

Heterosexual Lifestyles of Young People in an English City

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Introduction

This paper discusses some of the underlying ideas and recent survey findings from a study of the sexual lifestyles of young people in England. The study is part of the growing research effort to gather data and develop theory which is of relevance to the practical initiatives designed to control the spread of the Human Immunodeficiency Virus (HIV). HIV has rapidly become by far the most serious sexually transmitted disease (STD) and is believed by many to pose the greatest public health threat of the late-twentieth century (Liskin and Blackburn, 1986). Large research literatures are rapidly developing which are concerned with the wide-ranging medical and social issues related to HIV and the Acquired Immunodeficiency Syndrome (AIDS). The specific focus of this paper is upon the social and health education implications of young people's (principally hetero-) sexual behaviour in the South-West of England. Given that there is currently no clinical cure, nor preventive vaccine to combat HIV, it is well recognised that prevention through education/communication strategies is the most realistic control option available. With regard to curbing the transmission of HIV through sexual activity such strategies are concerned with the promotion of so-called *safe-sex*, entailing the limitation of an individual's sexual activity to within an exclusive, monogamous relationship, and/or the use of a condom as a prophylactic (Institute for the Advanced Study of Human Sexuality, 1986). The particular presentation of the idea of *safe sex* varies widely across different cultures and depending upon the specific socio-sexual group to which the message is addressed. At the outset, before outlining the survey findings, it is beneficial to briefly consider the general socio-cultural and historical context within which sexual activity takes place. It is important to note that sexual behaviour is not blindly driven by physiological impulses but is fundamentally conditioned and channelled by socio-cultural factors (Gagnon and Simon, 1973). What is considered appropriate or admissible sexual behaviour varies from culture to culture, and within cultures, according to social group and personality. Indeed Freud considered that human society evolved primarily as a means of controlling,

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sublimating and repressing the impulse of the libido (Hyde, 1986). Whilst most social theorists would not accord such primary status to the concept of sexuality, it clearly has a wide-ranging effect upon reproduction, nuptiality, family relations and personal development. The major research impact of the global concern with AIDS has been to bring the subject of sexuality more into the mainstream of social scientific research. The imperative to influence patterns of sexual activity (for instance, through health education) demands greater understanding of the factors which condition and shape such activity.

Taking a long-term and macro-level perspective, historians and epidemiologists have identified major epochal shifts in the permissiveness of sexual behaviour in particular societies (Selvin, 1984). It has been suggested that such shifts, for instance, in terms of *restrictiveness - permissiveness* have taken place in response to the rising and falling hazard of sexually transmitted diseases (STD). For instance, the virulent strain of syphilis brought back to Europe from the *New World* by Columbus' crew was able to spread rapidly and widely within the permissive sexual climate of fifteenth century Europe. Is it merely coincidence that the following sixteenth century was an era of Calvanistic religious Reformation with its attendant puritanical, sexually-restrictive stance ? (Potts, 1988). At a macro level changes in sexual behaviour can be viewed as "...culturally adaptive responses to sexually transmitted disease as a natural hazard..." (Lewis and Mayer, 1988). Societies have always regulated patterns of sexual activity by means of a complex array of social, personal and often religious sanctions. Thus, as with fertility regulation, patterns of sexual behaviour are not fixed and static, but dynamic and evolving. It is this dynamic aspect which gives health educators some optimism that sexual behaviour may indeed be influenced in ways which may curtail the spread of HIV (for instance, limiting numbers of sexual partners/ consistent use of the condom).

Taking a more micro-level perspective it is pertinent to note that there are also variations in sexual behaviour and attitudes between individuals within the same socio-cultural setting. A major task of HIV-related research is to widen understanding of both the nature of such differences and the influencing mechanisms which shape them. Given the complex and as yet poorly articulated interrelation between sexual behaviour and attitudes, it is helpful to think in terms of sexual *lifestyles*. The term, *lifestyle*, is used here to denote a combination of behaviour and attitudes related to personal tastes and preferences. The level of variation in sexual lifestyles within a society is probably related to the general openness of social attitudes. Thus there is considerable variation in sexual lifestyles in broadly liberal and pluralistic societies such as England or

Thailand, but probably less variation in sexual lifestyles in a more socially conformist country such as the People's Republic of China.

