Primary Care Guidance: Early intervention in psychosis - keeping the body in mind.

Why is this important for primary care?
Young people with psychosis are at much higher risk of future premature death due to physical health conditions. Understanding the nature of these physical risks and how they are active in an emerging psychosis provides Primary Care with an important opportunity to improve these adverse physical health pathways.

The scale of the problem
Despite continuing government policy to narrow health inequalities:

• People with schizophrenia and bipolar disorder die up to 25 years earlier than the general population. [1]
• More premature deaths are due to treatable cardiovascular, pulmonary and infectious diseases (66%) than from suicide and injury (33%). [2]
• The differential mortality gap has worsened in recent decades particularly from heart disease in younger people: Thus those aged 25 to 44 now experience 6.6x higher cardiovascular mortality than an age-matched general population.[3]

What causes these premature ‘physical’ deaths?

1. Lifestyle issues: Western and westernised populations are experiencing an escalation in cardiovascular risk factors such as obesity, smoking and sedentary lifestyles. Arguably people with psychosis face an epidemic within an epidemic of cardiovascular risk [4] due to being:

   • More likely to lead a sedentary lifestyle
   • Less likely to eat fruit and vegetables. [5]
   • Twice as likely to develop type II diabetes mellitus (risk may be higher for those from certain Black and Minority Ethnic groups.

   e.g. Pakistani and Bangladeshi communities who have a 5x risk of diabetes, even without the impact of mental disorder).[6]
   • Much more likely to be obese
   • More likely to smoke cannabis which in turn increases appetite
   • Particularly likely to smoke…

2. Smoking is the largest cause of preventable illness in the UK with smokers dying on average 10 years earlier than non-smokers. [7] Increased smoking is responsible for a large proportion of the excess mortality of people with mental health problems. [2] Moreover there is a potent interaction between risks which link to mental disorder: e.g. smokers have a 44% increased risk of type 2 diabetes compared with non-smokers, rising to 61% for those who smoke at least 20 cigarettes a day. [8]

   • 64% of those with probable psychosis were smokers compared with 29% without psychosis in a large population survey of psychiatric morbidity. [9]
   • 76% of those in their first episode of psychosis are smoking regularly. [10]
   • Those with schizophrenia have a 10 fold increased death rate from respiratory disease. [11]
   • Smoking induces the liver enzyme P450-1A2 responsible for metabolism of some antipsychotic medication, resulting in smokers requiring increased doses which can be reduced by up to half following smoking cessation. [12]

3. Medication: Substantial evidence implicates some or all antipsychotics in causing or worsening weight gain, dyslipidemia, and diabetes. [13]

   • Metabolic syndrome is 2-4 times higher in people with schizophrenia receiving antipsychotics than in an appropriate reference population.

4. Genetic factors: 15% of drug-naïve individuals with first-episode psychosis have elevated fasting glucose levels, high levels of insulin and cortisol, and three times as much intra-abdominal fat as age and Body Mass Index -matched control subjects (correlating with insulin resistance). [14] Familial links with diabetes have long been recognised.

5. Discrimination within the National Health Service – exemplifying the inverse care law: There is clear evidence that people with psychosis receive suboptimal health care, despite being at high risk for serious physical disorders:

   • If diabetic: less likely to receive routine eye checks; have poorer glycaemic and lipid control. [15]
   • Acute myocardial infarction: less likely to receive drug thrombolysins, aspirin, B-blockers, ACE inhibitors. [16]

Key learning points
Many thousands of people with psychosis are at high risk of dying of physical health problems in their twenties and thirties, at an age when primary care would not usually consider active primary or secondary prevention.

Adverse lifestyle factors, particularly smoking, and the impact of anti-psychotic medication with its risk of rapid weight gain or emergent diabetes, may be operating very early on in the course of psychosis.

The early phase of psychosis offers therefore an ideal opportunity to prevent or modify risks and avoid premature physical illness and shortening of life.
Only 49% of service users report being ever offered a physical health check [17]

Primary care consultation records: data recording is poorer for a range of health promotion areas, and cardiovascular risk factors in particular are less likely to be recorded or acted upon than for the general population. [18]

6. Lowered reporting of physical symptoms: People with schizophrenia are less likely than healthy controls to report physical symptoms spontaneously. [19]

What can be done?

These young people should be a priority for health promotion interventions, using a systematic approach to goal setting and planned proactive follow up:

1. Evaluate physical health risks: provide screening and intervention for cardiovascular risk factors (See Barnett et al for detailed consideration of parameters to consider [20]):
   - Initial evaluation to assess metabolic and cardiovascular risk.
   - Provide as a minimum, active, routine physical health screening for smoking status, blood pressure, body mass index (BMI) (or other measure of obesity such as waist circumference), fasting blood glucose, and plasma lipids measured annually.

2. Encourage participation in care decisions based on information about treatment and health promotion interventions:
   - Help patients understand and weigh the benefits and risks of antipsychotic medication
   - Emphasise the trade offs of improved mental health symptoms for increased physical health risks in the way that cancer specialists discuss the secondary morbidity of potentially curative treatments.
   - Emphasise how such risks can be significantly reduced by ensuring access to effective health promotion interventions with appropriate long-term support.
   - Work with families when they raise concerns about physical health on behalf of a patient, avoiding patient confidentiality becoming a blanket excuse for not acting.

3. Take positive actions to improve physical wellbeing: Provide targeted health promotion to combat ‘the big 3’: smoking cessation, dietary improvement and increased physical exercise.
   - Raise awareness about early psychosis and its physical health impact, and how primary care can use its skills and capability to improve these physical pathways
   - Quality and Outcomes Framework for people with serious mental illness: place patients on the disease register as soon as the diagnosis is made.

Primary care and specialist mental health practitioners should provide clear and consistent information and an open conversation which would:

- Apply reflective practice and learning; use audits against agreed standards of physical health impact e.g. access to smoking cessation; body mass index; exercise
- Borrow examples from other long-term conditions like diabetes to provide systematic and achievable preventative measures which are evidence-based [21] against coronary artery disease, stroke, diabetes and cancer e.g. the HEALTH Passport (Helping Everyone Achieve LongTerm Health) currently in development in the West Midlands UK as a 10 point ABCD approach, simple to use with all patients
- Provide new approaches using for example commissioning levers such as Practice-Based Commissioning, Local Enhanced Services.

Next time you see a young person with psychosis...
... Keep the body in mind