

P-1098 Mental distress and health-related QOL among patients with diabetes using SMBG in Japan: a large-scale survey



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Background and Aims

Although self-monitoring of blood glucose (SMBG) is established as a useful tool for self management for patients with type 1 diabetes (T1D) and type 2 diabetes (T2D), mental distress associated with SMBG has remained unsolved. The aim of the present study was to explore whether views of patients with diabetes toward self-monitoring of blood glucose (SMBG) and involvement of their doctors affect the patients' quality of life (QOL)..

Materials and Methods

This multi-center, cross-sectional survey was conducted in patients with type 1 (T1D) and type 2 (T2D) diabetes using SMBG, recruited from 42 Japanese medical institutions. To evaluate mood status and health-related QOL, Profiles of Mood States 2 (POMS2) and diabetes therapy-related QOL (DTR-QOL) were used. An original questionnaire was developed asking how SMBG gave Q1) "importance" Q2) "painfulness" and Q3) "confidence" to the patients. Another questionnaire for doctors was also developed including how often they checked SMBG diary (QD4).

Characteristics of the study participants

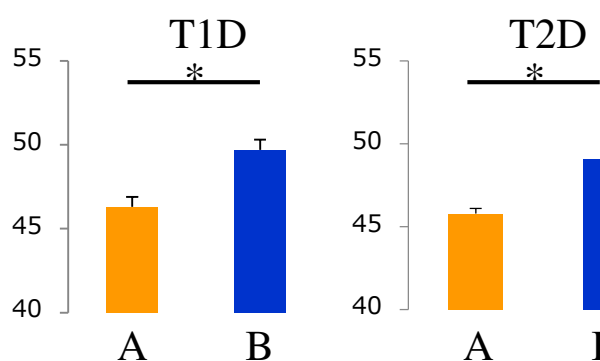
	T1D	T2D
n (male/female)	517 (234/282)	1648 (982/659)
Age (years)	51.4 ± 15.7	64.1 ± 11.6
BMI (kg/m ²)	22.9 ± 3.5	25.4 ± 4.5
Duration of diabetes (years)	15.2 ± 10.6	16.8 ± 10.0
Duration of insulin use (years)	14.0 ± 10.4	8.0 ± 6.7
HbA1c (%)	7.8 ± 1.2	7.5 ± 1.1
Frequency of SMBG instructed by doctors (times/day)	3.2 ± 1.2	2.2 ± 1.1
Frequency of SMBG performed by patients (times/day)	3.4 ± 1.8	2.4 ± 1.6

(mean ± SD)

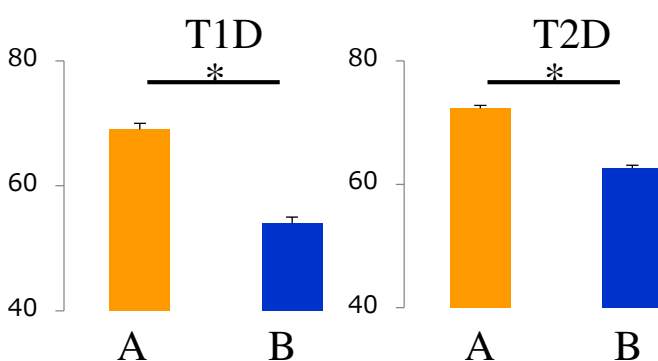
Factors associated with SMBG-associated distress

T1D and T2D patients who answered "very unlikely" and "unlikely" (A) and "likely and "very likely" (B) to Q2 "How painful is SMBG to you?"

