

Abstract

There is increasing burden of depression and suicide related deaths worldwide. Many sufferers are not receiving treatment despite the availability of effective treatment. With the rapid growth of mobile devices usage, utilizing mobile intervention will help in health outcomes in suicide related behaviours. We evaluated the efficacy of mobile health interventions in suicide prevention and deaths using a systematic review. We searched PubMed, the Cochrane Central Register of Controlled Trials (CENTRAL), EMBASE, PsycINFO and Google Scholar for studies published from 2000 – 2017. We reviewed the reference lists of retrieved included trials. An updated search was re-run in December 2017. Out of 4,244 records, 38 full-text were assessed for eligibility. We included seven randomized controlled trial (RCT) studies with a total of 1,387 participants. Out of seven, only four studies reported outcomes of death. Risk of bias among domains was low-risk except for high performance bias. Our study favors mobile intervention in suicide prevention: risk ratio (RR) 0.67, 95% confidence interval (CI) 0.49 to 0.92, moderate quality of evidence. The number needed to treat for suicide prevention was 25, indicating that suicide reduction is moderately meaningful clinically. Healthcare providers may consider integrating mHealth into their practices for suicide prevention. The use of mHealth in suicide prevention is in its early days. This review

highlights the need to fill this gap. Studies included in this review, were few. Standards are lacking for quantifying the intervention value. Further research is necessary to demonstrate the influence of mHealth and its effectiveness of suicide prevention and death.

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