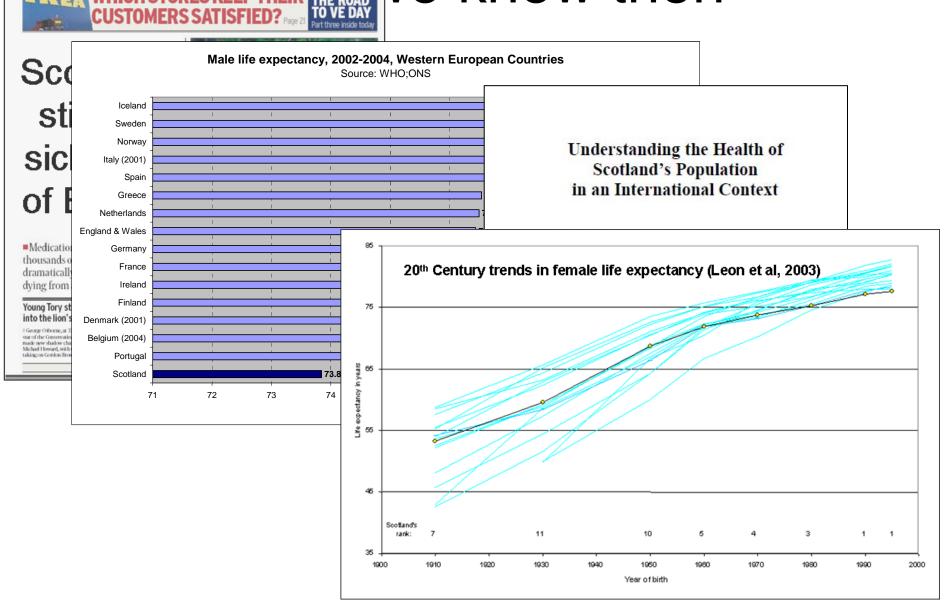
Telling a story...

- What we knew then
 - Including what we thought we knew
- What we did
- What we know now
- What we still need to know

(Answer to all of the above: "a lot")

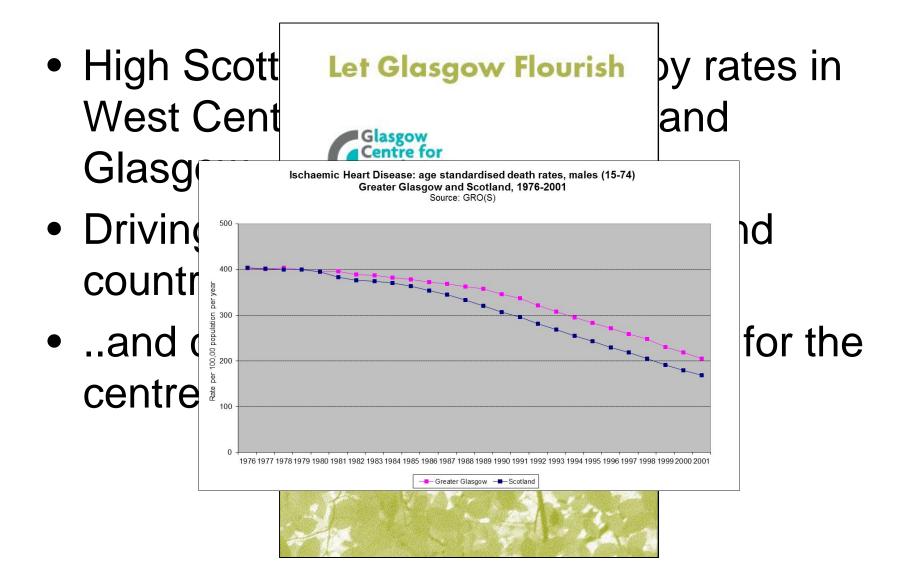


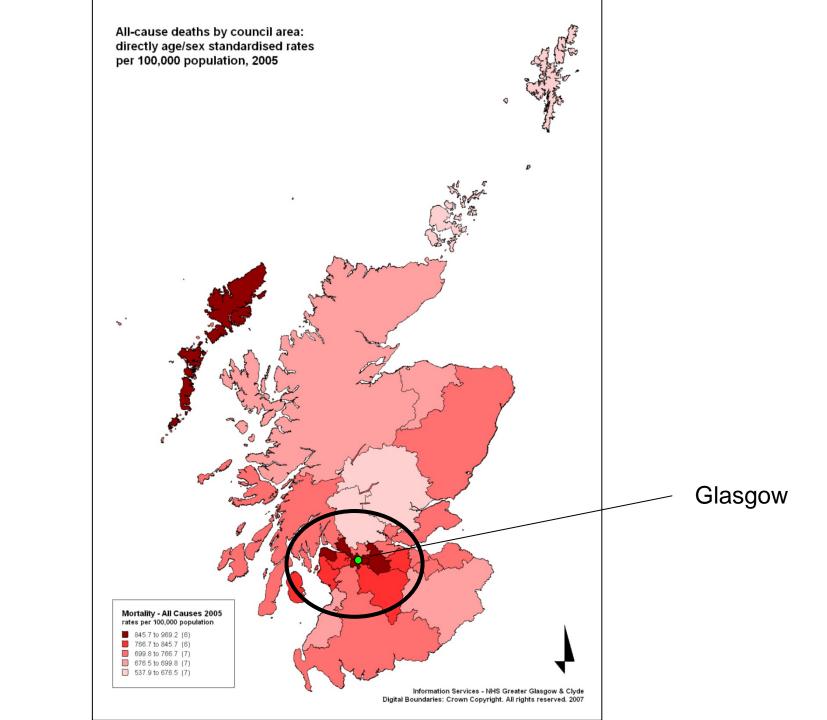
ve knew then





What we knew then







What we thought we knew then

 Traditional explanation for Scotland's high mortality: socio-economic deprivation (underpinned by effects of post-industrial decline)



..but some complications

Scottish Council Foundation

independent thinking

The Scottish Effect?

Healthy Public Policy Network

Occasional Paper

November 1998

Journal of Public Health

Vol. 27, No. 2, pp. 199–204 Advance Access Publication 17 March 2005

Why is mortality higher in Scotland than in England and Wales? Decreasing influence of socioeconomic deprivation between 1981 and 2001 supports the existence of a 'Scottish Effect'

P. Hanlon, R. S. Lawder, D. Buchanan, A. Redpath, D. Walsh, R. Wood, M. Bain, D. H. Brewster and J. Chalmers

Abstract

Objectives To determine the degree to which changing patterns of deprivation in Scotland and the rest of Great Britain between 1981 and 2001 explain Scotland's higher mortality rates over that period.

Dosign Cross-sectional analyses using population and mortality data from around the 1981, 1991 and 2001 censuses. Setting Great Britain (GB).

Participants Populations of Great Britain enumerated in the 1981, 1991 and 2001 censuses.

Main outcome measures Carstairs deprivation scores derived for wards (England and Wales) and postcode sectors (Scotland). Mortality rates adjusted for age, sex and deprivation decile.

Results Between 1981 and 2001 Scotland became less deprived relative to the rest of Great Britain. Age and sex standardized all-cause mortality rates decreased by approximately 25% across Great Britain, including Scotland but mortality rates were on average 12% higher in Scotland in 1981 rising to 15% higher in 2001. While over 60% of the excess mortality in 1981 could be explained by differences in deprivation profile, less than half the excess could be explained in 1991 and 2001. After adjusting for age, sex and deprivation, excess mortality in Scotland rose from 4.7% (95% Cl- 3.9% to 5.4%) in 1981 to 7.9%. (95% Cl: 7.2% to 8.7%) in 1991 and 8.2% (95% Cl: 7.4% to 9.0%) in 2001. All deprivation deciles showed excess indicating that populations in Scotland living in areas of comparable deprivaon to populations in the rest of Great Britain always had higher mortality rates. By 2001 the largest excesses were found in the most deprived areas in Scotland with a 17% higher mortality rate in the most deprived decile compared to similarly deprived areas in England and Wales. Excess mortality in Scotland has increased most among males aged <65 years.

