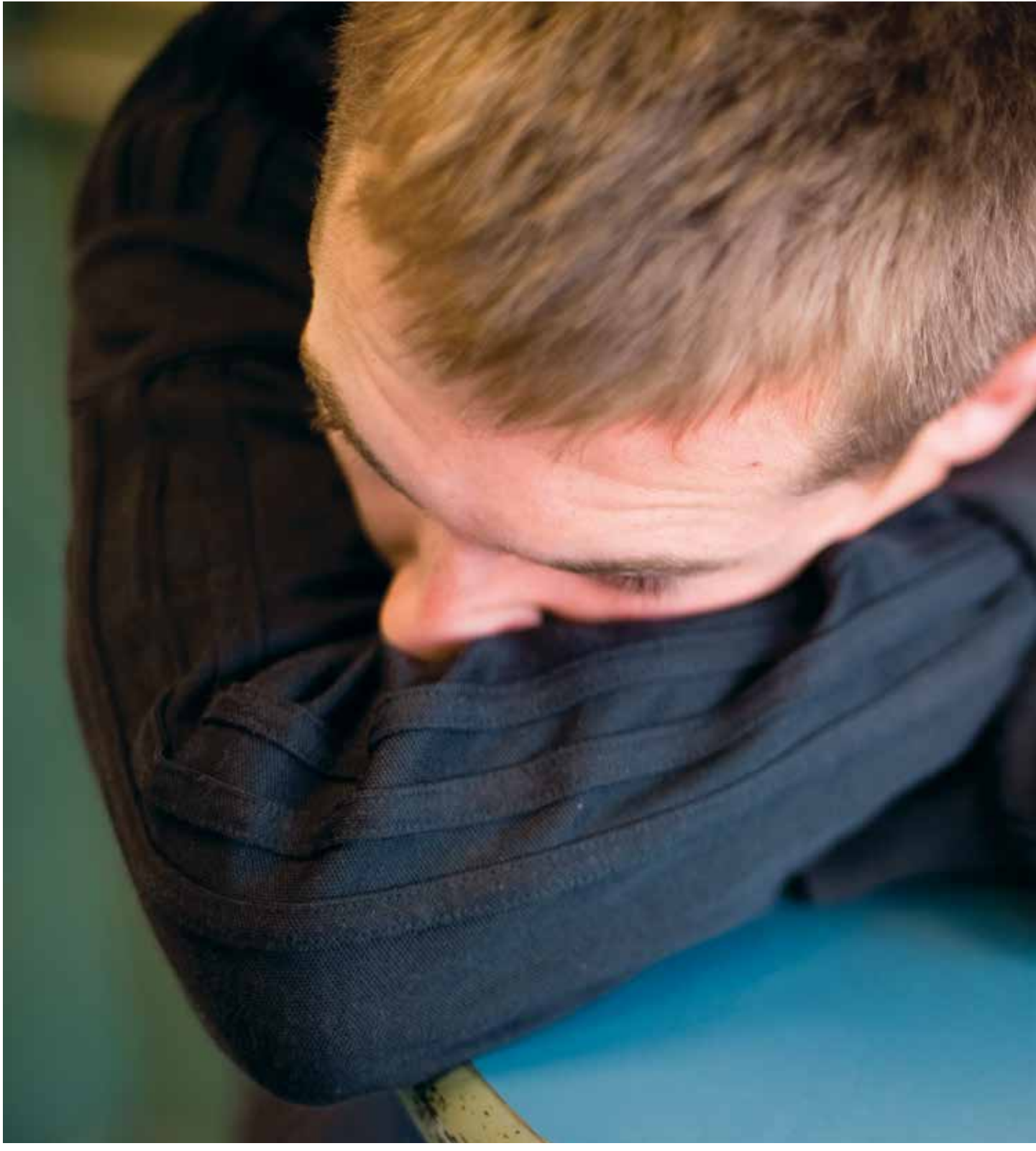


HEALTH & WELLBEING



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NO HEALTH WITHOUT MENTAL HEALTH

More support is needed for mental health services, particularly for the young. Sophie Goodchild looks at how customising approaches could lead to better outcomes



NO HEALTH WITHOUT MENTAL HEALTH

It has long been acknowledged that mental health is a ‘Cinderella service’ within the NHS. Representing just 13 per cent of the public health budget, mental healthcare still fights for equal priority with physical health despite government moves to address this inequality. Not only does it affect the life expectancy and chances of patients, this lack of parity serves to increase the social burden of mental health problems including anxiety, depression and self-harm that the Centre for Mental Health estimates to cost £100 billion a year.

This is not to say attempts have not been made at reforming mental health support and treatment. A national agreement between local care agencies and services – the Crisis Care Concordat – now exists to help people get the support they need when they need it. In addition, waiting times have been introduced for the first time – people needing therapy for depression, for example, will get guaranteed treatment within six weeks. But the current reality is that services are underfunded and beds are in short supply, which means patients end up in treatment far from home – or not receiving care at all. Crisis care too often falls short with police left as the first line of support instead of trained NHS staff.

To tackle mental illness in Britain, it is essential to address the societal causes – which are numerous and complex. Living in poverty, social isolation or in a violent or abusive family are all contributing factors along with unemployment, bullying and pressures on young people such as school performance. Louise Arseneault from King’s College London, who is heading the part ESRC-funded project The Environmental Risk (E-Risk) Longitudinal Twin Study, says that victims of domestic violence, for example, are at greater risk of mental health problems including depression and psychotic symptoms, and health professionals need to be aware that women who experience mental health problems may also be domestic violence victims and vice versa. “Given the prevalence of depression in these victims, we need to prevent these situations and take action – early childhood abuse also increases their risk of being exposed to violent relationships in adulthood and domestic violence in turn increases their risk of depression,” she states.

EARLY ANXIETIES

There is growing evidence that mental health starts in the womb because an anxious mother-to-be will produce stress hormones that affect the developing foetus.