In attempting to understand variations between individuals within a society (for instance, concerning young people's attitudes to pre-marital sexual intercourse) it is useful to consider the cognitive perspective. In this sense behaviour is viewed as an expression of an underlying cognitive structure of emotions, attitudes, values, beliefs, knowledge and intentions (Abramson, 1983). HIV-related research is beginning to address itself to the content of these underlying cognitive structures and the factors which shape them. The survey findings reported in this paper pertain to young people's sexual behaviour and attitudes.

Taking a broadly cognitive perspective, it is important to investigate young people's sexual activity in terms of the meanings ascribed to it, primarily with reference to sexual relationships. Small scale social psychological studies have highlighted differences in the sexual attitudes of young people in Western societies such as the USA and England.

Further elaboration of these differences has enabled the identification of a range of sexual *philosophies* (Christopher and Cate, 1985; D' Augelli and Augelli, 1979; Peplau et al., 1977). Such philosophies can be structured and summarised in terms of a continuum of restrictive-permissive attitudes to the timing of pre-marital sexual intercourse. Three broad types may be identified : i) *traditional-restrictive*, in which intercourse is reserved for marriage; ii) *liberal-romantic*, in which intercourse is reserved for a steady relationship; and iii) *casual-recreational*, in which intercourse outside a steady relationship is acceptable (Ford, 1987) (figure 1). It is possible to monitor changes in social attitudes to sexual activity in terms of changes in the relative proportion adhering to each broad philosophy over time. Cross-cultural comparison may also be possible by comparing the relative proportion and gender variation of the individuals adhering to these broad *philosophies*. In the following outline of survey findings reference will be made to indicators of both sexual activity and underlying philosophy.

Figure 1. Three typologies of sexual behaviour and decision-making

Sexual ideologies	D'Augelli (Sexual philosophies)	Peplau et al. (premarital couples)	Christopher and Cate (sexual pathways)
Traditional-restrictive	Inexperienced virgins		
	Adamant virgins	Sexually traditional	Low involvement
Liberal-romantic	Potential non-virgins		
	Engaged non-virgins	Sexually moderate	Delayed involvement Gradual involvement
Casual-recreational	Liberated non-virgins	Sexually liberated	Rapid involvement
	Confused non-virgins		

Source : Ford, 1987

As mentioned above patterns of sexual behaviour are dynamic, changing in response to a multiplicity of social forces. In summary, the pattern of sexual activity of English youngsters in the late 1980s can be considered within the broad social context of the past thirty years. There are two key interrelated dimensions, social changes and advances in the technologies of reproductive health. The recent history of sexual behaviour in England (and indeed the whole of the Western World) has been one of a growing liberalisation and removal of constraints upon the sexual behaviour of young people associated with the *permissive revolution* (Reiss, 1981). This trend towards sexual freedom is closely related to the more general social liberalisation process - a process most visible during the 1960s, but followed by a slow consolidation and diffusion in the subsequent decades. The sexual dimension to this process was facilitated, perhaps even made possible, by two areas of technological advance in reproductive health care. Firstly, the availability and accessibility of modern contraception made it at least possible to separate sexual intercourse and reproduction. In particular, the Oral Contraceptive Pill had become the major form of contraception used by the young in contrast with the higher levels of condom use pre-1970 (Wellings, 1986). Thus as modern contraception reduced females' fear of pregnancy from pre-marital intercourse by the 1980s the gender variation in levels of pre-marital coitus had been greatly reduced. Secondly, advances (in particular during World War Two) in

penicillin and antibiotic treatments for venereal disease made the treatment of this other *side-effect* of coitus, more manageable (Morton, 1984). In summary, the recent history of sexual behaviour in the UK, had been one of almost universal pre-marital coitus, for both sexes, and also, significantly, a decline in the use of the condom. This general picture has given rise to a measure of public and personal concern of late in the light of the threat of HIV infection. In the pre-AIDS era relatively little accurate and representative data was available. The following outline of findings reports on a recent survey which has sought to remedy this situation.

