

Editorial

Health inequalities and psychosis:
time for action

David Shiers, Tim Bradshaw and Jonathan Campion

**Summary**

People with psychosis face a life-restricting and life-shortening epidemic of obesity, diabetes and cardiovascular disease. This can be predicted by the associated antecedent risk factors evident from early in psychosis, yet remain largely ignored. Greater coordination between primary care, secondary care and public health to systematically prevent and intervene earlier for these physical illnesses offers a realistic solution to reduce this health inequality.

Declaration of interest

D.S. is a member of the current National Institute for Health and Care Excellence (NICE) quality standard group for children and young people experiencing bipolar disorder,

psychosis and schizophrenia; topic expert for the current update of NICE guidance on psychosis and schizophrenia in children and young people; member of the Expert Reference Group for Early Intervention in Psychosis Access and Waiting Times Initiative led by the National Collaborating Centre for Mental Health (NCCMH); Board member of NCCMH and clinical advisor (paid consultancy basis) to the National Audit of Schizophrenia (NAS). These are his personal views and not those of NICE, NCCMH or NAS.

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A gold standard for success in treating any illness is the impact on mortality. For people experiencing psychosis a widening 15- to 20-year life expectancy gap highlights both the adverse impact of some interventions and a lack of implementation of others. Cardiovascular disease (CVD) is a major contributor to this reduced life expectancy, far exceeding suicide.¹ Benefits from three decades of reducing CVD mortality in the general population have eluded people with psychosis, for whom CVD, obesity and diabetes are now two to three times more prevalent.¹

Genes may load the gun but it is the environment that pulls the trigger

As well as genetic determinants, socioeconomic inequalities also increase the likelihood of mental disorder, exemplified by several-fold variation in incidence of psychosis between least and most deprived areas of England.² Socioeconomic inequalities operating early in life are particularly important, given that most lifetime mental disorders, including psychosis, emerge in adolescence or early adulthood. Mental disorder is then associated with a range of further inequalities including health-risk behaviours, resulting in higher rates of physical illness and premature mortality as well as poorer educational and employment outcomes, stigma and discrimination.³ Therefore, addressing inequalities can prevent mental disorder and early intervention for mental disorder across different aspects including physical health can prevent wide-ranging adverse outcomes.

Socioeconomic inequalities and poor life skills of people experiencing psychosis are associated with higher rates of health-risk behaviours that are further exacerbated by illness

factors such as lack of motivation or adverse effects of medication on appetite or concentration. In particular, smoking is the largest UK cause of premature death including for people with mental disorder.⁴ However those with psychosis are two to three times likelier to smoke than the general population, smoke more heavily and spend proportionately more income on cigarettes.⁴ Other unhealthy lifestyle factors include greater alcohol and illicit drug use, poor diets and physical inactivity.¹ All increase risk for CVD and diabetes.

Antipsychotic drugs also affect cardiovascular risk directly, relevant to every prescriber's duty to minimise harm.¹ Any antipsychotic drug can cause weight gain and metabolic disturbance although this tendency varies between individual drugs.¹ These adverse effects can occur within weeks of commencing antipsychotics with 50% of individuals who are treatment-naïve gaining over 7% of body weight within 1 year.⁵

Minding the monitoring and intervention gap

As the UK's Chief Medical Officer highlighted,⁶ only a minority with any mental disorder receive treatment, with even less coverage of interventions to address associated health-risk behaviour and physical illness.³ For those with psychosis, improved understanding about the nature of early psychosis has translated into two decades of welcomed service reform although coverage by early intervention psychosis services has recently reduced despite their evidenced benefits.⁶ However, the need for continuing reform is highlighted by the widening mortality gap reflecting systemic failure to provide and monitor appropriate coverage of evidence-based treatments for people with psychosis. This arises in part from underlying discriminatory attitudes at every level, further exacerbated by 'diagnostic overshadowing' and reduced likelihood of receiving treatments even when physical problems are recognised.⁶

The National Audit of Schizophrenia (NAS), examining the care of over 5000 people attending community mental health services from England and Wales, discovered inadequate physical health monitoring and lack of intervention for identified risk by

secondary and primary care.⁷ The quality outcomes framework (QOF) encourages primary care to improve the physical health of people experiencing psychosis. This had previously relied on 11 pay-for-performance measures, although most incentivised screening rather than monitoring intervention coverage or outcomes. However, the 2014 QOF decision to retire weight, glucose and lipid measures may further widen health inequalities, notwithstanding evidence for systematic underrecognition and undertreatment of CVD by primary care of people experiencing schizophrenia even before these retirements.⁸ Thus, although the epidemic of obesity, diabetes and CVD is clearly predicted by antecedent risks evident from the onset of psychosis, few patients go on to receive appropriate monitoring or intervention, representing a breach of the right to health.

