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**References**


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**SERVICE DELIVERY**

**Can the Internet be used to improve sexual health awareness in web-wise young people?**

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**Abstract**

**Objectives.** To assess Internet use amongst young people to determine whether it would be a practical way to provide sex education and information.

**Methods.** Year 10 students (aged 14–15 years) from North Nottinghamshire schools were asked to participate in focus groups to discuss the Internet. A series of predefined questions were directed to the whole group to generate debate. Areas explored included: Internet access and site; frequency and purpose of Internet use; websites visited; ideas for a genitourinary medicine (GUM) website. Responses were recorded by a hand count or as individual verbal responses.

**Results.** Thirteen focus groups were held involving 287 students of approximately equal sex distribution. All had access to Internet facilities at school and 224 (78.0%) had access elsewhere. Access was at least once a week by 178 (62.0%) mostly for e-mail, games, chatlines and homework. No one accessed for health information. One hundred and seventy-nine (62.4%) participants said they would use a GUM website. A ‘question line’ where they could e-mail
Can the Internet be used to improve sexual health awareness in web-wise young people?

Conclusions. The Internet would be a practical and accessible way of delivering sexual health education to young people, particularly if it is incorporated into activities and websites they enjoy.

Key message points
- Young people have a high level of access to Internet facilities.
- Most access the Internet for e-mail, games, chatlines and homework but not for health information.
- Almost two-thirds of the young people stated they would use a GUM local website.
- The Internet has great potential as a tool to improve sexual health awareness but young people do not directly use it for health information.
- Sexual health information needs to be incorporated imaginatively into activities and websites young people enjoy and access.

Introduction
Over the last 10 years in the UK there has been a significant rise in the number of sexually transmitted infections (STIs) diagnosed, particularly amongst young people.¹

Data from national surveys of sexual attitudes and lifestyles do not support the theory that exposure to sex education hastens first sexual experience. Indeed, it appears rather that there is a positive association between receiving sex education at school and risk-reduction practices.²,³

However, given the rising incidence of STIs, it is evident that current prevention strategies need to be modified in order to make them attractive and therefore more effective with young people. To achieve this we need to develop imaginative ways of capturing an audience that is not fully responding to our current interventions. The Internet has become an ever-increasing resource for health information. This may also represent a novel way to provide sex education, which is practical and easily accessible, to young people.

Objectives
We aimed to assess Internet use amongst young people to determine whether the Internet would be a practical way to provide sex education and information; to explore which websites are visited to give insight into how popular subjects could be used to draw young people’s attention to sexual health issues; and to explore opinions regarding information they would like to access via the Internet regarding genitourinary medicine (GUM).

Methods
Students (aged 14–15 years) from a range of schools in North Nottinghamshire in Year 10 attending the GUM session of their school’s personal and social education (PSE) programme were asked to participate in focus groups to discuss the Internet. Verbal consent was obtained from the supervising teacher and the students.

The focus groups were led by health advisors from GUM after completing a standard 1-hour interactive session promoting awareness of sexual health, giving information on STIs and describing GUM services. A series of predefined questions relating to Internet use were directed to the whole group to generate debate. Areas explored included: Internet access and site; frequency and purpose of Internet use; websites visited; and ideas for a GUM website focusing on sexual health and infection. Responses were recorded by a hand count or as individual verbal responses, where appropriate. Data were analysed on completion of the project.

Results
Thirteen focus groups were held representing nine schools from across the region. Seven of the schools were non-denominational state schools and two were Church of England schools. In total 287 young people were involved in the study, with each group of an approximately equal sex distribution having an average of 20 participants, except for one large group of 44 participants.

All 287 participants had access to Internet facilities at school and 224 (78.0%) had access elsewhere, with alternative venues of home being named by all groups, television and library by three groups, and mobile phone by two groups. The frequency of Internet access by participants were as follows: 91 (31.7%) daily, 22 (7.7%) approximately three times per week, 65 (22.6%) weekly, 36 (12.5%) monthly, 31 (10.8%) uncertain and 44 (15.3%) were not asked due to time constraints. Access was for a variety of reasons (Figure 1) and 15 named websites were specified as regularly used although none of the participants accessed the Internet for health information including sexual health.

