



# Paging Dr. Google: Parents' Report of Internet Use for Type 1 Diabetes Management

*Diabetes Care* 2015;38:e18–e19 | DOI: 10.2337/dc14-2461

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Caregivers are important for effective treatment management of a child's type 1 diabetes, as effective treatment often requires intensive care. Some parents balance this high burden of care by turning to the Internet for additional information (online health information seeking [OHIS]) and often use information found online to care for their child (1,2). This is potentially concerning as the quality and accuracy of online health information are variable (3,4); however, reliable estimates of OHIS have not been established. The current study will examine the prevalence and frequency of OHIS in type 1 diabetes caregivers.

The researchers designed a brief survey for caregivers to complete while waiting for their child's appointment at a large Southeastern pediatric diabetes specialty clinic. The survey assessed parents' demographics and their use of online sources for diabetes information. A total of 49% of the families seen in the clinic during the recruitment period participated. A total of 209 primarily Caucasian (80.9%), middle-aged (mean 42.15 years; SD 8.94; range 21–72) mothers (72.3%) of children with type 1 diabetes completed the survey. Children were primarily school-aged (mean 12.26 years; SD 4.7), with an average parent-reported glycosylated hemoglobin A<sub>1c</sub> (HbA<sub>1c</sub>) of 8.69% (71 mmol/mol)

(SD 1.7% [18.6 mmol/mol]; range 5–14% [31–130 mmol/mol]) and an average time since diagnosis of 5 years (SD 52.26 months; range 15 days to 294 months).

Regarding access to the Internet, 96.2% of caregivers reported having access either at home or on their cell phone. A majority of caregivers (63.6%) reported using the Internet for diabetes information, with social media as both the source used most commonly and for the most amount of time on average (Table 1). Child age had a negative correlation with total message board time ( $r = -0.20$ ,  $P < 0.01$ ). Management style (with higher codings denoting more child management), controlling for parent and child age, had a negative correlation with personal Web site time ( $r = -0.23$ ,  $P < 0.01$ ), social media time ( $r = -0.16$ ,  $P < 0.05$ ), and total time looking for diabetes information online ( $r = -0.23$ ,  $P < 0.01$ ). Child

HbA<sub>1c</sub> was not correlated with any Internet use variables.

This clinic-based prevalence study is the first to our knowledge to examine OHIS prevalence (63.6%) in caregivers of children with type 1 diabetes. Importantly, this study identified social media Web sites as a commonly used source. As such, a primary implication of this study is that physicians, nurses, diabetes educators, and researchers should actively assess OHIS and work to steer patients toward trusted information providers not only on traditional static Web pages but also on social media sources. These findings also should encourage providers and researchers to reach patients through the dissemination of evidence-based recommendations via social media sources. This study also identified significant relationships between increased parental management and increased OHIS across child age. These involved caregivers therefore are a

**Table 1—Internet sources used for diabetes information: percentage used and time per week**

Source	Mean minutes per week*	SD	Range (min)	Used source (%)
Social media	120.95	159.05	5–900	45.5
Professional Web sites	72.21	73.51	5–480	41.1
Message boards	74.46	72.21	5–480	22.0
Personal Web sites	108.64	202.28	5–1,320	21.1

\*Means are calculated from those who reported using that source.

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population of special interest for whom intervention may be especially suited.

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**Acknowledgments.** The authors would like to thank the families who participated and the research team. The authors especially extend their thanks to Adam M. Reid, Joseph P.H. McNamara, and Jackie Petruzzelli of the University of Florida for their help with this study.

**Duality of Interest.** No potential conflicts of interest relevant to this article were reported.

**Author Contributions.** A.M.B. and B.O. conceived and designed the study. A.M.B. and L.L. oversaw participant recruitment, conducted data analyses, and drafted the manuscript for

publication. B.O. oversaw data analysis review and interpretation and revised the manuscript for submission for publication. J.S. participated in recruitment planning, establishing recruitment within the clinic, and revising the manuscript for submission for publication. G.R.G. oversaw the design and implementation of the study and participated in progress evaluation and publication planning, editing, and submission. G.R.G. is the guarantor of this work and, as such, had full access to all the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.

**Prior Presentation.** A preliminary version of these results was presented at the 2014 Annual Meeting of the American Psychological Association, Washington, DC, 7–10 August 2014.

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