Objectives

The immediate objective of this study was to collect information into the sexual behaviour, perception of AIDS and attitudes to sexuality and relationship development among young people (16-21 years of age) in the city of Bristol in the South-West of England. The ultimate objective of the study was to provide information which can help contain the spread of HIV by contributing to relevant health education interventions targeted at young people.

The Survey Site

The survey was undertaken by the Institute of Population Studies, University of Exeter, in collaboration with Southmead Health Authority. With a population of around 400,000 Bristol is the largest city in the South-West of England. The city is sited on the River Avon, 14 km from the head of the Bristol Channel which separates South-West England and South Wales. Historically Bristol has been one of England's most important trading ports, and today owes its relative prosperity to its wide base of services and industries. In social and economic terms Bristol is fairly representative of urban England. The city offers a range of social opportunities and constraints to young people, similar to those offered in other English cities.

Methodology

The survey was undertaken during April 1988 among 400 young people throughout the city of Bristol. Quota sampling was undertaken within 40 randomly selected gazetteers (areal units) out of a total of 120. Gazetteers were selected with probability of selection proportional to the total population in each, as shown in the registers for February 1981. Within each selected gazetteer interlocking quota controls of age (two groups: 16-18, 19-21 years) within sex were used by fieldworkers for the

selection of 10 respondents. These quotas broadly reflect the demographic profile of 16-21 year olds within the city of Bristol. Furthermore, no more than one person per household was to be interviewed. Interviews were carried out in residents' households in the late afternoon or early evening in order to ensure a sufficient proportion of respondents in employment were selected. Respondents were identified by *knocking on doors*. If an eligible respondent resided at a house, but was out, arrangements were made for the interviewer to call back later.

The data collection instrument (schedule-structured questionnaire) comprised two parts: the first part (covering questions on socio-demographic characteristics, AIDS awareness, sexual attitudes etc.) involved the interviewers asking questions of the respondent and recording his/her answers; the second shorter part (covering questions on sexual behaviour) was given to the respondent for his/her self-completion. The second part was completed in the interviewer's presence but he/she did not see the answers, since, once completed, the respondent sealed it in the envelope provided.

The questionnaire was well received by the respondents as evidenced by both the low non-response rate (7%) and many comments noted by respondents at the end of the self-completion section. The interview took between twenty-five and forty minutes to administer.

Survey Findings

This section will highlight some of the key survey findings concerning the respondents' sexual behaviour and attitudes, which are detailed at greater length in the survey report (Ford, 1988b).

Socio-demographic Profile of Respondents

The sample of 400 respondents was divided almost equally between females (51%) and males (49%). Of these 400, 55%, were in the age group 16-18 years and 45% in the age group 19-21 years. In terms of occupation the sample roughly divided into just over one third in full-time education, one sixth unemployed, and just under one half in full-time employment (Table 1). The vast majority of respondents (78%) were living at home with their parents.

Table 1. Percentage of occupation by age group

Occupation	Total	Age group	
		16-18 years	19-21 years
Full time education	37.0	76.0	24.0
Employed	48.0	44.0	56.0
Unemployed	15.0	39.0	61.0

Basic Indicators of Sexual Activity

Reservation have often been expressed concerning the difficulties of obtaining accurate and reliable data on respondents' sexual behaviour (Hyde, 1986). However, it appears that the widespread social concern with AIDS is leading to a more open and rational attitude to sex, especially among young people in England. The accuracy and reliability of data fundamentally depends upon the way in which the questionnaire is designed and the survey undertaken. Given:

- the careful development of the questionnaire (including a series of pilot tests and refinements);
- the strict assurance of anonymity on the part of the respondent;
- the respondents' awareness of the importance of the subject matter;
- the very low level of data inconsistencies revealed during data checking and processing;
- the close supervision of the interview team;
- the low refusal rate (7%);

the research team is reasonably confident in the overall reliability of the data.

