Economic evaluation of a clinically effective Brief Mobile Treatment (BMT) on suicide prevention in Sri Lanka

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Only the Abstract is available

Abstract

Introduction: Economic analyses are helpful in decision making. We conducted a Sri Lankan RCT, evaluating a "Brief Mobile Treatment" (BMT) that used a combination of brief inpatient intervention and mobile phone messages to reduce suicide risk. The trial found that the intervention was superior to the usual care (UC).
Objective: The current research performed an economic evaluation of BMT versus UC, using data in the Sri Lankan RCT.
Method: Cost-Utility Analysis (CUA) was selected. The analysis was completed in nine steps which includes calculation of the cost of the intervention and UC, analysis of incremental cost and effect, calculation on the incremental cost-effectiveness ratio (ICER) and ICER 95% confidence interval together with a graphical presentation of calculated ICER and 95% confidence interval, calculation of acceptability threshold under different willingness-to-pay thresholds with graphical presentation of acceptability curves and finally a completion of one-way sensitivity analyses.
Results: The total establishment cost for the BMT was Rs. 91,918/= with an average cost of Rs. 2,703/= per patient. The variable cost to provide BMT totaled at Rs. 32,17/=. Total cost of usual care was Rs. 774/=. Mean cost per BMT intervention patient was Rs. 4,103/= compared with a mean cost of Rs. 23/= for usual care patients. Probability that the BMT intervention was cost-effective, when compared with usual care, was 90% at a willingness-to-pay thresholds of Rs. 5 million/QALY, and 91% at 7 million/QALY. Similar results were obtained using multivariable analyses.
Conclusion: Although BMT intervention was more costly than UC for a small sample, it was cost-effective at the selected willingness-to-pay thresholds, based on acceptable costs of changing 1 unit of QALY. Considering the high suicide rates in Sri Lanka and the significant impact of suicide on individuals and their families and friends, use of BMT is found to be cost-effective, compared with standard care.

Keywords – BMT versus UC, ICER, multivariable analyses, high suicide rates, impact of suicide