

Analysis

Still 'being bothered about Billy':

managing the physical health of people with severe mental illness

INTRODUCTION

People with severe mental illness (SMI) face a future not only limited by stigmatising psychiatric illness, but also a life shortened by 15–20 years through physical comorbidities. Social and behavioural determinants help explain why many of these comorbidities cluster together. Moreover, the experience of multiple conditions, sometimes with conflicting management requirements and multiple healthcare providers, creates a disproportionate treatment burden accompanied by often poorer individual disease outcomes, a situation compounded by discriminatory health care.¹

The late Professor Helen Lester called upon GP colleagues to make the care of people with SMI *core business* in her 2012 James Mackenzie Lecture, 'Being Bothered about Billy', to the Royal College of General Practitioners (RCGP) Annual General Meeting. Recognising the particular contribution of cardiovascular disease (CVD) and diabetes to reduced life expectancy, Professor Lester urged GPs to '*Don't just screen, intervene*' for cardiometabolic risks. This advice was seemingly unheeded when GP contract negotiators retired three key cardiometabolic indicators from the 2014/2015 Quality and Outcomes Framework (QOF),² with the predictable detrimental impact of this decision.³ While CVD remains the commonest cause of a still widening mortality gap,⁴ this population also experiences elevated rates of other physical comorbidities compared with the general population.⁵ We will argue that tackling this health inequality should remain *core business* for GPs.

'CLOSING THE MORBIDITY AND MORTALITY GAP'

Why this matters to primary care

In the UK, the lifetime prevalence of psychotic disorders such as schizophrenia

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and bipolar disorder are 0.72%⁶ and 1–2%⁷ respectively. A GP with an average list size can expect about one patient per year to present with a new psychotic illness, characterised by changes in perception, thinking, mood, and behaviour. Stigma and social isolation compound disrupted education and employment, and financial and accommodation uncertainties.

About 20% of individuals will fully recover following a single episode. However, most continue to experience psychological and social difficulties. Of these, about half achieve good levels of social functioning, while the remainder experience a more difficult course sometimes leading to severe disability; many develop poor physical health. This means that every general practice in the UK cares for substantial numbers of patients affected by SMI who have ongoing physical and mental health needs. GPs and primary care teams are ideally placed to build up relationships over time, and to proactively support these individuals and their families.

The widening mortality gap

While suicide rates are particularly high early in the course of psychosis, overall many more premature deaths arise from physical illnesses including CVD and smoking-related pulmonary disorders. Type 2 diabetes is 2–3 times more frequent, eventually affecting 10–15% of people with

SMI.⁹ CVD is three times more frequent for those with schizophrenia and the single biggest cause of a *still widening* mortality gap which sees people with schizophrenia dying, on average, 11 years earlier than the general population.^{4,8} Unlike life expectancy trends which see the general population living longer, the average age of death of men and women with schizophrenia decreased between 1980 and 2010.⁸

Why do people with severe mental illness still die early?

Increased cardiometabolic risk is a major contributor to reduced life expectancy. This is partly due to adverse health risk behaviours such as poor diet, smoking, and inactivity, in addition to the impact of psychiatric illness and its treatment (for example, lack of self-care, poor concentration); this is all compounded by stigma and social disadvantage. Vulnerability to some of these risks may be present even before psychosis is diagnosed.

Smoking is a major contributor to the health inequality experienced by this population.¹⁰ Four decades of public health focus on preventing smoking-related diseases in the UK have witnessed smoking rates in the general population steadily fall from around 40–50% in 1974 to around 15% in 2017 alongside reduced daily cigarette consumption in those who do smoke. Yet for those with SMI, smoking rates are stuck at 40–50% and most smokers do so heavily.¹¹ Given that quitting smoking is probably the single most effective way of improving the health of people with SMI, how this can be achieved will be considered in the section 'What can be done'.

A study of 1150 people with SMI drawn from 64 practices across England found average consultation rates of three per year,¹² barely higher than for the wider practice population; moreover, practice nurses were half as likely to see people

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with SMI as the wider practice population. Despite annual physical health checks for people with SMI being incentivised through the QOF since 2004, the 2012 National Audit of Schizophrenia for England and Wales reported that less than a third of >5000 patients had received a completed cardiometabolic risk assessment within the previous 12 months; even if assessed, many of those with identified risks received no intervention.¹³ This may reflect barriers to accessing routine health checks and poorly coordinated primary and mental healthcare services. Findings were echoed in a survey of 314 general practices in Scotland, revealing under-recognition and under-treatment of cardiovascular disease in people with schizophrenia.⁵ Thus the care of people with SMI is an example of the 'inverse care law',¹⁴ with those with most need of care being least likely to receive it.

