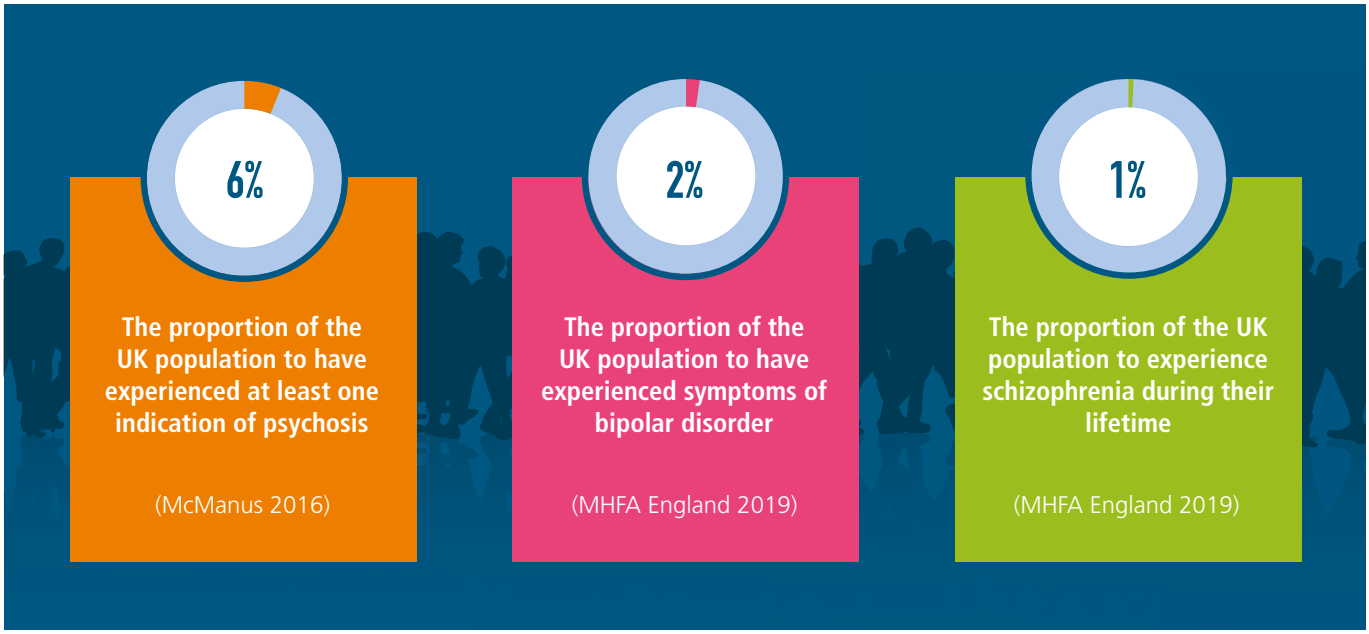
Handout to be studied alongside the training film

Introduction

Severe mental illness or SMI

refers to conditions where psychosis is present



Severe mental illness (SMI) refers to conditions where psychosis is present. Included on the primary care SMI register should be all patients with psychosis, schizophrenia, or bipolar disorder.

Psychosis and schizophrenia typically first occur in young people between the ages of 15 and 30 (Drake et al 2016) while bipolar disorder often starts between adolescence and mid-thirties (Dagani et al 2019).