Conclusions Scotland's relative mortality disadvantage compared to the rest of Great Britain, after allowing for deprivation, is worsening. By 1991 measures of deprivation no longer explained most of the excess mortality in Scotland and the unexplained excess thas persisted during the 1990s. More research is required to understand what is causing this 'Scottish affect.'

Keywords: deprivation, inequalities in health, mortality

Introduction

The stimulus for this study was the observation that standardized mortality ratios for Scotland relative to England and Wales had risen during the 1980s and that the rise was particularly large for middle-aged men.1 Since life expectancy was improving in both populations, this widening gap represented a relative rather than absolute decline for the Scottish population but its size and speed of change suggested the need for further investigation. Historically, Scotland's poorer health has been attributed to higher levels of deprivation2 but more recent analysis3 appeared to show that, by the early 1990s, deprivation was accounting for less of Scotland's excess mortality, a phenomenon that was called the 'Scottish Effect'.4 The purpose of this study is, therefore, to determine the degree to which changing patterns of deprivation in Scotland and the rest of Great Britain between 1981 and 2001 explain Scotland's higher mortality rates over this period.

³University of Glaugow, Division of Community Based Sciences, Lilyhank Gardens, Glaugow, G12 BRZ ³Information Services, NHS National Services Scotland, Gyle Square, 1 South

*Histornation Servicia, NHS National Servicia Scotland, Gyle Square, 1: Gyle Creacent, Edinburgh, EH12 9EB
*NHS Health Scotland, Cillion House, Cillion Place, Glaugow, G3 7LS

Phil Hanlon, Professor of Public Health Richard S Lawder, Statisticien

Duncan Buchanan, ² Principal Statistician Adam Redpoth, ² Programme Principal

Rachael Wood, ² Specialist Registrar in Public Health Medicine

Marion Bain, 2 Medical Director

David H Brewster, 2 Director, Scottish Cancer Registry

James Chalmers,2 Consultant in Public Health Medicine

Bavid Walsh, Public Health Information Manager
Address correspondence to P. Hanion, University of Glasgow, Division of

Addrau correspondence to P. Hanion, University of Glasgow, Division o Community Based Sciences, Lilybank Gardens, Glasgow, G12 RRZ E-mail: phil.bankon@idinmed.gla.ac.uk

© The Author 2005, Published by Oxford University Press on behalf of Faculty of Public Health. All rights reserved.



..but some complications

Understanding the Health of Scotland's Population in an International Context

A review of current approaches, knowledge and recommendations for new research directions

> David A. Leon Susan Morton Suzanne Cannegieter Martin McKee

PART I

A report by the London School of Hygiene & Tropical Medicine

Commissioned and funded by the Public Health Institute of Scotland

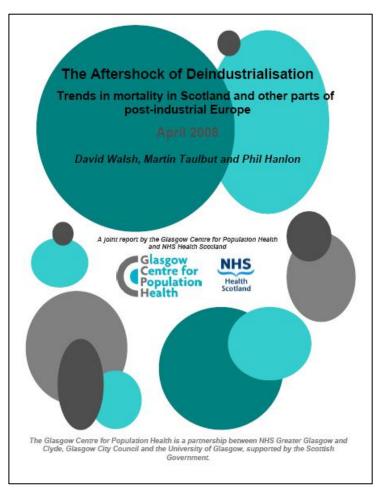


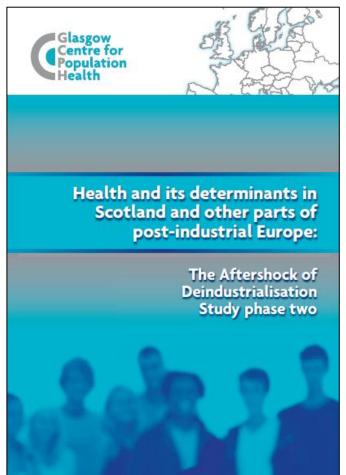
ISBN: 1-904196-11-X

- National comparisons problematic?
- Suggested more meaningful comparisons could be made with other postindustrial areas of Europe



What we did









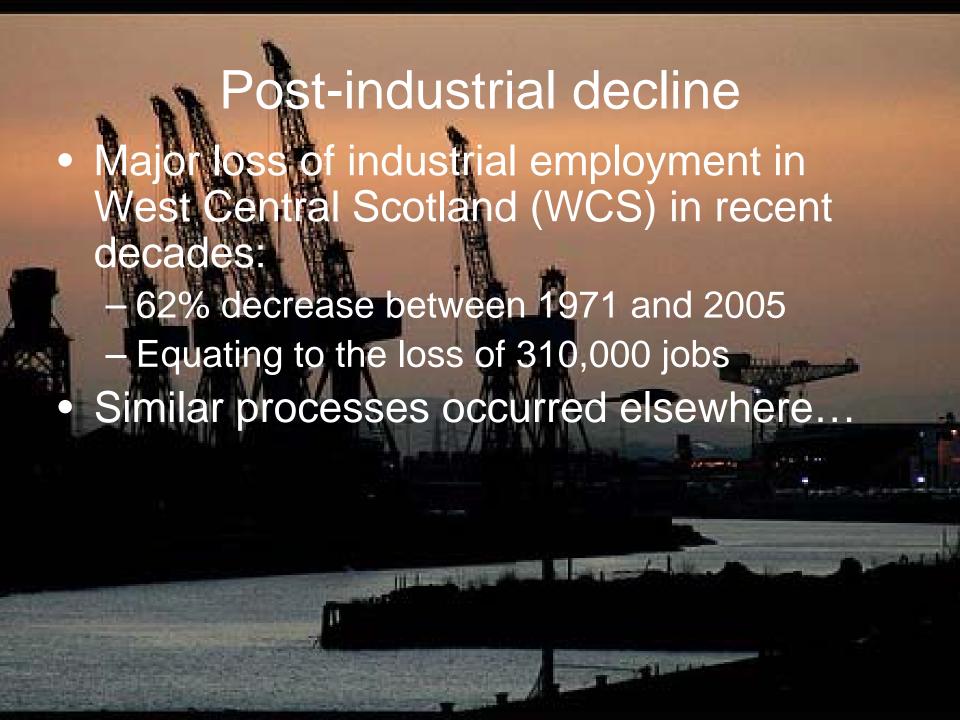
What we did

First phase:

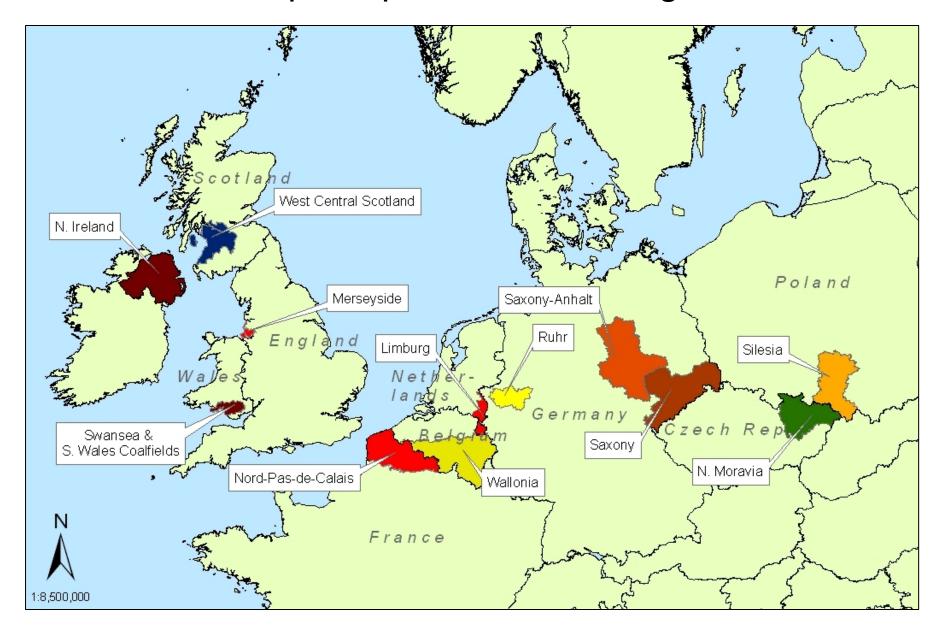
- Quantified West Central Scotland's levels of deindustrialisation
- Identified comparably deindustrialised regions across eastern and western Europe
- Undertook very detailed analyses of mortality experiences across all regions