Also, the critical ‘window’ for mental health problems typically to develop is between 12 and 25 years so it is a matter of growing concern how to meet the needs of young people as well as adults. Professor Arseneault says that nearly two thirds (60 per cent) of young people not in education, employment or training (NEET) have already experienced more than one mental health problem in childhood or



Early years
Bullying and anxiety at a young age can contribute to mental health problems later in life

adolescence. Therefore, unemployment takes an additional toll on those who are already vulnerable. As a result of these psychological problems and a lack of ‘soft’ skills such as time management, NEETs are already at a “disadvantage” in the jobs market despite a commitment to working, says Professor Arseneault. “It’s crucial that young people are better supported by mental health services as they make this transition from school to employment.”

This need for more ‘youth-friendly’ or youth-appropriate services is a theme being explored by Maria Michail and colleagues at the University of Nottingham in a three-year ESRC-funded programme ending in 2017. Under current provision, children receive assistance from the Children and Adolescent Mental Health Services (CAMHS) until the age of 18. But Dr Michail argues that teenagers can struggle making the transition to adult services because support at this crucial crossroads is fragmented. Her research findings suggest that continuity of care for young people could be achieved by not stopping at 18 but instead extending them from age zero to 25.

No child I know is going to walk into a service called ‘mental health’



Digital technology may also maximise how young people access services given that, as Dr Michail points out, more than 90 per cent of young people use the internet daily: “There are lots of pressures on young people to perform, achieve and improve themselves, but the way our mental health services are set up is not addressing the needs of young people. It’s very unlikely a 22-year-old (man) with depression, anxiety and thoughts of suicide will go knocking on their GP’s door. Digital technology may be a better way of communicating – it should complement face-to-face therapy, not replace it.” Her view is that a national framework for E-mental health is needed, which would integrate digital technology – including apps to improve mood and online talking therapies – into the existing system of healthcare and use this technology as a tool for communicating what support is available.

BREAKING DOWN BARRIERS

Stigma surrounding mental health is still an obstacle to patients seeking out help. Public figures such as actor Stephen Fry and Alastair Campbell, the former political aid and author, speaking out in recent times about their own struggles with mental ill health, have changed attitudes on one level. On another, though, mental illness is not met with the same understanding and sympathy as, say, a broken leg or cancer. Dr Michail says stigma is still rooted in a perception that people are “unpredictable or violent even” and this means those with a mental illness will try and hide their symptoms from friends, family and medical

Careful monitoring
More support needs to be available for vulnerable young adults as they leave education and prepare for employment

A more targeted and tailored approach is needed that starts early in life

professionals for fear of affecting their life chances. “With young people it’s the perceived impact of that disclosure such as ‘How will this affect my future job prospects?’” She commends the work of Time to Change, a nationwide campaign aimed at ending discrimination faced by people with mental health problems, but echoes the concerns of charities such as Young Minds that there is “still a long way to go” in changing attitudes.

Attitudes also need to change among those working in health and social care services says Dr Iris Elliott, head of policy and research at the Mental Health Foundation. Social workers and midwives without mental health training, she argues, can make new mothers and pregnant women with a history of mental illness “worried” their child “will be taken into care”. Better training is essential, she says, as well as improved service provision for adults and children.

However, the Mental Health Foundation also wants a national prevention strategy to reduce the risk of people experiencing mental illness and to equip people with tools at an early age. Says Dr Elliott: “Mental health should be an integral experience, part of pre- and secondary-school learning in order to build resilience skills in children and we should be creating mentally healthy workplaces too.” This is a view shared by Lord Victor Adebowale, chief executive of social care organisation Turning Point and a member of a new mental health task force set up by NHS England. In his opinion, having mental health challenges should be seen as “perfectly normal for young people” and that can only be achieved if services are integrated into schools, instead of being ‘special’. “No child I know is going to walk into a service called ‘mental health’. Resilience training, for example, should be part of growing up, and teachers trained to identify, understand and intervene,” he says.

There is agreement among experts that a more targeted and tailored approach is needed that starts early in life. The consensus too is that there is “no health without mental health” to quote the government’s own mantra on achieving parity of esteem. ■

www.kcl.ac.uk/ioppn/depts/mrc/research/index-old.aspx

Sophie Goodchild is an award-winning health and social affairs journalist who was previously Health Editor on the Evening Standard and Chief Reporter on the Independent on Sunday.

As spending on social care falls, is this putting at risk support for a larger, older population?

OPINION

CARING ABOUT SOCIAL CARE

By George Stoye and David Innes

OVER THE LAST PARLIAMENT, the National Health Service (NHS) was relatively protected from budget cuts, despite overall cuts to public spending. Between 2009-10 and 2014-15, spending on public services (accounting for economy-wide inflation) fell by nine per cent, while the budget for the Department of Health increased by two per cent.

The rationale for protecting health spending is compelling. Much recent debate has focused on the challenges facing the NHS: a growing and ageing population, the ability to treat more complex and costly diseases, and a range of pressures that increase the cost of providing healthcare. Demographic pressures alone are significant, with Office for National Statistics (ONS) estimates suggesting that the population aged 65 and over will increase by more than a fifth over the next decade. In recent analysis using data from administrative hospital records, we estimate that average hospital spending on those aged 90 is three times that on a 70-year-old, and nine times more than a 50-year-old. A larger elderly population will therefore require more funding to treat, with a real increase of 4.9 per cent over the next five years necessary just to keep pace with this population change.

The very same demographic pressures also affect social care services. A larger, older population will require more social care, including support that allows them to stay in their homes for longer and places in nursing homes. Wage pressures in this area are also likely to be particularly acute following the introduction of the National Living Wage, since a relatively large proportion of the sector are currently employed on low wages. Yet in stark contrast to health spending, social care spending has not been protected, and fell by 12.3 per cent in real terms between 2009-10 and 2014-15. This is mainly due to large cuts to the grants received

The contrasting experiences of spending on the NHS and spending on social care are surprising

by local authorities from central government. Given that many social care services are provided by local authorities, and that spending on these services make up such a large proportion of their overall spending, the cuts to their grants have inevitably led to a reduction in social care spending.

