

Plain Language: A Vital Tool for Diabetes Education

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*Plain language does not mean bland writing or "dumbing it down"! It is direct, focused, and engaging. Plain language expresses ideas clearly. State your points with short words and sentences. Excessive text weighs down a page, so cut out unnecessary words and sentences. Cut out extra words that distract from the main message. **Say it once, and say it well.***

If you knew that more than half of your patients could not follow written health instructions, would you take steps to change this? Yes! As diabetes educators, our job goes far beyond information delivery. We need to ensure that people can understand and use the information we provide. Plain language is one tool to help with this vital task. This article describes:

1. plain language as a tool to improve health literacy for diabetes management; and
2. characteristics of well-designed, plain-language print materials.

Let's start with some definitions and important facts

General literacy is the ability to read, write, understand and communicate information. Many Canadian adults have low literacy skills meaning they have a limited ability to respond to various types of written information. Table 1 provides a snapshot of literacy levels in Canada.

Health literacy means having the skills needed to access, understand and use information and services for health (2,3). If people are not generally

literate, they are not likely health literate. About 60% of adults in Canada do not have the literacy skills needed to manage their health properly (3). This is a vital statistic for educators to know, given that diabetes management is complex and the prevalence of diabetes increases as health literacy decreases (3). Simply put, this means we must not rely solely on print materials when teaching people about the management or prevention of diabetes. It also means that when print materials are used, they must be written in plain language.

The importance of considering health literacy and choosing plain language print materials is highlighted in some key research findings:

- Limited health literacy is associated with poorer diabetes outcomes (2).
- Patients with low health literacy have poorer glycemic control and higher rates of retinopathy than those who have adequate literacy (4).
- Literacy skills of caregivers are associated with glycemic control in children with diabetes (5).
- Most health materials are written at a grade 10 level or higher, although many adults read at a much lower level (6).
- Health materials should be written at a grade 6 reading level or lower to improve the likelihood of patients following health instructions. Even patients with adequate literacy prefer education materials written at lower grade levels (6).
- Level of education does not indicate reading ability. Highly educated individuals may have inadequate reading skills (6,7).

Table 1. Literacy levels in Canada (adapted from reference 1)

Level	Percentage of adults	Skill level	Interpretation
1	15	Poor skills	• Shopping or paying bills can be difficult or impossible.
2	27	Limited skills	• Can read simple, clear material. Daunted by long paragraphs. • May not be able to fill out forms or bank deposit slips.
3	39	Adequate skills	• The minimum reading level for successful participation in society. • Can read well, but find complex tasks difficult.
4–5	19	Highest skills	• Strong literacy skills, including strategies to deal with complex materials. • Can handle new reading challenges.

- Many patients with low literacy levels say they read well (6).
- Many patients do not prefer print to access health information, therefore other education strategies should also be used (7). Examples include audiovisuals, hands-on practice, discussion, visual images, games and role play.

Diabetes educators need to consider health literacy in each patient encounter. Many patients who have difficulty reading go unrecognized and do not receive suitable forms of health instruction. Healthcare professionals generally overestimate their patients' ability to read and understand printed information (6). The lowest levels of health literacy occur among seniors, immigrants and the unemployed (3); but even highly literate individuals may have difficulty processing information when they are fatigued or stressed.

As a skilled reader, it may be hard to imagine the effort that goes along with reading. Try to put yourself in the shoes of someone who is learning to read English and has just been diagnosed with diabetes. Reading a new language, or even new words, is like sorting out a code. Each word takes time, energy and effort to process.

“**yrt gnidaer siht ecnetnes**” (hint: each word is spelled backwards).

People with limited health literacy may recognize some letters and words but still find them difficult to understand or remember. Writing in plain language can help ease the burden for people with limited reading skills.

Plain language: What is it?

Plain language is also known as “clear writing” or “clear language”. The goal of plain language is to present information that is easy to read, easy to understand and easy to use. This means that the target audience can understand information the first time they read or hear it (8). Although ease of reading varies—depending on context and health literacy—there are many things you can do to make your documents easier to read. The hallmarks of plain language include:

- simple words;
- short sentences;
- short chunks of information;
- active voice;
- personal, conversational tone;
- logical organization; and
- easy-to-read layout and design.

These points are important if you are writing new diabetes education materials or choosing published materials such as pamphlets or handouts.

It's a matter of time.

