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LETTER TO THE EDITOR

Dear Editor,

Title: *School support for children with type 1 diabetes mellitus: the parental perspective*

Running Title: Type 1 diabetes in schools

Type of manuscript: Letter to the editor

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The known:

- The school environment plays a significant role in the management of children with T1D

The new:

- Parents are overall satisfied with Victorian T1D school care.
- Areas for improvement include staff training, and both communication and diabetes management plan use in secondary school.
- A number of parents felt that their child's diabetes had a psychosocial impact on school life.

diabetes management plan (DMP) and support participation of all students in school activities.[1] To enhance Australian data, we explored parental perception of the T1D support available to students in Victorian schools, how experience of these supports differed between primary and secondary school settings and the impact of T1D on participation in school activities and child wellbeing.

A structure-response questionnaire was derived from a study by Lehmkuhl & Nabors (2008).[3] Participants were parents of children with T1D who attended the diabetes outpatient clinic at the Royal Children's Hospital, Melbourne, March-June 2019. Of the 308 parents who self-approached for inclusion in this study, 279 surveys were included in the final analysis (Table 1). Overall satisfaction with diabetes school-based care was reported in 219/275 (79.6%). Staff training was identified as an issue with 82/279 respondents (29.8%) responding negatively to the level of training. Parents of secondary-level students reported use of the DMP (69.5% vs 35.4%, p=0.001) and were less satisfied with the communication between parents and staff (74.2% vs 48.3%, p=0.03), whereas 38/128 (29.7%) consider that more support should be provided to primary students (p=0.04). Out of 274 parent respondents, 36 (13.1%) felt their child was prevented from participation in activities and 70/273 (25.6%) reported that their child felt different as a result of T1D.

This study shows that overall, parental perception of school-based diabetes care is largely positive in Victorian schools although some deficits have been identified**.** Our findings are similar to that of the national *Diabetes in Schools* assessment where the need for improved communication, staff training and DMP use were also highlighted.[4] Exclusion of children with T1D from school activities is an ongoing concern,[2] as full participation in activities is central to the school experience. Interestingly, while parents acknowledge that the level of support provided to secondary level students is appropriate, the expectation of ongoing dialogue with the school remains. Improved education provided to school staff, underlies the federally-funded *Diabetes in schools* pilot education program, which may need to be tailored to ensure it addresses both the medical and psychosocial needs of children with T1D.

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Table 1: demographical and clinical variables between primary vs secondary students

		Total (n=279)	Primary-School (n=129)	Secondary-School (n=150)	p value
Males, n(%)		143 (51.3)	69 (53.5)	74 (49.3)	0.5
Age, years (SD)		12.0 (3.4)	9.0 (2.0)	14.7 (1.7)	<0.001
Duration of diabetes diagnosis, years (SD)		5.3 (3.8)	3.9 (2.7)	6.5 (4.1)	<0.001
Mean duration at current school, years (SD)		4.9 (2.5)	5.0 (2.3)	4.7 (2.7)	0.3
HbA1c in %, mean (SD)		7.76 (0.96)	7.73 (0.86)	7.79 (1.04)	0.6
Number of performed BGL, Mean (SD)		4.7 (2.0)	5.3 (2.0)	4.2 (1.7)	<0.001
School type, n(%)	**Public**	166 (59.5)	85 (65.9)	81 (54.0)	0.04
	Private	92 (33.0)	34 (26.4)	58 (38.7)	0.03
	Other	21 (7.5)	10 (7.8)	11 (7.3)	0.90
School supports received, n(%)	**Insulin administration**	25 (8.9)	19 (14.7)	6 (4.0)	0.002
	Blood glucose levels	89 (31.9)	73 (56.6)	16 (5.7)	<0.001
	Hypoglycaemia management	187 (67.0)	105 (81.4)	82 (54.7)	<0.001
Insulin regimen, n(%)	**BD**	80 (28.7)	62 (48.1)	18 (12.0)	

	Intensive	199 (71.3)	67 (51.9)	132 (88.0)	<0.001
CGM, n(%)	**Yes**	105 (37.6)	63 (48.8)	42 (28.0)	<0.001
	No	174 (62.4)	66 (51.2)	108 (72.0)	

Abbreviations BD = twice-daily injections; Intensive insulin regimen – a composite of those on MDI (multiple daily injections) and CSII (continuous subcutaneous insulin infusion); CGM =continuous glucose monitoring; between group comparisons (primary- vs secondary-school) were assessed using Chi Square analyses Student's t test for categorical and continuous variables respectively