Cardiometabolic risk management requires not only effective monitoring but also careful antipsychotic selection and dosage, given their early adverse impact. However, the NAS reported widely varying prescribing practice including polypharmacy and prescribing of doses exceeding British National Formulary recommendations.⁹

The safest way to health

Although weight gain and metabolic disturbance can accelerate following antipsychotic initiation,^{1,5} these serious risks to health are often either ignored or even worsened by poorly prescribed drug treatments.¹⁰ This represents a critical opportunity to intervene earlier and more effectively to minimise such risks.

Although antipsychotic medications are important, their use needs to balance benefits and harm particularly from associated cardiometabolic risk. In enabling patients to make informed choices from commencing treatment, this more balanced approach should include early universal access to evidence-based psychosocial interventions such as psychological therapies and family interventions,¹¹ and behavioural interventions and lifestyle approaches effective in reducing CVD risk. Evidence for addressing weight gain was sufficiently robust for Bartels to recently conclude 'the greatest current barrier to increasing the life expectancy of persons with serious mental illness is no longer a knowledge gap – it is an implementation gap'.¹² Indeed, emerging evidence suggests such interventions can be effective in the critical early phase of psychosis.¹³ Similarly, the continuing failure to address smoking, the single most important individual risk factor, is not about whether to act but how best to implement what is already known.⁶

The importance of such an integrated approach from the onset of illness and treatment can be summed up by Hippocrates (460–377 BC) 'If we could give every individual the right amount of nourishment and exercise, not too little and not too much, we would have found the safest way to health'.¹⁴

A matter of opportunity

Responding to these concerns, the NAS supported the Royal College of General Practitioners and the Royal College of Psychiatrists to codevelop the Lester *Positive Cardiometabolic Health Resource* encouraging collaborative and evidence-based approaches to protect cardiometabolic health using a simple assessment and intervention framework (see Appendix).¹⁵ Adapted for UK use from an original Australian resource in a process led by the late Professor Helen Lester, the Lester resource was recently updated and promoted by NHS England and Public Health England through the NHS Mental Health Commissioning Quality Innovation scheme (NHS CQUIN 2015/16, offering

financial incentives to provider trusts), and NHS Improving Quality's Living Longer Lives Programme.

Two other Royal College of General Practitioners/Royal College of Psychiatrists coproduced and updated resources resonate with the Lester resource strap-line 'Don't just screen, intervene':¹⁵ *Primary Care Guidance on Smoking and Mental Disorders* and *Early Intervention in Psychosis – Keeping the Body in Mind* (Appendix).^{4,16} These resources are reinforced by an international consensus entitled Healthy Active Lives (HeAL) asking health professionals and service providers to pay far greater attention to the cardiometabolic health of people experiencing psychosis for the first time. HeAL has attracted growing support since its 2013 launch by the Royal College of Psychiatrists in England and by New South Wales Health in Australia.^{17,18} These four resources highlight tremendous opportunity . . .

'Healing may be a matter of time but it also may be a matter of opportunity' (Hippocrates).¹⁴

A time for action

Addressing the inequalities experienced by people with psychosis is a defining challenge for modern psychiatric care. The nature and size of the morbidity/mortality gap for psychosis demands systematic prevention and early intervention through a population-based public health approach. This typically young population requires early, practical and positive support through careful prescribing, promoting and monitoring of physical health, and addressing health-risk behaviours. Nor is this simply a task for specialist services in the early treatment phase. Critically, primary care must be involved if early gains are to be consolidated. Local public health input is also vital to routinely monitor levels of both mental and physical unmet need, intervention coverage and outcomes, and coordinate upstream population approaches.^{6,19} The shared commitment required is exemplified by the collaborative development of the resources detailed in the Appendix.

Recognising primary care's importance in tackling this health inequality, perhaps the last word should go to the late Helen Lester, Professor of Primary Care. In delivering the prestigious 2012 James McKenzie lecture 'Bothering about Billy', she called on her GP colleagues to act: 'there are many things that cost little, that are based on simple observations not rocket science that we could introduce tomorrow . . .'. Speaking out against the stigma that 'seeps and creeps' into clinical practice behind the health inequalities of patients with psychosis like Billy, she concluded 'But above all, I think, if we examine our hearts, it boils down, quite simply, to being bothered about Billy'.²⁰

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Appendix

Highlighted resources

- (a) The Lester UK Adaptation of the *Positive Cardiometabolic Health Resource* (2014 update with acknowledgement to the late Helen Lester for her contribution to the original 2012 version).¹⁵ www.rcpsych.ac.uk/quality/NAS/resources
- (b) *Primary Care Guidance on Smoking and Mental Disorders* (2014 update).⁴ <https://www.rcpsych.ac.uk/pdf/PrimaryCareGuidanceonSmokingandMentalDisorders2014update.pdf>
- (c) *Early Intervention in Psychosis: Keeping the Body in Mind* (2014 update).¹⁶ <http://www.rcgp.org.uk/clinical-and-research/clinical-resources/mental-health.aspx>
- (d) *Healthy Active Lives (HeAL) Consensus Statement*.¹⁷ www.iphys.org.au

