Teenagers' health concerns: implications for primary health care professionals

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SUMMARY. Four hundred and eighty five students, aged 13–15 years, at nine comprehensive schools in the London borough of Brent completed a questionnaire about health-related behaviours and health concerns. Among general health concerns, most prominent were weight, acne, nutrition and exercise. There appeared to be a considerable unmet need to discuss sexual development, sexually transmitted diseases and contraception. A substantial proportion (16% of the girls and 3% of the boys) reported sexual abuse, but few wished to discuss this with a doctor or nurse. Although a relatively high percentage of the students smoked and a smaller percentage used alcohol or drugs regularly, there was little concern or interest in discussing these matters with a health professional.

Most of the schools did not have a formal health education programme, and in none of them were health professionals available for discussion of the issues under study. There appears to be a need for more comprehensive health education in schools and for primary health care professionals, particularly general practitioners to raise these issues opportunistically with their teenage patients.

Introduction

ADOLESCENCE is a time when people make important decisions about a variety of behaviours, some of which may have serious consequences for their future health. For example, smoking habits and obesity are largely established by the end of the teenage years.

Little information is available about adolescents' needs and health concerns¹ and this hinders the planning of preventive medicine and the delivery of appropriate health care services to this age group. Data from a number of studies suggest that adolescents are frequently concerned about a variety of health-related issues².³ but it appears that school teachers, school nurses and doctors may seriously underestimate the extent of such concerns in this age group.⁴ There is evidence that teenagers are at substantial risk from harmful behaviours such as smoking, alcohol consumption and drug abuse.⁵⁻¹ Awareness among primary health care professionals of areas of health concern to adolescents may help them offer advice and health education which will be more appropriate and thus potentially more effective.

The objectives of the study were to obtain information about health concerns and health-related behaviours in a sample of teenage students in an inner-city population in London, and to determine to what extent they had discussed or would like to discuss these concerns with their general practitioner, school doctor or school nurse.

Method

The study was conducted during the autumn term of 1987. With the support of the acting education officer (schools branch) of the London borough of Brent, an inner-city area with a population of mixed ethnic origin, all the secondary schools in the borough were contacted. Of the 18 comprehensive schools, nine agreed to participate, two refused and seven did not respond to our invitation. Participating schools distributed a self administered questionnaire to all students in at least one class chosen at the discretion of the head teacher. Students from 26 classes (between one and four per school) filled in questionnaires. Completion of the questionnaire was supervised by a teacher during normal class time and all the children in the class were required to participate. Data was collected about age, sex and ethnic background of the respondents but the forms were anonymous. According to the teachers supervising the classes, only 20 students were absent from the classes at the time the questionnaires were completed and there were no refusals to participate. A total of 520 questionnaires were returned of which 35 (7%) were excluded from the analysis because the respondents' age and sex were not recorded. The completed forms were returned to the department of general practice at St Mary's Hospital medical school.

The growth and development questionnaire, used in this study to obtain information on a variety of health-related areas, was based on that developed by Malus and his co-workers (personal communication). Multiple choice response options were provided throughout and there was a space for comments at the end of each section. For each of the questions dealing with physical development in puberty, family life, and fears and worries the following format was employed: 'Are you concerned about...?' Not at all/a little/quite a lot/very concerned. 'Is this something you would like to discuss with a doctor or nurse?' Yes/no. 'Please tick the relevant box(es) if you have ever discussed this with your': GP/school doctor/school nurse.

The section on lifestyle included questions on exercise, diet and weight and the use of cigarettes, alcohol and drugs. As in the other sections, the students were asked whether they were concerned about any of these and if so whether they would like to discuss this with a doctor or nurse or had ever discussed it with their general practitioner, school doctor or school nurse.