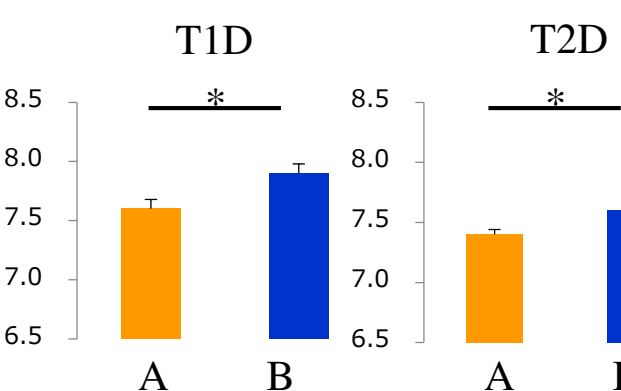
A. TMD T-score



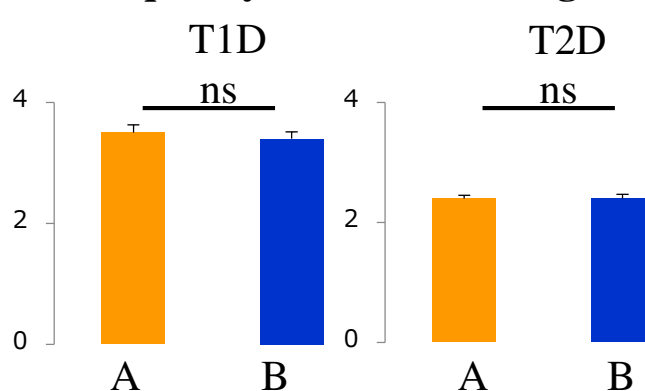
B. DTR-QOL total score



C. HbA1c



D. Frequency of SMBG testing



Data are shown as mean ± SEM. * indicates $P < 0.05$. TMD T-score; total mood disturbance score calculated by POMS2.

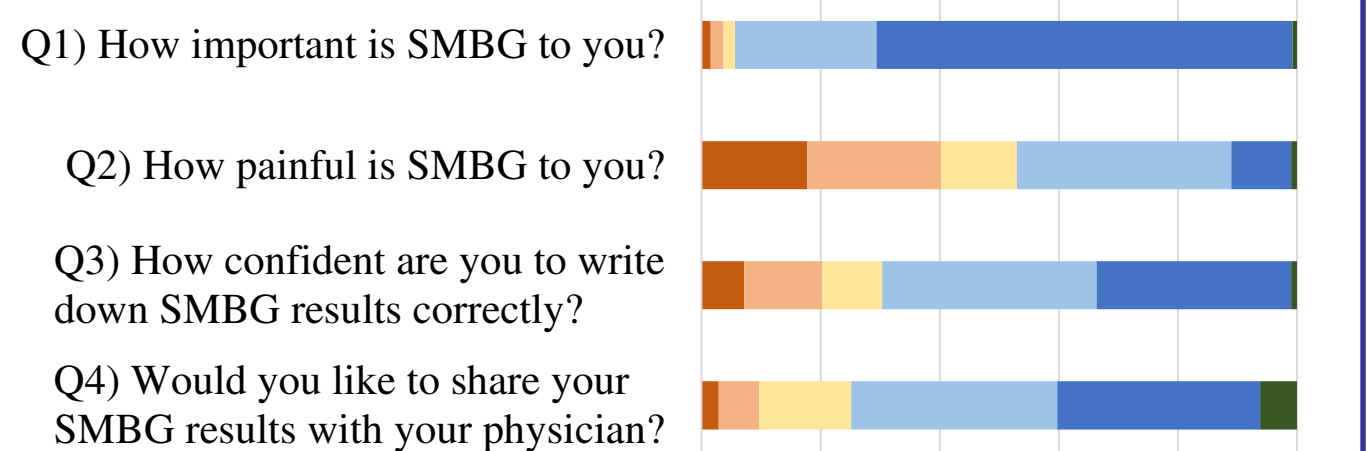
Conclusion

T1D and T2D experiencing SMBG-associated discomfort had more mental distress, lower health-related QOL and higher HbA1c, regardless of daily SMBG checks. Doctors' involvement with SMBG education might reduce the SMBG-related distress and increase the health-related QOL.

