Managing physical illness in people with severe mental illness

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People with severe mental illness have poor physical health, and increased morbidity and mortality compared to the general population. Community-based mental health care has led to hospital doctors being more involved in the physical care of psychiatric patients. This paper focuses on key issues in the medical management of psychiatric patients in a general hospital setting.

More recent studies confirm mid-19th century observations that long-term psychiatric patients suffer from increased physical morbidity and mortality (Brown, 1997). There is an increased risk of premature death (Harris and Barraclough, 1998), and natural deaths contribute 59% of excess mortality in schizophrenia (Brown, 1997).

A range of medical, social and behavioural factors are responsible for the poor physical health of these patients (*Table 1*). The influence of these factors will vary for each patient. Doctors must be aware of the limited social skills and communication difficulties experienced by many psychiatric patients. More time is needed for consultations, and patients cannot be relied upon to mention all their symptoms spontaneously. There is a need for systematic questioning (Jeste et al, 1996). Progress depends on staff being aware of the problem and being willing to find imaginative solutions which are acceptable and useful to patients (Phelan et al, 2001). These may range from health promotion initiatives to enhanced surveillance for physical illnesses.

VULNERABILITY TO SPECIFIC DISORDERS

These are summarized below.

Cardiovascular disorders

Baldwin (1980) described an increased prevalence of cardiovascular disorders in patients with schizophrenia and affective disorders. This may be a result of the adverse effects of psychiatric medication, as well as unhealthy lifestyles (Ruschena et al, 1998). Recognized adverse effects of neuroleptic medication include those that increase the long-term risk of cardiovascular disorders (e.g. weight gain, diabetes), hypotension and increased risk of ventricular arrhythmia. A prospective study of lifestyle in people with schizophrenia suggests that they eat a high fat and low fibre diet, lacking in fruit and vegetables, which is likely to increase cardiovascular risk (Brown et al, 1999).

Prospective studies have also shown an increased risk of cardiovascular disease in depressed individuals with a mean lag phase of 10 years between the report of depression and first report of cardiovascular disease (Ford et al, 1994).

Gastrointestinal disorders

Patients with schizophrenia have a greater mortality from peptic ulceration compared to the general population as a result of increased alco-

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TABLE 1.
Factors leading to poor physical health among the severely mentally ill

Lifestyle	Poor diet
	Smoking
	Substance misuse
	Lack of exercise
	Sexual practices
	Long-term antipsychotic medication
Social consequences of mental illness	Poverty
	Unemployment
	Poor housing
	Stigma
	Low self-esteem
Difficulties accessing health care	Poor communication skills
	Doctors focus on mental health
	Erratic compliance with health screening and treatment

hol misuse (Newman and Bland, 1991). Alcohol misuse is also a risk factor for development of liver disease. Weight gain associated with psychotropic medication can lead to a hiatus hernia (Clark, 1994).

Neurological disorders

People with schizophrenia have high rates of substance misuse (Reiger et al, 1990). Thus, it is vital to be aware of withdrawal symptoms as they may alter the presentation of medical illnesses. Regular thiamine may need to be prescribed to prevent complications like amnesic syndrome.

Psychiatric patients frequently use illicit substances (know as comorbidity). Many psychiatric drugs lower seizure thresholds, and this, combined with illicit substance use, compounds vulnerability and may induce epileptic fits.

Antipsychotic medication use can result in neurological complications such as acute dystonia, which are uncommon but frightening and life threatening, and tardive dyskinesia which is socially handicapping.

Musculoskeletal disorders

A common problem, especially in elderly patients, is neuroleptic-induced postural hypotension resulting in falls and fractures. There is some evidence for a positive association between reduced bone mineral density and depressive illness (Dinan, 1999) and a reduced incidence of rheumatoid arthritis in patients wtih schizophrenia (Vinogradov et al, 1991), although the latter findings are disputed.

Endocrine disorders

There is an increased rate of non-insulin dependent diabetes among people with schizophrenia. This increase may be directly as a result of schizophrenia as well as being a consequence of neuroleptic use (Mukherjee et al, 1989).