The questions about sexual development and sexually transmitted diseases were as follows: 'Would you like advice from a doctor or nurse about any of the following?' Yes/no. 'Have you ever had advice about this from your...?' GP/school doctor/school nurse. The students were also asked to indicate whether they ever (not at all/sometimes/often/very often) had fears or confusion about homosexuality ('being attracted to someone of the same sex as yourself') or whether they had ever (yes/no) been subject to sexual abuse ('being sexually attacked, molested or petted by an adult, family member or otherwise'). Those who answered yes were asked whether they would like to discuss this or had ever done so with their general practitioner, school doctor or school nurse.

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After completion of the study, the participating schools were surveyed about the availability of school doctors and school nurses, and if there was a formal health education programme.

Results

Characteristics of respondents

A total of 485 questionnaires were completed by 313 girls (65%) and 172 boys (35%) ranging from 12 to 17 years old. Four hundred and fifty students (93%) were between 13 and 15 years old, and the mean age was 14.0 years. One hundred and fifty six (32%) students described themselves as black Asian, 112 (23%) as white UK, 91 (19%) as black Afro-Caribbean, 59 (12%) as Irish and 67 (14%) as belonging to another ethnic group. The parents at one girls' school objected to their children answering the questions relating to sexuality, and the 92 students in these classes were therefore instructed to omit them. The overall response rate for the remaining questions was at least 97%.

Three hundred and fifty four (73%) of the students had seen a general practitioner since their twelfth birthday, 77 (16%) had seen a school doctor and 212 (44%) had seen a school nurse.

Health concerns and habits

The areas about which the students most frequently reported being 'quite' or 'very' concerned were nutrition, unemployment, acne, overweight, menstruation (girls only) and exercise (Table 1). After sexually transmitted diseases and contraception, these were the subjects, with the exception of unemployment, which the students most frequently expressed an interest in discussing with a doctor or nurse (Table 2). Girls were more concerned than boys with weight and acne. With the exception of acne, health concerns had apparently been discussed with a health professional by only a small minority of the students, despite the fact that nearly three quarters of them had recently seen a general practitioner. Where discussion had taken place, general practi-

Table 1. Issues about which students were 'quite' or 'very' concerned.

	Number (%) of respondents		
	Girls	Boys	All
Issues	(n = 313)	(n = 172)	(n = 485)
Nutrition	113 (<i>36</i>)	51 (<i>30</i>)	164 (<i>34</i>)
Unemployment	107 (<i>34</i>)	53 (31)	160 (<i>33</i>)
Acne	112 (<i>36</i>)	33 (<i>20</i>)	145 (<i>30</i>)
Overweight	102 (33)	34 (20)	136 (<i>28</i>)
Menstruation	61 (<i>28</i>)ª		
Exercise	81 (<i>26</i>)	46 (<i>27</i>)	127 (<i>26</i>)
Arguments with parents	77 (<i>25</i>)	20 (22)	97 (20)
Fear of cancer	64 (20)	32 (19)	96 (20)
Worried about own death	65 (21)	28 (16)	93 (19)
Illness in family	57 (18)	37 (22)	94 (19)
Communication with			
parents	75 (24)	14 (8)	89 (1 <i>8</i>)
Fear of nuclear war	50 (16)	36 (21)	86 (1 <i>8</i>)
Growth	48 (15)	32 (19)	80 (1 <i>6</i>)
Underweight	39 (12)	28 (16)	67 (14)
Nuclear power plant		,	,
leaks	43 (14)	20 (1 <i>2</i>)	63 (1 <i>3</i>)
Secondary sexual			
characteristics	27 (12)a	11 (6)	38 (10)b
Smoking	28 (<i>9</i>)	15 (<i>9</i>)	43 (8)
Drugs	7 (2)	17 (10)	24 (5)
Alcohol	13 (4)	10 (<i>6</i>)	23 (5)
Homosexuality	2 (1)a	9 (5)	11 (3)b
Arguments with parents			
about sex	5 (2)a	4 (1)	9 (<i>2</i>) ^b

 $^{^{}a}n = 221$ (92 excluded). $^{b}n = 393$ for these questions (92 girls excluded).

Table 2. Issues which students have discussed or would like to discuss with a health professional (general practitioner, school doctor or nurse).