The role of prescribed medication is also important. Many antipsychotics increase appetite and can directly cause weight gain and insulin resistance, increasing the likelihood of developing diabetes and cardiovascular disease. Initiation of drug treatment is associated with a striking trajectory of weight gain of around 12 kg within 24 months of initial diagnosis (Figure 1).

This degree of weight gain can be demoralising, adding further stigma to that of mental illness. For some patients, feeling 'fattened and flattened' by their medication may lead them to withdraw from care, thus entering a dismal cycle of relapsing psychosis and further treatment attempts. This is a particular concern given the high risk of suicide in the first 5 years of psychosis and underlines the difficult balance between adverse cardiometabolic effects against the consequences of having no treatment.

What can be done? 'Don't just screen, intervene'¹⁵

We wish to highlight some practical examples of how primary care can help address the mortality and treatment gap.

CVD AND DIABETES

High rates of CVD and diabetes in people with SMI are not only predictable but also potentially avoidable. Moreover, the best way to tackle physical comorbidity is through prevention and early intervention rather than waiting until something goes wrong. This forms the basis of the Lester resource (Table 1), tailored to respond proactively to cardiometabolic risk from the onset of psychosis and instigation of treatment. With

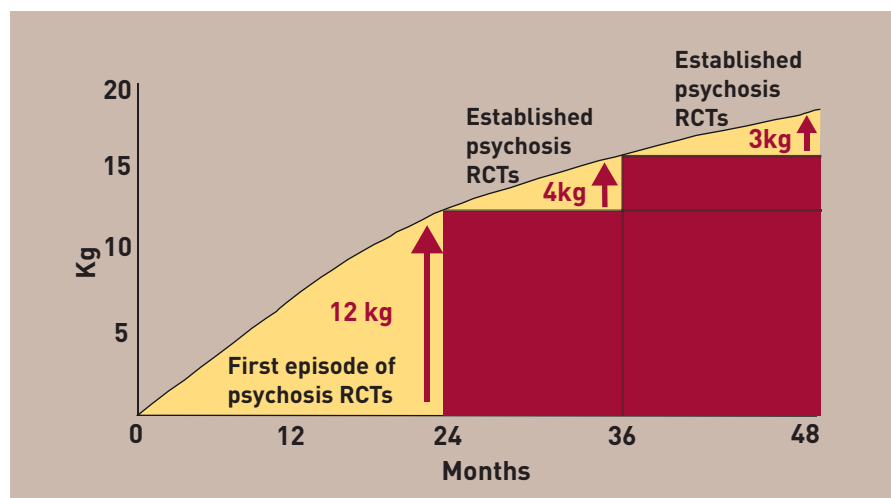


Figure 1. Antipsychotic-induced weight gain in chronic and first-episode psychotic disorders. Used by permission of Dr Mario Álvarez-Jiménez.¹⁶

its mantra 'Don't just screen, intervene', the Lester resource resonates with the NHS vascular health check but targets the particular needs of this (often younger) high-risk population. It was adapted for UK use from an original Australian version in a process led by the late Helen Lester involving the RCGP and The Royal College of Psychiatrists (RCPsych), and endorsed by the National Institute for Health and Care Excellence (NICE) in 2014. Encouragingly, this international collaboration has led to six other countries developing their own adapted versions for use by clinicians in primary and secondary care.

The Lester resource stresses the importance of involving the person with SMI in discussions about the benefits and adverse effects of their antipsychotic medication. There are relatively small differences in efficacy but substantial differences in side effects. These vary according to individual drug response rather than an arbitrary classification into first-generation and second-generation

drugs.¹⁷ There is a hierarchy of effect on weight gain and metabolic disturbances, with olanzapine and clozapine having greater impact than drugs such as aripiprazole and lurasidone. However, a large Finnish cohort study¹⁸ of people with schizophrenia found that olanzapine and clozapine were associated with the lowest overall mortality. The important message is that prescribing should be tailored to maximise benefits and minimise side effects for individual patients.

