“AN OVERVIEW OF MEDICAL AND PUBLIC HEALTH LITERATURE ADDRESSING LITERACY ISSUES: AN ANNOTATED BIBLIOGRAPHY”

by

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CITATION CATEGORIES

The 177 citations were reviewed and grouped into the following broad categories. Each citation was limited to one category. This file contains the citations for the category in enlarged-bold print.

1. Links Between Literacy and Health (9)
   1A. Studies (6)
   1B. Editorials and Letters (17)

2. Literacy Levels of Patients, Clients, or Program Participants (16)

3. Match Between Reading Ability and Written Materials (21)

4. Functional Literacy and Institutional Settings (8)
   4A. Consent Forms (11)
   4B. Emergency Department Discharge Information (7)

5. Materials Assessment (25)

6. Research Tools for Assessing Health Literacy (5)
   6A. Health Instruments: Readability Considered (7)
   6B. Health Instruments: Validity Issues (4)

7. Program Descriptions
   7A. Literacy Noted as Key Issue (13)
   7B. Literacy Noted (7)

8. Guidelines for Practice
   8A. Materials/Readability (11)
   8B. Patient/Health Education (9)
5. Materials Assessments


Analyzes 63 Patient package inserts (PPI’s), from three types of sources. Materials were found to have, on average, a 10th grade reading level. Design characteristics, such as type size, were poorest in PPI’s produced by pharmaceutical companies. The authors recommend designing and testing of new PPI formats and a reassessment of readability.


Assesses readability for 5 frequently employed measures: Beck Depression Inventory, Integrated Outpatient Tracking Assessment, MOS 36-Item Short-Form Health Survey, Social Adjustment Scale-Self Report, and Symptoms Checklist-90-Revised. Measures were generally shown to be useful for patients with an eighth or ninth grade education.


Reviews the link between cancer and illiteracy; the magnitude of the problem; and the association between cancer, certain health-related behaviors, and educational attainment. Also examines National Cancer Institute (NCI) and Cancer Information Service programs and materials designed to reach this high-risk population.


Assesses 40 articles from the Journal of Health Education, Journal of Physical Education, Recreation and Dance, Research Quarterly for Exercise and Sport, and Strategies: A Journal for Physical and Sport Educators. Articles were estimated at college junior level.


Applies readability formulas to transcripts of health and safety lectures and found differences within the lectures of one instructor and between the CPR instructors.


Surveys the readability of 209 nutrition education pamphlets using three different tests. Materials from the educational institutions had lower reading levels than materials from professional organizations and government agencies. 68% of the publications were written at the 9th grade level or higher.

Reviews literature on the relationship between patients’ literacy skills and the literacy levels required to read educational health care materials. Applied a similar analysis to a commonly used ophthalmic patient-educational materials.


Assesses the readability of 38 cholesterol education materials available from government, health agency, professional associations, university and industry sources using SMOG and Fog Grading formulas. The average readability level was grade 11, which is too difficult for many adults.


Analyzes nineteen breast cancer education pamphlets using Right Writer. Materials were found to have an average readability of 9th grade. The authors suggest that literature should be analyzed for readability before assuming it is an aid to patient education.


Assesses readability levels and cultural sensitivity of 100 cancer-prevention materials targeting African Americans. The overall SMOG grade was 9.32. Although the reading level may be appropriate for some materials, it may not be appropriate for African Americans at high risk for cancer.


Evaluates the readability of 33 pediatric education materials using three formulas: the Fog, Fry and SMOG. The majority of the pamphlets were written at grade 9 levels or above. Stresses the need to use multiple readability formulas (all of which were found to be significantly different from one another). Also suggests a need to focus on the readability of multiple sections within a pamphlet, not only on the overall readability.


Analyzes fifteen sets of condom patient package inserts (PPI’s) prepared commercially and 30 sets of generic instructions (GI’s) prepared by health care providers with six standard readability formulas (Fry, Fog, Dale-Chall, Flesch, Flesch-Kincaid, SMOG). Readability levels ranged from 6.3 to 13.7 and the PPI’s were found to require a significantly higher grade level for comprehension than were the GI’s (10.32 vs. 8.69).


Analyzes 51 patient education booklets for readability using the SMOG formula. Materials were assessed at a mean level of 11.9. Although 55% of the booklets were too difficult for many Americans to read and understand, booklets produced after 1985 were written at significantly lower reading levels than those published in earlier years.

Assesses reading grade levels of 4 hypercholesterolemia patient education pamphlets. Materials were at levels 14.4, 15.8, 14 and 14.4 with the FOG, Fry and SMOG formulas. The authors suggest the pamphlets may not be appropriate for use with most of the adults in the United States who may be candidates for this specific patient education.


Examines 183 cancer education brochures and computes reading level (SMOG) scores for 159 of them. The average reading level of the materials was found to be between 10th and 11th grade, and therefore may be of limited value in providing information to the low-education population.


Examines the readability of 24 nurse-designed written information leaflets using FOG and SMOG formulae. Results showed readability levels with a mean grade of 11.3, a level too high for many patients. Guidelines available for developing information leaflets are explored and recommendations for further research are offered.


Assesses 179 dental practice leaflets for readability and the amount of information contained. Most leaflets were written at too high of a reading level and provided only a minimum of information. Recommendations are made to dental practitioners who want to improve their patient education materials.


Assesses widely-produced samples of health education leaflets for readability and message delivery.


Stresses the importance of patients and families having understandable materials to help them make the difficult decisions often faced in critical care units. Reviews the definitions and measurement of readability, and a selection of studies which measured the reading levels of patients. Provides research and practice recommendations for critical care nurses.


Examines 15 different leaflets given to elderly patients in the diabetes unit of a British teaching hospital. The Fog was used to determine readability and the size and style of the print were also examined. 10% of the leaflets were as difficult to read as the British Medical Journal and 73% failed to meet the print guidelines suggested by the Royal National Institute for the Blind.

Examines 65 prenatal education pamphlets with the SMOG Readability Formula and found materials to be at the 10th to 12th grade level, higher than the skill level of many women in the high risk prenatal population. A modified literature testing was also used on 8 of the pamphlets to assess the literature for accuracy, usability, believability, appeal and cultural relevance. Four pamphlets were identified that may be the most appropriate for the target population.


Applies the Australian Rix readability formula to assess the readability of 50 Australian pamphlets on asthma. The mean grade of reading difficulty was 8, with one-third of the materials being written at or above grade 9. The authors suggest that a substantial number of pamphlets on asthma are beyond the reading and comprehension abilities of many of the target population.


Offers findings from an analysis of patient package inserts (PPI’s), from commercial diaphragm, pill and condom manufacturers and generic contraceptive instructions (GI’s), written by health agency staff members, using 6 readability formulas (Dale-Chall, Fry, Fog, Flesh, Flesch-Kincaid and SMOG). Readability levels ranged from grade 5.5 to 13.6 and the PPI’s tended to require higher levels of reading comprehension than the GI’s.


Discusses the evaluation of breastfeeding pamphlets for accuracy, degree of positive approach to breastfeeding, readability and compliance with the WHO/UNICEF Code on the Marketing of Breast Milk Substitutes. Only 2 of the 22 pamphlets tested were written at the recommended 5th-8th grade level. The authors conclude that none of the materials met all of the criteria for good breastfeeding literature.


Describes the readability assessment of 136 HIV/AIDS educational items using the SMOG Index. Comic books and brochures were found to be more readable than were books and pamphlets. The author suggests that an understanding of the literacy of target audiences is needed to produce materials with appropriate reading levels and that more readable materials must be created.