

TEXT MESSAGING INTERVENTIONS FOR PROMOTING MEDICATION ADHERENCE: A REVIEW OF THE LITERATURE

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ABSTRACT

We reviewed the literature on the use of mobile phone text messaging as an intervention to promote medication adherence. A literature search was conducted of the PubMed, CINAHL, PsycInfo, EMBASE and Cochrane databases, supplemented by grey literature hand searches. These searches returned 1752 results and the final selection consisted of 14 studies published between 2009 to 2013 with a randomized controlled trial (RCT) design, which were reviewed in detail. The studies were conducted in 10 different countries, on patients suffering from five different diseases, or discharged from the emergency department, or healthy volunteers seeking preventive treatment. There was great variability in intervention design and the adherence outcome was defined and measured in multiple ways, making direct comparison amongst studies difficult. Overall, the effectiveness of text messaging interventions on medication adherence was mixed and some methodological flaws were identified which need to be addressed in future research. We also conducted a preliminary exploration of other types of interventions available to promote medication adherence. We pooled data from these studies to examine the average improvement in medication adherence across different types of interventions. Comparisons of average improvements across the eight types of interventions suggested that text messaging was the second most effective type of intervention (after behavioural interventions). While this finding augurs well for the development of text messaging as an intervention to enhance medication adherence, it must be interpreted with caution due to methodological limitations

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