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Cost-Effectiveness of the Interventions to Avoid Complications and Management in Diabetes Mellitus: A Narrative Review from South-East Asian Perspective (Review)

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Abstract

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Background and Aims: Asians accounts 60% of the world's diabetic population with a different burden on young and middle-aged. The objective is to critically evaluate the published literature relevant to cost-effectiveness analysis of interventions to avoid complications followed by the management of diabetes mellitus in South-east Asia. Methods: PubMed, ScienceDirect International Pharmaceutical Abstracts (IPA), Proquest and Google Scholar thoroughly searched within the period of November- December 2015. Only research and reviews published in the English language within the period of January 2000-November 2015 considered. The extracted details and particulars from the included studies account for interventions, outcomes, and modeling methods. Results: A total of seven studies from Japan, Singapore, Cambodia and two each from India and Thailand were included. Incremental cost-effectiveness ratios (ICERs) per quality-adjusted-life-year (QALY) accounted as an outcome in more than half of the reviewed studies. Most of the economic evaluations of DM management and preventive interventions in each country focused on different interventions and alternatives for comparison. However, type 1 DM patients showed better outcome when using specific insulin regimens utilized in the southeastern Asian countries followed by the implementation of Thai DM-self management support program (DM-SMS) via healthcare professionals. Conclusion: Alternatives to pharmacologic approaches such as insulin regimen and oral anti-diabetic agents showed a significant difference © 2018 2018 Shazia Qasim Jamshed, published by Sciendo.

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