Second phase:

- Sought to understand findings through collection and analyses of health determinant data
- Compared economic, political, historical contexts in key regions



European post-industrial regions





Nord-Pas-de-Calais





43% decrease in industrial employment between 1970 and 2005

Represents loss of >300,000 industrial jobs





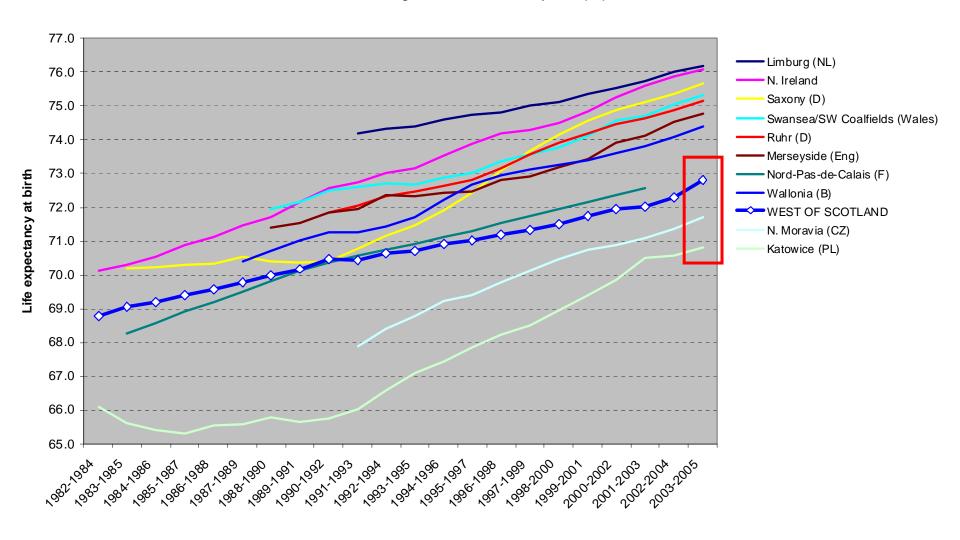




What we know now

Male life expectancy at birth, West of Scotland and ten post-industrial regions

Calculated from original source mortality and population data

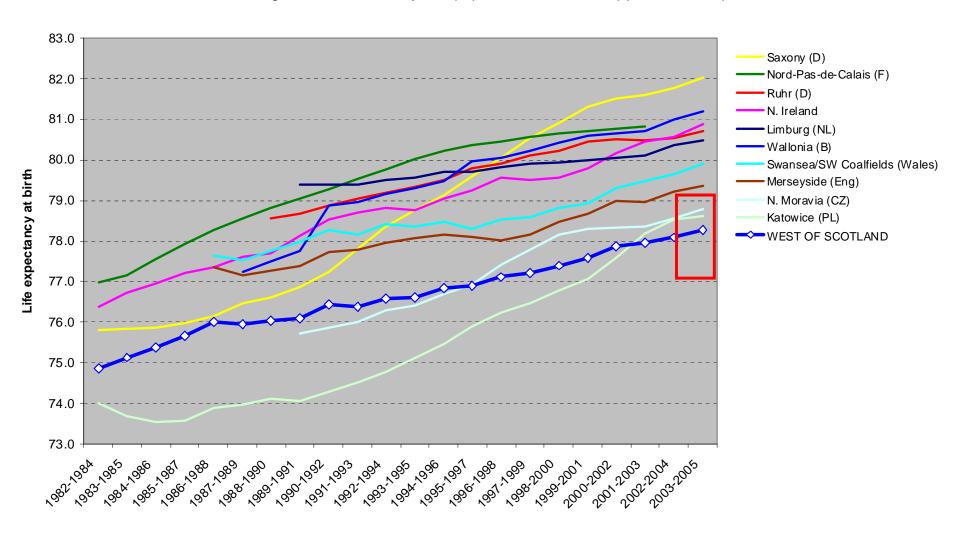




What we know now

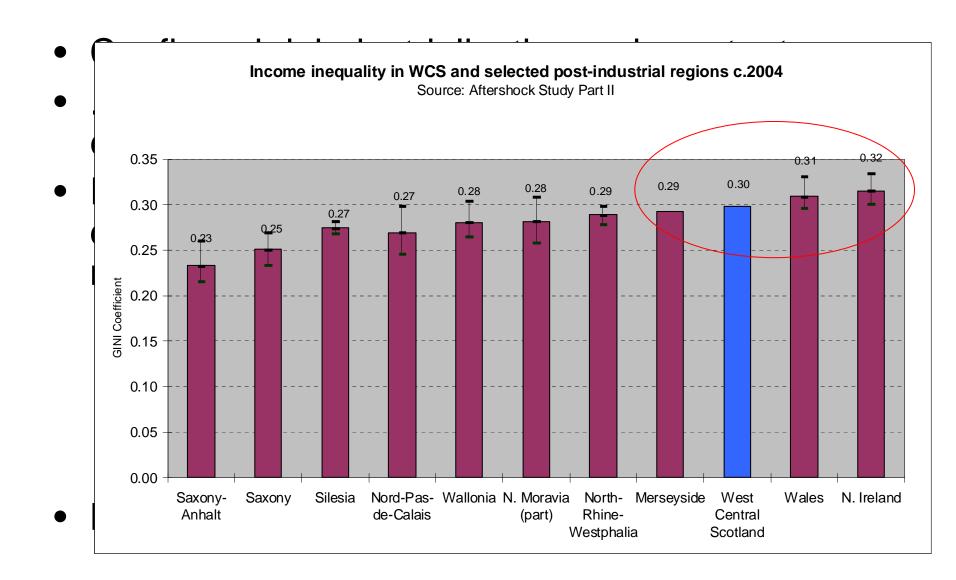
Female life expectancy at birth, West of Scotland and ten post-industrial regions

Calculated from original source mortality and population data - see Appendix 4 of report for details





What we know now





What we thought we knew then

 Traditional explanation: socio-economic deprivation (underpinned by effects of post-industrial decline)

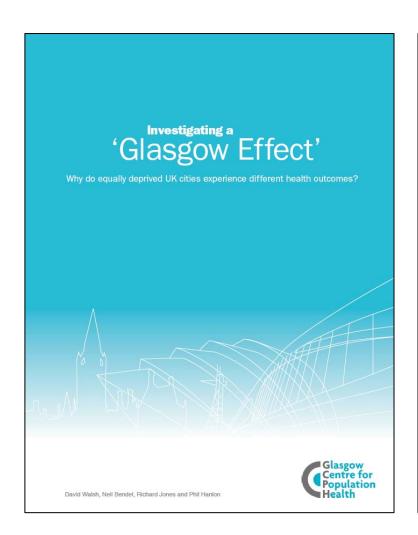


What we thought we knew then

 Traditional explanation: socio-economic deprivation (underpinned by effects of post-industrial decline)



What we did



PUBLIC HEALTH 124 (2010) 487-495



available at www.sciencedirect.com

Public Health





Original Research

It's not 'just deprivation': Why do equally deprived UK cities experience different health outcomes?