CUTS AND REPERCUSSIONS

The cuts to social care budgets appear to have already affected the provision of social care. The National Audit Office found there has been a reduction in adult social care volumes between 2010-11 and 2014-15. For example, the total weeks of homecare provided by local authorities fell by 13 per cent, while day care provision fell by 30 per cent.

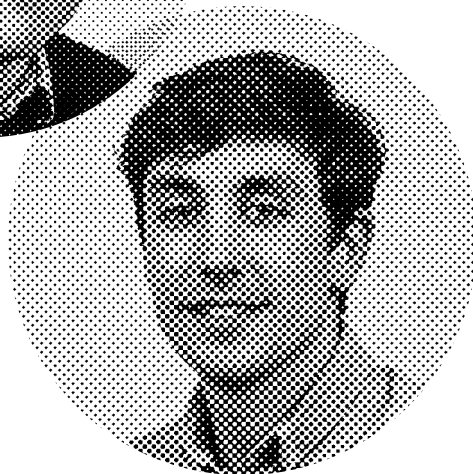
The new Conservative government has confirmed it will continue cutting public spending until 2019-20. Health spending is once again protected, with an additional £8 billion promised to the NHS budget by 2020. But this means larger cuts must be found elsewhere, with local authority spending – and therefore social care – likely facing further cuts.

The contrasting experiences of spending on the NHS and spending on social care are perhaps surprising given that the two services clearly interact. For example, good social care may prevent a vulnerable elderly individual from having a fall or getting an infection that would otherwise need (more expensive) hospital treatment. Similarly, social care may allow people who still need non-medical care to be discharged from expensive hospital beds. Cutting social care spending is therefore likely to have negative consequences for patient health and hospital budgets.

That policymakers are aware of such interactions, as evidenced by recent policies such as the creation of the 'Better Care Fund', is encouraging. Whether such policies are ultimately successful in integrating health and social care remains to be seen. Co-ordinating care across different organisations and structures will be challenging. But improved co-ordination is vital for ensuring good, connected care for people in need that is sustainable in light of future demand and cost pressures. ■

www.ifs.org.uk

David Innes and George Stoye are Research Economists at the Institute for Fiscal Studies.



 CHILD HEALTH

Drinking disadvantage

How does alcohol abuse during pregnancy affect a child in later life?

EXPOSURE TO ALCOHOL in utero harms children's test scores later in life, according to research by the University of Bristol that shows that 63 per cent of women drink at some point during pregnancy. But a problem in estimating its effects is that mothers who drink may be systematically different from mothers who don't. Some studies show that higher-educated women are more likely to drink during pregnancy. As higher maternal education is associated with better test scores, this can mask any negative effect that alcohol exposure may have.

This study exploits the fact that genetic markers are randomly allocated, and uses a carefully validated (maternal) genetic variant that is associated with alcohol intake to estimate the effect on children's test scores. It compares test scores of children whose mothers carry the

63%

of women drink at some point during pregnancy

Who is most likely to drink during pregnancy, and at what cost?



variant with those whose mothers don't, so any differences are due to alcohol exposure, not to how educated the mothers are. The authors find that prenatal alcohol exposure harms children's educational achievement.

LITTLE AND NOT OFTEN

Most countries advise abstinence when pregnant. The UK recommends not drinking in the first trimester; but if women do choose to, they shouldn't exceed one to two units once or twice a week. These conflicting recommendations arise from inconsistent findings in observational studies. Studies that attempt to account for the fact that mothers who do and do not drink may be different in both observable and unobservable ways tend to find that alcohol exposure harms children. As randomised experiments are unethical, these studies are crucial in contributing to our understanding of the effects of prenatal alcohol exposure on children's later life development. ■

onlinelibrary.wiley.com/doi/10.1111/ecoj.12144/abstract

 BEHAVIOUR

IGNORING THE SIGNS

Do air pollution warnings help or hinder those with respiratory diseases?

THE UK GOVERNMENT provides daily air pollution forecasts for vulnerable people. Unfortunately, for most people the cost of avoiding air pollution seems to be larger than the perceived benefits, resulting in a muted response to air pollution warnings – that's the conclusion of research by Dr Katharina Janke of the University of Lancaster and CMPO, University of Bristol. This combines daily data on air pollution forecasts, levels of air pollution and hospital emergency admissions for respiratory diseases in children aged five to 19 years from 2002 to 2008.

Estimating the relationship between hospital admissions and air pollution warnings while controlling for actual levels of air

pollution essentially compares days with a certain level of air pollution for which a warning was issued, with days with the same level of air pollution for which no warning was issued. If parents and children respond to warnings with preventative measures, there should be fewer hospital admissions on days for which a warning was issued.

For all respiratory admissions, there is no effect. For the subset of admissions for acute

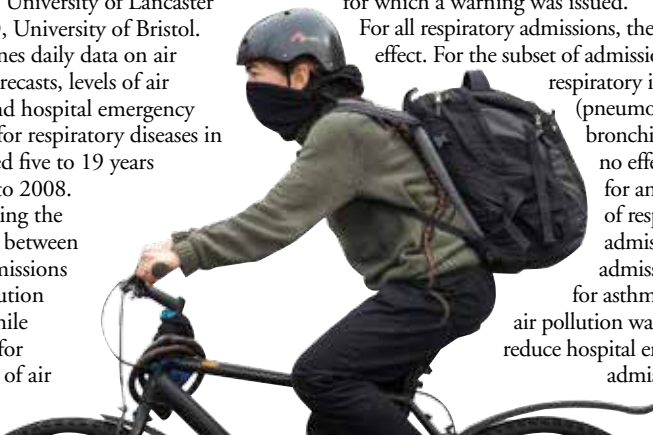
respiratory infections (pneumonia and bronchitis) there is no effect. Only for another subset of respiratory admissions, admissions for asthma, do air pollution warnings reduce hospital emergency admissions, by

For most people the cost of avoiding air pollution seems to be larger than the perceived benefits

about eight per cent. Since standard advice for asthmatics is to adjust the dose of their reliever medicine and to make sure they carry their inhaler with them when high levels of air pollution are forecast, it is less costly for them to respond to an air pollution warning.

