Many parents find written information on their child's condition beneficial but it is unclear how many use the internet to access this. Consumer surveys show that in some parts of the UK, access to the internet among the general population rose from 34% to 45% during 1999, and in the year 2000, 25% of all homes were connected to the internet. Government statistics for April 2002 show that 55% of the UK adult population have now used the internet, with the figure for adults aged 16–24 years being 89% and for those aged 25–44, 74%. Studies have shown that 40–68% of internet searches in the USA were to find medical information. Although much has been published about what information is available on the internet and how doctors can access it, there is little published information on patient use.

This study was designed to establish the extent of internet access and use among parents attending general paediatric outpatient clinics at a district general hospital.

METHODS

Over a six week period in 2000, all parents of children attending general paediatric outpatient clinics were asked to complete an anonymous questionnaire while waiting to be seen. Clinics where the authors were working were excluded.

A covering letter explained the purpose of the study and assured confidentiality. The majority of the responses were tick boxes, with a few questions on internet use allowing free text responses.

Questions were asked concerning previous use of the internet, ownership of a home computer, and internet access. Other questions related to whether a health professional had suggested that parents seek information on the internet in 6% of cases. These parents were more likely to use the internet than parents to whom this had not been suggested (67% v 20%, p < 0.001). Eighty-nine (84%) parents who had used the internet prior to this clinic appointment found it useful. Thirty-six (34%) parents had discussed or were planning to discuss the information they had found with their doctors.

Conclusion: A significant proportion of parents have access to the internet and use it to find information about their child’s medical condition. The parents who discuss what they find with the clinic doctor are in the minority. Doctors should be prepared to ask parents about their information needs and discuss use of the internet.

Further questions addressed the types of information sought, whether the information was helpful, and if so, how.

Parental use of the internet

Where appropriate, the results were analysed using the statistics package SPSS.

RESULTS

Where appropriate, the results were analysed using χ²; p < 0.05 was considered to be statistically significant.

Of 577 questionnaires distributed, 485 were completed (a response rate of 84%).

Patient details

The ages of patients attending the clinics ranged from 4 weeks to 23 years, with a mean age of 6 years 4 months. Parents were asked whether they had discussed or were planning to discuss their findings with the paediatrician.

Ethical approval for this study was obtained from the local research ethics committee. The results were analysed using the statistics package SPSS.

Computer ownership and use of the internet

A total of 480 (99%) respondents had heard of the internet and 293 (61%) had used it; 332 (69%) owned a computer and 248 (51%) had internet access; 107 (22%) had looked on the internet for information about the problem for which their child was being seen in clinic that day. Parents who knew their child's diagnosis were more likely to have used the internet than those who named their child's symptoms only. A health professional had suggested that parents seek information on the internet in 6% of cases. These parents were more likely to use the internet than parents to whom this had not been suggested (67% v 20%, p < 0.001). Eighty-nine (84%) parents who had used the internet prior to this clinic appointment found it useful. Thirty-six (34%) parents had discussed or were planning to discuss the information they had found with their doctors.

Use of the internet for the problem for which they attended clinic

A total of 107 (22%) of the sample had used the internet to find information about the problem for which they were being seen in clinic that day; 106 parents completed the second part of the questionnaire.
of the questionnaire giving more details on the information sought. Those families who had looked on the internet on this occasion were more likely to have internet access at home than those who had not (78% vs 45%, χ² = 14.5, p < 0.001); 89 (84%) found the information useful, 14 (13%) were unsure, and three found it unhelpful; 103 (97%) said they would use the internet again for health information.

Of the whole population, 27 (6%) said that a health professional had suggested they search the internet for information about their child’s condition, of whom 18 (67%) had looked on this occasion, compared to 20% where no such suggestion had been made. This is statistically significant (χ² = 33.6, p < 0.001).

Table 2 gives details about what information parents looked for. A series of choices were given with tick boxes. All parents ticked more than one box. Parents were asked an open question on how the information had been useful. Table 3 gives a summary of those responses. The responses of a few parents fell into more than one category.

Parents were asked whether they planned to or had discussed their findings with the clinic doctor. Of those who answered the question, 36 (34%) said yes, 50 (48%) no, and 19 (18%) said don’t know. Those answering no, were asked why this was. Table 4 gives a summary of those responses.

**DISCUSSION**

Discussions in the literature on the use of the internet in pediatrics have focused on the benefit to doctors rather than parents. Little work has been published about patients using the internet. A small postal survey of adult gastroenterology outpatients found that although patients were not currently using the internet for medical information, two thirds felt that this would be an important source of information in the future. These patients felt that they might use the internet for information about their treatment and the best hospitals to provide it.

**Computer and internet ownership**

Nearly 70% of parents in this study owned a computer and 51% had internet access at home. Figures for the general population show computer ownership in the UK in 1998 was 32%, rising to 39% a year later, with certain areas having levels more recently of 50%.

Internet access was estimated to be in around a quarter of homes by mid-2000. National figures for home internet use are difficult to compare with those from this study as they represent the whole adult age range, rather than parents of young children. We do know however, that almost 70% of adults who use the internet are aged 15–44. With internet access available widely in workplaces and schools as well as in public areas such as libraries, most of the population have access to the internet, although some may be unaware of this. The difference between our figures and those of national surveys may be due to several factors. It may reflect the fact that this area is slightly more affluent than the average or that families with young children have higher levels of ownership than the general population. However, since studies have also shown that the fastest rise in internet use recently has been among those with children and the less affluent, even if our figures are unrepresentative of the UK as a whole, other areas may have similar rates of usage in the future.

**Internet use for the child’s medical problem**

This study shows that over one fifth of parents attending paediatric outpatient clinics at a district general hospital have looked for information about their child’s condition on the internet. The most common reason for using the internet was to find information about the child’s condition, its management, and outcome. Around a quarter looked for families in a similar situation to themselves, and a fifth were looking for specialist centres or doctors. Although we did not ask about this, some of these latter families may have been looking at ways of obtaining second opinions.
cases, it may have been helpful. Sadly, a small number felt that
their child’s doctor would be uninterested or too busy to
discuss the information. Discussion of information found
with the parent would enable the doctor to be aware of the
information needs of the parents, correct any misconceptions,
discuss differences in information found and suggest other
sites if the parents had been unable to find adequate
information. This requires doctors to be proactive in asking
parents about searches made and to have a good working
knowledge of reliable and useful sites."

Parents in this study appeared to have a generally positive
attitude towards the internet, with 88% of them feeling that
doctors should suggest suitable sites to parents. In addition,
increasing numbers of patients and families are likely to use
the internet for health information in the future. Professionals
will therefore need to keep up to date with the information
available, and health care providers need to consider the pro-
vision of internet access in clinics and surgeries for those who
do not have access elsewhere.

The questionnaire can be viewed on the ADC
website (www.archdischild.com)

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