D. Walsh a,*, N. Bendel b, R. Jones c, P. Hanlon d

*Glasgow Centre for Population Health, Glasgow G2 4DL, UK

^bNHS Manchester/Manchester Joint Health Unit, Manchester, UK

^cLiverpool Primary Care Trust, Liverpool, UK ^d University of Glasgow, Glasgow, UK

ARTICLE INFO

Article history: Received 2 January 2010 Received in revised form 20 January 2010 Accepted 9 February 2010 Available online 11 March 2010

Keywords: Glasgow Liverpool Manchester Mortality Deprivation 'Scottish effect' SUMMARY

Badguoud: The link between deprivation and health is well established. However, recent research has highlighted the existence of a 'Scottish effect', a term used to describe the higher levels of poor health experienced in 'Scotland over and above that explained by socio-economic circumstances. Evidence of this 'excess' being concentrated in West Central Scotland has led to discussion of a more specific Chiaspow effect', However, within the UK, Chaspow is not alone in experiencing relatively high levels of poor health and deprivation; Liverpool and Manchester are two other cities which also stand out in this regard. Previous analyses of this 'effect' were also constrained by limitations of data and seconatoly.

Objectives: To establish whether there is evidence of a so-called 'Glasgow effect': (1) even when compared with its two most similar and comparable UK cities; and (2) when based on a more robust and spatially sensitive measure of deprivation than was previously available to researchers.

Study design and methods: Rates of 'income deptivation' (a measure very highly correlated with the main UK indices of multiple deptivation) were calculated for small areas (average population size: 1600) in Glasgow, Liverpool and Manchester. All-cause and cause-specific standardized mortality ratios were calculated for Glasgow relative to Liverpool and Manchester, standardizing for age, gender and income deprivation decile. In addition, a range of historical census and mortality data were analysed.

Results: The deprivation profiles of Glasgow, Liverpool and Manchester are almost identical bespite this, premature deaths in Glasgow are more than 30% higher, with all deaths approximately 15% higher. This 'excess' mortality is seen across virtually the entire population: all ages (except the very young), both makes and females, in deprived and non-deprived neighbourhoods. For premature mortality, standardized mortality ratios tended to be higher for the more deprived areas (puricularly among males), and approximately half of 'excess' deaths under 65 years of age were directly related to alcohol and drugs. Analyses of historical data suggest that it is unlikely that the deprivation profile of Glasgow has changed significantly relative to Userpool and Manchester in recent decades; however,

Corresponding author. Tel.: +64 141 23 76 45; fax: +64 141 23 76 955.
 E-mail address dand/walkb@nd.galgaps/go.ni. (D. Walsh).
 0033-9306/\$\frac{4}\$ see front matter @ 2010 Published by Elsevier Itd on behalf of The Royal Society for Public Health. doi:10.1016/j.pub-2010.02.006

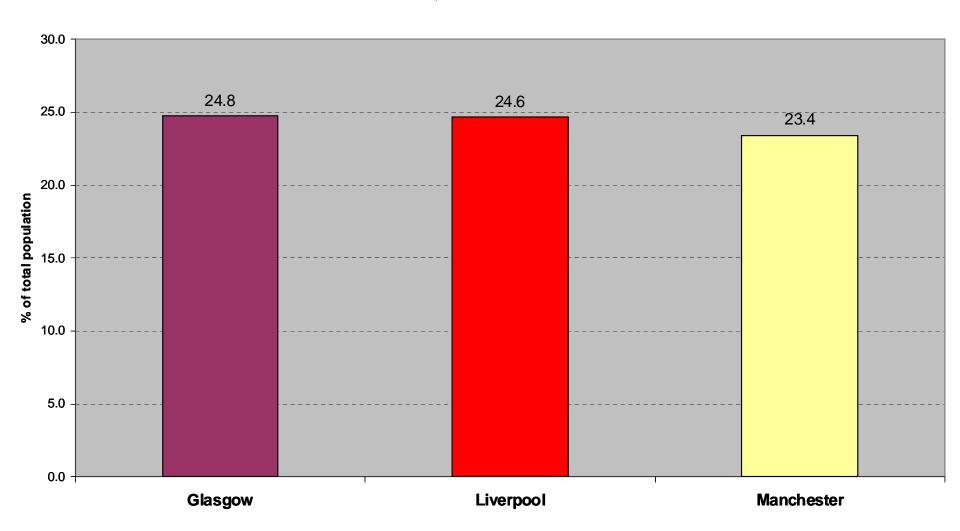


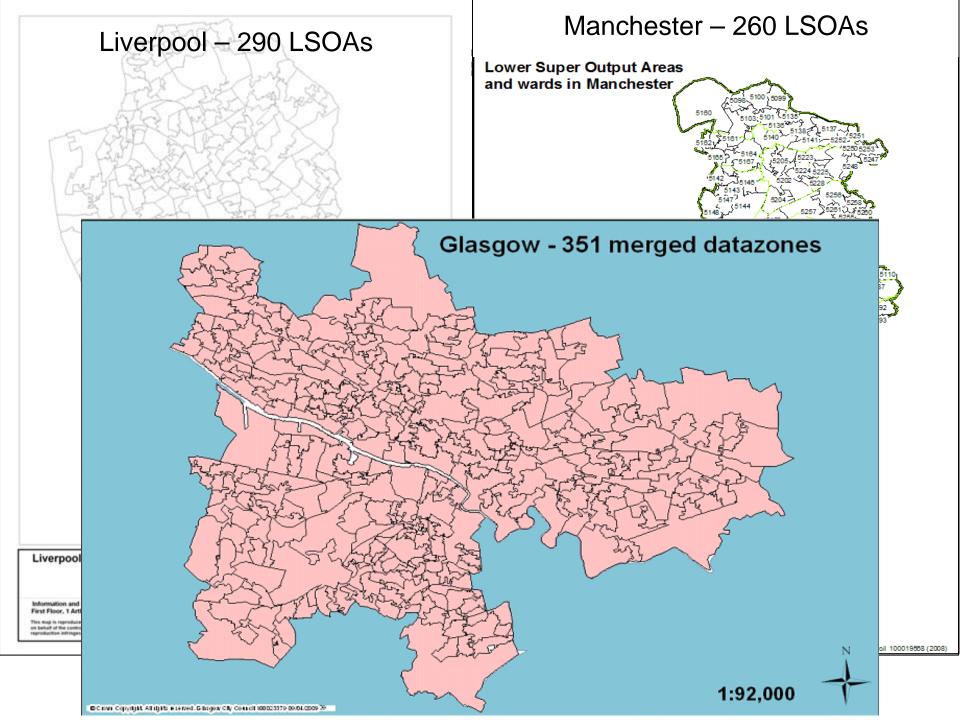
What we did

- Undertook very detailed analyses of deprivation and mortality in Glasgow and its most similar UK cities..
- Liverpool, Manchester (and Belfast)

Income deprivation in Glasgow, Liverpool & Manchester

% population classed as 'income deprived', 2005 Source: GCPH, based on SIMD/DWP data



