

Burden of care in direct caregivers of children with type 1 diabetes

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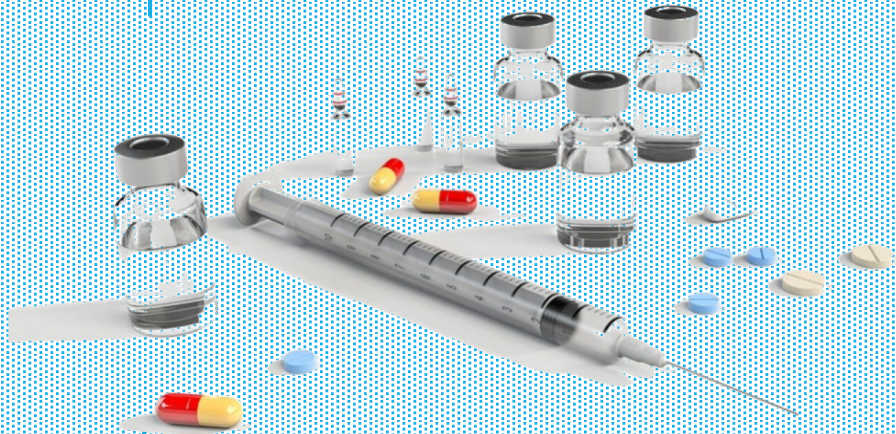


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INTRODUCTION



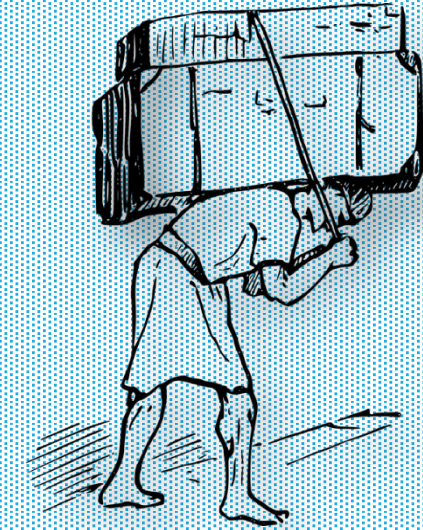
AIM

METHODS

- The treatment of type 1 diabetes is a process that involves not only sick children but also their caregivers. Parents undertake various actions towards their child aiming at reaching diabetes management targets, which can make the disease a significant challenge for the whole family.
- To assess the burden of care for direct caregivers of children with type 1 diabetes.
- The study included 125 caregivers who reported to a diabetes clinic with their child for a follow-up visit. The Caregiver Burden Scale (CB Scale) was used to collect the study material.

[Elmstahl i wsp., 1996]

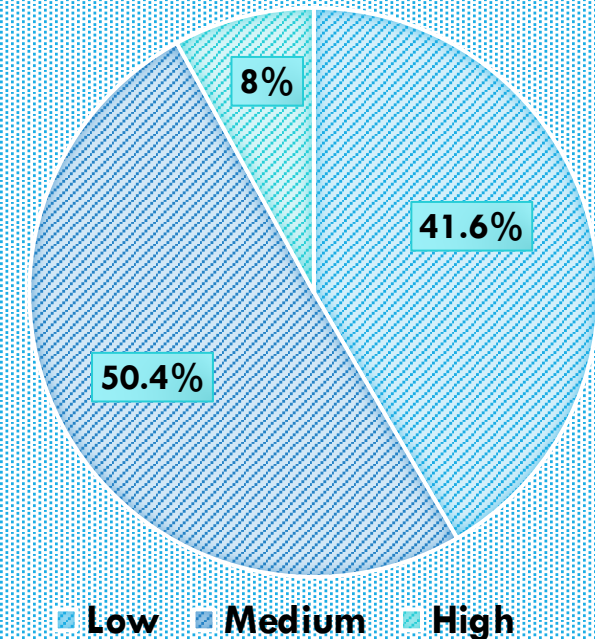
RESULTS



Tab.1. Level of caregiver's burden - CB Scale Subscales

Subscales	M	SD	Min	Max	Level of burden (%)		
					Low	Medium	High
General strain	2.4	0.67	1	3.6	27.2	48.0	24.8
Isolation	1.81	0.77	1	3.7	57.6	31.2	11.2
Disappointment	2.36	0.75	1	4	31.2	40.0	28.8
Emotional involvement	1.62	0.68	1	3.7	68.8	23.2	8.0
Environment	1.97	0.59	1	3.7	48.0	43.2	8.8