Respiratory diseases

High rates of cigarette smoking among psychiatric patients increase the risk of emphysema and recurrent chest infections. There is an increased risk of death or near death from asthma in asthmatic users of major tranquillisers (Joseph et al, 1996). Psychotropics commonly cause weight gain which can result in sleep apnoea in vulnerable patients (Clark, 1994).

Infectious diseases

Tuberculosis, human immunodeficiency virus (HIV) and hepatitis C are increasingly affecting those with long-term mental illness (Santhouse and Holloway, 1999). Their unhealthy lifestyles make them particularly vulnerable to respiratory and skin infections.

Oral health

A high prevalence of gum and dental morbidity was found in patients with severe mental illness (Mirza et al, 2001). Cormac and Jenkins (1999) have described the effects of poor dental hygiene in psychiatric patients such as dental caries, periodontal disease, malocclusions and tooth wear.

Self harm

Psychiatric patients are at an increased risk of self-injury, including overdoses, self-laceration, burning, and object insertion. Alienation from services may result in late presentation and complications such as skin lesions, fractures or impaired hepatic function.

Sexual health

Psychotropic medication commonly induces sexual dysfunction. Impotence is often caused by a wide range of antipsychotic and antidepressant drugs. Anorgasmia can be a particular problem with selective serotonin-reuptake inhibitors. Menstrual disturbances are, again, a common complication of antipsychotic drugs.

DRUG INTERACTIONS

As well as being vulnerable to the many interactions between different psychotropic drugs, patients may experience interactions between their psychotropic medication and prescribed and non-prescribed medication. Major interactions are summarized in *Table 2*. The reader should refer to the British National Formulary for further details.

GENERAL MANAGEMENT PRINCIPLES

Communication skills

Good communication skills are vital when treating people with severe mental illness. Patients may distrust medical and nursing staff, and appear hostile. This can be overcome with empathic listening, patience and willingness to try and understand the patient's experiences and opinions.

Role of psychiatric liaison service

In most hospitals there is a psychiatric liaison service, consisting of doctors and/or nurses. It is usually available to support and advise staff, assess and review patients when required, and advise on psychiatric management. To ensure that roles and responsibilities are clear, both medical and psychiatric teams should write a comprehensive care plan, indicating the level of their future involvement in the patient's treatment.

Liaison with mental health team

Liaison with a patient's mental health team early during an admission will help to improve compliance with medical and psychiatric treatment, and facilitate discharge from hospital. A patient with severe mental illness will usually have a care coordinator, who will be the best contact person. New issues in treatment and management need to be incorporated into the existing care plan to improve coordination of service provision to this vulnerable group.

Education and health promotion

Unhealthy lifestyle combined with poor living conditions may lead to continuing physical morbidity. Education should focus on effects of eating patterns, exercise, smoking and illicit drug misuse on physical health. This can be done by the staff on the ward for inpatients and needs to be reinforced by both medical and psychiatric staff involved in the care in the community.

Use of the Mental Health Act 1983

Under certain conditions, the Mental Health Act 1983 permits the compulsory treatment of mental disorders. The act does not cover physical illness, and a person cannot be compelled to accept treatment for a physical illness under the powers of the Mental Health Act 1983, regardless of whether they have a mental illness or not.

TABLE 2.
Potentially hazardous drug interactions between psychotropic and other drug groups