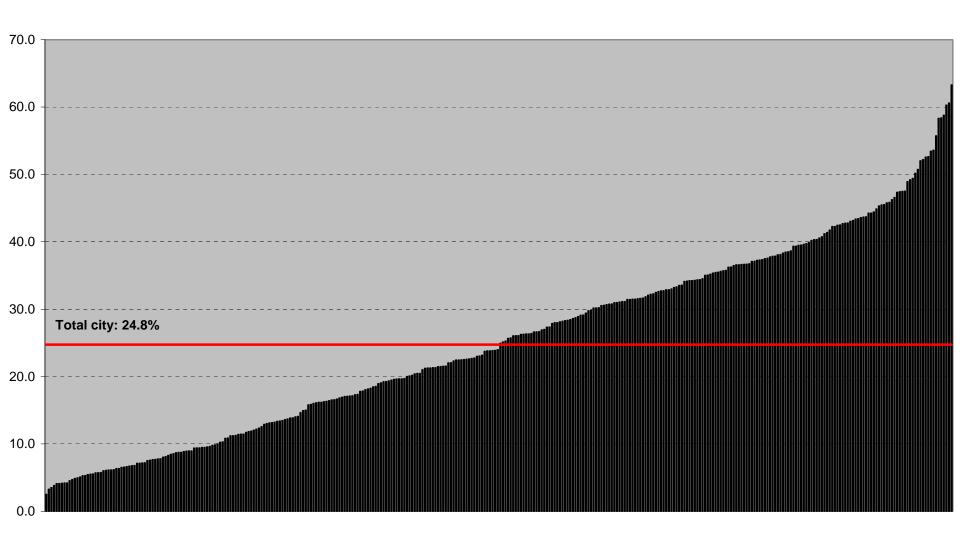




% deprived - Glasgow

Glasgow merged DZs: income deprivation distribution

Source: GCPH, based on SIMD/DWP data

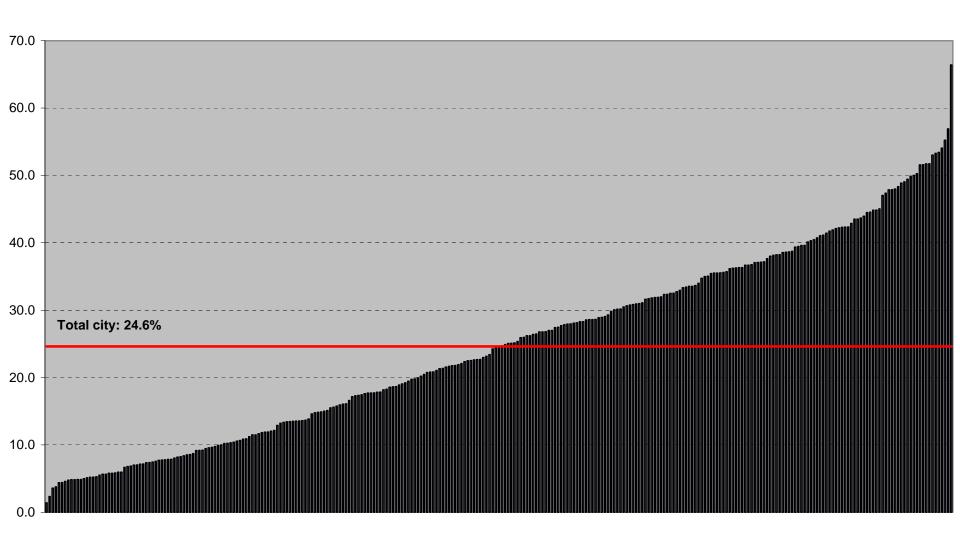




% deprived - Liverpool

Liverpool LSOAs: income deprivation distribution

Source: DWP

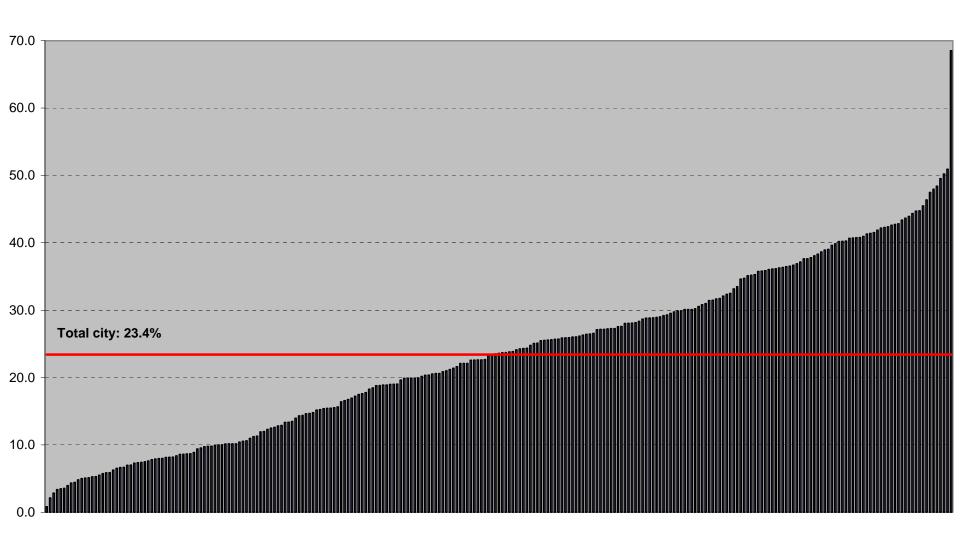




% deprived - Manchester

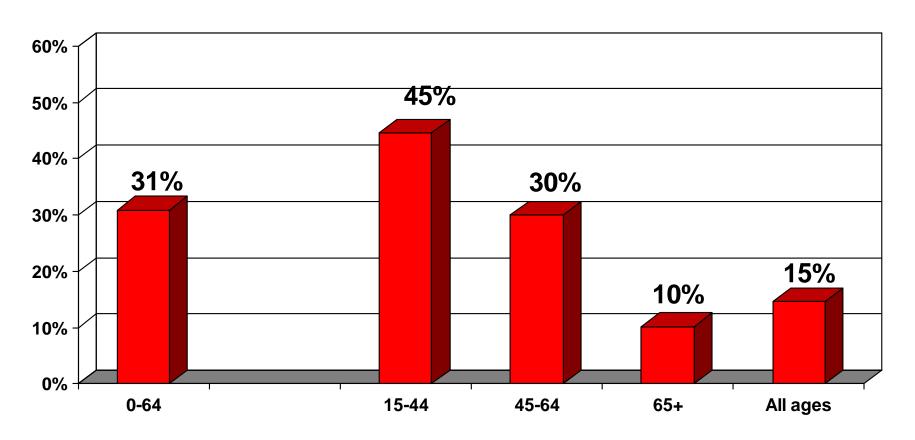
Manchester LSOAs: income deprivation distribution

Source: DWP



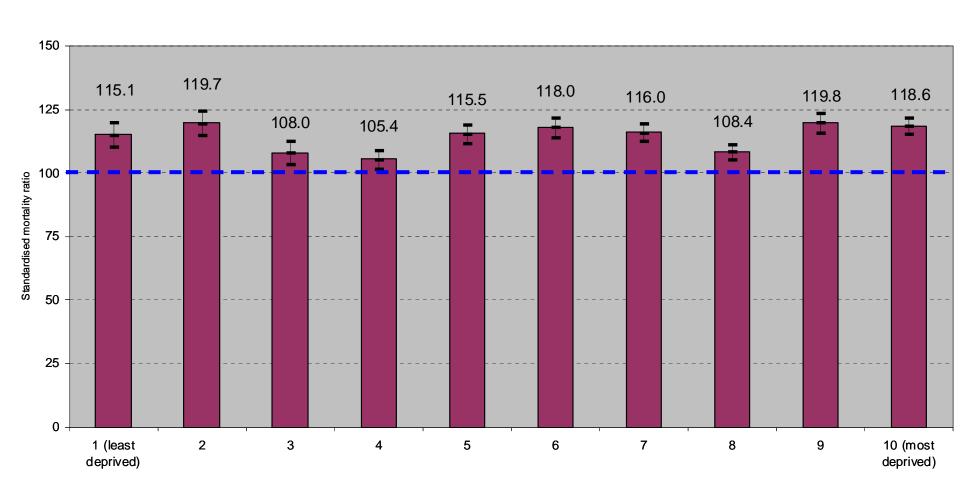
Excess mortality, Glasgow relative to Liverpool & Manchester

