There are many formulas for assessing reading level of written material. Most word processing programs have a feature that will calculate the readability for you (see Box 27–2). Nurses involved in developing written health teaching materials should write for lower reading levels (see Client Teaching). The goal is to have the education materials at a fifth- or sixth-grade level (Aldridge, 2004). People with good reading skills are not offended by simple reading material and prefer easy-to-read information. Even the simplest written directions, however, won’t be helpful for the client with low or no reading skills. See the Client Teaching box for suggestions on how to teach clients with low literacy levels.

**Box 27–2 Determining Readability Using Word Processing Programs**

**MICROSOFT WORD**
- Click on “Tools”
- Click on “Options”
- Click on the tab “Spelling and Grammar”
- Select or check “Show readability statistics”
- Click “OK”

When finished with the document, click on “Spelling and Grammar” again. When Microsoft Word finishes checking the spelling and grammar, it will provide information about the reading level of the document.

**COREL WORDPERFECT**
- Click on “Tools”
- Click on “Grammatik”
- Click on “Options”
- Click on “Analysis”
- Click on “Readability”
- In the Readability dialog box, choose a comparison document

Information will then be provided about the reading level of the document.

**Note:** Instructions from Microsoft Word for Windows, 2003 computer software and Corel WordPerfect 12, 2004 computer software.

Printed client information may not be helpful because of low English-language literacy levels. The researchers in this study compared the gain of knowledge about polio vaccination from information presented in two formats: printed pamphlet and videotape of animated cartoons. Both formats contained the same information. The participants were parents/caregivers of pediatric clinic clients. Ninety-six participants were in the treatment group who watched the videotape in the clinic waiting room. The comparison group consisted of ninety-six participants who were given a written pamphlet to read. Both groups completed a pretest that included demographics and five questions related to understanding polio vaccine. After the two groups completed either reading the pamphlet or viewing the videotape, the participants completed a post-test which included the same five pretest questions and three additional questions.

There was no statistical difference between the two groups regarding demographic information or pretreatment knowledge. There was a significant statistical difference between the two groups in post-test knowledge. Both groups scored higher on the post-test in comparison to the pretest. However, 30% of the participants in the videotape group answered all of the posttest questions correctly while none of the participants in the pamphlet group responded correctly to all the questions.

**Implications**

This study showed that animated cartoons can improve client knowledge independent of the level of literacy. The production cost of the videotape used in this study was $6,000 with a production time of 6 weeks. Printed material is less costly and can be developed quickly. However, if the client does not or cannot read the material, what is the ultimate cost to the client and the health care system?

**Research Note**

Can Animated Cartoons Increase Knowledge of Educational Information?

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