	Number (%) of respondents $(n = 485)$		
Issues	Would like to discuss	Have discussed	Have not discussed but would like to
Sexually transmitted			
diseases ^a	217 (<i>55</i>)	44 (11)	186 (<i>47</i>)
Contraception ^a	194 (<i>49</i>)	63 (16)	162 (41)
Menstruation ^b	81 (<i>37</i>)	89 (40)	39 (18)
Nutrition	162 (<i>33</i>)	63 (1 <i>3</i>)	120 (<i>25</i>)
Fear of cancer	161 (<i>33</i>)	27 (<i>6</i>)	143 (<i>29</i>)
Acne	160 (<i>33</i>)	119 (<i>25</i>)	93 (1 <i>9</i>)
Overweight	141 (29)	59 (1 <i>2</i>)	116 (<i>24</i>)
Exercise	134 (28)	56 (1 <i>2</i>)	101 (<i>21</i>)
Growth	88 (1 <i>8</i>)	86 (1 <i>8</i>)	50 (1 <i>0</i>)
Worried about own death	85 (<i>18</i>)	22 (5)	72 (15)
Unemployment	85 (<i>18</i>)	17 <i>(4</i>)	72 (15)
Illness in family	83 (1 <i>7</i>)	31 (<i>6</i>)	60 (1 <i>2</i>)
Underweight	73 (15)	33 (7)	58 (1 <i>2</i>)
Fear of nuclear war	69 (14)	16 (<i>3</i>)	62 (1 <i>3</i>)
Arguments with parents			
about sex ^a	46 (1 <i>2</i>)	15 (<i>4</i>)	42 (11)
Nuclear power plant			
leaks	52 (11)	14 <i>(3</i>)	46 (<i>9</i>)
Secondary sexual			
characteristics ^a	39 (1 <i>0</i>)	47 (1 <i>2</i>)	9 (2)
Communication with			
parents	44 (9)	24 (5)	37 (8)
Arguments with parents	36 (7)	19 (4)	30 (<i>6</i>)
Homosexuality ^a	26 (<i>7</i>)	17 (4)	21 (5)
Sexual abuse ^a	12 (3)	15 <i>(4</i>)	10 (3)

 $^{a}n = 393$ for these questions (92 girls excluded). $^{b}n = 221$ (girls only and 92 excluded).

tioners were two to three times more likely than school nurses to have been involved and very much more likely than school doctors.

A substantial proportion of students of both sexes expressed an interest in discussing contraception. Girls were more likely to want to do so (149/221 girls (67%) versus 45 boys (26%): chi-squared = 65.8; P<0.001) and to have discussed it already (43 (19%) girls versus 10 (6%) boys: $\chi^2 = 15.4$; P<0.01). One hundred and forty two (64%) girls and 75 (44%) boys said they would like to discuss sexually-transmitted diseases but only 32 (14%) girls and 12 (7%) boys had actually done so.

Of the 213 girls and 166 boys who responded to the question, sexual abuse was reported by 34 (16%) of the girls and by five (3%) of the boys. However only six of the girls and two of the boys said that they wanted to discuss this with a doctor or nurse and none had actually done so. Twenty six students (7%) wanted to discuss fears about homosexuality with a doctor or nurse, but of these, only five had actually done so.

One-fifth of the students (107, 23% of all the girls, and 19% of all the boys) reported that they smoked cigarettes, 33 (7%) apparently often or every day. Over a half (261, 54%) reported drinking alcohol, 29 (6%) drinking often or every day. Thirty one students (6%) reported use of illicit drugs, of whom 17 reported use of marijuana, eight of inhaled solvents, and one to two students each use of cocaine, heroin, lysergic acid diethylamine, amphetamines, methedrine, and barbiturates. Less than a quarter of the students expressed concern about the effects on health of alcohol, cigarettes or drugs and only a very small minority had ever discussed these with a doctor or nurse.