Excess mortality in Glasgow, standardised by age, sex and 3-city deprivation decile, 2003-07



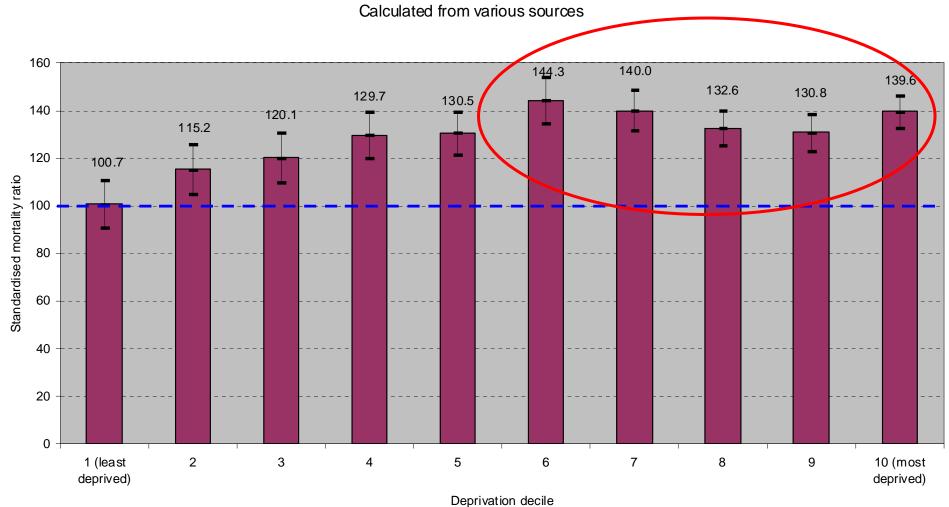
By deprivation decile – all ages

Age/sex standardised mortality ratios (all-cause deaths 2003-07), Glasgow relative to Liverpool & Manchester, by 3-city deprivation decile Calculated from various sources



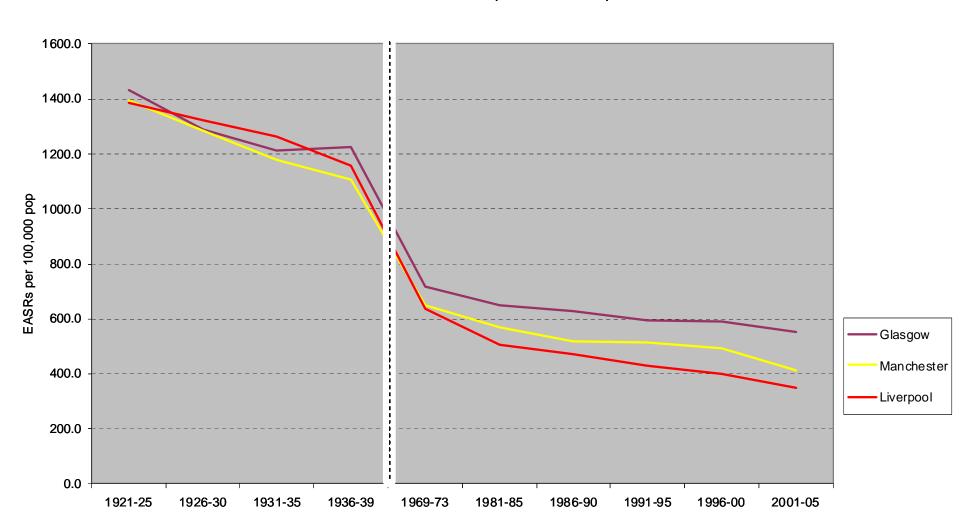
By deprivation decile, 0-64

Age 0-64: age/sex standardised mortality ratios (all-cause deaths 2003-07), Glasgow relative to Liverpool & Manchester, by 3-city deprivation decile



Has there always been an 'excess'?

Male premature (<65) mortality: age-standardised mortality rates, 1921/25 - 2001/05 Source: calculated from SASI Research Group Death and Population Data, 1921-2005





What we know now:

Glasgow, Liverpool and Manchester

- Identical levels and patterns of deprivation
- But premature deaths 30% higher in Glasgow (15% higher for deaths at all ages)
- This 'excess' Glasgow mortality seen in (almost) all age bands, both genders, deprived and non-deprived neighbourhoods
- Not explained by historical changes in deprivation
- Not explained by differences in population composition of cities
- Data show quite remarkable similarities between the cities (especially Glasgow and Liverpool) in all aspects...
 except mortality



What no-one knows...

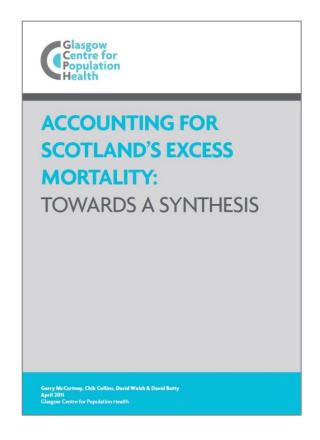
... (but it doesn't stop them guessing)

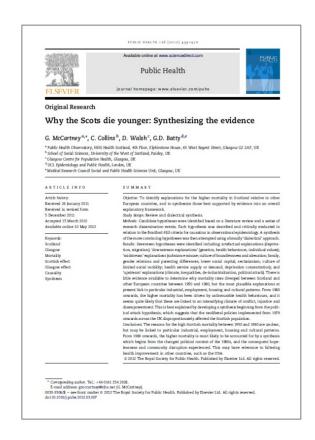
- Artefact
- Culture
- Genetics
- Greater 'vulnerability' in Glasgow
- Migration
- Psychological outlook
- Substance misuse cultures

- Social capital
- Spatial patterning of deprivation
- Family/parenting
- Gender
- Political attack
- Social mobility
- Sectarianism
- The weather...



What we did





 Summarised, and assessed all the many theories in terms of plausibility...



Artefactual (deprivation, migration)

<u>'Upstream':</u>

- inequalities
- deindustrialisation
- political attack/ effects
- climate

'Midstream':

- social capital
- deprivation patterning
- sectarianism
- social mobility
- 'anomie'
- early years experiences
- health service
- substance misuse 'culture'

'Downstream':

- health behaviours
- individual values
 (e.g.
 psychological
 outlook)
- sense of coherence

Also - genetics



Artefactual (deprivation) migration)

'Upstream':

- inequalities
- deindustrialisation
- political attack/ effects
- climate

<u>'Midstream':</u>

- social capital
- deprovation patterning
- sectationism
- Social mobility
- 'anomie'
- early years experiences
- heal service
- substance misuse 'culture'
- Also genetics

<u>'Downstream':</u>

- health behaviours
- individual values

(e.g.

psychological

outbok)

sense of

coherence

Other factors..



