What is true goal for e-health? Beyond auditing, punishing tool...

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11 Sep. 2018  ISPOR Asia-Pacific Conference, Tokyo, Japan
W17 How E-Connected Medicine Will Change the Value of Pharmaceuticals

What is need to be distinguished

• ”Concrete” evidences are ready for relationship between poor adherence rate and poor efficacy

• Insufficient evidences are available if some interventions can upgrade the adherence rates themselves
Strategies for improving adherence to antiepileptic drug treatment in patients with epilepsy.

Ali Assefi S., Al Sabban J.

Update in Strategies for improving adherence to antiepileptic drug treatment in people with epilepsy. [Cochrane Database Syst Rev. 2017]

Abstract

BACKGROUND: Poor adherence to antiepileptic medications is associated with increased mortality and morbidity. In this review we focus on interventions designed to assist patients with adherence to antiepileptic medications.

OBJECTIVES: To determine the effectiveness of interventions aiming to improve adherence to antiepileptic medications in adults and children with epilepsy.

SEARCH STRATEGY: We searched the Epilepsy Group’s Specialised Register (24 June 2010), the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library 2010, Issue 2) and electronic databases: MEDLINE (OVID) (1950 to June 2010); EMBASE (OVID) (1980 to 2010 Week 24); CINAHL (1982 to June 2010) and PsycINFO (22 June 2010), and the reference lists of relevant articles.

SELECTION CRITERIA: Randomised or quasi-randomised controlled trials of adherence-enhancing interventions aimed at patients with clinical diagnosis of epilepsy (as defined in individual studies), of any age and of either gender, treated with antiepileptic drugs in a primary care, outpatient or other community setting.

DATA COLLECTION AND ANALYSIS: We screened titles and abstracts for eligibility. Two review authors independently extracted data and assessed each study according to the Cochrane criteria. The studies differed widely according to intervention and measures of adherence, therefore combining data was not appropriate.

MAIN RESULTS: Six trials met our inclusion criteria: five targeted adult epileptic patients with a combined patient number of 222 and one targeted parents of children with epilepsy (n = 51). Follow-up time was generally short: from one to six months. Two main types of intervention were examined: educational and behavioural modification. Each study compared treatment with no intervention ‘usual care’. None compared one intervention with another. Due to heterogeneity between studies in terms of interventions and the methods used to measure adherence, we did not pool the results. Education and counselling of patients with epilepsy have shown mixed success.

Behavioural interventions such as the use of intensive reminders and ‘implementation intention’ interventions provided more positive effects on adherence.

AUTHORS’ CONCLUSIONS: Intensive reminders and ‘implementation intention’ interventions appear promising in enhancing adherence to antiepileptic medications, however we need more reliable evidence on their efficacy from carefully designed randomised controlled trials before final conclusion can be reached.

Information and communication technology based prompting for treatment compliance for people with serious mental illness

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Editorial group: Cochrane Schizophrenia Group.


Information and communication technology based prompting for treatment compliance for people with serious mental illness

Background

Non-compliance is a significant problem among people with serious mental disorders, presenting a challenge for mental health professionals. Prompting such as telephone calls, visits, and a posted reminder letter or messages can currently used to encourage patients to adhere to treatment as often as possible through computerized systems or text messages. These electronic devices have the potential of improving treatment compliance.

Objectives

To investigate the effects of ICT-based prompting to support treatment compliance in people with serious mental illness compared with usual care.

Search methods

We searched the Cochrane Schizophrenia Group’s Trials Register (31 May 2011 and 9th July 2012) which is based on searches of MEDLINE (OVID), EMBASE, AMED, NAMSA, NAAG, NAMS, RPS, PsycINFO, and register of ongoing trials. Also, we scanned references of all included studies for further trials and contacted authors of trials for additional information.

Selection criteria

Relevant randomised controlled trials involving adults with serious mental illness, comparing any ICT-based prompt or combination of prompts by electronic or automatic system compared with usual care.

Data collection and analysis

Review authors independently assessed trial quality and extracted data. We calculated risk ratios (RR) with 95% confidence intervals (CI) using a fixed-effect model. For continuous outcomes we calculated the mean difference (MD) between groups, with 95% confidence intervals.

Results

No significant differences were found for all outcomes. However, we calculated mean difference (MD) between groups, with 95% confidence intervals. Based on the existing data, there is no evidence that either intervention is less acceptable than the other (n = 247). ICTs, RR, 1.86 (0.70 to 5.09), low quality evidence. Included studies did not report outcomes of service utilization, behavior, costs or adverse events.

Authors’ conclusions

The evidence base on the effects of ICT-based prompts is still inconclusive. Due to clarify ICT-based prompting effects are awaited from ongoing trials, but further well-conducted trials considering the different ICT-based prompts are warranted.
Compliance, Adherence, Concordance

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<tr>
<th>Word</th>
<th>definition</th>
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<tr>
<td>Compliance</td>
<td>The extent to which the patient’s behaviour MATCHes the prescriber’s <strong>recommendations</strong></td>
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<tr>
<td>Adherence</td>
<td>The extent to which a person’s behaviour, taking medication, following a diet, and/or executing lifestyle changes, <strong>CORRESPONDs</strong> with <strong>agreed recommendations</strong> from a health care provider</td>
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<td>Concordance</td>
<td>The process, which entertains patients’ views on medication-taking, and acknowledges that patients’ views have to be respected even if they make choices, which appear to be in conflict with the clinician’s views</td>
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Use and potential “Misuse” of e-health equipment

- Promising E-health product should.

| NOT be used | Simple auditing (punishing?) tool for checking **COMPLIANCE** |
| be used     | Tool for upgrading not only adherence rate, but also the opportunity of interactive communication bet. patients and health care providers |
Pharmacists say ”checked and confirmed”, while patients do NOT think they were checked

Did you check/Were you checked the status of “Unused Drug”?  

Growing concern for polypharmacy and “unused” medication

• Unused medication would be beneficial for pharma?  
  • It LOOKS beneficial in very short term (monetary)  
  • It would be harmful, to downgrade the repetition of medication itself

• Unused medication must not be efficacious for patient

• Polypharmacy could be problematic in particular for psychometric (and/or dementia) area
RWD and HTA

• MORE data would be required after market approval
  • ”GOOD” or “BAD” example of de-list of dementia medication

• E-health could be somewhat helpful tools for post-marketing clinical studies?

De-reimbursement of anti-dementia drugs in French-HAS

• Issues pointed out by HAS (at least from 2011)

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<th>Component</th>
<th>Issues</th>
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<tr>
<td>Efficacy</td>
<td>Few evidence for true endpoints (QOL, LY, delay for institutionalization)</td>
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<tr>
<td>Safety</td>
<td>Various safety issues around AE</td>
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<tr>
<td><strong>Tolerability &amp; External validity</strong></td>
<td>Real world patients are more likely to be super-aged</td>
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<td>More patients have some problem for polypharmacy, which increase the risk of AE, discontinuation</td>
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RWD is crucial for justifying the presence of medications