Findings are highlighted concerning:

- sexual orientation;
- sexual experience and age at first intercourse;
- regularity of sexual intercourse;
- numbers of sexual partners;
- condom usage.

These indicators have been selected in order to evaluate how far the sexual behaviour of the young people of Bristol conforms to the notion of *safe sex*.

The overwhelming majority (97%) of respondents consider themselves to be heterosexual. In order to collect information on the specifically non-heterosexual population it is probably necessary to undertake surveys through the *gay* organizations. As Tables 2 and 3 indicate a sizeable majority (69%) of the sample are non-virgins with sexual activity beginning at a fairly early age for many of the respondents. Nearly half of the 16 year old respondents had engaged in sexual intercourse, rising to 90% of respondents aged 21 years. It is noticeable that a higher proportion of males were sexually experienced by age 15, although this gender variation had closed by the older ages.

Table 2. Percentage of sexual experienced by age

Sexual experience	Total	Age *					
		16	17	18	19	20	21
Sexually experienced (Non - Virgins)	69.0	43.0	63.0	72.0	71.0	85.0	90.0

Note : * $P < 0.000$

Table 3. Percentage of age at first sexual intercourse (non-virgins only) by gender

Age at first intercourse	Total	Gender	
		Males	Females
Before 13	3.0	5.0	1.0
13	6.0	8.0	4.0
14	9.0	13.0	5.0
15	22.0	22.0	22.0
16	31.0	24.0	37.0
17	17.0	16.0	18.0
18	8.0	5.0	10.0
19	3.0	5.0	2.0
20	2.0	2.0	1.0
21	0.0	0.0	0.0

Having engaged in sexual intercourse does not necessarily indicate that an individual is regularly sexually active. The findings indicate that the majority of the non-virgin respondents are sexually active on a regular basis and nearly half had engaged in intercourse during the last week (Tables 4 and 5).

Table 4. Percentage of time period since last sexual intercourse (non-virgins only) by gender and age group

Period of time	Total	Gender*		Age group**	
		Males	Females	16-18 years	19-21 years
0-7 days	49.0	48.0	50.0	44.0	53.0
8 days-1 month	12.0	10.0	14.0	14.0	11.0
> 1-3 months	13.0	11.0	15.0	8.0	17.0
> 3 months-1 year	20.0	24.0	16.0	25.0	15.0
> 1 year	6.0	8.0	5.0	9.0	4.0

Note : * P = N.S.

** P < 0.01

Table 5. Percentage of frequency of sexual intercourse in last month by gender and age group

Frequency of sexual intercourse in last month	Total	Gender*		Age Group**	
		Males	Females	16-18 years	19-21 years
0	41.0	46.0	36.0	44.0	39.0
1 - 2	10.0	6.0	13.0	14.0	6.0
3 - 5	14.0	10.0	18.0	14.0	13.0
6-10	17.0	13.0	21.0	12.0	22.0
11-20	12.0	17.0	8.0	13.0	12.0
> 20	6.0	9.0	4.0	3.0	9.0

Note : * P < 0.05

** P = N.S.

A key indicator which is related to the likelihood of STD infection is an individual's number of sexual partners. This indicator was measured in terms of the number of partners in a lifetime and in the last twelve months. These items obviously comprised some of the most sensitive questions in the survey but hardly any of the respondents left the questions uncompleted (1% for lifetime, 2% for last twelve months). Whilst monogamy is recommended as the safest means of avoiding HIV infection, it is evident that a fairly high proportion of respondents have had a number of sexual partners in their lifetime (51%, two or more) (Table 6). Although just over one quarter of the sample had engaged in sexual intercourse with four or more partners in their lifetime, this is by no means a measure of *promiscuity* given that it could be a reflection of an individual having four serial, steady, strictly monogamous relationships over a period of years. Thus the measure of sexual partners in the last twelve months is a far more accurate measure of casual sexual activity, as this also helps to control for the cumulative effect of age on sexual experience.

