

ONLINE SURVEY ON PERCEPTIONS AND ISSUES WITH CONTINUOUS SUBCUTANEOUS INSULIN INFUSION THERAPY IN ADULTS WITH TYPE 1 DIABETES

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Introduction

Type 1 diabetes (T1D) requires life long insulin replacement due to autoimmune destruction of the beta cells. The continuous subcutaneous insulin infusion via pump (CSII) is an effective method for glucose control. There is a lack of data on the utility and challenges of CSII use from a patient's perspective. Such information is important to health care professionals and manufacturers to optimize the use of a technology of proven clinical benefit for T1D.

Objectives and Methods

- We conducted an online survey to identify the perceptions and problems that are experienced by adults (>18 y.o.) with T1D using CSII for the past 3 months or more.
- Participation was solicited from patients of the diabetes clinic database at IRCM and through announcement at “Diabète Québec” website
- The survey was filled online through a secure software (Survey Monkey ®)
 - It consisted of 37 multiple choice and two open-ended questions
 - It was provided in English and French

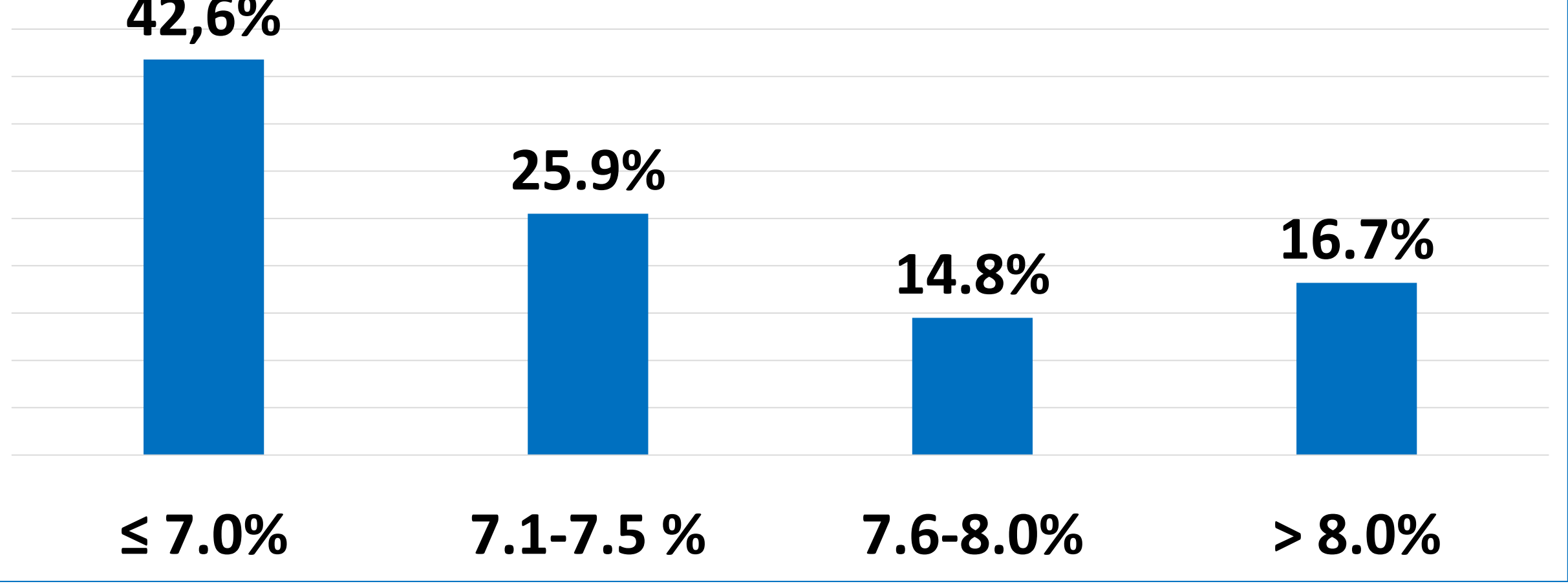
Results

Baseline characteristics of the participants

N (% Females)	115 (72%)
Age (years)	39.7 ± 14.0
Duration of DT1 (years)	20.9 ± 12.2
Duration of CSII Use (years)	6.2 ± 4.1