The Lester resource encourages a collaborative approach to care; its framework for identifying and treating abnormal CVD risk utilises a simple traffic-light system to support clinicians in providing a consistent approach across primary and secondary care services. Encouragingly, a large randomised controlled study in the US recently showed that an 18-month tailored care intervention drawing from care coordination and care management approaches could significantly reduce overall CVD risk in adults with SMI.²²

Table 1. Lester resource monitoring schedule

	Baseline	Weekly for first 6 weeks	At 12 weeks	Annually
Personal and family history of CVD/diabetes	X			X
Lifestyle review	X		X	X
Weight	X	X	X	X
Waist circumference	X			X
Blood pressure	X		X	X
FPG/HbA1C	X		X	X
Lipid profile	X		X	X

CVD = cardiovascular disease. FPG = fasting plasma glucose. HbA1c = glycated haemoglobin.

Box 1. Myths about smoking and severe mental illness

- Smoking helps people with mental disorders. No! Stopping smoking is as effective as antidepressants for treating mild-to-moderate depression.
- People with mental illness can't or won't stop smoking. No! Not only do they often want to stop smoking, but also with appropriate tailored support the SCIMITAR study (the largest trial of its kind) shows they can.¹⁹ Resources that can be offered to patients include the y-QUIT leaflet.²⁰
- Pharmacological smoking cessation interventions used in the general population do not help with these patients. No! prescribed treatments like nicotine replacement therapy, varenicline, and bupropion can be as effective and safe for people with SMI.²¹

Box 2. Practical tips for supporting people with severe mental illness during the COVID-19 pandemic and afterwards

- Reach out to people with severe mental illness (SMI): be aware of the risk of relapse, ask about concordance with medication, ask about support.
- Ensure that details of carers are documented (and contact carers to enquire after their wellbeing).
- Flag notes so that receptionists can prioritise access to a GP (or other clinician) who knows the patient.
- Offer slightly longer appointments — whether this is by telephone, video, or face-to-face.
- If a patient is attending, offer waiting space outside the GP's door to avoid busy waiting areas that can exacerbate stressful symptoms.
- At every contact, explore lifestyle factors (smoking, diet, activity, alcohol) and give advice; review whether physical examination or blood tests are needed; review medication — is the patient on a high-risk antipsychotic?
- Act on abnormal findings — on examination or blood tests.

Box 3. Further resources

- Royal College of General Practitioners (RCGP), Ten top tips to protect the physical health of patients experiencing psychosis. This condenses some elements to consider in offering an integrated approach — <https://www.rcgp.org.uk/clinical-and-research/toolkits/-/media/DF38FE77265441A0916C1588AE86C5B8.ashx>
- British Association for Psychopharmacology guidelines provide clinical guidance for managing weight gain, metabolic disturbances, and cardiovascular risk associated with psychosis and antipsychotic drug treatment — https://bap.org.uk/pdfs/BAP_Guidelines-Metabolic.pdf
- *Primary Care Guidance on Smoking and Mental Disorders* (2014 update) summarises some key considerations — https://www.rcpsych.ac.uk/docs/default-source/improving-care/better-mh-policy/policy/primary-care-guidance-on-smoking-and-mental-disorders-2014-update.pdf?sfvrsn=5824ccd5_2
- Rethink Mental Illness offers a resource describing antipsychotics and their side effects — <https://www.rethink.org/diagnosis-treatment/medications/antipsychotics/side-effects>
- Public Health England, *Severe Mental Illness (SMI) and Physical Health Inequalities: Briefing. Research And Analysis* (2018) — <https://www.gov.uk/government/publications/severe-mental-illness-smi-physical-health-inequalities/severe-mental-illness-and-physical-health-inequalities-briefing>.
- Helen Lester's 'Being Bothered About Billy' lecture. RCGP James Mackenzie Lecture 2012 — <https://www.youtube.com/watch?v=tqyACm50QOM>
- Right From The Start, Keeping Your Teeth In Mind — <https://rightfromthestartmatters.com/keeping-your-teeth-in-mind/>

SMOKING CESSATION

GPs and primary care nurses can 'make every contact count' in encouraging their patients with SMI to quit smoking. However, some myths have perpetuated this major cause of health inequality (Box 1).

