ABSTRACT

It has recently been recognized that depressive disorder leads to a significant economic burden to the society in addition to the burden to the patient. To reduce such burden, good pharmacotherapy is essential. As a class of new antidepressant, selective serotinin reuptake inhibitors have been claimed to lead to fewer side-effects but their acquisition cost is higher. Studies on their cost-effectiveness in comparison with the conventional class of tricyclic antidepressants have not yet generated conclusive results. Modelling techniques are useful in this area and a decision analysis model is employed in the local context in this study to compare the expected average direct cost incurred by choosing either a selective serotinin reuptake inhibitor, Paroxetine, or a tricyclic antidepressant, Imipramine, as first-line treatment for a patient with Depression within a time frame of 1 year. Whereas the daily medication cost of Paroxetine is 27 times higher than that of Imipramine, the expected total direct cost per patient for Paroxetine is only 19% higher ($4617 v. $3892). The direct cost for treating a patient successfully for Paroxetine is 15 % higher than that of Imipramine ($6490 v. $5645). The practice of using selective serotinin reuptake inhibitors as first-line treatment in Hong Kong is not supported if the measure of number of patients having significant improvement of depressive symptoms at the end of one year is set as a measure of effectiveness in economic valuation. It is concluded that local research using decision analytic models will serve to inform clinicians in using medication in a cost-effective manner.