Medication non-adherence is usually defined as taking <80% of a prescribed dose of medication, but may also be defined as taking more than the prescribed amount. The consequences associated with such behaviour include:
» Not obtaining the benefits expected from the treatment;
» Increased risk of poor health;
» Adverse clinical events;
» Mortality.

The nurse’s role in managing individuals who ineffectively manage their therapeutic regimen or who are non-concordant can be crucial. As part of the multiprofessional team, they can use evidence-based practice to assure a holistic and integral approach to medicines management.

Review objectives
The objective of this updated Cochrane review was to assess the effects of interventions that were designed to promote patient adherence to medication, measuring both treatment adherence and clinical outcomes.

Intervention/methods
The criteria for the inclusion of primary studies in the review were as follows:
» Randomised controlled trial (RCT) comparing a group receiving an intervention to improve medicine adherence with a control group;
» RCT with patients who were prescribed medication for a medical disorder (including psychiatric but not addictive disorders) as participants;
» RCT measuring both medicine adherence and clinical outcomes;

Results
A total of 182 RCTs and 46,962 participants were included (109 RCTs were carried forward from the previous review undertaken by Haynes et al, published in 2008). Meta-analysis was not possible because the studies were so heterogeneous in terms of:
» Setting;
» Participants (most with psychiatric disorders, chronic obstructive pulmonary disease, cardiovascular disease or risk of, hypertension and diabetes);
» Treatments (one medication, more than one, or unknown);
» Adherence intervention;
» Medicine adherence measurement and clinical outcomes.

Only 17 studies had a low risk of bias for both the study design and the primary clinical outcome. These tested complex interventions frequently enhancing support from family, peers or allied health professionals (such as pharmacists) through health education, counselling (motivational interviewing or cognitive behavioural therapy) and daily treatment support. Only five of the studies obtained positive but not significant results for both medicine adherence and clinical outcomes. Furthermore, no common issues were identified among them.

Conclusions
The available studies suggest that current interventions are complex and not very effective, with inconsistent effects shown among the studies. Since most studies had a moderate-to-high risk of bias, better RCTs are needed in this field.

Implications for practice
There is no consistent evidence to respond to the clinical question so further research is necessary with well-designed and sufficiently powered studies, testing viable long-term interventions with patient-important clinical outcomes. NT

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References