

An out-patient study into the suitability of providing Ear, Nose & Throat patients with internet based information

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Abstract

Introduction: The internet is an increasingly important and versatile source of medical information. This study aims to assess the suitability of providing recommended internet addresses to help patients find internet based information.

Method: The study included every out-patient attending the department in a three week period, and involved filling in a questionnaire prior to their appointment.

Results: 632 completed questionnaires were collected. The results showed 75.4% of patients had access to the internet at work or at home, or could gain access with someone else's help. Computer access and internet use was high among younger patient's, decreased to about 50% among patients in their 60's and declined dramatically after the age of 70. A total of 62% of all out-patients expressed an interest in using internet addresses if they were provided. It also showed that only 21.7% of patients preferred internet information and that 68.8% would rather be given a leaflet.

Conclusion: This study shows that the majority of patients have access to the internet and would use internet based information if directed to it. Currently this would serve the younger population well, since the majority of the older patient groups are much less likely to use the internet for medical information. With computer access and literacy on the increase amongst all age groups, these proportions can be expected to change.

INTRODUCTION

The internet is an increasingly important source of medical information, both for healthcare practitioners as well as patients^{1,2}. There are a large number of internet sites available to the general public, with varying levels of accountability and editorial rigour. While these sites are potentially very useful in allowing patients to read about a condition or procedure, care must be exercised in the use of some of the information on the internet^{2,3}. Otolaryngology encompasses a very broad range of conditions, many of which are chronic in nature. There are also many self-help groups and charities which are accessible via the internet⁴, and there is an increase in the demand for high quality medical information from the internet^{5,6}.

In this study we set out to assess the suitability of giving patients details of web-based information. Providing departmentally approved internet addresses could provide a large amount of high quality information for our patients.

We needed to assess whether providing web-addresses to find internet based information would be an appropriate and effective way of informing our local population. It has been shown that internet use is higher among the younger population^{7,8}. We, therefore, wanted to ensure that we would not be excluding any section of the population. To assess the impact of this we looked at how internet access and use varied with the age of patients. We also looked at whether patients felt they would use the internet for information.

METHOD

The study was carried out in the Ear, Nose and Throat (ENT) out-patient department at Derriford Hospital in Plymouth over a 3 week period. Every patient was asked to fill in a questionnaire prior to their appointment. If the patients were children or needed help, their parent or carer was asked to complete the questionnaire on their behalf. A pilot study was carried out which lead to changes in the questionnaire (Appendix 1). The questionnaire asked basic demographic

information and closed questions relating to computer use and internet access. Patients were also asked if they would use recommended internet based information and any preference between leaflets or the internet. The patient was asked to ring the most appropriate response in each case. The responses to each question were then compared between the different age groups by decade.

RESULTS

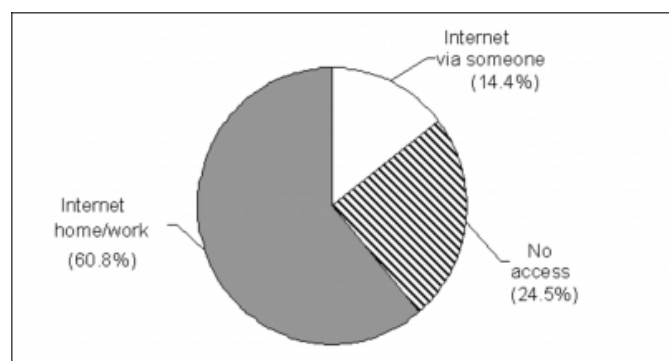
A total of 632 questionnaires were collected in the study period between 20.06.05 and 08.07.05. Of the respondents, 334 (52.8%) were male and 288 (45.6%) female, 10 (1.6%) failed to specify. Internet access at home is available in 68% of people's homes up to the age of sixty in the patients analysed. For patients in their 60's internet access drops to 50%. In the over 70 year old population internet access at home drops to 15%. The age group 60-69 is the largest with 103 patients. Of these 66 (64.1%) considered themselves retired, 31 were working or looking for work and 6 did not respond.

The total percentage of out-patients that could be served by being given an internet address was 75.4%, and the number who had no access at all 24.6%

See figure 1.

Figure 1

Figure 1: Percentages of patients with internet access.

