PROMs in clinical diabetes practice

Routine assessment of Patient-Reported Outcome Measures (PROMs) in the DiaPROM trial.



Hernar I ^{1,2,3}, Graue M ¹, Strandberg R. B ¹, Nilsen R. M ^{1,2}, Rekdal M ⁴, Cooper J. G ⁵, Løvaas K. F ⁵, Madsen T. V ⁵, Tell G. S ², Haugstvedt A ¹

¹ Western Norway University of Applied Sciences, ² University of Bergen, ³ Haukeland University Hospital, ⁴ Dips AS, ⁵ Norwegian Organization for Quality Improvement of Laboratory Examinations

Background

Routine assessment of diabetes-related distress and psychological well-being is recommended in clinical diabetes practice. Patient-Reported Outcome Measures (PROMs) are considered beneficial and feasible for assessing emotional problems, but details on how to capture such self-report data electronically is limited.

Objectives

- 1) Investigate willingness to complete PROMs on a touchscreen computer in the outpatient clinics' waiting area.
- 2) Estimate the proportion of participants with elevated PROMs scores in need of additional follow-up.
- 3) Examine the association between diabetes-related distress and psychological well-being.

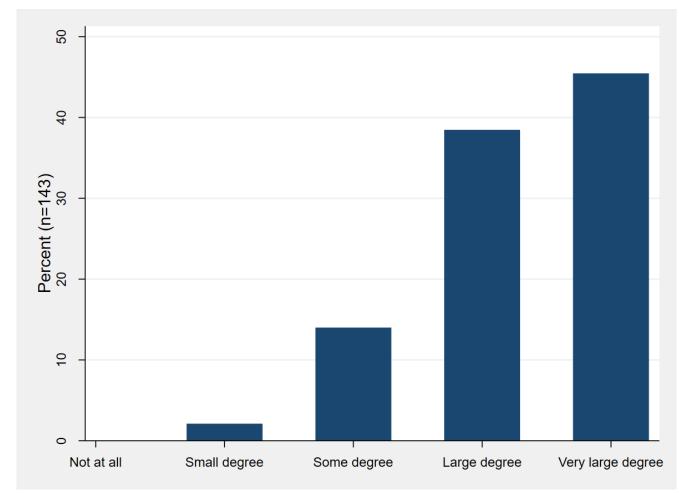
Methods

149 adults (18-74 years) with type 1 diabetes (T1D) completed PROMs electronically at Haukeland University Hospital. The data was transferred to the electronic patient records:

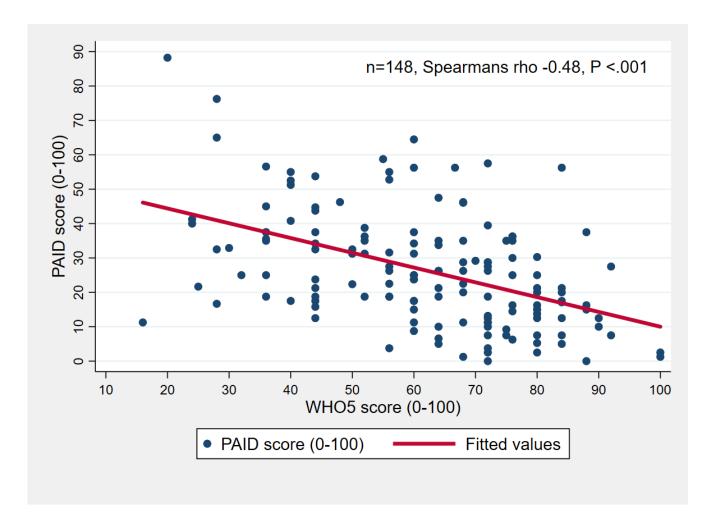
- The Problem Areas in Diabetes Scale (PAID) maps diabetes-related distress (20 items).
 Scores ≥30 or minimum one item scored ≥3 qualify for extra follow-up. ≥40 suggest serious distress.
- > The WHO-5 Well-being Index (WHO-5) measures psychological well-being (5 items). Scores ≤50 indicate suboptimal well-being and ≤28 suggest depression.

Results

Aim 1: Willingness to complete PROMs on a touchscreen computer in 143 adults with T1D (%):



Aim 3: The association between PAID and WHO-5 scores in 148 adults with T1D is moderate.



Aim 2: Age, diabetes duration, HbA_{1c}, PAID and WHO-5 scores in 149 adults with T1D completing PROMs:

Age (years)	36 (18-74)
Diabetes duration (years)	16 (1-67)
HbA _{1c} (mmol/mol)	61 (39-108)
PAID score (0-100) ¹	25 (0-88)
Score ≥30 ¹	57 (38.3)
Score ≥30 or at least one item scored ≥3 ¹	74 (49.7)
Score ≥40 ¹	26 (17.5)
WHO-5 score (0-100)	64 (16-100)
Score ≤50	41 (27.5)
Score ≤28	9 (6.0)

Data are shown as n (%) and median (min-max) of patients with valid values. ¹ n = 148 due to missing.

Aim 2: Proportion of PAID and WHO-5 scores of concern in 149 adults with T1D:





Conclusion

Using PROMs may help clinicians to identify emotional problems and become aware of diabetes-related challenges, and then again to facilitate targeted follow-up for adults with elevated scale scores.



Contact: ingvild.hernar@hvl.no









