A Needs Assessment of A Web-Based Smoking Cessation Program

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Background: Cigarette smoking is the single most preventable cause of premature death in the United States. The purpose of this study was to determine the need for and specifications of a Web-based smoking cessation program.

Web base patient education unlike CD-I or CD-ROM technology can provide the certain advantages: 1) increased accessibility (at home) and 2) personal interaction through electronic conferencing via e-mail or bulletin board services [1]. Additional logistic advantages include the ability to quickly update materials and the ability to be used across platforms.

Current problems associated with computer assisted patient education such as 1) lack of patient computer skills or accessibility, 2) limited hardware and software capabilities, 3) limited bandwidth, 4) fear of technology, and 5) high cost, may not be problems in the future.

Studies have shown that computer patient education interventions are well accepted by patients and can lead to improved health status [2,3].

Methods: An anonymous 20 question needs assessment survey was given to all VA smoking cessation clinic patients from 09/24/97-1/07/98.

Results: The sample size of the study was 97. The demographic data showed that the mean age of our population was 54 yr. (range 29-79 yr). A majority of the subjects (89.1%) were white. A majority was male (89.1%). Ninety-two percent had completed at least high school. Forty-one percent expressed an interest in taking the smoking cessation course in computer format; 52.6% had not. Those who were interested in the computer version were significantly younger than those that were not interested (2-tail independent t-test p<0.009).

We looked at potential barriers to using the current system (time and distance): 23.7% lived 40 miles or more away; 27.8% had problems with class timing. Of those who were interested in using the smoking cessation program in computer format, we examined the percentage of those who have barriers to using this format. (See the following table).

Barriers To Using a Web-Based Smoking Program	Percentage of Subjects Who Indicated This Is a Problem
Lack access to computer	30%
Lack access to modem	45%
Self-perceived beginners or non-computer users	50%
Had not used a browser before or unsure	50%
Needed maximum personal interaction to quit	20%
Uncomfortable with format/using computers	12.5%/27.5%

Conclusions: This study suggests that the utility of the Web-based program may be limited by the barriers discussed above. Since 20% of those interested felt they needed the maximum in personal attention to quit, the computer intervention may not entirely replace individual patient counseling. There also may not necessarily be a savings in cost/labor since 50% had not use a WWW browser before and 27.5% did not feel comfortable using a computer. This implies the need for a computer trainer. Computer equipment accessibility is also a problem for 30-45% of those interested in the Web-based program. This implies the need for clinic terminals.

Time and distance are also barriers since 23.7% lived >40 miles away and 27.8% cited class timing as a problem. Based on these test results, younger smokers are more receptive to a Web-based smoking cessation program. The usefulness of the program itself will be evaluated in the future.

References:
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