Artefactual (deprivation, migration)

<u>'Upstream':</u>

- inequalities
- deindustrialisation
- political attack/ effects
- climate

'Midstream':

- social capital
- deprivation patterning
- sectarianism
- social mobility
- 'anomie'
- early years experiences
- health service
- substance misuse 'culture'

'Downstream':

- health behaviours
- individual values

(e.g. psychological outlook)

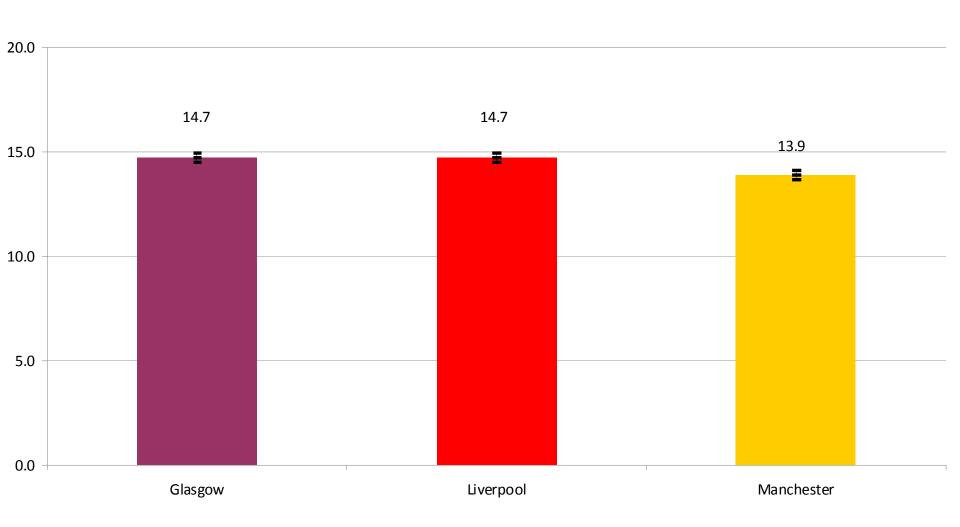
sense of coherence

Also - genetics



Optimism

Life Orientation Test (revised) (LOT-R): mean overall optimism score (0-24)





Artefactual (deprivation, migration)

<u>'Upstream':</u>

- inequalities
- deindustrialisation
- political attack/ effects
- climate

'Midstream':

- social capital
- deprivation patterning
- sectarianism
- social mobility
- 'anomie'
- early years experiences
- health service
- substance misuse 'culture'

'Downstream':

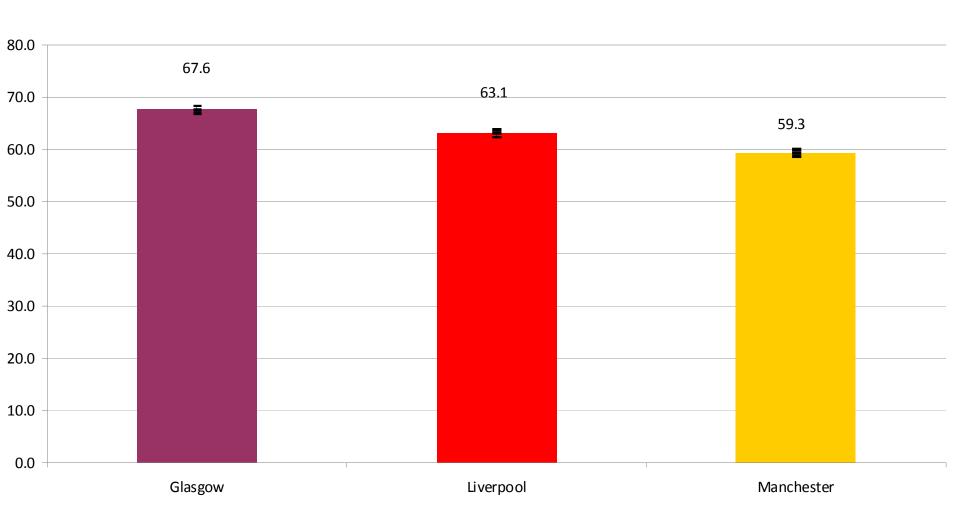
- health behaviours
- individual values
 (e.g.
 psychological
 outlook)
- sense of coherence

Also - genetics



Sense of coherence

Mean Sense of Coherence (soc-13) score (13-91)





Artefactual (deprivation, migration)

<u>'Upstream':</u>

- inequalities
- deindustrialisation
- political attack/ effects
- climate

'Midstream':

- social capital
- deprivation patterning
- sectarianism
- social mobility
- 'anomie'
- early years experiences
- health service
- substance misuse 'culture'

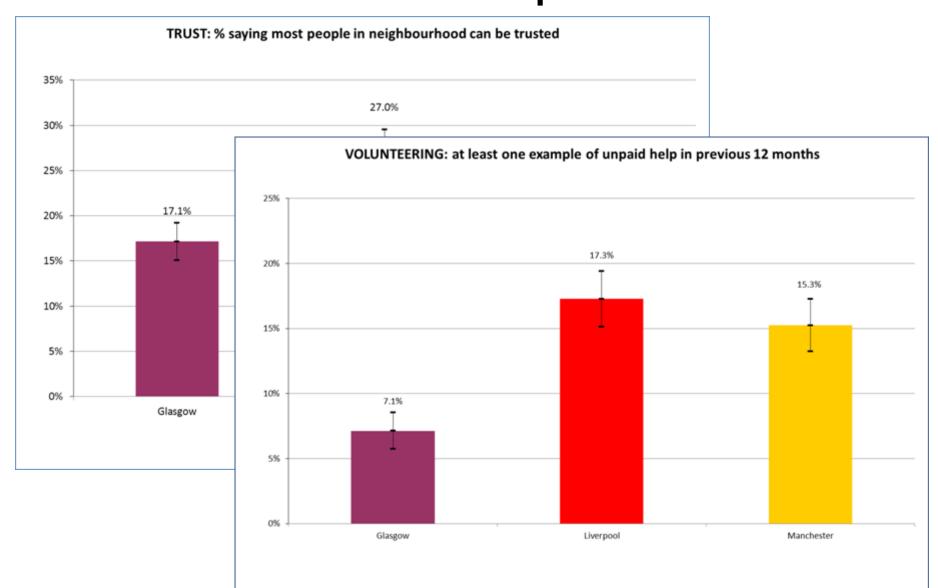
'Downstream':

- health behaviours
- individual values
 (e.g.
 psychological
 outlook)
- sense of coherence

Also - genetics



Social capital





Artefactual (deprivation, migration)

'Upstream':

'Midstream':

'culture'

Women and children last?
Comparing early-years experiences in
Scotland, England and three cityregions

Martin Taulbut and David Walsh

Glasgow Centre for Population Health March 2013 social capital deprivation patterning sectarianism social mobility 'anomie' early years experiences health service substance misuse

<u>'Downstream':</u>

- health behaviours
- individual values
 (e.g.
 psychological
 outlook)
- sense of coherence





Artefactual (deprivation, migration)

<u>'Upstream':</u>

- inequalities
- deindustrialisation
- political attack/ effects
- climate

'Midstream':

- social capital
- deprivation patterning
- sectarianism
- social mobility
- 'anomie'
- early years experiences
- health service
- substance misuse 'culture'

'Downstream':

- health behaviours
- individual values
 (e.g.
 psychological
 outlook)
- sense of coherence

Also - genetics



Artefactual (deprivation, migration)

<u>'Upstream':</u>

- inequalities
- deindustrialisation
- political attack/ effects
- climate

'Midstream':

- social capital
- deprivation patterning
- sectarianism
- social mobility
- 'anomie'
- early years experiences
- health service
- substance misuse 'culture'

'Downstream':

- health behaviours
- individual values
 (e.g.
 psychological
 outlook)
- sense of coherence

Also - genetics

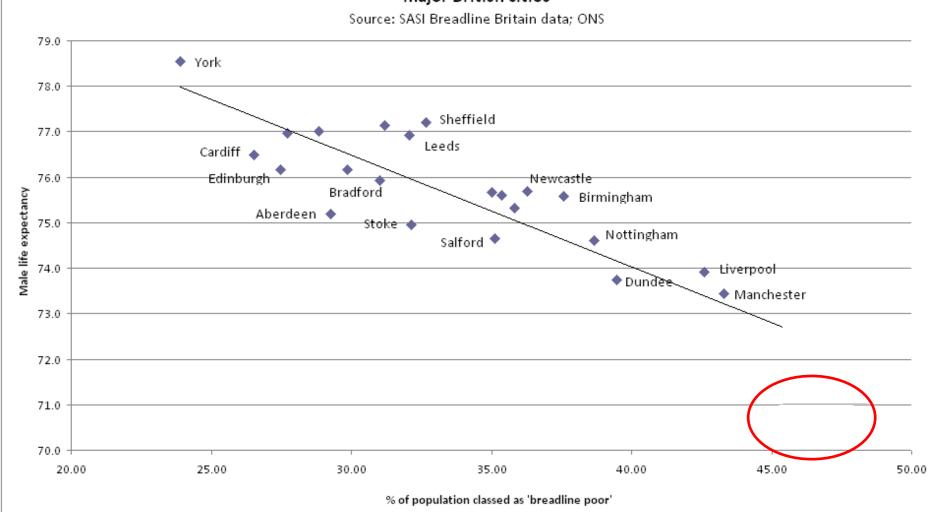


What we need to remember

 Seeking an understanding of the 'excess' isn't an excuse to ignore the non-'excess'...

