An evaluation of two rheumatology patient information programs

Sir, Information for Health, the information strategy for the NHS [1] states that patients should have access to accredited, independent, multimedia information about their problems, treatment options and possible outcomes. Studies have shown that patient education, in the form of self management or cognitive behaviour therapy programmes, can improve the health status of patients with a chronic disease, such as rheumatoid arthritis, in addition to the outcomes of medical or surgical treatments [2]. Information given in the form of leaflets and computerized instruction has been shown to increase knowledge [3, 4]. Benefits to health status have been demonstrated less often, although a randomized trial of information leaflets for patients with arthritis showed significant improvements in knowledge, pain and depression [5].

In order to assist with ongoing patient information provision, we recently evaluated at Barnsley District General Hospital NHS Trust (BDGH) two touch-screen multimedia information systems using a patient questionnaire and a semi-structured interview. The two systems were the ‘Out Patient Advice Link’ (OPAL) and ‘So You have Arthritis’ programs. OPAL was developed by a multi-disciplinary team in BDGH as a response to perceived gaps in information-giving. A wide range of clinicians involved in the care of people with arthritis helped to write the information content, and the system is designed to be compatible with the Internet. The So You have Arthritis programme was developed by Arthritis Care and is available on compact disc. Both systems aim to inform and advise patients about arthritis. Interaction with both systems is via a touch-sensitive screen. OPAL uses mainly text and images whilst So You have Arthritis uses speech output and images and has very little text. The study aimed to identify specific needs (content, presentation and human–computer interaction) of patients with arthritis using a multimedia patient information system.

Twenty patients participated in the study. Participants were asked to find specific information in the programs. Each patient used both programs; the program that was presented first was varied by random selection to minimize the effect of order of use on the results. After using the programs, participants were asked a number of questions on the following aspects: format and design; the quality of information given; specific questions about the So You have Arthritis program; and questions asking participants to compare the two programs.

Thirty-five per cent of the participants were male and 65% were female, and all had a rheumatological condition. Their ages ranged from 31 to 74 yr with a mean age of 53 yr. Eighty-five per cent of the participants had not used a touch-sensitive screen before. For both programs, 75% of participants found the touch-sensitive screens ‘easy to use’ and the size of the touch-screen buttons and the text size to be ‘just right’. Sixty per cent of participants found the diagrams in the So You have Arthritis program helped them to understand the information presented ‘a lot’ and the number of diagrams was ‘just right’, whilst the diagrams in the OPAL program helped ‘a little bit’ (45%). Sixty-five per cent of participants found the diagrams in the So You have Arthritis program helped them to understand the information presented ‘a lot’ and the number of diagrams was ‘just right’, whilst the diagrams in the OPAL program helped ‘a little bit’ (45%). Sixty-five per cent of participants found the diagrams in the So You have Arthritis program helped them to understand the information presented ‘a lot’ and the number of diagrams was ‘just right’, whilst the diagrams in the OPAL program helped ‘a little bit’ (45%). Sixty-five per cent of participants stated that they preferred to listen to speech whilst 35% preferred to read text. When asked about the amount of information provided, 65 and 75% said there was enough in OPAL and So You have Arthritis respectively. The usefulness
of the information was scored as useful or very useful by 80% for OPAL and 95% for So You have Arthritis.

Delivery of patient education through multimedia is feasible and can be patient-friendly even for those who have not used similar technology before. In developing such packages, attention needs to be given to format and layout, as recommended by Stephanidis [6]. The present study suggests that patients value diagrams and speech output. Suarez-Almazor et al. [7] found that the majority of information available to patients on the World Wide Web is from profit-driven companies and individuals with no clear affiliation. We recommend that information provision such as the So You have Arthritis program should be made more widely available publicly through rheumatology centres and public venues, such as libraries, healthy living centres, NHS Walk-in centres and the World Wide Web.

In summary, our study found the use of touch-sensitive screen computer technology to be acceptable to older people with arthritis. Attention to layout, text size and button size will ensure that the systems are accessible to people with reduced motor skills. Features that patients particularly liked were speech and diagrams, and thus they favoured the So You have Arthritis program.


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