P-1069 Characteristics and perceptions of barriers to diabetes education of healthcare professionals in Thailand

Mahidol University
Faculty of Medicine Siriraj Hospital

Lukana Preechasuk¹, Pornsri Sriussadaporn¹, Supawadee Likitmaskul^{1,2}
Siriraj Diabetes Center¹, Division of Endocrine and Metabolism, Department of Pediatric²,
Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand

Background

Diabetes education is integral to successful diabetes management. However, data about characteristics and barriers of diabetes education in clinical practice in Thailand is limited.

Objectives

To describe characteristics of diabetes education and identify perceptions of barriers to diabetes education among administrators, doctors and other healthcare professionals working as diabetes educators (DEs) in Thailand.

Method

A survey was conducted in 613 hospitals (508 public and 105 private hospitals) across Thailand from December 2016 to March 2017. A self-completion questionnaire was sent to administrators, diabetes clinic doctors, and health professionals working as a DE to collect data about the workload, characteristics of diabetes education from DEs and perceived barriers to diabetes education from 3 groups of respondents.

Result (1)

- The overall response rate was 54.8% (58.3% public and 38% private hospitals). The response rate of administrators, doctors and DEs was 48.3%, 49.9% and 65.7%, respectively.
- The median (IQR) number of DEs per hospital was 4 (2,6). The median (IQR) number of patients per educator per week was higher in public hospitals than private hospitals (70 [30,150] vs. 20 [10,30]).

Table 1. Characteristics of diabetes education programs in public and private hospitals

	Public hospitals	Private hospitals
Criteria to provide DM education, n(%)		
Newly diagnosed diabetes	332 (93.5)	34 (70.8)
Uncontrolled diabetes	310 (87.3)	23 (47.9)
Defined as		
Fasting plasma glucose	183	150
(mg/dL)	(180,200)	(128,180)
HbA1c (%)	8 (7,8)	7 (7,8)
Diabetes with complication	225 (63.4)	21 (43.8)
Method of DM education, n(%)		
Individual education	339 (95.5)	37 (77.1)
Group education	282 (79.4)	14 (29.2)
Duration of DM education session		
Individual education (min/ session)	15 (10,30)	30 (12.5,30)
Group education (min/ session)	30 (20,30)	30 (25,60)
Evaluation of DM education, n(%)		
Successful	89(25.6)	16 (34)
Uncertain outcome	141 (39.7)	16 (33.3)
Non-evaluation	89 (25.1)	16 (33.3)

Data was presented as median (25th,75th percentile) and n(%) as appropriated.

Result (2)

- The health professionals working as a DE were outpatient nurses (84.1%), nutritionists (59.8%), pharmacists (53.6%), doctors (44.7%), inpatient nurses (34.2%), physical therapists (18.4%), health educators (15.1%), Thai traditional medicine staffs (7.7%) and dentists (3.2%).
- DEs self-reported the percentage±SD of patients receiving diabetes education in <30, 31-60, 61-120, 121-500 and >500 beds hospitals were 70±23, 73±21, 62±26, 63±26 and 46±27, respectively.

Table 2. Perceptions of barriers to diabetes education among different groups of respondents in public hospitals

	Administrators (n=264)	Doctors (n=269)	DEs (n=355)
Non-compliance with recommended changes of unhealthy behavior	217 (82.2)	220 (81.8)	299 (84.2)
Lack of time for diabetes education by DEs due to other duties	205 (77.7)	186 (69.1)	303 (85.4)*†
Lack of interest in diabetes education from patients	195 (73.9)	207 (77)	275 (77.5)
Lack of skill of DEs in assisting patients with behavioral change	151 (57.2)	108 (40.1)	219 (61.7)†
Inadequate numbers of DEs	115 (43.6)	118 (43.9)	203 (57.2)*†
Lack of suitable place to provide diabetes education	90 (34.1)	71 (26.4)	184 (51.8)*†
Lack of budget to support effective diabetes education	64 (24.2)	61 (22.7)	106 (29.9)†
Lack of suitable educational material	53 (20.1)	42 (15.2)	147 (41.4)*†

Data are presented as n (%). *p<0.05 comparing between administrators and DEs, † p<0.05 comparing between doctors and DEs1

Discussion

- The majority of the hospitals reported >60% of patients received diabetes education. Nevertheless, only 30% of DEs believed their diabetes education was successful while 60% of DEs were uncertain about their educational outcomes.
- Lack of evaluation after education was a diabetes education weakness in Thailand.
- Furthermore, we observed that administrators and doctors tended to report a lower percentage of barriers than DEs. This difference in perception might be another obstacle to diabetes education in Thailand. Therefore, improvements in human resource, educational approach and clear educational role definitions for DEs are needed.

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