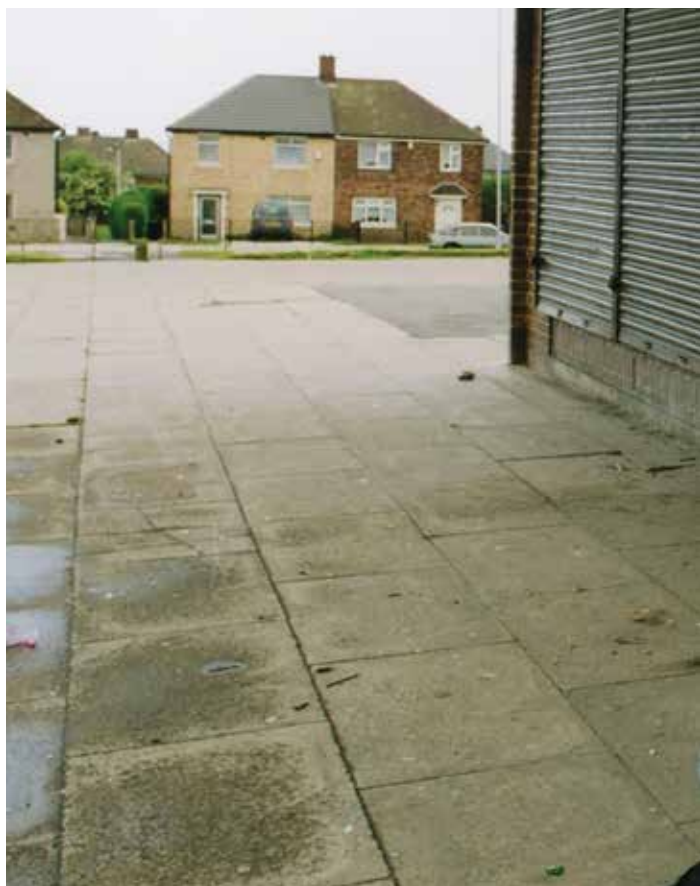
Other types of respiratory disease require far more disruptive measures such as staying indoors, making the cost of responding to a warning larger than the perceived gains. ■

dx.doi.org/10.1016/j.jhealeco.2014.07.002



HEALTHY & UNHEALTHY CONNECTIONS

Our biology influences our health and lives, while the environments in which we live alter our biology



Society and health are intricately related. Our health is affected by the world around us – how we developed as children, where we live, how much money we have, how stressful our lives are – all have lasting consequences for our health and lives as we age. Equally, our health affects our ability to engage in all other aspects of our lives – employment, family, school and our social lives. At a more fundamental biological level the genes that we inherit from our parents influence our health and lives, and in turn the environments in which we live can alter the way in which our genes operate.

To understand the two-way relationships between our social and economic circumstances, and our health, we need to have studies that measure both social factors and health well. Too often medical or clinical studies provide a wealth of rich information on different aspects of health, but little on the rest of people's lives, while social studies provide rich data on every aspect of people's lives but only one or two general questions on health. Studies are required that measure both dimensions equally well.

Several studies now collect 'biomarkers', objective indicators of biological processes, to combine with their social and economic information. The ambitious Understanding Society, the ESRC's landmark longitudinal study, follows 40,000 households every year to

understand changes in people's lives. Recently the study included a nurse interview to measure biomarkers, such as height and weight, measures of how well different aspects of the body (such as lungs or blood pressure) function, and measures taken from blood samples and DNA.

Biomarkers are valuable in lots of ways – they provide better information on different dimensions of health than questionnaire data, and also tell us about people having an illness or being at risk of one before they experience any symptoms. For example, a biomarker called HbA1c tells us how well people process sugars and is used to diagnose diabetes. We also ask people whether they have diabetes and are being treated for it, and so can identify those at risk but not yet aware of the condition, those who report having diabetes and whether they are effectively managing it. We can then look at their circumstances, now and in the past, to predict to whom, when and why these things happen. This helps policymakers develop approaches to preventing diabetes or supporting people to better manage the condition. Second, lots of studies show that people experiencing different kinds of social and economic disadvantage have poorer health than others, but why?

Measuring biomarkers can help us understand the pathways from having low income, losing your job, or feeling lonely to

CHILD POVERTY

Living in poverty, particularly as a child, can have serious, lasting effects. Here are some sober statistics from Barnados about child poverty¹ in the UK:

- ▶ 3.7 million children are currently living in poverty in the UK – over ¼ of all children. 1.7 million of these are living in severe poverty.
- ▶ Three-year-olds in households with incomes below about £10,000 are 2.5 times more likely to suffer chronic illness than children in households with incomes above £52,000.
- ▶ Families living in poverty can have as little as £13 per day per person to buy everything they need such as food, heating, toys, clothes, electricity and transport.

Source: www.barnados.org.uk 'A family with two adults and two children under 15 needs to have £375 a week, after paying for housing, to be above the poverty line'



Studies are providing increasing amounts of data that indicate upbringing and genes affect future health

the stress and other psychological or behavioural changes that these result in to biological changes in the body to ill health. Comprehension of the biological pathways helps to strengthen our understanding of how different social and working environments influence health and hence helps identify ways of preventing their health damage.