It is important to note that stopping smoking can affect the hepatic metabolism of drugs such as clozapine and olanzapine, causing drug levels to rise by up to 25% within a week

and 50% within a month. Similar effects can occur with certain antidepressants and benzodiazepines. These effects can work in reverse for those patients who resume smoking. Therefore, prescribing should be carefully managed and coordinated when considering smoking cessation.

MEETING THE HOLISTIC CHALLENGE

This is not just about CVD, diabetes, and

smoking. A survey of 314 general practices in Scotland revealed that, compared with the wider practice population, people with schizophrenia experience higher rates of a range of comorbidities, including a three-fold increase in Parkinson's disease, constipation, and viral hepatitis.⁵ Smoking-related respiratory disease such as COPD is more common. Primary care is uniquely placed to respond to such diverse physical health needs through its strengths of holism and continuity.

We also highlight the frequently neglected subject of sexual health. GPs may be reluctant to discuss this or, if they do, limit this to an enquiry about the adverse effects of medication on sexual functioning. This population is vulnerable to risks including sexual exploitation and abuse, self-stigma and limited choice of partners, and lack of awareness of how to practise 'safe sex'. All can lead to risky sexual behaviours, with serious consequences such as elevated rates of unplanned and hazardous pregnancies and sexually transmitted diseases (including potentially life-shortening blood-borne virus infections).²³ GPs and primary care nurses are ideally placed to help and the message is simple: START THE CONVERSATION about sexually transmitted diseases and blood-borne virus infections, contraception, and family planning.

Finally, oral health is an important concern for this population. A systematic review found people with SMI were three times more likely to have total tooth loss, and decayed, missing, or filled teeth.²⁴ Many of the same risk factors for CVD (for instance, smoking and poor nutrition) contribute to poor oral health. Furthermore, increased vulnerability through poor oral hygiene can result from low motivation and concentration from the psychiatric illness as well as medication side effects such as xerostomia. Poor oral health has serious consequences on self-esteem and quality of life, with one study reporting that a third of people with SMI felt their oral health had interfered with simple functions, such as eating and talking.²⁵ Despite these concerns, dental care is often inaccessible and ineffective. The key message is that oral health is an essential component of holistic care and should be mentioned as part of the regular primary care review, with signposting to a community dentist.

CONCLUSIONS

People with SMI view primary care as the cornerstone of their health care. Box 2 offers practical tips for practices to improve access and care, reducing the impact of

the inverse care law.¹⁴ Key is the need for continuity, which offers a unique understanding of the patient's context and family, and which can improve outcomes for people with SMI.²⁶ Primary care has an important role to play in support of carers. The primary care team plays a critical role in addressing the health inequalities experienced by people with SMI, and their carers, above achieving QOF targets. Box 3 provides additional resources.

The last word should go to Helen Lester. Reflecting on the issue of 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.'

