

**ONLINE MATERIALS PROVIDED TO PUBLIC BY
MOTHER-SUPPORT GROUPS IN BREASTFEEDING:
OBSERVATIONS ON READABILITY AND ACCESS**

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ABSTRACT

The Internet has developed as a medium for linking people to share support and information, particularly when family responsibilities, disabilities, age, or geography isolate them from a relevant peer group. However, poor literacy limits access to online searches and communication. Internet users may sometimes download and print out information materials for others without Internet access, who may or may not be proficient readers. Functional illiteracy is often unrecognized and it has been recommended that health informational materials be pitched at Grades 5 or 6 reading levels. This article examines the readability scores of a selection of short informational materials in English, available for download on the Websites of self-help organizations for breastfeeding mothers.

INTRODUCTION

The exponential growth of the Internet in the late-twentieth and early-twenty-first centuries has made it an important medium for the dissemination of ideas, information, and opinions, with information varying in quality. On the positive side, the Internet has become a useful tool in linking people isolated by age, disability, family responsibilities, or lack of a peer group related to their situation, so that they can share support and information online (Madara, 1999-2000; Salem &

Bogat, 1999-2000). This may be particularly true of those experiencing unusual situations, where face-to-face contact with a peer is not possible (Gribble, 2001).

Illiteracy and poor functional literacy are more common than is generally realized (National Institute for Literacy, 2003). Difficulty in reading is more common among older adults in the United States and elsewhere, but it is not confined to older people. Setting reading levels too high creates barriers to the accessibility of printed materials on health issues and preventive health for the general public (Thorley, 2004, 2006). Recommended readability scores for health information materials intended for the general population are Grade 5 or 6 level (Rudd, Moeykans, & Colton, 1999).

Poor literacy levels may not be recognized by health care personnel because adults with poor literacy are commonly too ashamed to admit it (Marcus, 2006). Consequently, individuals with low literacy may use the emergency room more frequently and be admitted to hospital more frequently, being unable to follow written instructions about medications and care (Marcus, 2006). These issues also apply to printed health information provided by self-help groups and other preventive health information.

Access to the Internet requires a level of literacy sufficient to search for information. Although individuals using the Internet to find information have better than basic literacy, material may be downloaded for others without Internet access, some of whom may have poor print literacy. Using the Flesch-Kincaid test, Dornan and Oermann (2006) calculated a mean grade reading score of 9.2, well above the readability level recommended for health information materials, in their analysis of breastfeeding information available on 30 Websites. Some of the materials selected for the present study, though available online, are also available to the group members and the public in hard copy as leaflets or articles. This article analyzes basic written material for breastfeeding mothers, selected from materials provided online by mother-support groups in the United States, Britain, and Australia.

METHODOLOGY

Selection Process

The materials selected were short informational materials written by self-help groups for breastfeeding mothers in the United States, Britain, and Australia and available online. The groups chosen were mother-support groups, rather than groups led by health professionals. Thus, the information materials produced for mothers by organizations such as the Baby Friendly Initiative, UK, have been excluded. Details of the groups will be provided in the Discussion. The materials selected covered basic aspects of breastfeeding and included a handout intended to be downloaded, some of it also available in hard copy for a fee, and a small number of articles from association magazines. Materials providing more detailed

information on specific topics were not selected. This study is limited to English language materials. The author is unaware of studies applying readability tests devised for English materials to texts in other languages.

It should be remembered that, although the written materials originated in particular countries, their placement on Websites makes them accessible internationally to anyone using relevant search terms. The Internet is accessible across national boundaries.