Drug group	Psychotropic group	Hazard
5-HT_1 agonists	SSRIs, MAOIs	Risk of CNS toxicity
ACE inhibitors	Lithium	Reduced excretion of lithium with increased lithium concentration
Altreatamine	TCAs, MAOIs	Risk of severe postural hypotension with MAOIs and TCAs
Amfebutamone	MAOIs	Avoid with or for 2 weeks after taking MAOIs
Anorectics	MAOIs	Hypertensive crisis
Anaesthetics	Antipsychotics	Enhanced hypotensive effect
Analgesics	Antipsychotics, TCAs, MAOIs, lithium, carbamazepine	Enhanced sedation, hypotensive effect and risk of CNS toxicity with some analgesics
Antiarrhythmics	Antipsychotics, TCAs	Risk of ventricular arrhythmias
Antibacterials	Antipsychotics, anxiolytics, carbamazepine	Risk of ventricular arrhythmias, changes in plasma drug concentrations
Antifungals	Antipsychotics, anxiolytics	Risk of ventricular arrhythmias with pimozide, prolonged sedative effect with anxiolytics
Antimalarials	Antipsychotics, carbamazepine, valproate	Chloroquine and mefloquine antagonize anticonvulsant effect, avoid pimozide
Antivirals	Antipsychotics, anxiolytics, SSRIs, TCAs, carbamazepine	Changes in plasma concentrations
Anticoagulants	SSRIs, carbamazepine	Enhanced effect and metabolism of acenocoumarol and warfarin
Antiepileptics	Antipsychotics, SSRIs, TCAs	Antagonism of antiepileptic effect and changes in plasma concentration
Antihypertensives	TCAs, MAOIs, lithium	Enhanced hypotensive effect with risk of rebound hypertensive crisis, neurotoxicity may occur with methyldopa
Beta-blockers	Antipsychotics	Risk of ventricular arrhythymias, changes in plasma concentrations
Barbiturates and primidone	SSRIs, TCAs, MAOIs	Antagonism of anticonvulsant effect
Calcium-channel blockers	Carbamazepine	Enhanced effect of carbamazepine, reduced effect of some calcium-channel blockers
Cyclosporin	Carbamazepine	Reduced plasma cyclosporin concentration
Corticosteroids	Carbamazepine	Reduced effect of corticosteroids
Diuretics	Antipsychotics, lithium, carbamazepine	Increased risk of arrhythmias because of possibility of electrolyte imbalance
Dopaminergics	SSRIs, TCAs, MAOIs	Antagonism of effect of dopaminergics, risk of CNS excitation and hypertensive crisis
Hormone antagonists	Carbamazepine	Changes in carbamazepine metabolism
Oestrogens	Carbamazepine	Reduced contraceptive effect
Sympathomimetics	TCAs, MAOIs	Risk of hypotension, hypertension and arrhythmias
Theophylline	SSRIs	Increased theophylline concentration with fluvoxamine
Ulcer-healing drugs	Carbamazepine	Increased plasma carbamazepine level

5-HT1 = 5-hydroxytryptamine-1 receptors; ACE = angiotensin-converting enzyme; MAOI = monoamine oxidase inhibitor; SSRI = selective serotonin-reuptake inhibitor; TCA = tricyclic antidepressant

Consent and capacity

Consent is the voluntary and continuing permission of the patient to receive a particular treatment, based on adequate knowledge of the purpose, nature, likely effects and risks of treatment including the likelihood of its success and any alternatives to it. Permission given under any unfair or undue pressure is not 'consent'. Patients usually retain capacity to give valid informed consent for physical treatment even when receiving compulsory treatment for their mental illness under the powers of the Mental Health Act 1983.

An assessment of a person's capacity to consent must be made for each individual treatment. Capacity may vary over time, and should be fully recorded in the notes.

Doctrine of necessity (an unlawful act can be excused if the circumstances justify it) covers treatment in the patient's 'best interests', i.e. it is necessary to save life, prevent a deterioration or ensure an improvement in the patient's physical or mental health, and is in accordance with a practice accepted at the time by a reasonable body of medical opinion skilled in the particular form of the treatment in question [Bolam v Friern Hospital Management Committee, 1957].

Treatment may thus be given under common law in an emergency, if the capacity is lacking as a result of any cause including delirium, shock, pain, drugs, irreversible brain damage or dementia. A person who lacks capacity as a result of dementia may be treated in their best interests without section as long as they are not resisting detention, care or treatment. The criteria for judging capacity are given in *Table 3*.

For further reading, please refer to the *Mental Health Act Manual* (Jones, 1999).

MANAGEMENT OF AN ACUTE PRESENTATION

Pain

Pain is a common symptom of physical illness. Patients with schizophrenia may have a greater pain tolerance than healthy subjects (Dworkin, 1994), and neuroleptic medication may reduce pain sensitivity. This should be taken into account during any physical assessment, and may explain, in part, why people with schizophrenia are less often treated in the early stages of a physical illness and more likely to present late compared to the general population (Munk-Jorgensen et al, 2000).

