

Representativeness of the Swiss Diabetes Registry

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Background/Introduction:

The Swiss Diabetes Registry (SwissDiab) is a multicentre, longitudinal, observational study of outpatients with diabetes in tertiary care. The overall objective is to assess diabetes care and management, the prevalence and incidence of diabetes-related complications, and quality of life. The aim of this study was to evaluate the representativeness of participants at one of the study centres, the Division of Endocrinology and Diabetes at the Cantonal Hospital of St. Gallen.

Methods:

The study included 493 SwissDiab participants enrolled between January 2010 and December 2016 and 640 non-participating patients treated at the centre during the same time. For participants and non-participating patients, demographic characteristics, clinical findings, blood chemistry, and medication were retrieved from the SwissDiab baseline visit and the medical record +/-6 months from the first available visit within the study period, respectively. Analyses were stratified by diabetes type (type 1/DM1; type 2/DM2).

Results:

Overall, in DM1 and DM2, participants smoked less (24% vs 45% and 21% vs 29%), had higher educational attainment (39% vs 21% and 25% vs 18%) and lower HbA1c (7.2% vs 7.8% and 7.2% vs 8.1%). In DM2, the proportion of females (30% vs 38%) and migration background (36% vs 49%) was lower among participants. All P-values <0.05. SwissDiab participants were similar, but slightly better controlled than non-participating patients with ≥6 months of prior treatment, whereas patients recently referred to the clinic (<6 months of prior treatment) and patients excluded from participation in SwissDiab were less well controlled.

Conclusion:

The differences in clinical characteristics of study participants and non-participating patients indicate that SwissDiab is likely to overestimate the state of diabetes care and management, and underestimate the effect of therapeutic regimens. The results highlight the need to improve recruitment of females and patients with migration background in DM2.