How a person is affected by severe mental illness

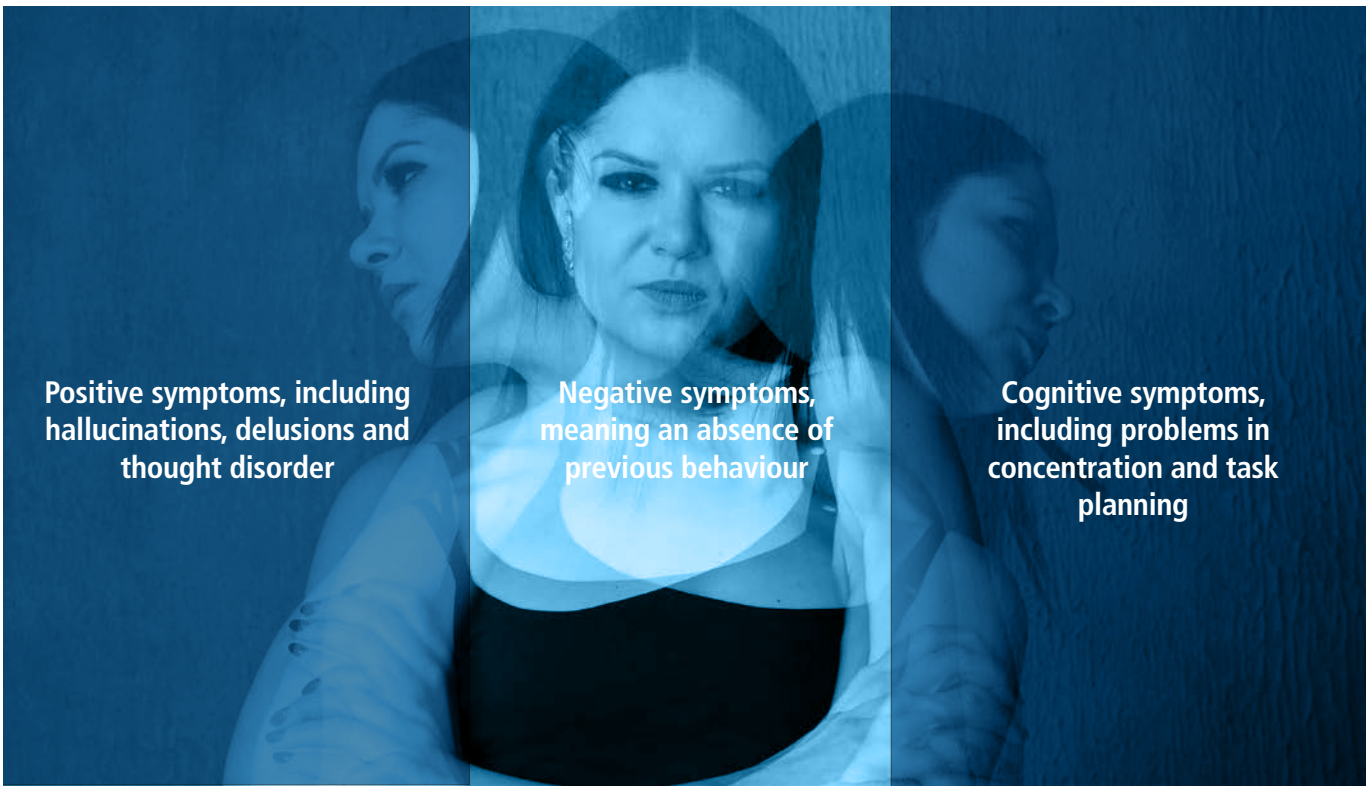
The way a person is affected by their mental illness influences how they behave and communicate, their ability to organise themselves and their understanding of any information and advice offered. This needs to be taken in to account when planning to see people with SMI.

Psychosis is not a condition but a symptom of mental illness. As the senses are altered, the affected person may not be able to distinguish between reality and their symptoms, and they may perceive or interpret things differently from those around them.

The two main features of psychosis are **hallucinations** and **delusions**.

When a person experiences an hallucination they may see, hear, smell, taste or feel something that does not exist. Auditory hallucinations are the most common type, the person might hear someone speaking to them or telling them to do certain things. The voice may be angry, neutral, or warm. A delusion is a belief maintained despite being contradicted by reality. Often, there is have an element of paranoia.

A person experiencing a persecutory delusion may believe they are being spied on, or forced to do something against their will, or someone is planning to hurt them. In those with a grandiose delusion, the belief may be that they have some sort of power or authority. As people who have psychotic episodes are often unaware that their hallucinations or delusions are not real, they may feel frightened or distressed.



Schizophrenia is a psychotic disorder where the person has positive, negative and cognitive symptoms.

The positive symptoms include hallucinations, delusions and thought disorder (thoughts and conversation appear illogical and lacking in sequence).

The negative symptoms are an absence of behaviour that the person may have had previously. They may appear emotionally inexpressive and unresponsive, have poverty of speech, lack the desire for company, be unable to show or feel pleasure, and have a lack of will, spontaneity, and initiative.

Cognitive symptoms are frequently experienced and include problems in concentration and task planning.

Bipolar disorder is characterised by episodes of elated mood known as ‘mania’, and depression.