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Competing interests

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REFERENCES

1. Thornicroft G. Physical health disparities and mental illness: the scandal of premature mortality. *Br J Psychiatry* 2011; **199**(6): 441–442.
2. Department of Health. About the Quality and Outcomes Framework. <https://www.health-ni.gov.uk/articles/about-quality-and-outcomes-framework-qof> (accessed 23 Jun 2021).
3. Minchin M, Roland M, Richardson J, *et al*. Quality of care in the United Kingdom after removal of financial incentives. *N Engl J Med* 2018; **379**(10): 948–957.
4. Hayes JF, Marston L, Walters K, *et al*. Mortality gap for people with bipolar disorder and schizophrenia: UK-based cohort study 2000–2014. *Br J Psychiatry* 2017; **211**(3): 175–181.
5. Smith DJ, Langan J, McLean G, *et al*. 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**(4): e002808.
6. Saha S, Chant D, Welham J, McGrath J. A systematic review of the prevalence of schizophrenia. *PLoS Medicine* 2005; **2**(5): e141.
7. Pini S, de Queiroz V, Pagnin D, *et al*. Prevalence and burden of bipolar disorders in European countries. *Eur Neuropsychopharmacol* 2005; **15**(4): 425–434.
8. Nielsen RE, Uggerby AS, Jensen SOW, *et al*. Increasing mortality gap for patients diagnosed with schizophrenia over the last three decades — a Danish nationwide study from 1980 to 2010. *Schizophr Res* 2013; **146**(1–3): 22–27.
9. Mitchell AJ, Vancampfort D, Sweers K, *et al*. Prevalence of metabolic syndrome and metabolic abnormalities in schizophrenia and related disorders — a systematic review and meta-analysis. *Schizophr Bull* 2013; **39**(2): 306–318.
10. Brown S, Kim M, Mitchell C, Inskip H. Twenty-five year mortality of a community cohort with severe mental illness in the United Kingdom. *Br J Psychiatry* 2010; **196**(2): 116–121.
11. McManus S, Meltzer H, Campion J. *Cigarette smoking and mental health in England: data from the Adult Psychiatric Morbidity Survey*. London: National Centre for Social Research, 2010.
12. Reilly S, Planner C, Hann M, *et al*. The role of primary care in service provision for people with severe mental illness in the United Kingdom. *PLoS One* 2012; **7**(5): e36468.
13. Crawford MJ, Jayakumar S, Lemmey SJ, *et al*. Assessment and treatment of physical health problems among people with schizophrenia: national cross-sectional study. *Br J Psychiatry* 2014; **205**(6): 473–477.
14. Hart JT. The inverse care law. *Lancet* 1971; **1**(7696): 405–412.
15. Royal College of Psychiatrists. National Audit of Schizophrenia: Lester adaptation of the cardiometabolic health resource. <https://www.rcpsych.ac.uk/quality/nationalclinicalaudits/schizophrenia/nationalschizophreniaaudit/nasresources.aspx> (accessed 23 Jun 2021).
16. Álvarez-Jiménez M, González-Blanch C, Crespo-Facorro B, *et al*. Antipsychotic-induced weight gain in chronic and first-episode psychotic disorders. *CNS Drugs* 2008; **22**(7): 547–562.
17. Leucht S, Cipriani A, Spineli L, *et al*. Comparative efficacy and tolerability of 15 antipsychotic drugs in schizophrenia: a multiple-treatments meta-analysis. *Lancet* 2013; **382**(9896): 951–962.
18. Taipale H, Tanskanen A, Mehtälä J, *et al*. 20-year follow-up study of physical morbidity and mortality in relationship to antipsychotic treatment in a nationwide cohort of 62,250 patients with schizophrenia (FIN20). *World Psychiatry* 2020; **19**(1): 61–68.
19. Gilbody S, Peckham E, Bailey D, *et al*. Smoking cessation for people with severe mental illness (SCIMITAR+): a pragmatic randomised controlled trial. *Lancet Psychiatry* 2019; **6**(5): 379–390.
20. Psychosis Research Unit. Y-Quit: keeping your body in mind. <https://www.psychosisresearch.com/news/y-quit-a-resource-to-support-people-experiencing-psychosis-who-want-to-stop-smoking/> (accessed 23 Jun 2021).
21. Peckham E, Brabyn S, Cook L, *et al*. Smoking cessation in severe mental ill health: what works? An updated systematic review and meta-analysis. *BMC Psychiatry* 2017; **17**(1): 252.
22. Daumit GL, Dalcin AT, Dickerson FB, *et al*. Effect of a comprehensive cardiovascular risk reduction intervention in persons with serious mental illness: a randomized clinical trial. *JAMA Netw Open* 2020; **3**(6): e207247.
23. Hughes E, Mitchell N, Gascoyne S, *et al*. Sexual health promotion in people with severe mental illness: the RESPECT feasibility RCT. *Health Technol Assess* 2019; **23**(65): 1–136.
24. Kisely S, Quek LH, Pais J, *et al*. Advanced dental disease in people with severe mental illness: systematic review and meta-analysis. *Br J Psychiatry* 2011; **199**(3): 187–193.
25. Kilbourne AM, Horvitz-Lennon M, Post EP, *et al*. Oral health in Veterans Affairs patients diagnosed with serious mental illness. *J Public Health Dent* 2007; **67**(1): 42–48.
26. Ride J, Kasteridis P, Gutacker N, *et al*. Impact of family practice continuity of care on unplanned hospital use for people with serious mental illness. *Health Serv Res* 2019; **54**(6): 1316–1325.

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