No one wants to spend a long time reading and processing print material when the same information can be obtained in less time. Translating complex print material takes time, even for capable readers. Health material that is too complex will exhaust the literate and overwhelm the less literate. More likely, it will not be read at all.

Remember, there is heavy competition for a reader's attention:

- the phone is ringing;
- a child is crying;
- there are other things to read (bills, newspapers, e-mails); or
- they are experiencing anxiety, pain, or stress.

Readers of health material want to know what the material says, why they should care, and how they can apply their knowledge (9). The general rule of thumb is to write to communicate and write for value. Each word is costly, so if a “very” or a “however” or an “in fact” doesn't offer important information, delete it.

While simple words and short sentences are effective ways to improve the readability of health materials, visual elements such as layout and font are almost as important as the text and content. See Table 2 for some tips to improve the readability of health material.

The message is clear: Write well for better diabetes management!

Since many readers have difficulty understanding written health instructions, using plain language in diabetes education materials is vital. Other educational strategies are also needed. Making a document easier to read calls for clear, concise wording, and good organization, layout and design. Reading level scores alone do not predict readability or comprehension. Printed handouts, pamphlets, booklets and the internet can play an important role in providing and reinforcing information. As educators, our challenge is to help people understand and use information for better health. When people are learning about diabetes, they may be overwhelmed by information and the shock of a new diagnosis or treatment. Visually appealing print materials that are

Table 2. Writing tips for plain language

<p><input type="checkbox"/> Use short, simple words (1 or 2 syllables). Explain technical or medical information and terms with common, everyday words. Example:</p> <ul style="list-style-type: none">• “Glucagon raises the blood sugar by sending a signal to the liver” rather than “Glucagon raises the blood sugar by stimulating the liver.”
<p><input type="checkbox"/> Use short sentences (15 words or less). If a sentence can not be read in one breath, shorten it or split it up.</p>
<p><input type="checkbox"/> Use chunking. Chunk main points into distinct sections.</p> <ul style="list-style-type: none">• Use short paragraphs.• For short lists, use bullets.• Choose logical organization of points. Put the most important points first.
<p><input type="checkbox"/> Use the active voice. Reduce or avoid passive tense. Example:</p> <ul style="list-style-type: none">• “Once your child’s blood sugar is above 4 mol/L, give a snack.” (active)• “Once your child’s blood sugar is above 4 mol/L, it is very important that a snack be given.” (passive)
<p><input type="checkbox"/> Address the reader directly whenever possible (use “you” or “your”). This makes your writing more personal and inviting.</p>
<p><input type="checkbox"/> Use a question and answer format. This creates a conversational, interactive tone. It also helps organize information into more manageable chunks.</p>
<p><input type="checkbox"/> Consider all features of plain language. Reading level scores alone are not enough to make a document easy to read.</p>
<p><input type="checkbox"/> Use a large font. Choose serif fonts for most text.</p> <ul style="list-style-type: none">• 12-point font or larger is recommended for the main text. Headings should be larger.• Serif fonts are good to use for large chunks of text because they help lead the reader’s eye toward the next letter.• Sans serif fonts are good for titles or headings. They are simple and bold.• Verdana font may be easier to read on a computer screen because there is more space between the letters. <p>Compare these 12-point fonts: Font A, Font B, Font C.</p>
<p><input type="checkbox"/> Use easy to read layout and design.</p> <ul style="list-style-type: none">• Use left-aligned margins, not justified text. Justified text spaces words unevenly and makes reading more difficult.• Use bold to emphasize points. ALL CAPS and <u>underlining</u> are harder to read.• Use black text on a white or light background. If you use colour, limit the number of colours.• Use visuals to help explain or emphasize points. Make sure they are relevant and well-placed so they do not distract the reader.• Use lots of white space so the page doesn’t look crowded.
<p><input type="checkbox"/> Check the reading level of your document. Grade 5 is considered ideal (7). Reading levels can be calculated using Flesch-Kincaid or other formulas. Flesch-Kincaid scoring can be done quickly with MS Word (go to “Spelling and Grammar”).</p>
<p><input type="checkbox"/> Ask people from the target audience for feedback on the document.</p> <ul style="list-style-type: none">• Did they read it?• What did they learn?• What will they do with the information?