During a phase of mania, the person may feel euphoric and self-important, be full of energy and have new ideas, and plans. They often talk quickly, are easily distracted, irritated or agitated and do not sleep or eat. They may participate in pleasurable behaviour with upsetting consequences, such as spending large amounts of money or engaging in risky sexual encounters.

During the depression phase the symptoms can include feeling sad and hopeless, empty or worthless, and guilty or despairing. The person may lack energy, have difficulty concentrating and remembering things, lose interest and enjoyment in everyday activities and experience self-doubt. Difficulties with sleeping and waking up early, and suicidal thoughts may also be present. Symptoms of psychosis can be experienced during the mania or depression phase.

Working with a person with SMI

People with SMI should be treated by healthcare professionals in the same way as any other person being consulted in that they respond to their individual needs.

However, some people with SMI can become overwhelmed by their environment, so communicating with them effectively will put them at ease and make good use of the consultation time.

Following some general guidelines can help people feel more comfortable:

- Don't crowd their personal space
- Show acceptance, for example, 'It's really good to see you'
- Convey interest, concern and alertness through body posture and facial expression
- Listen actively – use eye contact, nodding, open gestures. Paraphrase what is being said to ensure mutual understanding

Most of the time, people with SMI will respond to a healthcare professional in the same way as anyone else, but sometimes the healthcare professional's queries, and conversation may be met with silence or monosyllabic answers. Even though they are interested in what is being discussed, the person's facial expression and tone might reflect differently. At times, the person with SMI may react in a way that is hard to deal with. Below are some common reactions and how the healthcare professional could respond.

Reaction of person with SMI	How the healthcare professional could respond
Uncommunicative and appear disinterested.	Continue the conversation until the person shows disapproval
Displaying odd ways of speaking or behaving.	Attention should not be drawn to this and the person should not be asked why they are behaving in such a manner. The conversation should be continued normally
Presenting with inappropriate emotions.	If this causes discomfort or embarrassment to the healthcare professional, or the person does not appear to be managing, the conversation can be postponed for a later time
The person suspects the intentions of the healthcare professional and gets angry.	The subject upsetting the person should be avoided. The person should be reassured that the healthcare professional cares for them and would like to continue the conversation when the person is ready to do so
If the person displays unusual behaviour which is affecting the healthcare professional's ability to work with them	Look at the person. Say exactly what the person is doing that is making the consultation difficult. For example: 'It makes me feel a bit nervous when you keep getting up and walking around the room.'

Recognising relapse in mental health

As with long-term physical conditions, people with SMI may have periods when they relapse. Some of the reasons for this include:

- having a poor understanding of their condition
- being unable to recognise the symptoms of when they are becoming unwell
- not taking their medication as prescribed
- misusing alcohol or drugs
- having a poor sleep pattern
- being stressed
- not have supportive family and/or friends
- be experiencing stigma
- having poor physical health