Table 6. Percentage of number of sexual partners in lifetime by gender and age group

Number of partners	Total	Gender*		Age group**	
		Males	Females	16-18 years	19-21 years
0	31.0	33.0	30.0	42.0	18.0
1	18.0	16.0	19.0	21.0	13.0
2/3	24.0	17.0	31.0	19.0	31.0
4 or more	27.0	34.0	20.0	18.0	37.0

Note : * P < 0.001
** P < 0.000

Although only 6% of respondents have had four or more sexual partners in the last twelve months, this involves high numbers of individuals if extrapolated to the whole population of 16-21 year olds in Bristol.

A second key indicator which is related to an individual's likelihood of STD infection is the use of condoms in sexual intercourse. Whilst four-fifths of non-virgins had used a condom at some time, only 30% had used a condom during their last intercourse. The general situation seems to be that the majority of individuals are not using condoms, because they feel that they are unnecessary within the context of their

present relationship. However, when asked if they intend to use a condom with their next, new sexual partner, two-thirds intend to do so. However, whilst 71% of those (non-virgins) with none or one sexual partner in the last twelve months intend to take the precaution with their next, new partner, less than half of those with four or more partners intend to do so (Table 7). Thus those most at risk of infection according to their number of sexual partners multiply that risk by a lower level of use of the condom as a prophylactic.

Table 7. Percentage of number of sexual partners in the last twelve months by condom use (non-virgins only)

Condom use	Numbers of partners			
	0	1	2/3	4+
Total	36.0	41.0	17.0	6.0
Used condom last intercourse*	47.0	27.0	32.0	28.0
Intend to use condom with next, new sexual partner*	71.0	71.0	62.0	48.0

Note : * P = N.S.

Given that there has been a huge mass media publicity campaign in the UK to promote condom usage to combat HIV infection, it is interesting to examine use and intended condom use in relation to knowledge about AIDS. Knowledge was assessed by reference to an eighteen item scale concerning sources of HIV transmission. For broad comparison respondents were divided into three categories - *high* knowledge - all items correctly answered; *medium* knowledge - no more than three incorrect answers; *low* knowledge - four or more incorrect answers. The overall level of awareness and knowledge was fairly good - 37% high; 32% medium; 31% low (Table 8). Level of AIDS knowledge is significantly linked to use of condom during last intercourse, although it should be noted that nearly one third of even those with *high* knowledge still do not intend to use a condom with their next, new sexual partner. Knowledge alone would appear to be an insufficient determinant of *safe sex* practice.

Table 8. Percentage of condom use by level of knowledge about AIDS

Condom use	Level of AIDS-knowledge		
	Low	Medium	High
Total	31.0	32.0	37.0
Used condom during last intercourse*	19.0	30.0	39.0
Will insist on use of a condom with their next, new sexual partner**	66.0	65.0	70.0

Note : * P < 0.05

** P = N.S.

The foregoing outline of basic indicators of sexual activity provide a basis for epidemiological modelling of the spread of HIV in this particular community of young people. It is interesting to note that the findings show no statistically significant differences to the findings from a survey conducted eight months earlier among 400, 16-21 year olds in the neighbouring county of Somerset (Ford, 1988a). The Somerset findings which were projected using a model of HIV transmission (Knox, 1986), indicated that *once HIV enters the community*, the sexual behaviour pattern provides a basis for fairly high levels of HIV infection in the future (Bowie and Ford, forthcoming). However, in terms of health education strategies, it is useful to go beyond findings on sexual behaviour to consider the social meanings associated with sexual activity.

Attitudes to Sexual Activity and Relationships

Attitudes and meanings ascribed to sexual activity are summarised below by reference, firstly, to attitudes to the timing of sexual intercourse within relationship development, and, secondly, to a range of sexual lifestyles identified by a cluster analysis. In conclusion broad implications for HIV-related health education will be drawn.

In the introduction it was argued that it is possible to provide a summary measure of sexual *philosophy* (*traditional-restrictive*, *liberal-romantic*, *casual-recreational*) in terms of attitude to the timing of intercourse in relationship

development. Respondents' attitudes are here summarised in terms of five categories (Table 9).

