

Primary care physicians adherence to physical activity guidelines with diabetes patients

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► BACKGROUND

The Diabetes Canada clinical practice guidelines (CPG) requires that physicians assess and recommend physical activity in T2 diabetes mellitus (T2DM) patients (Grade B level 2).

► OBJECTIVE

To assess family physicians' adherence to the Diabetes Canada CPG with regards to physical activity with T2DM patients.

► METHODS

❖ Study design and context

An audit and feedback study, based on Quebec College of Physicians methods, of all family physicians in one Family Medicine Teaching Unit (FMTU).

❖ Participants

We randomly selected the electronic medical files (EMF) of 42 patients.

Eligibility criteria were:

- ✓ Aged 50-69 years
- ✓ Glycated hemoglobin (HbA1c) ≥6%
- ✓ Registered with the FMTU for their regular follow-up
- ✓ No contraindication to engaging in physical activity

❖ Data collection

Three team members extracted data from EMF (sociodemographic, socioeconomic, general health, diabetes treatment and main outcome).

❖ **Main outcome:** Diabetes Canada CPG divided into 3 recommendations (yes/no):

- Assessment of patients' physical activity level (active/sedentary)
- Physical activity counselling
- Referral to another professional (nurse, exercise specialist, dietitian and/or interprofessional diabetes team)

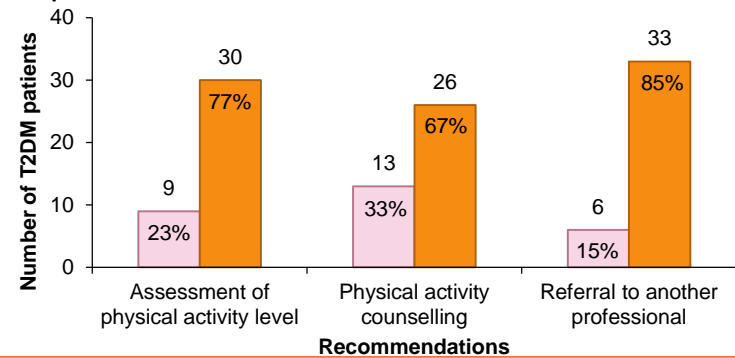
► RESULTS

❖ Table 1. Patient characteristics (n=39)

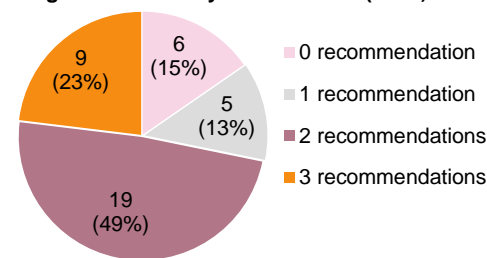
Characteristics	Mean ± SD	Number (%)
Age, years	61 ± 5.3	-
Neighbourhood	Low socioeconomic status	11 (28.2%)
	High socioeconomic status	28 (71.8%)
Gender	Women	11 (28.2%)
	Men	28 (71.8%)
BMI, kg/m²	31 ± 5.5 ^a	-
HbA1c, %	>7%	22 (56.4%)
	≤7%	17 (43.6%)
General health status*	Smoking	8 (20.5%) ^b
	Alcohol	24 (61.5%) ^c
	Physical inactivity	13 (33.3%) ^d
	Lifestyle	2 (5.1%)
Treatment	Antihyperglycemic	29 (74.4%)
	Antihyperglycemic + insulin	6 (15.4%)
	Insulin	2 (5.1%)

a: 19 (48.7%) information not available; b: 2 (5.1%) information not available; c: 4 (10.3%) information not available; d: 9 (23.1%) information not available; *Categories not mutually exclusive.

❖ Figure 1. Adherence to the Diabetes Canada CPG with regards to physical activity in T2DM patients



❖ Figure 2. Summary of adherence (n=39)



❖ Table 2. Health professionals other than physicians who were involved

Health professionals	Number (%) [*]
Nurse	23 (59.0%)
Exercise specialist	5 (12.8%)
Dietitian	8 (20.5%)
Interprofessional diabetes team	10 (25.6%)

*Not mutually exclusive

❖ Table 3. Adherence to the Diabetes Canada CPG with regards to physical activity in T2DM patients by socioeconomic status

Neighbourhood	Assessment of physical activity level		Physical activity counselling		Referral to another professional	
	Yes	No	Yes	No	Yes	No
Low socioeconomic status	7/30 (23.3%)	4/9 (44.4%)	5/26 (19.2%)	6/13 (46.2%)	9/33 (27.3%)	2/6 (33.3%)
High socioeconomic status	23/30 (76.7%)	5/9 (55.6%)	21/26 (80.8%)	7/13 (53.8%)	24/33 (72.7%)	4/6 (66.7%)

► CONCLUSION

❖ Adherence to Diabetes Canada CPG among family physicians in the FMTU with regards to physical activity in T2DM patients varied depending on the nature of the recommendation; adherence to counselling was lower than to assessment or referral to another professional (highest adherence).

❖ This exploratory audit and feedback study could be expanded to more FMTUs in the future.