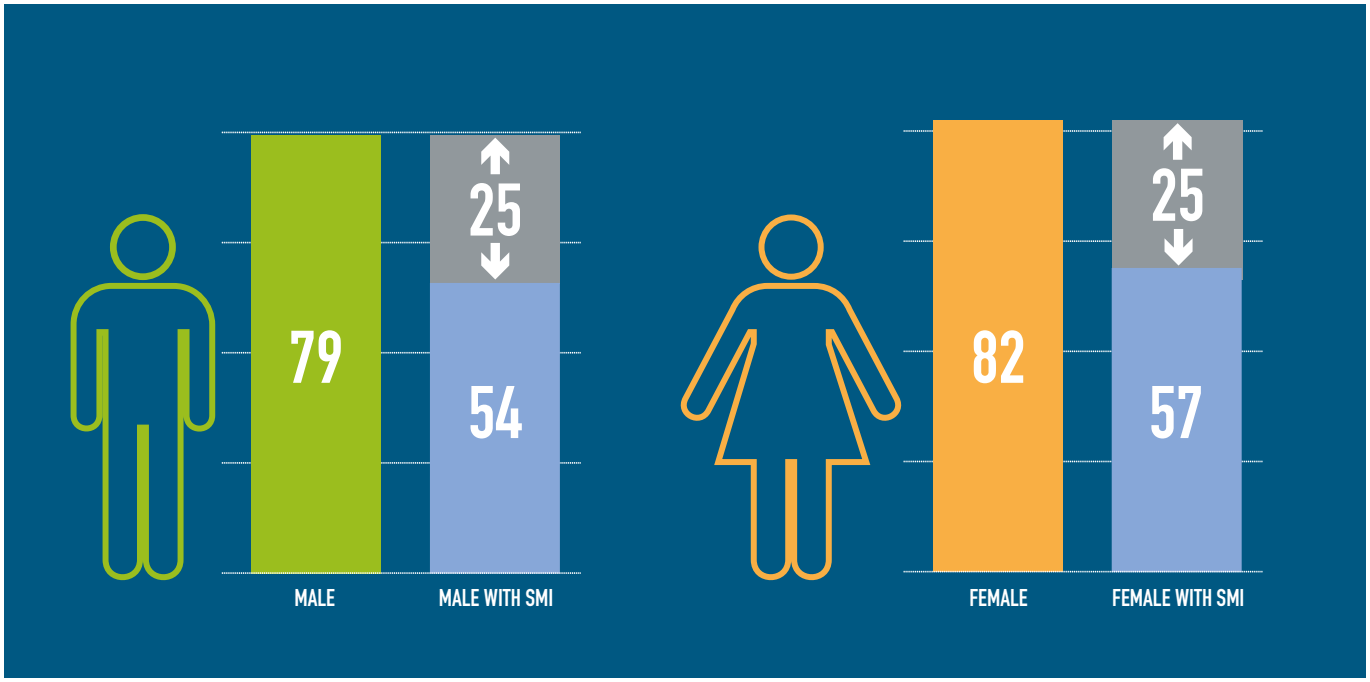
What to look out for

People with SMI should have a plan in their records which identifies their individual signs and symptoms of a possible relapse and describes the action to be taken by themselves, their family and healthcare professionals. Each person will display different warning signs, but the most common to look out for are:

- mood changes
- loss of humour
- irritability and/or agitation
- losing concentration
- not joining in
- talking or acting inappropriately
- describing strange plans or ideas
- neglect of personal care
- dressed in unusual clothes or unusual combinations of clothes (different from their usual attire)
- appear more sleepy or lively than usual
- noticeable weight loss or gain
- appearing suspicious or hostile
- intolerant of noise
- appear distracted, looking around (maybe be hearing voices or seeing things).

If a person with SMI appears to be relapsing they should be encouraged to access help. If they are very unwell, they may not recognize that they need help so the healthcare professional should contact their community mental health worker or GP as appropriate.

Physical health in SMI



Both an international study (Firth et al 2019) and one carried out in the UK (Hayes et al. 2017) found a mortality gap between people with SMI and the general population of up to 25 years.

Research has shown that 75% of this excess mortality is likely to be caused by physical illness such as respiratory disease, diabetes and cardiovascular disease (Barber & Thornicroft 2018, Liu et al 2017).

Premature mortality in this group can be amplified by economic disadvantage, unhelpful health behaviours (smoking, poor diet, lack of exercise, alcohol misuse), and difficulties accessing and adhering to medical treatments (Olfson 2015).

The antipsychotic medication used to treat SMI is also linked with premature mortality as it contributes to the development of cardiovascular disease, diabetes and obesity (Torniainen 2015, Mitchell 2013). Additionally, people with SMI are often not given adequate treatment for major medical conditions which may increase this risk (Woodhead 2016). People with SMI who neglect themselves have the highest excess mortality (Wu et al. 2012). Yet, when they are a low risk of self-harm or violence they are often discharged to primary care where enhancing self-care is unlikely to be considered (Hotopf & McCracken 2014).

The mortality gap between people with SMI and the general population has not improved despite increased appreciation of the significance of physical comorbidity (Mitchell et al 2017). To increase the life expectancy of people with mental health problems, inadequate social relationships, poor housing, unemployment and despondency need to be addressed as they have a major impact on physical health, but often the focus is on lifestyle factors alone (Marmot 2010).

In addition to the conditions causing early mortality, there is a high prevalence of other physical disorders such as, sexually transmitted infections, erectile dysfunction, obstetric complications, osteoporosis, and dental problems in people with SMI (De Hert et al. 2011).