Table 9. Percentage of timing of sexual intercourse in relationship development

	The timing of sexual intercourse				
	1	2	3	4	5
Total	5.0	11.0	59.0	20.0	6.0
Males****	5.0	11.0	63.0	12.0	68.0
Females****	5.0	11.0	63.0	12.0	68.0
Importance accorded to different sexual activities (Extremely/Very Important)					
Light petting**	17.0	9.0	32.0	37.0	28.0
Heavy petting*	11.0	19.0	27.0	33.0	20.0
Sexual intercourse*	11.0	21.0	37.0	60.0	36.0
Oral sex*	6.0	7.0	14.0	33.0	8.0
Will insist on condom use with next, new sexual partner*****	44.0	79.0	69.0	57.0	76.0
Condom reduces sexual pleasure (agree)***	67.0	16.0	38.0	58.0	16.0
Virgins*	12.0	20.0	44.0	13.0	11.0
Non-Virgins*	1.0	7.0	65.0	23.0	4.0

Note : 1 No intercourse before marriage
 2 No intercourse outside a steady relationship with a commitment to marriage
 3 No intercourse outside a steady relationship but without necessarily a commitment to marriage
 4 Intercourse admissible outside a steady relationship
 5 Unsure

* $P < 0.0000$
 ** $P < 0.0005$
 *** $P < 0.005$
 **** $P < 0.001$
 ***** $P < 0.01$

In terms of broad sexual philosophy the majority of young people adhere to a *liberal-romantic* view, reserving intercourse for a steady relationship. Only one twentieth believe in saving intercourse for marriage. A similar small proportion are *unsure* about when intercourse should take place during relationship development. However, one fifth condone intercourse outside a steady relationship (*casual-recreational* view). Significantly this group also has a lower propensity to insist on the use of the condom, feeling that it reduces sexual pleasure (Table 9). Those holding the *recreational* attitude to the timing of intercourse are seen also to be more erotically-oriented in general, placing a higher emphasis upon sexual intercourse and oral sex than the other respondents. The connections between sexual behaviour, philosophy, erotic orientation and condom usage may be described more clearly by reference to the findings of a cluster analysis.

Cluster analysis reveals eight distinct clusters which can be summarised in terms of four broad groups of respondents (Figure 2). Firstly, clusters 1 and 2 comprising nearly one third of the total sample exhibit a *traditional-restrictive* sexual lifestyle; cluster 1 comprising a strictly *no sex before marriage* view based on religious and moral standards and cluster 2 restricting sexual activity to a single partner with a strong emphasis upon eventual marriage to that partner. Cluster 1 comprised predominantly virgins, whilst cluster 2 respondents were both virgins and those having had few sexual partners. The second band of sexual lifestyles comprise clusters 3/4 and 5/6 which together include about three-fifths of the total sample. These clusters exhibit a broadly *liberal-romantic* sexual lifestyle in their emphasis upon sex within steady relationships but with lower emphasis upon constraints on sexual activity. Clusters 3 and 4 comprise a younger, sexually inexperienced group which aspires towards higher levels of sexual activity in the future. Clusters 5 and 6 both show a moderate level of past and present sexual activity but differ widely in the emphasis accorded to sexual activity (cluster 5 = very low, cluster 6 = moderately high). Also these clusters contain moderate proportions who condone sexual intercourse outside a steady relationship, moving towards a *recreational* sexual philosophy. However, clusters 7 and 8 comprising just over one eighth of the total sample exhibit the clearest *casual-recreational* lifestyles. Both clusters (but especially cluster 8) show high levels of past and current sexual activity including multiple partners in the last year. Furthermore this group places a very high emphasis upon sexual pleasure.

