What is the Impact of Structured Training for Paraprofessional and Professional Diabetes Educators?

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Background

- Only 5-7% of eligible patients receive formal diabetes self-management education and support (DSMES).[1]

- Patients receive diabetes-related information from all members of the health care team.

- ADCES defines the level of practice, knowledge, and skills for Diabetes Community Care Coordinators, non-specialist clinicians, and Diabetes Care and Education Specialists.[2]

- Diabetes Community Care Coordinators and non-specialist clinicians should be able to identify patient knowledge gaps to provide education within their scope or refer patients to DSMES.

Purpose

To assess the usage of ADCES modules to improve knowledge of Diabetes Community Care Coordinators and non-specialist clinicians.

Outcomes

- Change in pretest and posttest knowledge scores

- Change in employee self-confidence

Methods

Study design

- One group, pretest, posttest design

Inclusion criteria

- Health system employees

Exclusion criteria

- Certified Diabetes Care and Education Specialists

- Employees who provide diabetes prevention services

- Employees who primarily care for pediatric patients

Intervention

Pretest → ADCES modules → Posttest

ADCES Modules

Paraprofessional Level 1 (PP 1)	• 10 question pretest/posttest • 14.5 hour module (1 month)
Paraprofessional Level 2 (PP 2)	• 15 question pretest/posttest • 27 hour module (2 months)
Basic Diabetes Educator (BE)	• 20 question pretest/posttest • 46 hour module (3 months)

Results

Demographics

	PP 1 (n=28)	PP 2 (n=36)	BE (n=19)
Age (years, mean)	38	43	37
Sex			
Female	25	31	16
Race			
African American	8	9	2
Caucasian	18	25	14
Other	2	2	3
Years experience			
< 1 year	6	2	5
1-5 years	9	14	5
5-10 years	7	6	4
>10 years	6	14	5
Education			
High school	4	3	0
2 year degree	6	26	4
4 year degree	14	5	2
Masters	4	2	3
Doctorate	0	0	10

Occupation

PP 1 (n)	PP 2 (n)	BE (n)
• Nonclinical (9) • Health coach (8) • Lay health worker (5) • CHW (2) • Other (4)	• MA (22) • LPN (4) • CCHW (4) • Community paramedic (4) • Pharmacy tech (2)	• Physician (10) • RN (7) • NP (1) • PA (1)

Primary Outcome

PP 1 Scores	Pretest	Posttest	Change	P-value
N	28	24		
Score (%), M ± SD	59.6 ± 15.0	77.1 ± 14.0	+ 17.5	< 0.001

PP 2 Scores	Pretest	Posttest	Change	P-value
N	36	27		
Score (%), M ± SD	55.6 ± 15.3	72.8 ± 14.7	+ 17.2	< 0.001

Results (continued)

BE Scores	Pretest	Posttest	Change	P-value
N	19	8		
Score (%), M ± SD	61.8 ± 11.6	73.1 ± 14.9	+ 11.3	0.041

Self-Confidence Rating

	Pretest	Posttest	Change	P-value
PP 1 N	28	24		
Self-Confidence Rating, M ± SD	3.6 ± 0.9	4.1 ± 1.0	+ 0.5	0.027
PP 2 N	28	24		
Self-Confidence Rating, M ± SD	3.6 ± 0.9	4.1 ± 0.6	+ 0.5	0.007
BE N	19	8		
Self-Confidence Rating, M ± SD	3.8 ± 0.9	4.3 ± 0.4	+ 0.5	0.020

Conclusion

Structured training for Diabetes Community Care Coordinators and non-specialist clinicians can improve diabetes knowledge and employee confidence.

Acknowledgments

References

1. Diabetes Care 2022;4(Suppl. 1):S1-264
2. Burke, et al. (2016). *Practice Levels for Diabetes Educators and Diabetes Paraprofessionals*. ADCES. www.diabeteseducator.org