People with SMI are more likely to have metastases at diagnosis and die prematurely from cancer than the general population and less likely to receive specialised interventions for cancer (Bushe et al. 2010, Kisely et al. 2013). The symptoms of physical conditions are often not considered or are viewed by healthcare professionals as part of the person's mental illness (Nash 2013).

Making appointments accessible

People with SMI need to be valued by healthcare professionals as much as those with physical health problems to close inequalities in mortality, morbidity or delivery of care (Mitchell et al. 2017). In order to achieve this, the government placed a legal responsibility on health services to make practical modifications to ensure that people with SMI are not disadvantaged compared with the general population in accessing healthcare (Equality Act 2010). One way of realising equality in primary care is to make appointments more accessible for this group by adapting the way they are invited and considering the set-up of the appointment.

Inviting people with SMI for a health check

People can be invited by letter and/or telephone or by a prompt from a third party.

Letter

The capacity of people with SMI to remember the appointment or keep to time may be affected by the symptoms of their mental illness, or they may feel too anxious to attend. They may choose not to go to their health check as they are not always made aware of their risk of increased cardiovascular risk and other physical conditions (Hardy et al 2013). This is no different to people without a mental illness who are often not motivated to attend for a check-up when they are uninformed of their health risks (Burgess et al 2015).

Several studies in England have shown poor uptake for health checks following a standard invitation letter (McDermott et al 2016, Norman and Connor 1993). Letters offering people an appointment with a specific date and time for a health check significantly increases attendance compared to letters containing an open invitation (Norman and Connor 1993, Camilloni et al 2013).

The situation appears to be no different for the SMI population; an audit of one primary care practice found that people with SMI had a 70% attendance for their physical health check when they were invited by letter giving a date, time, place and name of practitioner (Hardy and Gray 2012). The authors agreed that providing a predetermined date and time removed a complicated step in the process for the person with SMI. Perron et al (2010) report increased attendance in the general population following a prompt letter being sent a few days before the appointment. The letter consisted of a short paragraph which takes about 30 seconds to read, explains the programme of care, and provides gentle encouragement.

Telephone

Randomised controlled trials in England on the subject of NHS Health Checks showed that more people attended an appointment when invited by telephone compared to those who received a letter (Gidlow et al 2019), and endorsed text message reminders had a big influence on participation (Sallis et al 2019).

However, a systematic review of telephone prompting (McClean et al 2016) only found one study specific to people with SMI (Reda and Makhoul 2001); they observed no clear difference in attendance between those prompted by telephone one or two days before appointment and those given standard appointment management system. This study took place at a time when people with SMI would have been less likely to have access to a working phone. It is now more common now for people to own a mobile phone, with 94% of people in advanced economies being in possession of one (Pew Research Center 2019).

Prompt from a third party

The community mental health team (CMHT) can be advised of the appointment if the person with SMI is in contact with them. They may be able to encourage the patient to come, and in some circumstances might attend the appointment too. National guidance for schizophrenia and bipolar disorder asserts that it is the responsibility of the mental health team to ensure that people under their care receive physical healthcare from primary care (NICE 2014a).