IDENTIFYING RISKS

Finally, we are increasingly understanding that the way the environment affects us may be influenced by our genes – for example, the extent to which air pollution causes us to have breathing problems – but we are also beginning to see that our environment can affect the way our genes work in the body. Getting a better understanding of the two-way relationship between our genes and our environment in real-life situations may help us identify those at particular risk from different hazards.

Understanding Society is not the first study to measure health in these ways, but it's the most comprehensive – covering people of all ages from all parts of the United Kingdom – so that we can observe how different aspects of health develop at young ages, when they peak and how quickly they decline for different types of health in different groups and places. This knowledge can help policymakers identify key stages of

life or particular places and population groups to intervene to strengthen the development of different aspects of health and slow the decline.

The study also has other unique features. It enables us to examine different aspects of health within households: we know that children may inherit health conditions from their parents but how are the daily lives of siblings or couples influenced by the health of each other? Within the UK, the health of the Scottish population is known to be poorer than the rest of the UK. But why? Few studies provide rich health and social data measured in the same way across all four countries of the UK to enable us to explore these questions. In Understanding Society we do, so that differences between countries in health, and the causes of these, can be investigated. These new data in the study create exciting opportunities to better understand how people's health and lives interact, to improve the health of the nations in the future. ■

www.understandingsociety.ac.uk

Michaela Benzeval is Professor of Longitudinal Research and Director of Understanding Society, and Meena Kumari is Professor of Social and Biological Epidemiology and leads on health and biomarker research for the study. Both are based at ISER, University of Essex.

IN THE AIR

As we become increasingly aware that environmental factors like air pollution affect the ways we develop as we grow older, here are some ways in which air quality can affect us, from the World Health Organisation¹:

- ▶ In the WHO European Region² alone, exposure to particulate matter (PM^{2.5}) decreases the life expectancy of every person by an average of almost one year, mostly due to increased risk of cardiovascular and respiratory diseases, and lung cancer.
- ▶ A recent study using data from 25 cities in the European Union has estimated that life expectancy could be increased by up to around 22 months in the most polluted cities if the long-term PM^{2.5} concentration was reduced to the WHO guideline annual level⁴.
- ▶ Some 40 million people in the 115 largest cities in the European Union are exposed to air exceeding WHO air quality guideline values for at least one pollutant.
- ▶ Ozone pollution causes breathing difficulties, triggers asthma symptoms, causes lung and heart diseases, and according to statistics is associated with about 21,000 premature deaths per year in the region.
- ▶ Indoor air pollution from biological agents in indoor air related to damp and mould increases the risk of respiratory disease in children and adults by 50%.

Source: ¹www.euro.who.int ²Countries included at www.who.int/choice/demography/euro_region/en/ ³Particulate matter is suspended in the earth's atmosphere – PM^{2.5} is the deadliest variety ⁴www.who.int/mediacentre/factsheets/fs313/en

PREDICTING DISEASE

Alzheimer's clues

Linguistic research could help identify those at risk of developing dementia

Simple word tests might help forecast your likelihood of developing Alzheimer's



THE RESPONSES PEOPLE give to word association cues may offer insights into their risk of developing Alzheimer's disease in the future. In word association tasks, participants write down the first word they think of when they see a cue word. Typical responses to the cue word 'bread' might be 'butter' (typically goes with bread), 'cake' (another thing like bread), 'pudding' (a word that can go after 'bread' to create a new idea), or 'head' (sounds like 'bread'). Each response involves a different type of link between ideas in the brain, and changes in which links most easily come to mind may indicate alterations in the brain's function.

Professors Tess Fitzpatrick and Alison Wray, and Dr Andreas Buerki, all of Cardiff University, are analysing word association responses from individuals at different genetic risk of future Alzheimer's. The results are combined with a broader profile of potential indicators, including cognitive test results, brain scan data and biochemical tests. The aim is to establish whether language tests can help identify those

in the earliest stages of Alzheimer's. Funded by BRACE Alzheimer's, the project is a direct consequence of ESRC research. The technique being used was developed in Fitzpatrick and Wray's previous ESRC-funded project. With Dr David Playfoot as the post-doctoral researcher, word association data was used to profile the mental lexicons at different points in the life span.

The profiling technique is sensitive to patterns of individual preference in making connections between words. Importantly, the ESRC study revealed differences in these patterns between teenagers and (unimpaired) over 65-year-olds that may indicate maturational changes in the way the brain organises access

Each response involves a different link between ideas in the brain

to words. The ESRC project laid the groundwork for developing appropriate reference datasets reflecting changes due to normal ageing. These patterns enable clearer insights into the abnormal changes associated with Alzheimer's. ■

www.cardiff.ac.uk/encap/research/dimensions.html

DIAGNOSIS

BEATING THE PAIN BARRIER

Can the language people use to describe pain sensations improve the accuracy of pain questionnaires?

THINK ABOUT THE last time you had a really bad headache: how exactly did it feel? Putting pain into words is often quite difficult. English has relatively few words that specialise in the description of pain sensations: 'ache', 'sore', 'hurt' and 'pain' itself, in their various forms. Because those words are quite generic, we often resort to figurative language, such as when we talk about a 'splitting' headache, a 'burning' in the stomach or a 'stabbing' pain in the leg.

Figurative language is very vivid but not very precise. Luckily, most of us have never been stabbed, but in that case can we really agree on what a 'stabbing' pain feels like? All of this would not be a problem if pain was always caused by visible damage to the body that a nurse or a doctor can easily diagnose, as in the case of broken bones, burns, cuts and so on. Unfortunately, pain is often not like this. Many people suffer from long-term chronic pain that has no visible or easily identifiable cause, but that nevertheless seriously affects quality of life.

In such cases, healthcare professionals rely, at least in part, on the person's ability to describe their pain in words, and on

diagnostic tools where the person picks the words that best describe their pain out of a set of options.