Fig.1. Level of caregiver's burden – total score



- Low-level (1.00-1.99)
- Medium-level (2.00-2.99)
- High-level (3.00-4.00)

RESULTS



Table 2. Factors associated with children and the level of burden for caregivers

		CB Scale					
		General strain	Isolation	Disappointment	Emotional involvement	Environment	Total score
Age of the child	rho	-0.161	-0.165	-0.177	-0.058	-0.159	-0.195
	p	0.073	0.066	0.048	0.521	0.077	0.030
Duration of the disease	rho	-0.024	0.082	0.015	0.021	-0.126	-0.035
	p	0.793	0.366	0.871	0.812	0.162	0.701
Number of glycemc tests - daytime	rho	0.040	0.034	0.096	-0.104	-0.027	0.081
	p	0.662	0.710	0.287	0.250	0.766	0.373
Number of glycemc tests - nighttime	rho	0.058	-0.061	0.011	0.027	-0.009	0.081
	p	0.521	0.504	0.903	0.770	0.917	0.371
Method of administration of insulin	U	1072.5	1050.5	1081	981.5	1140	981.5
	p	0.521	0.427	0.556	0.210	0.831	0.172
Metabolic control of diabetes (HbA1c)	rho	0.060	0.128	-0.024	0.081	0.052	0.117
	p	0.504	0.155	0.789	0.370	0.561	0.167
Frequency of hyperglycemc episodes	rho	0.072	0.075	0.075	0.119	0.059	0.136
	p	0.427	0.406	0.406	0.187	0.512	0.132
Glucose measurement method	H	0.41	0.70	2.30	3.14	0.82	1.11
	p	0.937	0.873	0.513	0.370	0.845	0.775

RESULTS

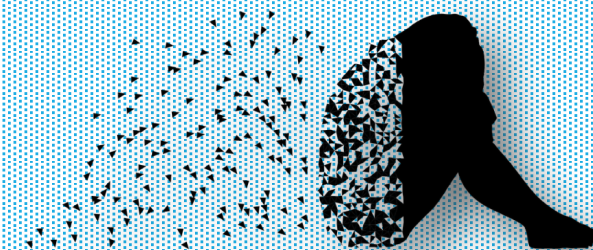


Table 3. Factors associated with families and the level of burden for caregivers

		CB Scale					
		General strain	Isolation	Disappointment	Emotional involvement	Environment	Total score
Sex	U	874	1071	1086.5	875	1073.5	1002.5
	p	0.056	0.508	0.580	0.051	0.519	0.224
Marital status	U	1021	1090	1133.5	1147.5	1127	1022
	p	0.230	0.436	0.621	0.675	0.543	0.183
Place of residence	H	4.37	4.05	3.21	2.62	1.46	3.77
	p	0.224	0.256	0.361	0.454	0.691	0.287
Parent's professional status	U	99.5	980	968	1203.5	1051	997.5
	p	0.074	0.057	0.051	0.602	0.144	0.049
Caregiver's age	rho	-0.040	-0.050	-0.106	-0.119	-0.135	-0.097
	p	0.660	0.583	0.239	0.186	0.132	0.281
Caregivers's education	H	0.41	3.47	1.11	0.27	0.28	0.33
	p	0.817	0.177	0.575	0.872	0.868	0.849

CONCLUSION

Direct caregivers of children with diabetes generally experience a moderate burden of care. The study identified factors which increase the sense of burden of care in caregivers. These include female sex, unemployment and younger age of the sick child.