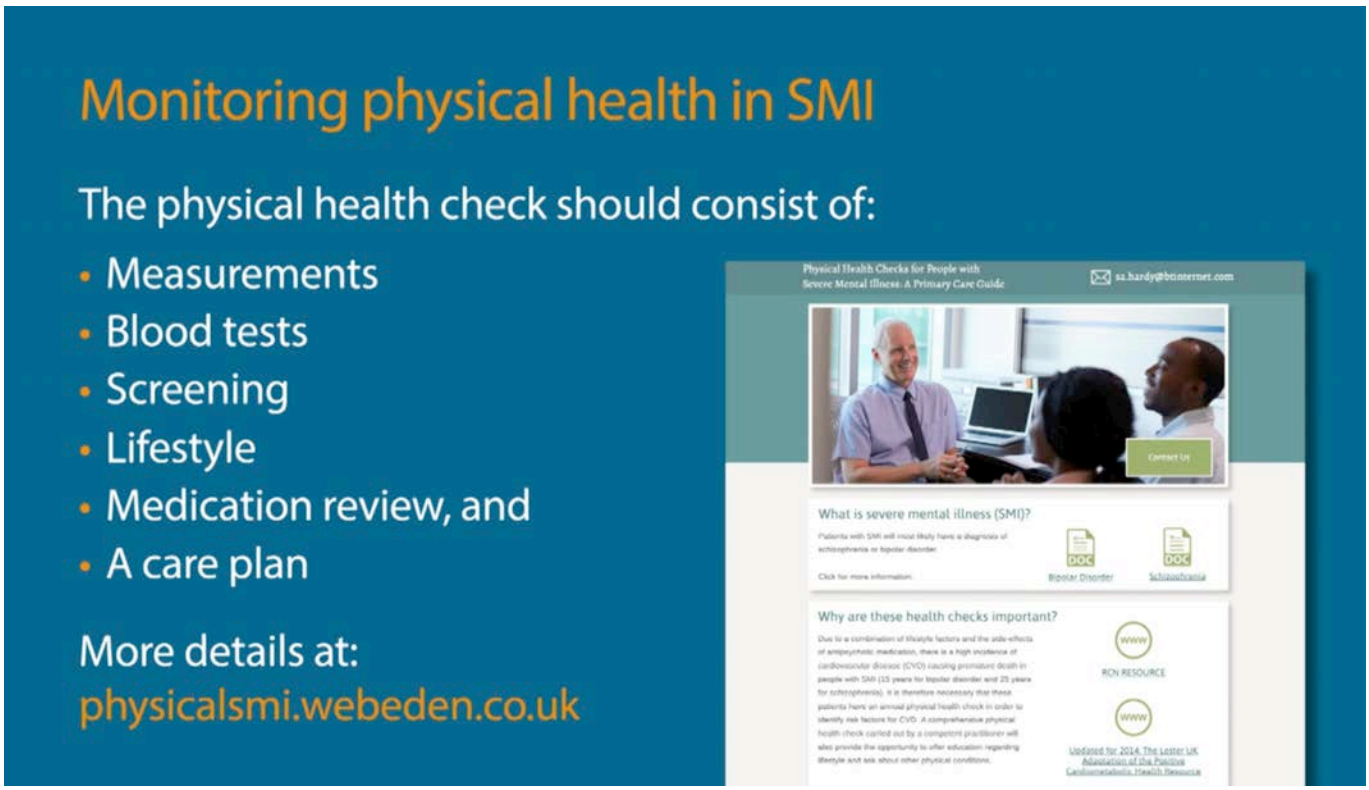
Appointment set-up

Practice nurses have made some practical changes in an attempt to make it easier for people with SMI to attend for their health check, though there is currently no available evidence to support what they have done. The changes include the time and duration of appointment and having a quiet area for waiting.

- **Time of appointment:** People with SMI may find it difficult to get up due to their symptoms and medication side effects, so avoiding early morning appointments is helpful.

- **Duration of appointment:** People with SMI may struggle with prolonged appointments which offer too much information, although there is a risk of them not coming back if all actions are not completed. Making sure the information given is concise, explaining the benefits of returning, and booking any follow up appointments during the consultation could help.

- **Quiet waiting area:** People with SMI may become agitated if they have to wait, and anxiety may be increased if the waiting room is full of people and is very noisy. This can be avoided by having a separate quiet waiting area, or organising appointments at a time of day which is not busy.

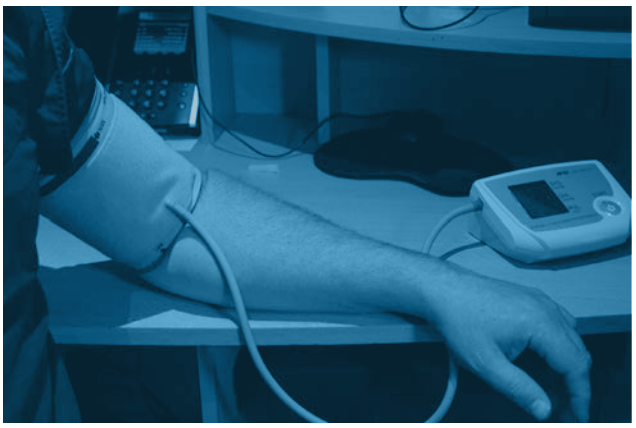


Monitoring physical health in severe mental illness

It is recommended by the authors of National Institute for Health and Care Excellence (NICE) guidance for psychosis and schizophrenia (NICE 2014a, checked March 2019) and bipolar disorder (2014b, checked October 2017 and amended February 2020) that GPs and other primary healthcare professionals in England monitor the physical health of people with SMI.