Figure 2. Sexual lifestyles of clusters and implications for AIDS education

Restrictive	1 31%	2	3 24%	4	5 35%	6	7 12%	8	Permissive
Religious Romantic Restrictive	<i>Liberal</i> little sexual experience but likely to increase in future	<i>Liberal</i> mildly recreational	<i>Recreational</i>						
Intended practice of <i>Safe</i> (r) <i>Sex</i>	High	High	Moderate				Low		
Likely STD infection	Low	Low	Moderate				High		
Appropriate AIDS education	Reinforce- ment of attitudes	Reinforce- ment of attitudes	Reinforcement change attitudes				Change attitudes		

Beyond sexual lifestyle, risk of STD/HIV infection is limited by the consistent use of the condom as a prophylactic. It is notable that despite all the condom-promoting publicity in the UK, only two thirds of the total sample of respondents stated that they *intended to use a condom with their next, new sexual partner*. The proportion who will actually put the intention into *practice* is likely to be even lower. Furthermore the percentage of intending condom users drops still further for the critical clusters (7/8) of respondents who hold permissive sexual attitudes and engage in the highest levels of sexual activity. By contrast the less sexually active groups have a more positive attitude to the condom. It remains to be seen whether the more sexually inexperienced individuals will continue to hold a positive attitude to condom use over time as they become more sexually experienced.

AIDS-related Health Education Implications

In summary, with reference to the clusters of sexual lifestyles, the future risk of HIV infection increases from very low for cluster 1 to fairly high for cluster 8 (Figure 2). Each of the four broad types of sexual lifestyles has different implications for the development of AIDS-related, health education. Two distinctive aims of such health education can be identified.

- 1) *Reinforcement* of the sexual attitudes and behaviour of these young people whose ideas and practices are at present consistent with the imperatives of safe sex.
- 2) *Engendering* changes in the sexual attitudes and behaviour of those individuals whose behaviour is manifestly outside the bounds of safe sex.

Given that resources at the disposal of Health Authorities for AIDS-related education are, of necessity, limited, the choice of a strategy for implementation becomes a matter of the most effective allocation of those resources. The messages conveyed through the mass media essentially act as an *aerosol spray* which may increase awareness but will have limited effect in changing behaviour. Furthermore mass media communication is unable to take account of the likelihood of different interpretations of health messages. For instance, an emphasis upon personal standards may be reinforcing for those of a *traditional-restrictive* or *romantic* philosophy, but of little relevance to those of a *recreational* philosophy. For the latter, high risk group, given their higher erotic orientation, there should be a positive emphasis upon encouraging *safer* practices within their overall sexual repertoire rather than merely negatively discouraging unprotected, penetrative intercourse. For these reasons a more personal, interactive and flexible strategy is appropriate for design and implementation by Health Authorities. Although not an easy option (outside educational institutions), discussion groups backed up by relevant materials would appear to hold out the possibility of having a real impact. The aim of such a strategy should be to foster a more rational and open appraisal of personal relationships and sexual activity within an individual's life. Group discussion could benefit from the importance accorded to peer group influence in fostering behaviour.

Given the early onset of sexual experience among young people in Bristol, there is clearly a need to provide AIDS-related education at an early age. It is probably more difficult to change patterns of unsafe behaviour once they have become established. The specific content of AIDS-related education should be structured to meet

the maturational needs of the young people. In the final analysis, it is especially important to develop a health education strategy which will have a real influence upon the high risk groups. Given that those individuals engaging in high risk behaviour are primarily found outside full-time education, it is particularly important to make contact beyond the educational institutions. Channels for contact may be made through large employers, youth training programmes and (perhaps more controversially) STD clinics.

