New guidance on managing TB stresses the importance of promoting adherence to treatment and gives advice on home isolation

Case management for tuberculosis

New guidance on managing tuberculosis (TB) is aimed at clinical and non-clinical professionals involved in the case management of patients with suspected and confirmed TB (Royal College of Nursing, 2012).

Controlling TB depends on early diagnosis and careful management. Case management involves comprehensive follow-up of a suspected or confirmed TB case and depends on a multidisciplinary team approach (RCN, 2012).

The guidance distinguishes between standard case management and enhanced case management (ECM). Standard case management is coordinated by a named case manager and is appropriate for clinically straightforward patients; ECM is coordinated by the case manager working alongside a specialist multidisciplinary team, which provides expert clinical and psychosocial care.

In both types, case managers are usually specialist TB nurses or, in areas with a low incidence, nurses whose responsibilities include TB. Trained and supported non-clinical members of the multidisciplinary team may also act as case managers, depending on patient circumstances.

Case managers are responsible for ensuring that:
» Investigations are completed and outcomes documented;
» An appropriate treatment regimen is monitored and completed;
» Patient contacts are identified, evaluated and treated.

Adhering to treatment

The guidance stresses that patients’ ability to adhere to and complete prescribed treatment is the most important factor affecting TB treatment outcomes. In healthcare generally, low adherence rates are common, with only half of patients estimated to adhere to treatment.

The guidance warns non-adherence to treatment leads to onward transmission, severe morbidity and preventable death, as well as the emergence of drug-resistant strains.

**Treatment models**

Two main treatment models are used for managing TB.

The first is self-administered treatment (SAT). In SAT, patients take an active role in their treatment and are responsible for collecting, organising and administering their medicine.

Although there is no direct observation of administration, nurses can support patients and promote adherence by ensuring medication is provided in a conveniently packaged form and delivered in the community where appropriate. Patients receiving SAT should be monitored regularly (at least monthly) in the community or at a clinic.

The second model is directly observed treatment (DOT), in which trained health professionals or other appropriate people provide the medication and observe patients swallowing every dose. Trained nurses or non-clinical outreach workers often provide this form of treatment.

The guidance emphasises that DOT should be considered standard care from the start of treatment for all TB patient groups at a higher risk of poor adherence. It acknowledges that factors such as age, sex and ethnicity do not predict adherence accurately, while others, such as psychiatric illness, substance misuse and homelessness, typically do. It adds that the best predictor is a history of non-adherence to TB treatment. In addition, TB services should aim to ensure that all patients who are likely to benefit from DOT receive this model.

DOT should be arranged to be most convenient for patients and can take place anywhere the patient, their case manager and DOT worker agree on; providers need to consider issues such as accessibility and travel costs when deciding on the location.

Virtually observed therapy (VOT) is a variation of DOT and can be an effective option to promote adherence for children and young people. In VOT, trained providers use Internet-based technologies remotely to observe every dose virtually. This treatment option must be combined with a home-based support component and regular drug studies.

**Patient education**

Patients in home isolation need to be educated to ensure their actions do not pose a risk to public health. They should be told to comply with the following advice for the first two weeks of treatment (or until they are non-infectious in the event of drug-resistant or extensive pulmonary disease):
» Stay at home unless they need medical care;
» Avoid contact with people thought to be confirmed TB case contacts and are safe to be around);
» Delay all non-emergency appointments until they are no longer contagious;
» Avoid people who are not known to the TB service as a contact (people who live with patients will be investigated as contacts and are safe to be around);
» Avoid public transport;
» Stay away from school, work or any other public place.

**Reference**