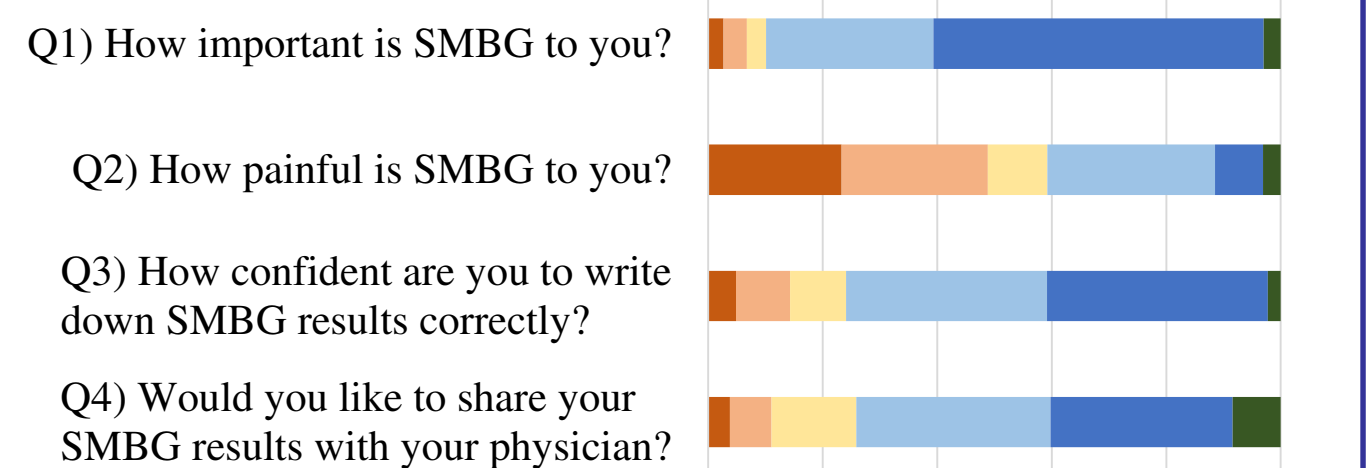
Results of the original questionnaire for the patients

very unlikely unlikely neutral likely very likely NA

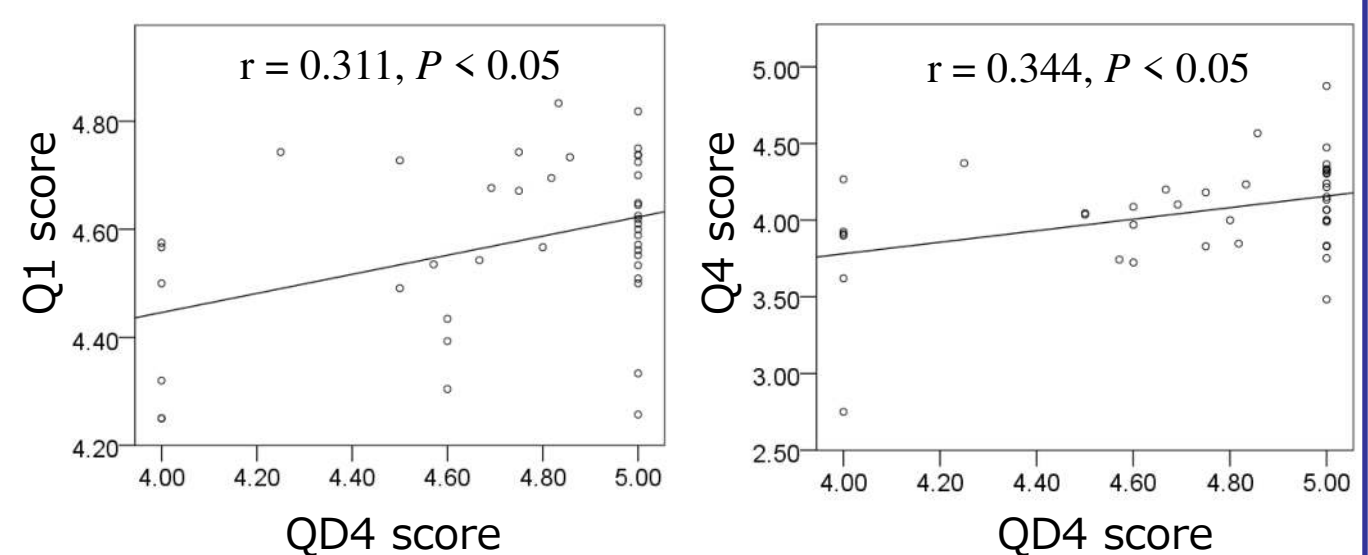
T1D



T2D



Association between views of patients and doctors about SMBG



Score of QD4) "Do you check patients' SMBG diary regularly?" for doctors was significantly associated with the score of Q1 and Q4.

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