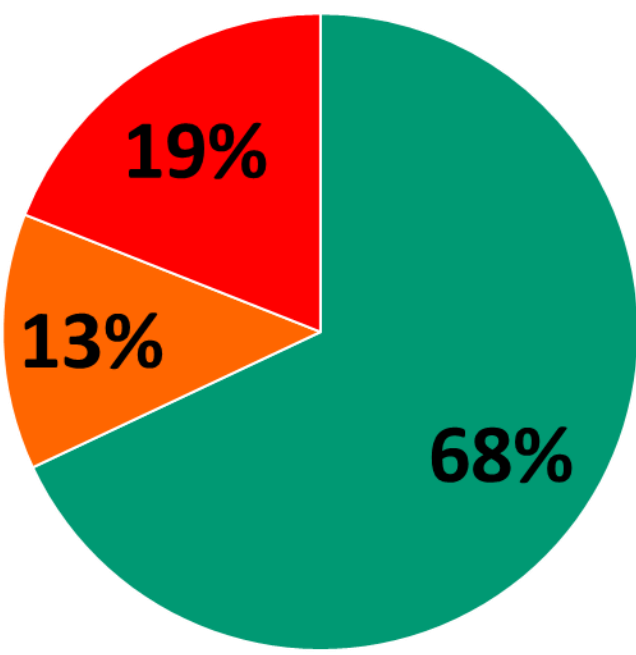
Participants used the different insulin pumps approved in Canada (Medtronic Veo®, Animas Vibe & Ping® & Omnipod®)