Discussion about developing a GUM website prompted 179 (62.4%) participants to say they would use it, with the following information being highlighted as useful: clinic opening times by 209 (72.8%) participants, explanation of clinic procedure by 192 (66.9%) participants, location of clinic and how to get there by 205 (71.4%) participants, and information on specific conditions by 193 (67.2%) participants. The majority of participants (202, 70.4%) were interested in a ‘question line’ where they could e-mail questions to a health care professional and receive an individualised response as this was perceived as one way of reducing embarrassment.

Additional comments included requests to book appointments via the Internet, an interactive quiz, pictures of the clinic and the facilities available. Several students requested that details about infections and tests were not too explicit.

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<tr>
<td>Sport</td>
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<tr>
<td>Homework</td>
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</tr>
</tbody>
</table>

Figure 1. Purpose of Internet use

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Discussion

Information technology is widely available and the young people in our study frequently access the Internet. Access is either at school or alternative sites and three-quarters of them use it on a regular basis. Hence, it should offer an ideal medium through which to promote sexual health.

There are already some websites that have been developed specifically for young people that incorporate health-related issues. However, given that none of the young people in our study accessed existing Internet sites for health information, this raises questions about how we might improve the utilisation of this medium in order to attract the interest of our target audience.

The most popular reasons for accessing the Internet were identified as e-mailing, texting, games, music and chatlines. Initial engagement of young people may be achieved by creating links from other websites that are popular with them to a sexual health-based website either by using hyperlinks, or by using ‘pop-up’ advertisement windows. Both facilities are easy to introduce but the latter may have cost implications. Maintaining users’ interest by incorporating activities that young people enjoy, such as computer games, music and chatlines, into a website which also promotes sexual health, may also encourage recurrent use.

Almost two-thirds of our participants stated that they would use a GUM website if it were available. As the focus groups were openly conducted by local sexual health workers there is obviously a potential for bias. However, given the responsiveness of the participants we have no evidence to confirm this. They were very specific about the information they would like to see included in the site, and consultation with the desired user groups in the planning and design of such a website would be crucial to its success. It might also improve uptake through positive publicity and word of mouth of those who helped in its design.

A recent report on a new sexual health-based platform computer game demonstrated good response in terms of number of visits to the site or ‘hits’, attracting over 250 000 players, followed by e-mail responses from game players indicating that they did learn from playing the game. However, it has not yet been formally evaluated in terms of improved sexual health awareness or behaviour modification. Such interactive ‘games’ may be useful not only in providing sexual health information but also in enabling individual users to identify their own risk behaviours in a ‘non-confrontational’, ‘non-embarrassing’ environment.

We did not seek details about the sexual behaviour of the participants as we felt this could reduce free participation in the groups and might restrict the Internet information gathered. However, others have identified that despite increasing theoretical knowledge about STIs and protection in sexual relationships from infection, knowledge alone does not necessarily influence behaviour. In addition, even in individuals in whom an infection is identified most do not perceive themselves at risk. This further complicates the development of Internet education, as although improved knowledge is important, risk perception is the key to behaviour modification. It is important that any educational sites are evaluated not only for knowledge, but also for change in risk perception and behaviour.

An additional, anticipated difficulty of using the Internet to deliver sexual health education is the restriction or ‘bar’ that may be in place in schools, public places and at home to prevent illicit sexual material being inappropriately viewed. This may also have the side effect of ‘barring’ sexual health promotion sites. The administrator of a site usually implements the ‘bar’, for example, parents, school or library staff, via software that enables viewing of selected sites and a ‘banned word list’. These obstacles can be overcome either by ‘filter-stepping’, which involves using a non-triggering name for the site, or negotiating with the site administrator to allow access.

The current project was performed in North Nottinghamshire, which is comprised of a mixture of urban and rural communities with numerous pockets of economic and social deprivation. We did not specifically look at the ethnic and cultural mix of the focus groups or whether this had an influence on responses. However, the schools were representative of socioeconomic groups I–IV and the geographical population of the North Nottinghamshire area which is over 90% Caucasian. Seven of the schools were non-denominational state schools and two were Church of England schools, hence students from a range of religious affiliations, or none, were included in the study.

These findings may not necessarily be extrapolated to all young people within the UK, particularly in areas of different ethnic mix. It is important to highlight this fact, particularly if a national sexual health site rather than a local site is being designed, as consultation with all groups of the community is essential.

Conclusion

Our findings suggest that the Internet could be a practical and accessible way of delivering sexual health education and improving sexual health awareness. However, innovative methods need to be used to initiate and sustain the engagement of young people. We also suggest that young people should be involved in the development of such websites in order to improve their chance of success.

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