LINGUISTIC LIMITATIONS

But existing questionnaires for the diagnosis of chronic pain have limitations. For example, a widely used questionnaire includes words that are infrequent in English ('taut'), words that are not often used to describe pain ('rasping'), and words that have multiple meanings ('boring'), alongside common pain descriptors such as 'sharp', 'stabbing' and 'throbbing'.

Linguists at Lancaster University are collaborating with London-based clinicians to improve the set of linguistic options that are included in these diagnostic tools. They are analysing the language that people actually use to describe different kinds of pain sensations to assess the strengths and weaknesses of existing pain questionnaires. The next step will be to develop new language-based diagnostic tools that avoid ambiguity and obscurity, and that will therefore work better from the perspective of both patients and clinicians. ■

cass.lancs.ac.uk



GP services vary countrywide - what's important to you?

HEALTH CHOICES

GREAT EXPECTATIONS

What factors do people take into account when they are choosing which health practice to join?

MANY OF THE REFORMS in public services in the last 20 years have sought to give the users of these services choice of provider with the intention that this will drive up the quality of care. But such reforms will work only if quality affects choice of provider. Research undertaken by the University of York and the CMPO at the University of Bristol set out to test this crucial pre-requisite. Researchers analysed the choice of family doctor by around 3.5 million people living in the East Midlands to see if clinical quality affected this choice.

Family doctor practices provide primary care and control access to non-emergency hospital care, the quality of their clinical care is measured and published, and this care is free. In this setting clinical quality should affect choice. But there is a widespread belief that clinical quality either is less important to patients than other aspects of the service, such as: opening hours or the range of services provided; that patients do care about quality but the measures of quality that are available don't enable them to distinguish between good and bad quality; or that there is no choice because doctors don't allow new patients to join their lists.

In fact, the researchers found that clinical quality was important in determining which family doctor practice people chose. A higher rating on the government's measure of practice performance (known as the QOF) increased the number of patients who chose the practice. Other aspects of care were also important. These included, not

Practices with poor published clinical quality will, over time, lose patients

surprisingly, the distance between where people lived and the practice, the age of the doctors, the gender of the doctors and where the doctors had trained.

People preferred practices that had higher clinical quality, were closer, that had more female doctors and had more doctors trained in the UK. The research also found that these results were not affected by whether

practices temporarily closed their lists to new patients because they were over-subscribed. Put another way, people still cared about quality even if their first choice was denied to them.

Most people had similar ratings of quality relative to other aspects of care. But younger men cared more about the distance to their practice and less about quality than other people. Younger men on average use GP services less than other groups, so it may well be that quality is less important to them than accessibility.

The results suggest that individuals do value the clinical quality of care and make their choices based, in part, on this. This implies that the current government's aim of increasing choice of family doctor may help drive up standards. It suggests that practices with poor published clinical quality will, over time, lose patients relative to those that are similar in terms of location and their staffing, but have higher published clinical quality. And also that publishing greater information on clinical quality will help patients make choices. ■

www.bristol.ac.uk/cmipo
onlinelibrary.wiley.com/doi/10.1111/eocj.12282/epdf



COUNTING THE WAGES OF SIN

Why is it misleading to include the value of illegal drugs to the UK economy in GDP figures?

IN 2012 NATIONAL statistical agencies in the European Union (EU) were required to include certain categories of illicit economic activity in the National Accounts. This was implemented in the UK with the publication of revised estimates by the Office for National Statistics (ONS) in September 2014. Including drugs and prostitution added £10 billion to measured UK gross domestic product (GDP) and attracted much media attention, in part because it contributed to a controversial rise in the UK's contribution to the EU budget. But should illegal markets be included in the GDP estimates?

GDP is the value of all final goods and services produced in a country in a year. In principle, it should clearly include products – like illicit drugs – which are produced and traded illegally. But there are other products and services that we currently exclude from GDP. Where to draw the boundary for inclusion in measured GDP is largely a practical decision, depending partly on what can and cannot be measured with reasonable accuracy.

ONS' estimates for illegal drugs were based on a demand-side view of the market, using an existing benchmark estimate of the size of the market in

2003-2004, updated to 2010 by reference to survey data on trends in drug use. Both parts of that procedure are subject to considerable uncertainty. The benchmark estimate, which I produced originally with colleagues from the Institute for Social and Economic Research (ISER), used special methods to adjust for the under-reporting of drug use and under-representation of regular drug users in conventional surveys. It gave 2003/4 market size as £5.6 billion – about 60 per cent higher than the estimate would have been if based on 'official' Home Office estimates of drug prevalence. Our benchmark estimate has often been quoted in the media, sadly, without mention of the wide margin of error (\pm £1.5 billion) that we gave.

Following government cutbacks in data collection over the last decade, it is now impossible to repeat the benchmark calculation, and extrapolating it to more recent years introduces further uncertainty surrounding survey estimates of consumption trends. Our review of ONS' methods show the likely margin of error increasing greatly as we extrapolate from the 2003/4 benchmark estimate to 2009/10. For example, in the case of cannabis, it triples from \pm 13 per cent to \pm 39 per cent and the situation is far worse for more uncommon drugs like cocaine, where it rises from \pm 16 per cent to \pm 44 per cent. Given this uncertainty in measuring the size of the market

in one year, estimates of year-to-year change are so uncertain as to be meaningless.

Where does this leave us? The new illicit activity element of the national accounts is of little practical value and its inclusion will only succeed in increasing the statistical 'noise' in official GDP growth figures.

These new official estimates for the illegal drugs market feed into the official estimates that determine Britain's contribution to the EU budget. This aspect of the new national accounting standard looks like a mistake – it is unwise to base contentious financial rules on concepts that cannot be measured adequately.