Conclusion

This paper has sought to present a framework for reducing the complexity of young people's sexual lifestyles and to report upon some recent survey findings, which are structured in terms of the framework. Finally the findings were tentatively related to some broad directions for AIDS-related health education. These survey findings are essentially descriptive. Further HIV-relevant research may seek to build upon such a description of the association between sexual attitudes and behaviour and attempt a more powerful explanation, which in turn will provide a stronger basis for the development of effective health education initiatives. As discussed in the introduction sexual lifestyles are shaped by a complex of social and cultural factors. HIV-relevant health education can only attempt to interact with these broader processes to seek to promote *safe sex* practices. As such HIV-related health education strategies are likely to be culturally specific. The high response rate obtained by the reported Bristol survey and the fact that such a study was feasible reflects the growing concern with AIDS and the increasing openness in which sexual issues may be discussed. It would be particularly interesting to compare these findings concerning the sexual lifestyles of young people in England with those evident in other cultural settings. In the case of Thailand it would be useful to acquire information concerning the age at which young people experience their first coitus, the numbers of sexual partners, condom use and sexual philosophies, and to assess how far these variables vary according to gender and other factors. Such information could contribute towards appropriate AIDS education strategies. Furthermore cross-cultural comparison could highlight the broad socio-cultural factors which shape patterns of sexual behaviour.

Notes

Throughout the report of findings the customary symbol $P <$ is used to describe the level of statistical significance (based upon the χ^2 statistic) of differences reported, while N.S. means not significant at the 5% level.

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References

Abramson, P.R. 1983. Implications of the Sexual System. In *Adolescence, Sex and Contraception*. D.Byrne and W.A.Fisher (ed.). New Jersey : Lawrence Erlbaum Associates, : 49-64.

Bowie, C., and N.J. Ford. (forthcoming). Sexual Behaviour of Young People and the Risk of HIV Infection. *Journal of Epidemiology and Community Health*.

Christopher, F.S., and R.M. Cate.1985. Premarital Sexual Pathways and Relationship Development. *Journal of Social and Personal Relationships* 2 : 271-288.

D'Augelli, F.J., and A.R. D'Augelli. 1979. Sexual Involvement and Relationship Development : A Cognitive Development Approach. In *Social Exchange in Developing Relationships*. R.L. Burgess and T.L. Huston (ed.). New York : Academic Press : 307-349.

Ford, N.J. 1987. Research into Heterosexual Behaviour with Implications for the Spread of AIDS. *British Journal of Family Planning* 13 : 50-54.

_____. 1988a. *A Survey of the AIDS Awareness and Sexual Behaviour and Attitudes of Young People in Somerset*. Occasional Working Papers No.6. Exeter: Institute of Population Studies.

_____. 1988b. *A Survey of the AIDS Awareness and Sexual Behaviour and Attitudes of Young People in Bristol*. Occasional Working Papers No.7. Exeter : Institute of Population studies.

Gagnon, J.H., and W. Simon. 1973. *Sexual Conduct*. Chicago : Aldine.

Hyde, J.A. 1986. *Understanding Human Sexuality*. London : McGraw Hill.

Institute for the Advanced Study of Human Sexuality (IASHS).1986. *Safe Sex in the Age of AIDS*. New Jersey : Citadel Press.

Knox, E.G. 1986. A Transmission Model for AIDS. *European Journal of Epidemiology* 2: 165-177.

Lewis, N.D., and J.D. Mayer. 1988. Disease as a Natural Hazard. *Progress in Human Geography* 12: 15-33.

Liskin, L., and R. Blackburn. 1986. AIDS - A Public Health Crisis. *Population Reports* L : 193-228.

Morton, R.S. 1984. The Evolution of Venereology as a Specialty. In *Sexually Transmitted Diseases*. K.K. Holmes et al., (ed.). London : McGraw Hill : 30-35.

Peplau, L.A., Z. Rubin, and C.T. Hill. 1977. Sexual Intimacy in Dating Relationships. *Journal of Social Issues* 33:86-109.

Potts, M. 1988. The Most Presumptuous Pox - AIDS and Contraception. *British Journal of Family Planning* 13: 144-147.

Reiss, I.L. 1981. Some Observations on Ideology and Sexuality in America. *Journal of Marriage and the Family* 43 : 271-283.

Selvin, M. 1984. Changing Medical and Societal Attitudes toward Sexually Transmitted Diseases : A Historical Overview. In *Sexually Transmitted Diseases*. K.K. Holmes et al., (ed.). London : McGraw Hill : 3-19.

Wellings, K. 1986. Trends in Contraceptive Method Usage Since 1970. *British Journal of Family Planning* 12 : 57-64.