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Commentary on the Article “Effects of Blended Self-Management Training on Knowledge and Self-Care Behaviors of Patients with Type 2 Diabetes: A Randomized Clinical Trial”

Diabetes self-management education and support (DSMES) has many benefits including reduction in A1C [1], decreased weight [2], improvement in diabetes knowledge and self-care behaviors, improved quality of life, and positive coping behaviors [3–5]. It is therefore recommended that all people with diabetes participate in DSMES [6]. Despite the benefits, DSMES is underutilized and within the United States, only 5–7% of individuals eligible for DSMES actually receive it [7].

There are several barriers, some of which include logistics issues (accessibility, timing, costs) and lack of perceived benefit [7]. Technology can help overcome some barriers. Mobile apps, simulation tools, digital coaching and digital self-management interventions offer more versatile ways to deliver DSMES [8]. Greater A1C reductions are observed with more patient engage-

ment [6] so identifying strategies to increase patient engagement is essential.

In the study conducted by Shahrzad Ghiyasvandian and colleagues, 100 people with diabetes between the ages of 20–65 were randomized to receive a blended education intervention (n = 50) or control through routine education (n = 50). The education interventions occurred over 2.5 months. The blended education intervention included two three-hour diabetes self-management workshops which incorporated problem-based learning and peer support through group interaction. Then participants were referred to a website with weekly education plans that incorporated multiple modalities including texts, photos, videos and questions. There were also weekly phone calls to encourage engagement and field questions. The control group only received educational pamphlets.

The intervention group showed statistically significant improvements in diet, physical activity, glucose monitoring, foot care, drug use and diabetes knowledge compared to the control group which only showed improvements in diet, foot care and diabetes knowledge, and to a much smaller magnitude compared to the intervention.

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Strengths of this study include the randomized, controlled design, similar baseline characteristics between groups, and the use of validated tools to assess diabetes knowledge and diabetes self-management behaviors. Limitations include short intervention and follow-up. The study occurred in one center at the Tehran University, so the generalizability of results is unknown. Additionally, clinical outcomes like A1C and weight were not evaluated. Weekly phone calls were provided by researchers in the blended education intervention and it is unknown how people might adhere to this intervention in a real-world setting.

Despite some limitations, overall, this study supports the guidance to individualize diabetes education [6]. Compared to educational pamphlets, this intervention of workshops, website with multiple modalities and weekly phone calls, improved knowledge of diabetes and self-management behaviors. This confirms the strengths of DSMES and efforts are needed to address existing barriers to DSMES. Healthcare professionals should be encouraged to find creative ways to deliver this education such as incorporating technology, peer support and individual preferences as done in this study.

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