Calculating GDP requires an estimate of the share of illegal drugs that are produced in Britain. Research reveals big changes, particularly in the cannabis market. For example, the proportion of cannabis seized as growing plants rose from less than five per cent before 2005 to around 50 per cent in recent years. My analysis suggests that the share of UK-produced cannabis on the market has risen from under five per cent in 2000 to around 50 per cent by 2013. If the balance of payments had improved by anything like this in the legal economy, the government would have been very pleased indeed.

www.iser.essex.ac.uk/people/spudney

Professor Steve Pudney, *Institute for Social and Economic Research (ISER)*.

DRUG MISUSE

While it is debatable that government statistics on illegal drug usage contribute reliably to calculations of GDP, here are some recent facts and figures from the 2014/15 Crime Survey for England and Wales:

- ▶ Around 1 in 12 (8.6%) of adults aged 16 to 59 took an illicit drug in the last year – around 2.8 million people. A decade ago, this percentage was 11.2%.
- ▶ Cannabis was the most commonly used drug with 6.7% of adults aged 16 to 59 using it in the last year.
- ▶ Powder cocaine was the next most commonly used drug at 2.3%.
- ▶ Around 1 in 5 of young adults aged 16 to 24 took an illicit drug in the last year – around 1.2 million people. A decade ago this was 26.5% – 1 in 4.
- ▶ Ecstasy was the second most commonly used drug among those aged 16 to 24 at 5.4%.
- ▶ Men are more likely to take drugs than women – 11.9% in the last year, compared to 5.4% of women.
- ▶ 279,000 of adults 16 to 59 used a new psychoactive substance (NPS*) in the last year.

Source: www.gov.uk; *NPS refers to newly available drugs that mimic the effect of drugs such as cannabis, ecstasy and powder cocaine, and which may or may not be illegal to buy, but are sometimes referred to as 'legal highs'.



Being a working woman with a family is a juggling act that can affect your health in later years

WOMEN'S HEALTH

MIXED BENEFITS

How does a woman's work/life balance affect health?

UNDERSTANDING THE impact of balancing paid work with family life on women's health in later life is increasingly important as more and more women have to fulfil multiple roles over their lifecourse. One strand of research says that combining paid employment with family life has financial advantages, which can positively affect women's health over the lifecourse and in later life. Another strand of work says the opposite: that juggling multiple roles is stressful and can have long-term, adverse effects on individuals' health.

Research by the ESRC Centre for Population Change and the Centre for Research on Ageing in the University of Southampton has attempted to increase understanding of such impact by analysing retrospective life history data for 2,160 women aged 64 and over (born between 1909–1943) from the English Longitudinal Study of Ageing. Using this retrospective information, the researchers were able to identify distinct patterns of women's working histories across the lifecourse, to understand women's self-reported health in later life.

The analysis showed key demographic and socioeconomic differences between groups who had different working patterns. For example, women who returned to work full-time after taking time out for family life were more likely to belong to a higher socioeconomic class than women who returned part-time, while women who worked

full-time for the majority of their adult life had, on average, the fewest children.

WEALTH & HEALTH

The second stage of the project involved exploring the association between specific work trajectories over the lifecourse and poor self-reported health in later life. This found that women who experience defined periods of full-time work, before and after focusing on family life, appear to have the most favourable later-life health outcomes, compared to women who predominantly worked full-time (with no time out for family), those who returned to part-time work after child-rearing, or those who were primarily inactive in the labour market over their life.

Juggling multiple roles is stressful and can have long-term effects on health

These findings seem to suggest that the accumulation of, for example, financial resources as a result of predominantly full-time work may not be as favourable for health in later life as the additional benefits (such as social networks) that might be gained via having family, followed by a return to full-time work.

Findings also have clear policy implications: social policies that help women to combine paid employment with family life have the potential to contribute to better health status for individuals in later life. ■

www.cpc.ac.uk; www.elsa-project.ac.uk

NEWS IN BRIEF

COMA RESOURCES

An online resource featuring families sharing their experiences of having a relative in a vegetative or minimally conscious state is providing information and support to family members as well as legal and medical practitioners. The healthtalk.org online resource provided information and support to more than 4,000 visitors in the first few months after launch. Training sessions based on the resources were also delivered in hospitals, rehabilitation centres and care homes as well as informing training for legal professionals. The online resource was developed after previous research revealed that many families with relatives in prolonged vegetative or minimally conscious states struggle with feelings of isolation, guilt and confusion, and are provided with incorrect legal guidance, poor information and inadequate support. healthtalk.org

HOW OLD?

Ageism is still the most commonly experienced form of prejudice in the UK and across Europe, according to a study of people's attitudes to age and experiences of ageism. The Eurage researchers examined data from over 50,000 individuals from 28 European countries based on the Ageism Module in the 2008–9 European Social Survey. In the UK, researchers found that ageism was most strongly related to lowered life satisfaction and happiness among people over 70. In this age group, those who experienced ageism reported 16 per cent lower life satisfaction and 14 per cent lower happiness compared to people who had not experienced ageism. Researchers used the data to dispel the notion that older people are generally able to maintain wellbeing in later life, even though many experience age-related changes or declines in circumstances, health or income. www.eurage.com

Professor Dominic Abrams,
University of Kent and
Professor Luisa Lima, Lisbon
University Institute



GETTY

How does the study of a disease's effects on people over a lifetime contribute to public health policy?

OPINION

CHARTING A HEALTHY COURSE

By Professor
Amanda Sacker

EPIDEMIOLOGY IS THE scientific study of how often and why diseases occur in different groups of people. Lifecourse epidemiology is mainly concerned with the 'why?' and views the onset of chronic disease as the end point of a lifetime's experience of social, biological and environmental hazards. Some research emphasises early influences in the womb or even before conception, whereas other research seeks to understand the chains of risk or the build-up of effects. The World Health Organization has endorsed lifecourse epidemiology as an approach to understanding the origins of health, wellbeing and (mainly non-infectious) diseases. It has instinctive appeal with its focus on development over time and across generations. But has it delivered? I believe as an organising framework it has.