Students' comments

There were a number of suggestions for topics not included in the questionnaire, such as the acquired immune deficiency syndrome, at what age to have sex, wet dreams, and 'child beating'. Fourteen girls said that they would not want to talk to a doctor or nurse about their health concerns because of lack of confidentiality, embagrassment, shyness, or because they knew their general practitioner too well and 10 girls said they would prefer to discuss their health concerns, especially sexual ones, with a non-professional such as an older sister, 'someone close', a teacher of the same sex, or a group of peers. Nine girls said they would like a female general practitioner. Many girls thought that it would be valuable to have opportunities for small group or individual discussion with a doctor about more 'personal' issues.

Health education programmes

Eight of the nine schools provided information about this. Although all but one had a school doctor and/or a school nurse, none of these were apparently involved in health education programmes. Four schools had some health education incorporated into other courses and one had a separate health education course, but the remaining three schools had no health education programme.

Discussion

Our findings indicate that the teenagers who took part in the study had a wide range of health related concerns and that many would have liked to discuss these further. A large number apparently wished to discuss issues such as acne, sexually transmitted diseases and contraception with a doctor or nurse, but there appeared to be a preference for discussing psychosocial issues with friends, relatives or teachers. Nutrition, exercise and overweight figured high among the students' concerns, and, while this might suggest an appreciation of the relationship between these aspects of lifestyle and health, there was an apparent lack of concern or desire for discussion about drink, drugs and smoking. The fact that this occurred in the context of a large number of students who admitted to smoking cigarettes and high levels of reported concern about cancer suggests a failure to convince teenagers of the link between the two. The finding that weight and acne were of particular concern, especially among girls, is in line with the results of several other studies of adolescent health concerns, 1-3 but there was a surprisingly high number of students who wanted to discuss cancer. This may have been because of recent publicity about cervical and breast cancer and the screening programmes for these. The high level of concern about unemployment probably reflects the inner-city working class environment in which the students live.

There were generally high levels of concern about issues relating to sexuality, particularly contraception and sexually transmitted diseases. As adolescents often do not use contraception until a year or more after becoming sexually active, ^{2,3} earlier education, perhaps even at primary school, might be appropriate. More girls than boys reported interest in discussing contraception and sexually transmitted diseases, suggesting that despite recent information campaigns about safer sex, boys still perceive birth control and disease prevention as being the girl's responsibility.

Because of the difficulty in obtaining data, the sensitive nature of the topic and differences in definition there is no reliable data on the incidence of childhood sexual abuse, but the reported incidence varies from 0.3% to 90%. We found that 16% of girls and 3% of boys reported having been sexually abused, although the questionnaire did not ascertain what form the abuse took. The teenagers' reluctance to discuss sexual abuse may stem

from embarrassment or guilt about the incident, or in some cases may be because the abuser was a relative or 'friend'. A similar situation would appear to apply to teenagers with fears about homosexuality, many of whom had apparently not been able to raise these with a health professional. As relatively large numbers are involved, it may be important to ensure ready access to appropriate counselling facilities. The students' comments confirmed the importance of providing opportunities for further discussion of these issues with a health professional, and general practitioners should bear this in mind when seeing teenagers in surgery. A pilot scheme involving general practitioners and medical students visiting schools in Brent on a regular basis to meet with students is now under consideration.

Though a large number of the teenagers apparently would have liked to discuss many of the issues included in the survey with a doctor or nurse, a much smaller number had actually done so. Since many of the schools which took part in the survey have little in the way of health education programmes, general practitioners may often be the only available reliable source of health information and there appears to be considerable scope for them to improve their use of the consultation to raise these issues opportunistically with teenagers.

It is difficult without further study to ascertain how far our findings apply to teenagers in other schools. It appears that a very high proportion of the students in the classes which participated responded to the questionnaire and there was no reason to believe that the schools were unrepresentative of those in the borough of Brent. The findings may well be applicable to schools in other inner-city boroughs, but the situation is likely to be different elsewhere. Nonetheless, there may well be scope for other health education initiatives like the one under consideration in Brent as a result of this study and for improving training in adolescent medicine during medical school and general practice vocational training.

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