The physical health check should be carried out annually when responsibility for monitoring is transferred from secondary care. Nurses and other healthcare professionals working in primary care will be familiar with most of the features recommended as part of the annual health check as they are not dissimilar to those advised for other long-term conditions. Hardy (2013) recommends that a health check in primary care should consist of measurements, blood tests, screening, lifestyle, medication review and a care plan.

A manual which describes each element in detail is available from a website (http://physicalsmi.webeden.co.uk/) designed for primary healthcare professionals carrying out these health checks. The website also houses other useful information and tools.



Measurements

Body mass index and/or waist circumference, blood pressure and pulse should be measured. Electrocardiography (ECG) should be performed on all patients with an increased pulse above 100 beats per minute and on those prescribed high doses of antipsychotic medication.

Blood tests

Liver function, lipids, glucose and/or HbA1c should be tested. It is also worth considering whether to test prolactin, urea, electrolytes and calcium, thyroid function, full blood count, B12 and folate, and plasma levels (as appropriate, such as lithium).

Screening

Discuss dental hygiene and dental visits and recommend regular visits to the opticians. It is worth examining the person's feet for neglect. Ask if there are problems with urination and enquire about bowel habits. Provide information and instruction about self-examination (testicles, breasts). In women, check cervical cytology has been carried out and ask about their menstrual cycle. Offer advice as appropriate.

Lifestyle

As with other physical conditions, advice and support should be offered as appropriate regarding sleep, smoking, exercise, alcohol, diet and fluids, caffeine and drug use and sex. There are some special considerations to consider in people with SMI when supporting them to reduce or stop smoking (Campion et al. 2014).

- Smoking increases the metabolism of some medications including antidepressants, antipsychotics, benzodiazepines and opiates, so the doses of these medications need to be reduced when smoking is reduced to prevent toxicity with further dose reductions as required with continued cessation.
- Monitor for smoking resumption as original doses of medication need to be reinstated if smoking is restarted.
- Monitor the mental state of people following reduction/cessation. For those taking bupropion and varenicline, there should be a clearly negotiated plan of support that outlines actions to be taken in the event of change in psychiatric symptoms, especially in the first two to three weeks.

In an evidence update, Public Health England advise that more research is needed on vaping among people with mental health conditions and its efficacy and safety for quitting smoking (Public Health England 2020). They write that high rates of smoking and vaping together suggests that smokers with mental health conditions should be advised and supported to quit smoking completely as soon as they feel able to do so. They found indications that health professionals need more tailored training on the use of vaping products among people with mental health conditions.

Medication review

All prescribed medication should be reviewed in the usual manner. Most people with schizophrenia will be treated with antipsychotic medication which can be divided into two types typical (older) and atypical (newer):

- Typical antipsychotics include chlorpromazine, flupentixol, haloperidol, perphenazine, pimozide, prochlorperazine, promazine, sulpiride, trifluperazine, zuclopenthixol
- Atypical antipsychotics include amisulpride (brand name Solian), aripiprazole (Abilify), clozapine (Clozaril, Denzapine, Zaponex), olanzapine (Zypadhera, Zyprexa), paliperidone (Invega, Xeplion), quetiapine (Seroquel, Seroquel XL), risperidone (Risperdal, Risperdal Consta)

Treating bipolar disorder is dependent on how the condition affects the individual patients. Different medication is used in each phase.

Acute manic phase

- Antipsychotics (olanzapine, quetiapine, risperidone and aripiprazole)
- Valproate, Lithium or Carbamazepine
- PRN Benzodiazepines

Depressive Phase

- Selective Serotonin Reuptake Inhibitors (SSRIs), e.g. citalopram, fluoxetine
- Antipsychotics
- Valproate, Lithium or Lamotrigine

Promoting concordance

As with any long-term condition requiring medication, patients are often reluctant to continue taking their treatment for a variety of reasons. Use these points when undertaking a medication review:

1. Provide information regarding their condition
2. Advise how important it is to take their medication as prescribed and not to miss doses
3. Ask patients about the type, severity and duration of side-effects. A tool can be used such as the Glasgow Antipsychotic Side-effect Scale, often referred to as GASS (Waddell and Taylor 2008). It can identify what specific problems the person is suffering from.
4. Explore resistance to therapy
5. Anticipate that the person may be misinformed about the illness or the treatment
6. Educate to continue taking medications when they are feeling better and describe why maintenance treatment is important
7. Refer to GP or original prescriber as appropriate if people have side effects or are unhappy about their medication

Long-acting antipsychotic injections

Antipsychotics can be administered either orally or as an injection. There are a number of reasons why injections may be prescribed instead of tablets:

- It is easier for some patients to have one injection fortnightly or monthly than remembering to take tablets every day
- The exact amount of medication that the patient is prescribed will be taken
- When a patient has malabsorption, an injection may be more effective
- There is a steady therapeutic medication level from regular injections
- There is protection from relapse beyond the time of the last injection.

Monitoring Lithium

To avoid harm to the recipient, the dosage of lithium needs to be adjusted based on recommended regular blood tests (usually every three months). The blood level of lithium is dependent on renal function and lithium has the potential to interfere with both renal and thyroid functions. Additionally, clinically significant alterations in lithium blood levels occur with commonly prescribed and over-the-counter medicines. People with SMI taking lithium should be made aware of the known side effects and symptoms of toxicity.

Side Effects

- gastric disturbance
- mild hand tremor
- ankle swelling
- thirst, polyuria
- metallic taste
- hypothyroidism
- disturbed renal function

Toxic! (Medical emergency)

- severe tremor
- stomach-ache with nausea and diarrhoea
- muscle weakness
- unsteadiness
- muscle twitching
- slurring of speech
- blurred vision
- confusion
- sleepiness

Blood tests for urea and electrolytes including calcium, estimated glomerular filtration rate (eGFR) and thyroid function should be taken every 6 months, and more often if there is evidence of impaired renal or thyroid function, raised calcium levels or an increase in mood symptoms that might be related to impaired thyroid function. The person should be monitored at every appointment for symptoms of neurotoxicity, including paraesthesia, ataxia, tremor and cognitive impairment, which can occur at therapeutic levels of lithium.

Care plan

As most patients who have a mental illness are seen only in a primary care setting, it is important that the primary care team takes responsibility for discussing and documenting a plan of care to prevent relapse (NICE 2014a). It should include:

- current health status
- social care needs including how needs are to be met
- social support. For example, help from friends or family or voluntary organisations
- summary of services received from secondary care
- occupational status
- 'early warning signs' that may indicate a possible relapse
- the patient's preferred course of action (discussed when well) in the event of a clinical relapse, including who to contact and wishes around medication

Flu vaccination

People with severe mental illness aged over 50 years and those who have a co-existing long-term condition should be offered a flu vaccination.

Supporting behaviour change

Physical health checks do not improve the health of people with SMI if the person is not offered any follow up (Chew Graham et al 2014). For morbidity and mortality to be reduced, any identified unhealthy behaviour needs to be modified. There is evidence to suggest that people with SMI can work with healthcare professionals to learn how to make lifestyle adjustments (Campion et al. 2005, Alvarez-Jimenez et al. 2008).

Recently, a randomised controlled trial of primary care nurses and healthcare assistants supporting people with SMI to change their behaviour, found appointments were well attended and there were fewer inpatient psychiatric admissions (Osborn et al 2019). Structured group education alone is not clinically effective in this group (Holt et al 2018) so people referred to groups such as weight management may require additional support to ensure attendance and engagement.

Summary

Healthcare professionals in primary care are responsible for carrying out physical health checks for people with SMI. Making practical changes when arranging appointments will make it easier for them to attend. To improve the health of people with SMI and decrease their risk of early mortality, support to change behaviour needs to be provided.

Vignette

Brian is nineteen years old. He was diagnosed with schizophrenia six months ago. He is responding well to his treatment with olanzapine. Since diagnosis he has gained nearly two stone and feels very tired all the time. He does not exercise regularly and eats lots of takeaway meals.

How should the healthcare professional support Brian to reduce his health risks?

Reflective Questions

- From the perspective a person with SMI, how accessible are the health checks in your practice?
- What extra support is provided by your practice team to assist people with SMI to change unhealthy behaviour?
- What else could be done in your primary care centre to improve the physical health of people with SMI?

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