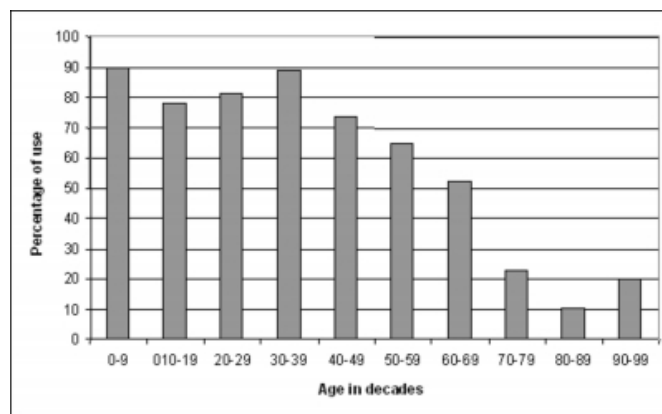


Of all the respondents, 56.4% use the internet for shopping, news or booking holidays. This figure was 67.3% for the under 70's but only 9.4% for the over 70 year olds. The response to being offered internet addresses to consolidate an outpatient appointment showed that a mean across all ages of 62% of patients would look up web based information. Broken down into age groups by decades, the percentages were between 73.6 – 89.9% for patients aged between 0 and 50. 51.9% of patients in their 60's said they

would use internet information. The figures were lowest among the oldest patients ranging from 10.3% to 22.3% for patients aged 70-99 years. 72.8% of patients under the age of 70 would use internet based information, while only 18.5% of patients over 70 years of age would do so. See figure 2.

Figure 2

Figure 2: Percentage of respondents who would use internet information in each age group in decades.



The internet was preferred as a source of information by 21.7% while leaflets were preferred by 68.8%. 6.4% indicated that they would like both a leaflet and internet based information, 2.8% were happy with either method. One respondent did not want any information and 3.9 % respondents did not fill in this part of the questionnaire.

DISCUSSION

The aim of the study was to assess what proportion of the ENT patient population would use internet based information if it was offered to them after an out-patient visit. Overall, 75.4% of our out-patient population can access internet information either themselves or with somebody else's help. This tends to include the younger section of the population up to the age of 60. The internet access for children and teenagers were similar to those of adults in their 30's and 40's. This may be because this group constitute the main bulk of the parents of the children attending the department, although we did not look at this in the study.

Patients in their 60's form a group where the numbers with internet access and who would use the internet for information drops to about 50%. This group includes both patients still working, and the 64% already retired. This may be the reason for the reduction in internet use. In patients over 70 years old, computer and internet use is very low, with only 15% of this group using the internet. Our results

may actually show an artificially high proportion of elderly patients using the internet. They show 20% of patients in their 90's using the internet. This was actually only one person out of the 5 patients over 90 we questioned.

Providing web-based information would be useful for the majority of our patients. However, the age related reduction in internet use means patients over 70 years old may have greater difficulty accessing information if a solely internet based system was adopted. This may be due to the more recent increase in the use of the internet, As the population ages, the sharp difference in the use of the internet may change across the age ranges. As the working population of today begin to retire, the use of the internet among the older members of the population can be expected to continue to rise. While we may not be able to inform all our patients via the internet today, the proportion of our patient population served by this kind of information will steadily increase in the future.

Despite the fact that most of the patient population do have access to the internet, our survey indicated that most patients would favour printed information leaflets to an internet address. This could be for a number of reasons. Patients may not want to go and look for information themselves. They may have concerns that they may not be able to find what they are looking for and ending up with no information. It may be more reassuring to leave a consultation with the information. The way we presented the question could also have influenced this response, as it did not give any examples of the sort of facilities potentially available on-line. The amount of information and the ability to include multi-media files, as well as a patient being able to look for very specific information, makes web-based information far superior to a printed leaflet₁₀.

CONCLUSION

Internet based information provides a versatile and comprehensive source of information available to the majority of our patients. At present it would serve the working population better than those who have retired. This will change as the retired population becomes increasingly computer literate. Information leaflets are still an important source of information favoured by all patients, particularly among the older patients who do not have access to the internet or the skills to use it. The internet is a powerful resource that if used correctly will be a useful tool to support clinical practice in the future.

APPENDIX 1

The ENT department at Derriford Hospital is looking at ways of providing patients with information. We would appreciate a few minutes of your time to fill in this questionnaire. We are particularly interested in the suitability of providing you with internet based information. Please answer the following questions regarding your use of the internet.

Please circle the relevant response or fill in the blanks on the dotted lines.

Thank you.

Figure 3

Are you a:	Patient	Parent	Carer	Relative	Friend
	Other.....				
Age of patient				
Sex:	Male	Female			
Occupation.....					
Do you have internet access at home?				Yes	No
Do you have internet access at work?				Yes	No
Do you use the internet to search for information? (eg holidays, shopping, news, hobbies etc.)				Yes	No
If you don't have access to a computer yourself, do you have someone who can get on the internet for you?				Yes	No
Do you know what a "search engine" is?				Yes	No
Have you heard of Google, Yahoo, Medline, Pubmed?				Yes	No
On average, how often do you search for information using the internet?				Daily /Weekly / Monthly / Rarely / Never	
Have you ever looked for medical information on the internet in the past?				Yes	No
If the doctor you see today, gave you web site addresses for further information after your consultation, would you use them?				Yes	No
Would you rather the doctor today gave you web site addresses for further information, or would you rather be given a written information leaflet?				Internet	Leaflet

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