References

- 1 Henderson DC, Vincenzi B, Andrea NV, Ulloa M, Copeland PM. Pathophysiological mechanisms of increased cardiometabolic risk in people with schizophrenia and other severe mental illnesses. *Lancet Psychiatry* 2015; **2**: 452–64.
- 2 Kirkbride JB, Jones PB, Ullrich S, Coid JW. Social deprivation, inequality and the neighbourhood-level incidence of psychotic syndromes in East London. *Schizophr Bull* 2014; **40**: 169–80.
- 3 Campion J, Bhugra D, Bailey S, Marmot M. Inequality and mental disorder: opportunities for action. *Lancet* 2013; **382**: 183–4.
- 4 Campion J, Shiers D, Britton J, Gilbody S, Bradshaw T. *Primary Care Guidance on Smoking and Mental Disorder, 2014 update*. Royal College of General Practitioners & Royal College of Psychiatrists, 2014.
- 5 Kahn RS, Fleischhacker WW, Boter H, Davidson M, Vergouwe Y, Keet IP, et al. Effectiveness of antipsychotic drugs in first-episode schizophrenia and schizophreniform disorder: an open randomised clinical trial. *Lancet* 2007; **371**: 1085–97.
- 6 Davies SC. *Annual Report of the Chief Medical Officer 2013, Public Mental Health Priorities: Investing in the Evidence*. Department of Health, 2014.
- 7 Crawford MJ, Jayakumar S, Lemmey SJ, Zalewska K, Patel MX, Cooper SJ, et al. Assessment and treatment of physical health problems among people with schizophrenia: national cross-sectional study. *Br J Psychiatry* 2014; **205**: 473–7.
- 8 Smith DJ, Langan J, McLean G, Guthrie B, Mercer SW. Schizophrenia is associated with excess multiple physical-health comorbidities but low levels of recorded cardiovascular disease in primary care: cross-sectional study. *BMJ Open* 2013; **3**: e002808.
- 9 Patel MX, Bishara D, Jayakumar S, Zalewska K, Shiers D, Crawford MJ, et al. Quality of prescribing for schizophrenia: evidence from a national audit in England and Wales. *Eur Neuropsychopharmacol* 2014; **24**: 499–509.
- 10 Correll CU, Robinson DG, Schooler NR, Brunette MF, Marcy P, Addington J, et al. Cardiometabolic risk in patients with first-episode schizophrenia spectrum disorders. Baseline results from the RAISE-ETP study. *JAMA Psychiatry* 2014; **71**: 1350–63.
- 11 Morrison AP, Hutton P, Shiers D, Turkington D. Antipsychotics: is it time to introduce patient choice? *Br J Psychiatry* 2012; **201**: 83–4.
- 12 Bartels SJ. Can behavioral health organizations change health behaviors? The STRIDE study and lifestyle interventions for obesity in serious mental illness. *Am J Psychiatry* 2015; **172**: 9–11.
- 13 Curtis J, Watkins A, Rosenbaum S, Teasdale S, Kalucy M, Samaras K, et al. Evaluating an individualized lifestyle and life skills intervention to prevent antipsychotic-induced weight gain in first-episode psychosis. *Early Interv Psychiatry* 2015; 26 Feb (Epub ahead of print).
- 14 Hippocrates. *Hippocratic Writings*. Encyclopedia Britannica, 1955.
- 15 Shiers DE, Rafi I, Cooper SJ, Holt RIG. 2014 update (with acknowledgement to the late Helen Lester for her contribution to the original 2012 version) *Positive Cardiometabolic Health Resource: An Intervention Framework for Patients with Psychosis and Schizophrenia*. 2014 Update. Royal College of Psychiatrists, 2014.
- 16 Shiers D, Campion J, Jones P, Taylor D. *Early Intervention in Psychosis: Keeping the Body in Mind – 2014 Update*. Royal College of General Practitioners & Royal College of Psychiatrists, 2014.
- 17 iphYs (International Physical Health in Youth) Special Interest Group. *Healthy Active Lives (HeAL) Consensus Statement*. iphYs, 2013.
- 18 Shiers D, Curtis J. Cardiometabolic health in young people with psychosis. *Lancet Psychiatry* 2014; **1**: 492–4.
- 19 Campion J. Public mental health: the local tangibles. *Psychiatrist* 2013; **37**: 238–43.
- 20 Lester HE. Being bothered about Billy. RCGP James McKenzie Lecture 2012. *Br J Gen Pract* 2013; **63**: e232–4 (<http://www.youtube.com/watch?v=tqyACm5OQOM>).