P0781-THE IMPACT OF HEALTH COACHING ON THE GLYCEMIC CONTROL AND MEDICATION ADHERENCE OF TYPE 2 DIABETES MELLITUS PATIENTS: A RANDOMIZED CONTROLLED TRIAL

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Background

- Diabetes self-management education (DSME) and support (DSMS) are part of routine care for type 2 diabetes mellitus (T2DM) patients.
- However, DSME alone is often insufficient to maintain behavioral changes in T2DM patients. Health coaching is one of the form of DSMS that assist patient with T2DM to perform and maintain diabetes self-management.

Aims

This study aims to evaluate the impact of health coaching on the glycemic control and medication adherence of T2DM patients.

Methods

- Trial Design:** Multicenter, randomized, open label, controlled study. Patients were randomly assigned to one of 2 groups, in 1:1 ratio, to receive either education alone (E) or in combination with health coaching (E+C).
- Participants:**
 - Eligible participants: patients with T2DM, aged 30-60 years, with hemoglobin A1c (HbA1c) level > 7.5 in the past 6 months
 - Settings: subjects were recruited from two tertiary care hospital in Jakarta Indonesia (Dr. Cipto Mangunkusumo National Referral Hospital and Fatmawati General Hospital) from January – August 2018
- Randomization:** for allocation of participants a simple randomization was used, subjects were asked to pick an envelope consisting intervention they will received (education or education + health coaching)
- Intervention:**

- An open label was done, patients and physicians were aware of the allocated intervention.

Results

Figure 1. Flow diagram

Figure 2. Mean Changes in A1c 3 And 6 Months after Intervention

Table 1. Proportion of Subjects with Controlled HbA1c During 3rd And 6th Month

A1C Level	6 th month		RR (95%CI)	NNT
	E+C (N=26)	E (N=27)		
<7 %	8	3	1.697(1.03-2.81)	5
7 %	18	24		

Table 2. Proportion of Subjects with Reduction of HbA1c More Than 1 Percent

Variabel	Decreased level of A1c		RR (95% CI)	P Value
	≥ 1% , n (%)	<1%, n (%)		
E + C	18 (60%)	12 (40%)	2,250 (1,342-3,771)	0,004
E	6 (20%)	24 (80%)		
Total	24 (40%)	36 (60%)		

Table 3. Increased Level of Medication Adherence After 6 Months Intervention

	Education	Education + coaching	P-Value
Baseline	3.07 ± 1.54	3.00 ± 1.67	0.868
3 months	2.89 ± 1.53	2.77 ± 1.60	0.782
6 months	2.81 ± 1.57	1.77 ± 1.18	0.009

Total score: 0: high adherence, 1-2: intermediate adherence, >2: low adherence

Discussion

Our study showed that health coaching improves glycemic control, which might be contributed by the improved medication compliance. To this end, health coaching, which can be performed by either diabetic educators or other trained professionals, should be added to the current standard T2DM treatment and DSME to further improve glycemic control.

Reference

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