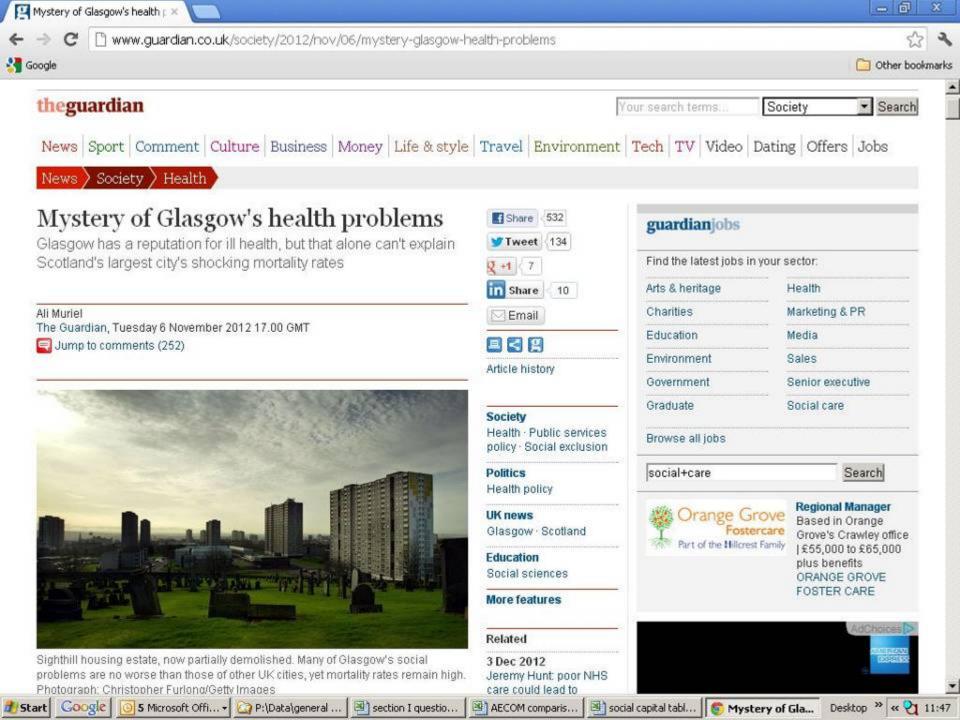








And finally....



LØRDAG 24. NOVEMBER 2012 LØRDAG 24. NOVEMBER 2012 29 27

Skottene lever seks år kortere enn engelskmenn. Ingen vet hvorfor.

GLASGOW (VG) Skottene lever i snitt lever til de er 72 år. Engelskmenn blir 78. Kan forklaringen være frityrstekt Mars-siokolade? Det tok VG få minutter å

finne godbiten på menyen i et gatekjøkken midt i

- Jeg selger en full kartong eller to i løpet av en uke. Opp mot hundre sjo-kolader, forteller Ilur Baj-Han står bak disken i ga

tekiøkkenet Blue Lagoon i West Nile Street og viser Street og viser hvordan han tilbereder frityrstekt Mars-sjokolade.

Først dyppes sjokoladen flere ganger i en flytende blanding av mel og smør før den frityr stekes i tre til fire minutter. Resulta-tet er en innbakt, smeltet sjokolade til 1.95 pund som særlig frister ungdommer og turis-

Det er godt, men hvis du er opp-tatt av vekten din

så bør du ikke prøve, smi-ler gatekjøkkenkokken. Myten om den frityrstekte sjokoladen nådde det medisinske tidsskriftet Lancet for flere ar siden. De sjekket flere hundre gatekjøkken i Skott-land. En av fem solgte «de-

Leter etter svar

- Jeg har aldri spist frityr-stekt Mars-sjokolade og kienner ingen som har spist det, sier foreleser Da-vid Walsh ved Universitetet i Glasgow. Han rister oppgitt på hodet.

Tallene viser at de dør langt oftere av lungekreft, Kosthold er viktie hierte- og karsykdommer. Kostholdet er dårligere fattige områder, men vi narkotika, enn engelsk har ikke bevis for at kost-



Befolkningen i de fattige områdene

Glasgow har høyest dødelighet, men selv skottene i høylandet og skotter som bor i utlandet lever i snitt kortere enn andre, forteller Walsh. De eneste unntakene fin es i de rike område ne i Edinburgh.

skottene har kortere

forventet levealder har Walsh og hans

kolleger sammenlig-net levekårene i Glas-

opplevd nedleggelse av tungindustri, jernverk og

skipsvertt.
Sammenligningen viste
at befolkningen i Glasgow
er like fattige, har like
mange arbeidsledige, de
royker ikke mer, drikker

seg ikke mer fulle og spi-ser ikke mer usunt enn be-

folkningen i Manchester og Liverpool. Likevel dør

30 prosent flere før fylte 65

år i Glasgow, enn i Liver-pool og Manchester.

drap, selvmord, alkohol og

skipsverft.



Gena Mahir som bor i Drumchapel, et av Glas-gows mange fattige sosiale boligområder, er der-imot ikke i tvil.

 Dårlig livsstil, svarer hun umiddelbart på spørs-mål om hvorfor hennes AND gow, Manchester og Liverpool. De tre by-ene har like historier. De var store industribyer som de siste tiårene har landsmenn dør så unge.

Hennes lokale kjøpesenter i Drumchapel er typisk for de gamle sosiale boligområdene. Den har ingen bugnende ferskvarebu-tikk. Utenfor veddemålbutikken Ladbrokes henger mannfolkene og tar seg en røyk. En mager eldre mann hoster og harker på vei mot bussen.

 Jeg må reise i 20 mi-nutter for å finne butikk med fersk mat, forteller

- Komplisert

David Walsh og kollegene har plukket fra hverandre en mengde forklaringer for à finne svaret på det



ret, manglende tro på fremtiden, miljøet skotte-ne vokser opp i med dårlige og billige etterkrigsbo-liger, utflytting og dårlig helse som følge av fattig-dom. Ingen av dem er ster-ke nok til å forklare den

høye dødeligheten, sier Walsh. Det er ikke en forklaring, det må skyldes en kompleks virkning av mange faktorer over man-ge år, sier Walsh.

Om ni måneder er forsk ningsarbeidet ferdig. Da er de kanskje nærmere

I gatekjøkkenet Blue Lagoon strømmer folk inn for å kjøpe frityrstekt lunsj. To solide bygningsarbeidere rister på hodet på spørsmål om de har spist frityrstekt Mars-sjo-kolade.

 Vi kjøper King Rib til lunsj. Det er veldig godt, dere burde prøve, smiler de na vei ut.

King Rib er frityrstekt svinekiettmasse, som selges med pommes frites.

Funct: annalisa unndarfahriffun m



GCPH Symposium

'From early understandings to new perspectives'

Thursday 28th February 2013 – The Teacher Building