Test Used

The SMOG test (McLaughlin, 1969) has been widely used in assessing the readability of printed materials in the health field (Harvey & Fleming, 2003; Singh, 2003; Wilson, Racine, Tekieli, & Williams, 2003). It has been shown to correlate highly with other tests, such as the Fry and Flesch-Kincaid tests (Coreil, Bryant, Westover, & Bailey, 1995, Dornan & Oermann, 2006) and is simpler. A convenient alternative to SMOG in the writing of new materials on a computer with a Microsoft Word spell-checker with a readability test option, is the Flesch-Kincaid Grade Level test provided by this tool. For existing material, however, it is probably more convenient to perform the SMOG test than to scan the document in order to use the readability check on the spell-checker. For these reasons I have used SMOG for the analyses in this article. An easy guide to using SMOG can be found online under “Readability and Reading Tests: III. McLaughlin ‘SMOG’ formula” at:

<http://www.healthsystem.virginia.edu/internet/health-education/read.cfm>

DISCUSSION

The Groups

La Leche League International (LLL) was the first of the lay mother-support groups for breastfeeding women in the world, founded in 1956. United States-based, it has a broad international reach. English-speaking countries which at this writing have LLL groups include Britain, New Zealand, and South Africa. LLL provides peer group support through local groups in many areas, confidential telephone and e-mail counseling, informational publications, and articles in its magazine, some of which are available online. The Nursing Mothers’ Council, also in the United States, provides local groups and publications, and the Website specifically states that the organization cannot provide e-mail replies.

The Australian Breastfeeding Association (ABA), formerly the Nursing Mothers’ Association of Australia, has local groups in most areas of Australia and was founded in 1964. It provides local groups, informational publications, and a magazine, with some of the articles available online. ABA counselors provide counseling confidentially to the mother by telephone or e-mail. Insurance does not

cover counseling for women living in the United States and Canada and they are referred to LLLI.

Britain is served by a number of relatively small voluntary groups that focus on supporting mothers to breastfeed. The National Childbirth Trust, which exists in Britain only, provides responses to counseling requests by e-mail, with replies posted on the Website rather than provided individually. La Leche League– Great Britain (LLL-Great Britain) is active in a few areas. Both the Association of Breastfeeding Mothers and the Scottish-based Breastfeeding Network are exclusively British.

Materials Selected

The Websites for the materials described here are included in Table 1. Some Websites had few free downloads of information materials; others had a wealth of downloadable information, making selection necessary. The Australian Breastfeeding Association’s Website was in the latter category. The online materials selected and analyzed here were accessed in March 2007.

La Leche League International (USA and International)

Recent materials that met the criteria for inclusion covered reasons for choosing breastfeeding (“benefits”) in the form of three online articles from La Leche League’s *New Beginnings* magazine.

Nursing Mothers’ Council (USA)

The pamphlet, *Proper Positioning*, available online or for sale, met the criteria for inclusion. It covers basic skills in positioning and attaching the baby for effective breastfeeding.

Australian Breastfeeding Association (Australia)

The materials selected from a large number that met the criteria were an online article on reasons for choosing breastfeeding, two articles on basic skills or issues from ABA’s magazine *Essence*, and an online article on breastfeeding after the return to work.

Association of Breastfeeding Mothers (UK)

Two leaflets on the Website meet the criteria for selection. They were a three-fold leaflet, *Questions New Mothers Ask*, and a practical guide titled *Returning to Work? Breastfeeding? You Can Do Both*. Two downloadable articles from the association’s magazine, *ABM*, were also included.

*The Breastfeeding Network
(Scotland and England)*

A relatively new organization, founded in 1997, the Breastfeeding Network's online information about basic breastfeeding techniques has minimal text and instead provides links to other material, including pictorial guides. Two articles by mothers were also chosen from the Website, as representative of the information provided.

National Childbirth Trust (UK)

The Website provides online counseling, with replies posted on the Website. The material covering basic concerns, such as increasing the milk supply, which met the criteria for this survey was in the form of online counseling, involving a request for information and a reply from a counselor. Other online material of suitable length came under the category of advocacy, requesting government support for breastfeeding, and so was excluded from this survey.