written clearly can help them learn, especially when they are under stress, even if they are highly literate. Writing in plain language can help ease the burden of diabetes management for everyone. Choosing to use easy-to-read diabetes education materials is all about “finding the right words for better health.” (10)

References

1. Canadian Public Health Association website. *Plain Language Service*. Available at: <http://www.cpha.ca/en/pls.aspx>. Accessed September 7, 2010.
2. Boren SA. A review of health literacy and diabetes: opportunities for technology. *J Diabetes Sci Technol*. 2009;3:202-209.
3. Canadian Council on Learning website. *Health Literacy in Canada: A Healthy Understanding*. Available at: <http://www.ccl-cca.ca/CCL/Reports/HealthLiteracy.html>. Accessed September 7, 2010.

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Numbers Count: Diabetes and Numeracy

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Health literacy is the ability to acquire, understand and use health information and services to make healthcare decisions. Diabetes educators have become increasingly aware of the importance of health literacy and its relationship to diabetes self-management. A recent review of health literacy and diabetes identified 15 studies that demonstrated significant association between health literacy and access to healthcare, glycated hemoglobin (A1C) levels, medication refill adherence, retinopathy and knowledge about diabetes (1). However, health literacy is only one dimension of literacy that is important in diabetes self-management; another key influence is numeracy.

Numeracy has been defined as the ability to understand and use numbers in daily life (2). We have many opportunities to use numeracy skills when cooking, shopping, travelling and calculating distances, using medications and enjoying hobbies that require simple mathematics. We also demonstrate numeracy when we interpret information, use mathematical ideas to analyze patterns and relationships, estimate chance and risk, represent information in tables and graphs, and use mathematical problem-solving skills (3).

Though numeracy is a skill for daily living, it is not a fixed skill; rather, it exists on a continuum. Individuals may need to develop or strengthen their numeracy skills to successfully deal with new situations that arise, such as the need to perform diabetes self-management.

What do we know about Canadians' numeracy skills?

In 2003, Statistics Canada conducted a survey in all Canadian provinces and territories that measured proficiency in 4 domains of literacy: document literacy, prose literacy, numeracy and problem-solving. This survey found that 25.5% of Canadians had the very lowest level of numeracy skills, i.e. they possessed a very limited ability to locate, understand and perform simple calculations (2). On a provincial level, residents of Yukon, Alberta, British Columbia and Saskatchewan had significantly higher numeracy scores than the Canadian average. Northwest Territories, Manitoba, Ontario, Quebec, Nova Scotia and Prince Edward Island residents had numeracy scores that were similar to the Canadian average, while residents of New Brunswick, Newfoundland and Labrador, and

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- Schillinger D, Piette J, Grumbach K, et al. Closing the loop: physician communication with diabetic patients who have low health literacy. *Arch Intern Med.* 2003;163:83-90.
- Hassan K, Heptulla RA. Glycemic control in pediatric type 1 diabetes: role of caregiver literacy. *Pediatrics.* 2010;125:1104-1108.
- Saferer RS, Keenan J. Health literacy: the gap between physicians and patients. *Am Fam Physician.* 2005;27:463-468.
- Atkinson T. Plain language and patient education: a summary of current research. *Res Briefs Health Comm.* Montreal, QC: The Centre for Literacy; 2003. Available at: <http://www.centreforliteracy.qc.ca/health/briefs/no1/no1.pdf>. Accessed September 7, 2010.
- The Plain Language Action and Information Network website. *Popular Topics: Health Literacy.* Available at: <http://www.plainlanguage.gov/populartopics/healthliteracy/index.cfm>. Accessed September 7, 2010.
- The Plain Language Action and Information Network website. *Why Plain Language?* Available at: <http://www.plainlanguage.gov/whyPL/index.cfm>. Accessed September 7, 2010.
- Health Literacy Month website. Available at: <http://www.healthliteracymonth.com>. Accessed September 7, 2010.

Additional resources

The following websites were accessed for information about literacy and plain language:

- Canadian Literacy and Learning Network. Available at: <http://www.literacy.ca>. Accessed September 7, 2010.
- Literacy Partners of Manitoba website. Plain Language Service. Available at: <http://www.plainlanguage.mb.literacy.ca/resources.htm>. Accessed September 7, 2010.
- Literacy Partners of Manitoba website. Clear Doc Index. Available at: <http://www.plainlanguage.mb.literacy/cleardoc.pdf>. Accessed September 7, 2010.