Distribution of Most Recent Reported HbA1c Value

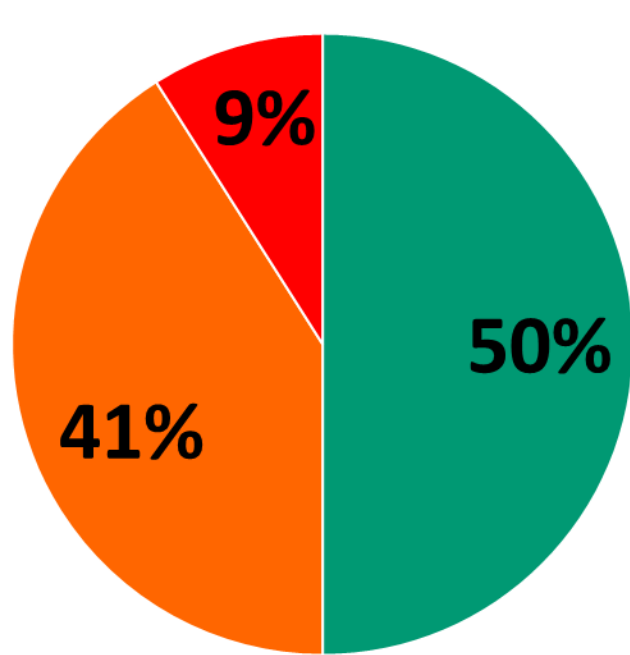


Patients' Perception of Glucose Control After Switching to CSII Therapy

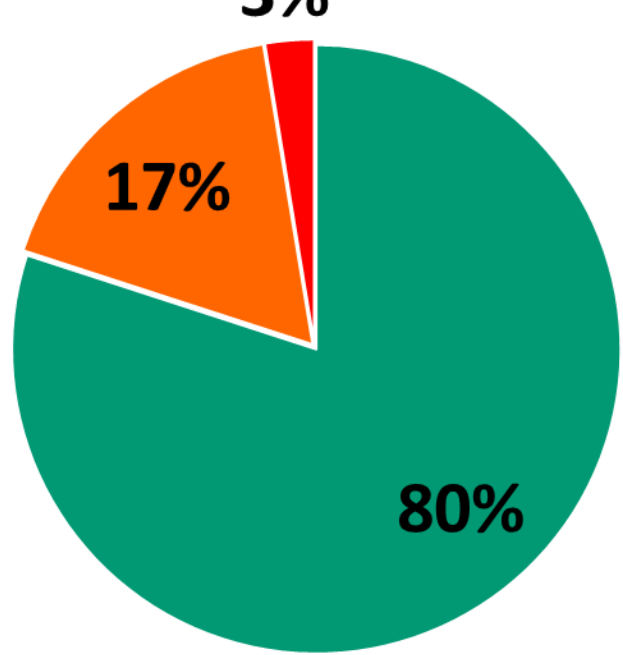
Hypoglycemia Frequency



Hypoglycemia Severity



Overall Glucose Control



Results

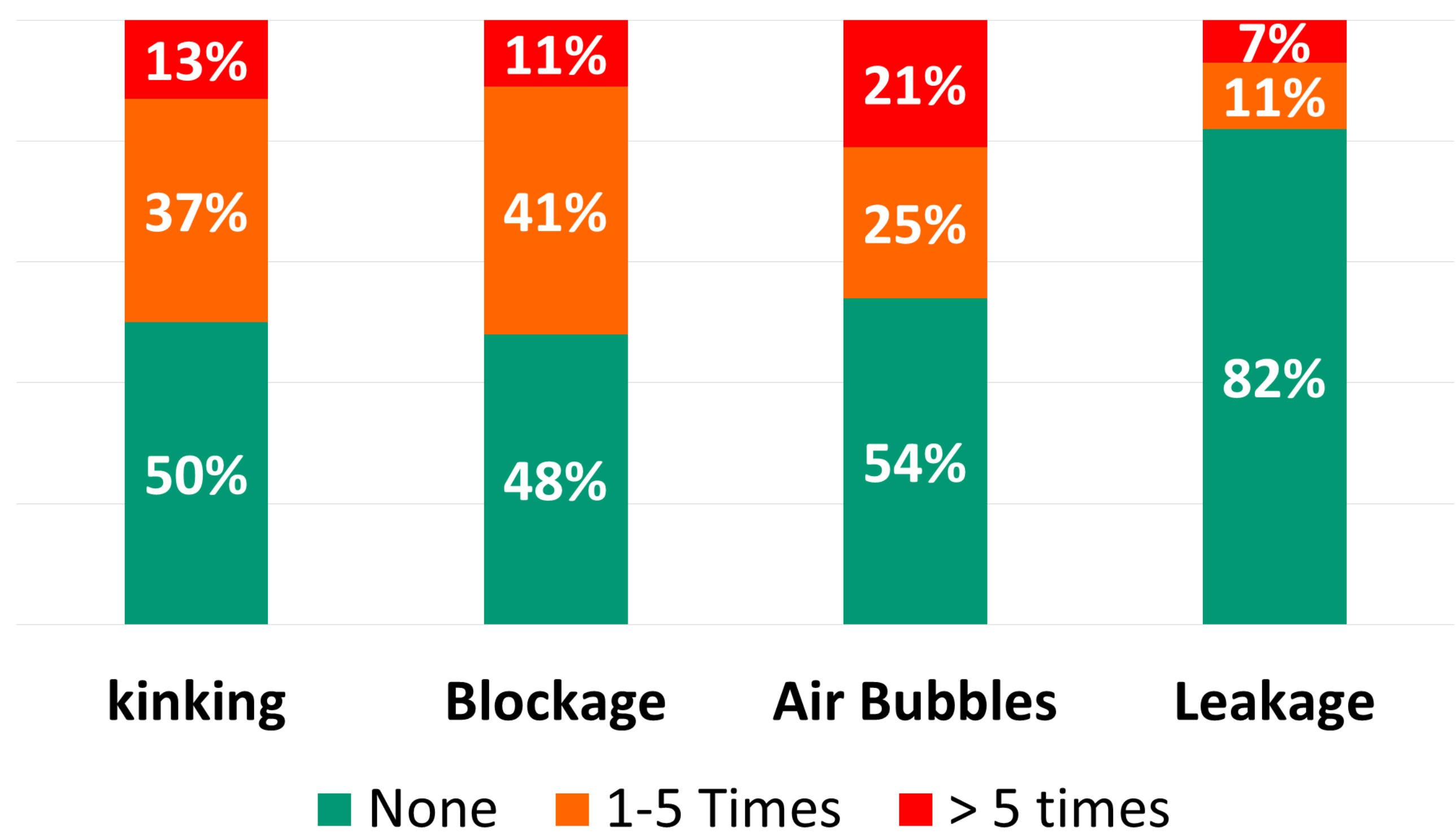
During The last Year of CSII Use

Patients' Perception of CSII impact on Quality of Life

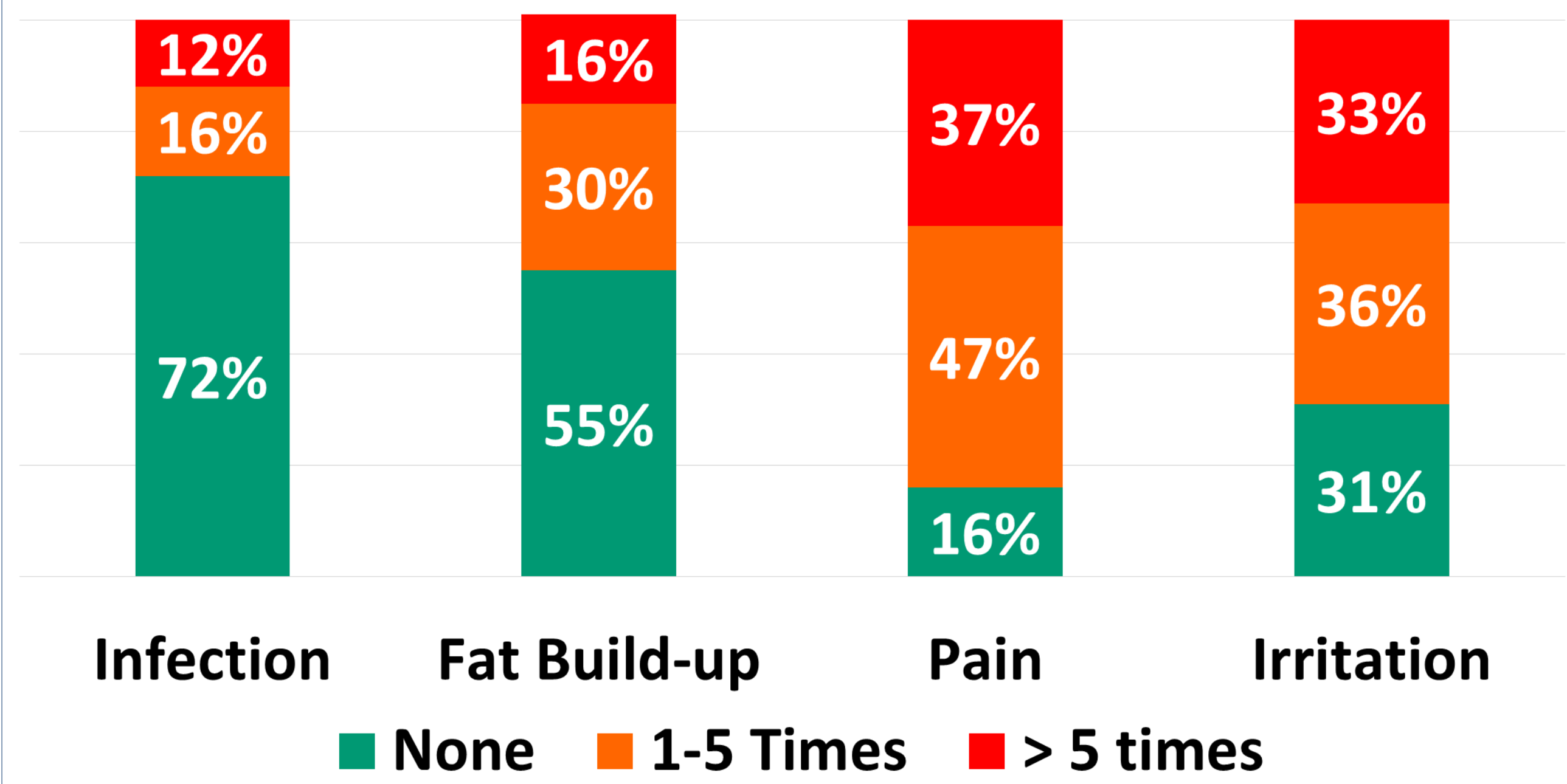
- 84% ➔ No worry or anxiety experienced by patient or family members
- 89 % ➔ No negative impact on life /family schedule
- 82% ➔ No effect on time off work/school

Patients' Perception of Technical Issues with CSII Use

Catheter Related Problems



Problems at Insertion Site



- Patients reported changing their infusion set/cannula every 3.3 ± 0.9 days
- Only 2.6% reported no technical problems at all
- 94% reported ≥ 2 medical follow-up visits/year
- But only 37% reported discussing pump technical problems with their health care professionals.

Conclusions

- CSII use was positively perceived by the majority of patients ➔ improved diabetes control without compromising their quality of life .
- However, a high frequency of infusion site / catheter problems was reported
- The frequency of CSII infusion site/catheter problems is probably underestimated and warrants further attention by health care professionals and manufacturers.

Acknowledgements

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