Led by the UK, and the ESRC in particular, there are now many surveys that have followed large numbers of people from birth, re-interviewing their families and themselves at intervals throughout their lives. These 'cohort studies' have given us many of the facts and figures needed to research the lifecourse and have been used extensively by social scientists. The recommendation by economists that investments at the beginning of life will have the greatest dividend in the long term has resulted from research using cohort studies. Yet if lifecourse epidemiology has taught us anything, it is that individual lives are diverse and multifaceted and that there is no 'quick fix'.

WHAT'S A DISADVANTAGE?

Again and again, research has shown that the more social, physical, economic and psychological disadvantage a child is exposed to, the more they are behind at school. For example, our research in the ESRC International Centre for Lifecourse Studies in Society and Health has found a two-year



*At the
end of the
lifespan,
social
support and
networks
protect us
from poor
health*



difference in verbal ability measured at entry to primary school for a child with no disadvantages compared to a child with seven or more disadvantages. This might suggest that intervening in the pre-school years will permanently reduce the gap, but test the same children again as they are about to move to secondary school and the difference has grown to five years – not because the advantaged have surged ahead but because the disadvantaged have lagged further behind.

It is a stark reminder that we must not forget our vulnerable children who need continued support throughout life and not

just in the early years. Getting the most out of children educationally is important because it sets them off on better lifecourse paths in work and family spheres. Lifecourse research emphasises that policy needs to target adulthood too, as adversities such as insecure work, unemployment, family break-up and poverty add to the risk of poor health.

At the end of the lifespan, a consistent finding is that social support and networks protect us from poor health. Lifecourse research emphasises that it is not only public health policy that can improve the health of the public. The older person's free bus pass in England and the Freedom Pass in London were introduced to reduce social exclusion, and have improved the health of our ageing population, partly through increased incidental physical activity.

The lifecourse approach has helped design public health programmes that place emphasis on specific phases of life but that also have age-relevant components across the lifespan. It highlights the need for joined-up policy across government departments and emphasises the deficiencies of short-termism. Unfortunately, the take-up of the lifecourse framework has coincided with sweeping cuts to public sector budgets. But as we plan for an increasingly ageing population, can we afford to neglect the accumulating evidence from lifecourse epidemiology? ■

www.ucl.ac.uk/icls

Professor Amanda Sacker is Director of the *ESRC International Centre for Lifecourse Studies in Society and Health*.



CHILDREN FIRST

What children say about how they are cared for in hospital

DISABILITY & MENTAL HEALTH

Is care adequate for children with more special needs?



64% of parents and carers of children with a physical disability, and 68% of those with children with a mental health condition or learning disability, said that the ward their child stayed on had the appropriate equipment and adaptations, but, by comparison, 81% of parents and carers whose children *did not* have these special needs were satisfied - almost 20% more.

45% of parents and carers of children with a physical disability, and 49% of those with children with a mental health condition or learning disability, said that staff were aware of their child's medical history. By comparison, 59% of parents and carers whose children *did not* have these needs were satisfied.

49% of parents and carers of children with a physical disability, and 48% of those with children with a mental health condition or learning disability, felt that staff knew how to care for their child's special needs. By comparison, 72% of parents and carers whose children *did not* have these special needs were satisfied.



> **82%** said hospital staff talked to them about how they were going to care for them in a way that they could understand

> **89%** said that they felt safe on the ward all the time

GOOD CARE

(8-15-YEAR-OLDS)



> **1 in 8** children were not told who to talk to or what to do if they were worried about anything when they got home

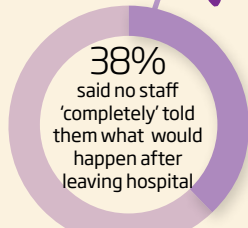
POOR CARE

(8-15-YEAR-OLDS)

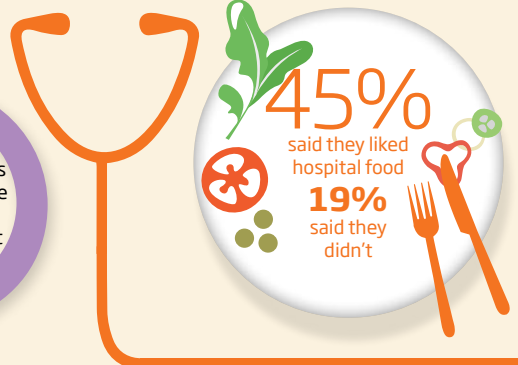
PARENTS & CARERS

> **41%** felt that staff were not always aware of their child's medical history before treating them

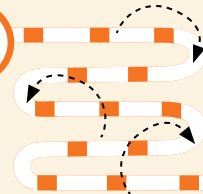
> **35%** said that they were not definitely encouraged to be involved in decisions about their child's care and treatment



FOOD & PLAY (8-15-YEAR-OLDS)

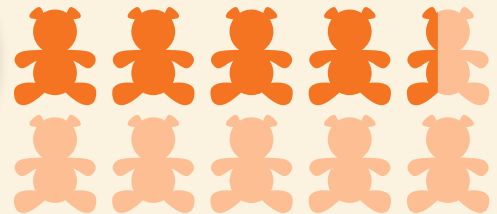


START



< **27%** said play didn't happen but they wished it had

FINISH



▲ More than **4 in 10** children (aged 8-11) said staff didn't play with them or do any activities

CONNECTING

75% of 8-15-year-olds said someone talked to them if they were worried about something

73% of all children said they were listened to, 88% said staff were friendly, and 82% said they were spoken to in an understandable way

61% of children with a mental health condition or learning disability said there was someone to talk to when they had worries

PARENTS & CARERS

1 in 5 were not given any written information to take home about their child's condition or treatment, but would have liked some



Source: Statistics represent the experiences of nearly 19,000 children and young people who received inpatient or day case care in 137 NHS acute trusts during August 2014. From children and young people's inpatient survey and day case survey 2014.

