

# Effectiveness of Health coaching on diabetic patients: Systematic Review and Meta-Analysis



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## Biography

Nashwa Radwan is a Professor of Public Health and Community Medicine, Faculty of Medicine, Tanta University and a Consultant in Ministry of Health, KSA.

**Background:** Chronic conditions including mainly diabetes mellitus are negatively impact quality of life, disability, morbidity and mortality. Health coaching has emerged as a possible intervention to help individuals with chronic conditions to adopt health supportive behavior that improve both quality of life and health outcome. The few published randomized controlled trials using health coaching for patients with diabetes have reported mixed results.

**Objectives:** To determine the effectiveness of health coaching on modifying health status and quality of life among diabetic patients and to clarify the characteristics of coaching delivery that make it most effective.

**Search methods:** We searched the COCHRANE, MEDLINE, PubMed, TRIP database and EMBASE in the last 15 years.

**Selection criteria:** We included randomized controlled trials (RCTs) of health coaching interventions among type 2 diabetic patients aimed to improve their health status and life style and published in English language from January 2005 to the end of December 2018

**Data collection and analysis:** Two authors independently assessed trials eligibility, risk of bias, quality and extracted data. We combined dichotomous data using risk ratios (RRs) and continuous data using mean differences (MDs) and presented all results with 95% confidence interval (CI).

**Main results:** We found that health coaching intervention has a significant effect on HbA1c (MD = -0.17, CI = -0.31, -0.03, I<sup>2</sup> = 94%, P < 0.00001), weight (MD = -3.20, CI = -5.90, -0.49, I<sup>2</sup> = 88%, P < 0.00001) and triglyceride trials (MD = -2.58, CI = -5.07, -0.09, I<sup>2</sup> = 57%, P > 0.02). We found also that the most effective strategy for health coaching delivery associated with improvement of HbA1c was decreasing number of sessions with increasing duration of each session. Mixed results were recorded for the effect of health coaching on the quality of life of diabetic patients.

**Authors' conclusions:** Health coaching intervention has a significant effect on glycemic control, weight and triglyceride and the most effective strategy is the decreasing number of sessions with increasing their duration. However, these results should be taken with caution as the evidence comes from studies at some risk of bias with considerable heterogeneity and imprecision.



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