



COST EFFECTIVENESS OF EXERCISE INTERVENTION AND LIFESTYLE COUNSELLING IN PREVENTION AND CONTROL OF DIABETES MELLITUS-A REVIEW

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ABSTRACT

Demographic transition, combined with urbanization and industrialization, has drastically changed global lifestyles. Consequently, lifestyle-related diseases like diabetes have emerged as major public health problems in all over the world. The increasing prevalence of diabetes mellitus has led to an unprecedented epidemic of death and disability worldwide. Despite this, little is known about what constitutes cost effective (CE) exercise intervention and lifestyle counselling to prevent and control diabetes within the global population. The objective of this paper was to assess the cost-effectiveness literature of exercise intervention and lifestyle counselling to prevent and control diabetes mellitus and improve the health status of the people. A systematic review has been done based on the published literature on cost effectiveness of exercise interventions to prevent and control diabetes mellitus. PubMed, Google Scholar, Scopus and Science Direct were searched in regards to identify cost-effectiveness evaluation of exercise intervention and lifestyle counselling for preventing and controlling diabetes mellitus among populations around the world. In this review 5 studies reporting on exercise intervention and lifestyle counselling were included. Most of the studies were from the developed countries. 10 of the 12 exercises and lifestyle counselling interventions included in the analysis were found to be cost-effective by the respective studies. In the case of gestational diabetes it has been seen from the studies that any kind of exercise intervention and lifestyle counselling did not contribute towards cost effectiveness. Apart from that, every form of physical exercises was shown to be consistently cost-effective in the included studies. It has been observed in this review that only a small number of studies examined the cost-effectiveness of exercise intervention and lifestyle counselling to prevent and control diabetes in the world. Given the opportunities and benefits, it is an area where the health economics and public health fields can play an important role in improving the health of millions of people, fighting with the non-communicable metabolic disorder, named diabetes.

KEYWORDS: Diabetes Mellitus, Exercise, Intervention, Lifestyle Counselling.



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