RESULTS

Analysis of Materials Selected

The readability scores of many of the online materials reflect the better-educated, middle-class membership of mother-led organizations for breastfeeding women, and the sophistication of users of online materials. Most were far in excess of the Grade 5 or 6 recommended for basic health information for the general public (Table 1).

Grade reading levels of 12 or greater were scored for all La Leche League International materials sampled. In contrast, the Nursing Mothers Council pamphlet had an overall readability level of Grade 9, but when a separate score was calculated for the numbered instructional sections only, it was a Grade 8 equivalent. Few materials from other organizations scored at under Grade 10 reading level.

Implications for Practice

However, all Websites urged mothers to contact a counselor for individual help, and provided telephone contact information. In some cases, e-mail counseling was offered. It was outside the scope of this survey to ascertain to what extent individuals who download informational material for others also pass on this contact information. Organizations providing online materials for the public to read would do well to consider whether to include some lower literacy materials, since online information is downloaded by computer-savvy

Table 1. Readability of Materials Selected

Source	Downloadable materials	SMOG Score
La Leche League International (USA & international)	LLLI. What Are the Benefits of Breastfeeding My Baby? http://www.lalecheleague.org/FAQ/advantages.html	14
	Myer, S. What Makes Human Milk Special? (Magazine article, on Website) http://www.lalecheleague.org/NB/NBMarApr06p82.html	13
	Dermer, A. A Well-Kept Secret: Breastfeeding's Benefits to Mothers. (Magazine article, on Website) http://www.lalecheleague.org/NB/NBJulAug01p124.html	14
Nursing Mothers Council (USA)	Nursing Mothers Council. Proper Positioning. (Pamphlet) http://www.nursingmothers.org/pamphlets/properpositioning.htm Scoring the instructional sections, only.	9 8
Australian Breastfeeding Association (formerly Nursing Mothers' Association of Australia)	ABA. Breastfeeding – The Natural Choice. http://www.breastfeeding.asn.au/bfinfo/general.html	13
	ABA. Not Enough Milk? http://www.breastfeeding.asn.au/bfinfo/lowsupply.html	11
	ABA. Increasing Your Supply. http://www.breastfeeding.asn.au/bfinfo/supply.html	9
	ABA. The ABC of Attachment. (Magazine article, on Website) http://www.breastfeeding.asn.au/bfinfo/attachment.html	10
	O'Dowd, Y. Just Breastmilk, Thanks! (Magazine article, on Website) http://www.breastfeeding.asn.au/bfinfo/justbm.html	12
	ABA. Can You Return to Work and Still Breastfeed? http://www.breastfeeding.asn.au/bfinfo/canwork.html	14

Table 1. (Cont'd.)

Source	Downloadable materials	SMOG Score
Association of Breastfeeding Mothers (UK)	LEAFLETS: ABM. Questions New Mothers Ask (3-fold leaflet)	11
	ABM. Returning to Work? Breastfeeding? You can do both. http://www.abm.me.uk	10
	ARTICLES:	
	Beward, S. Lactational Rescue – A Case Study. http://www.abm.me.uk/lactrescue.htm	14
	Cartwright, A. Learning Curve. http://www.abm.me.uk/learningcurve.htm	9
National Childbirth Trust (UK)	Nicol, K. Milk Supply Concerns. http://www.nct.org.uk/ask?keyword=Let-down&showanswer=296	12
Breastfeeding Network (BfN) (Scotland and England)	BfN. Getting Started. http://www.breastfeedingnetwork.org.uk/breastfeeding/getstart.php	8
	Marian's Story – Breastfeeding Her 4th Baby After Bottle-feeding the First 3. http://www.breastfeedingnetwork.org.uk/breastfeeding/beyond_marian.php	10
	Barbara's Story – Breastfeeding and Returning to Work. http://www.breastfeedingnetwork.org.uk/breastfeeding/beyond_barbara.php	12

individuals for others, who may have less sophisticated reading skills. It is evident that in online access of material, the suitable readability level needs to be explicitly considered.

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