TABLE 3.
Criteria for judging incapacity

Incapacity is said to be present if at least one of these criteria is met:
Not able to take in and retain information material to the decision especially as to the likely consequence of having and not having treatment
Not able to believe the information
Not able to weigh the information in the balance as part of a process of arriving at the decision
Department of Health (1999)

Medical comorbidity

Patients with psychiatric symptoms are usually admitted to a psychiatric ward. However, if they are found to have a serious physical illness that requires general nursing care, they may need to be transferred to a medical or surgical ward. It can be difficult to agree on the best option for some patients. Psychiatric nurses have minimal medical training, and cannot be expected to provide much medical care. However, psychiatric units are clearly a better environment for disturbed, violent or suicidal patients.

Long-stay psychiatric patients are relatively small in numbers but physically vulnerable. Although they reside in a hospital setting, available medical facilities may be limited. They should not be discharged from medical care, any sooner than a person who is being discharged home into the community under the care of a GP.

Issues surrounding continuation of psychiatric medication

Psychiatric medication should usually be continued unchanged during medical or surgical treatment. Patients may forget the details of their medication. Their mental health team or GP should be contacted to check the dosage and frequency of medication. One should not forget to ask specifically about depot injections, as well as about any oral medication.

Management of disturbed behaviour

Common reasons for behavioural disturbance include delirium, an inability to communicate, hypomania or psychosis. Patients need to be nursed carefully and given clear information about their treatment. Severe behavioural disturbances can be controlled by careful prescription of antipsychotic drugs. Benzodiazepines are the drug treatment of choice in delirium associated with benzodiazepine withdrawal, alcohol withdrawal and hepatic failure (Taylor and Lewis, 1993). Continuous observation by a trained psychiatric nurse should be considered if patients are felt to pose any risk to themselves or others. Patients who are 'at risk' within the meaning of the Mental Health Act 1983 can be assessed and detained under section 5(2) of the Act. Legally this needs to be completed by the responsible medical officer or his/her nominated deputy. On

a general medical ward, this would be the member of the medical team, not the duty psychiatrist.

MANAGEMENT OF LONGSTANDING CONDITIONS

Outpatient treatment

Patients with a severe mental illness and communication difficulties need to be given time to express themselves, and ideally should be allocated longer outpatient appointments. They may not attend for appointments, as a result of their chaotic lifestyle, forgetfulness, apathy, poor communication skills or mistrust of doctors. Close liaison with the GP is necessary, as the treating physician has a duty of care for outpatients who do not attend. It may be helpful to involve an advocacy service to empower patients and improve communication.

Patients may not volunteer information about sexual dysfunction, a common complication of psychotropic medication. Management includes ruling out any other cause of hyperprolactinaemia, reducing the dose or switching to another class of psychotropic medication. In practice it is best that the patient's psychiatrist be involved if there are any concerns regarding psychotropic medication.

Liaison with other professionals

A copy of any physical assessment should be sent to the patient's psychiatrist as well as the GP to ensure continuity of care. Always consider telephoning the GP and/or psychiatrist if there are any complications or worries about the patient's safety.

Health promotion

It should not be assumed that people with a severe mental illness will inevitably have an unhealthy lifestyle, or that they cannot change their habits. Outpatient appointments should be used as an opportunity to discuss the importance of a healthy diet, regular exercise and smoking cessation. Some interest and a brief conversation can have a significant impact on behaviour.

CONCLUSION

Managing physical illness in those with severe mental illness is a challenging task. It requires skill, patience and experience as patients usually present late with complications. Doctors need to be aware of the special needs of people with a severe mental illness. Effective treatment primarily depends on good communication with the patient, and liaison with other professionals. Extra time may be required, but it will ensure they get help that is so often desperately needed. HM

Conflict of interest: none.

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KEY POINTS

- Severe mental illness is associated with increased physical morbidity compared to the general population.
- Management of physical illness in this population presents a challenge for the hospital doctor.
- This can be overcome by having a dialogue with the patient as well as the care coordinator or GP responsible for the patient's care.
- This is a priority group for health promotion and education.