

CONTEMPORARY PATTERNS OF ADOLESCENT SEXUALITY IN URBAN BOTSWANA

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Summary. In Botswana, as in other areas in southern Africa, there is a growing concern about the risks associated with adolescent sexuality. To facilitate the design of policies that can address these problems, it is necessary to gain a thorough understanding of contemporary patterns of adolescent sexual behaviour, and the factors that affect them. This paper examines these issues using data from the 1995 Botswana Adolescent Reproductive Health Survey in conjunction with data from focus group discussions. The results suggest that adolescents become sexually active at an early age, and that many of them, males and females alike, have multiple sex partners. This early sexual initiation implies that adolescent reproductive health programmes should target youths aged 13 or younger. For school-based programmes this implies starting no later than Grade 6 or Standard 1, and preferably earlier. Young males appear to be a particularly vulnerable group that needs further attention. Adolescents perceive that teachers, peers and parents have the largest influence on their reproductive health attitudes. Schools appear to have the most potential for providing reproductive health information, because they reach youths both directly and indirectly by educating their peers. The results also show that male and female sexual behaviour is affected by different factors. Among males, having secondary education strongly increases the odds of being sexually active, presumably because such males make attractive partners. Among females, on the other hand, being in school significantly reduces the odds of being sexually active. This finding is consistent with the policy imposing a one-year school expulsion for pregnant schoolgirls, which was implemented as a deterrent to schoolgirl pregnancy.

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Introduction

In Botswana, adolescent sexual relations are associated with high levels of pregnancy-related school dropouts, abortions and HIV transmission (Dynowski-Smith, 1989; Ingstad, 1994; Lesetedi *et al.*, 1989; NIDRD, 1988). Sexual initiation typically happens at an early age. More than three out of four never-married women, and nearly half of those aged 15–17 are sexually experienced. Yet use of family planning methods is said to be low, leading to a high percentage of never-married mothers, ranging from 12% for ages 15–17 to 33% for ages 18–19, to over 60% for ages 20–24 (Gage & Meekers, 1993, 1994). Pregnancy accounts for over half of all female school dropouts. It is estimated that among a cohort of female Standard 1 students, 10% drop out of school due to pregnancy before completing primary school, and over 40% before completing secondary school (Meekers & Ahmed, 1999). While there are no statistics on abortions among adolescents, the level is believed to be high (Dynowski-Smith, 1989). Youths also have a high risk of HIV infection. One out of six sexually active adults is HIV positive (Modisaotsile, 1995; Rahman, 1995), and a large share of new infections occurs in young people. These recent social problems demonstrate the need and urgency of enhancing our understanding of the factors affecting contemporary sexual relationships.

This paper briefly reviews the ethnographic literature on the cultural and religious norms about sexual behaviour among the Tswana (who make up the large majority of the population of Botswana; see Campbell, 1995, and Kalule-Sabiti, 1995). Data from the 1995 Botswana Adolescent Reproductive Health Survey are used in conjunction with recent focus group data to describe patterns of sexual behaviour and the factors affecting adolescent sexual activity.

Background

Traditional norms regarding female sexual behaviour have been altered by Western influences, including Western religion, mass education, mass media and modern family legislation (Letamo, 1993; Motshologane, 1978). These changes have led to a new concept of sexuality, based on romantic love and increasing levels of sexual permissiveness. The resulting contemporary patterns of sexual behaviour deviate from traditional cultural norms, but also from modern Western norms.

Traditionally, the Tswana instructed adolescents about sexual behaviour during their initiation ceremonies. Out-of-wedlock childbearing was deviant, and premarital sexual relations were condemned and punished. Tswana marriages were arranged and youths were not allowed to choose their prospective spouses. A marriage was not valid unless bridewealth, *bogadi*, was transferred from the family of the groom to the family of the bride. To prevent premarital sex, young people were given few opportunities to associate. Young men spent extended periods of time working at far-away cattle-posts while unmarried women remained in the village with their mother, with whom they shared a hut at night. Child betrothals for girls further prevented premarital sexual activity (Comaroff & Roberts, 1977; Griffiths, 1990; Kalule-Sabiti, 1995; Krige & Comaroff, 1981; Letamo, 1993; Schapera, 1971; Letamo, 1984).

Due to Western influences, these traditional means of control of premarital sexual behaviour have weakened. Young people can meet in schools, at trading stores, and at dances (Motshologane, 1978; Schapera, 1971). Many adolescents grow up in single-parent households (Kalogosho, 1995), where parental control of adolescent sexual behaviour may be more difficult. Due to the influence of Christianity, the traditional initiation ceremonies have been abandoned, thereby creating a gap in family life education (Schapera, 1971). Even the most religious young people do not regard it as wrong to have premarital sexual relations, provided that they can avoid conception.

The socialization of Tswana youths has partly become the responsibility of the educational system (Letamo, 1993). Nevertheless, there has been some concern that providing family life education in schools may perpetuate the problem (NIDRD, 1988). Thus far, schools have not been able to control premarital sexual activity and pregnancy. The Ministry of Education requires pregnant schoolgirls to drop out of school for one year (Quansah, 1995). This rule has not been effective in deterring premarital pregnancy (Griffiths, 1990; Meekers & Ahmed, 1999), but the recent incorporation of family life education in the school curriculum may help better prepare adolescents for adult life and increase more responsible sexual behaviour.

Nowadays, Christian marriages, which have incorporated the custom of *bogadi*, are common, and many people respect individual partner choice. Magistrate marriages, which do not require parental consent, allow young couples to engage in love marriages. However, many people wait years before they marry, and many do not marry at all. Cohabiting unions are easy because no permission from relatives is required, inexpensive because no ceremony is involved and flexible because either partner can terminate the relationship at will. Often couples engage in a visiting union until they have one or more children. After the birth of a child, the couple may start living together, and may have a church, legal or traditional marriage (Ingstad & Saugestad, 1984; Ingstad, 1994). Some choose to remain unmarried even after they have children. A woman may do so because an unmarried woman who becomes pregnant can claim compensation for seduction and because her children can take care of her in old age (Griffith, 1990). Men may be discouraged from marrying the mother(s) of their children because their own parents need their labour and financial assistance (Gulbrandsen, 1986).

Originally, these patterns of non-marital unions and non-marital childbearing appear to have resulted from the sex imbalance resulting from male labour migration (Ahmed, 1993; Brown, 1980; Izzard, 1982, 1985; Timaeus & Graham, 1989). Many males work at distant cattle-posts or as wage labourers in urban areas. Hence, a Tswana village typically has a surplus of women (Brown, 1980; Izzard, 1982, 1985; Schapera, 1971, 1984; Timaeus & Graham 1989). This sex imbalance affects patterns of sexual behaviour (Ahmed, 1993).

However, the current situation seems to be rooted in a new set of values related to sexuality, marriage and the family. In contemporary Tswana society, it is accepted that youths will be fully sexually experienced. Few women are virgins upon marriage, although they must be discreet in their love affairs. Youths who are unable to find a lover are disrespected by their peers (Gulbrandsen, 1986; Schapera, 1971). Parents may even condone premarital sexual relationships. Calling on a girl is part of modern

courtship. If an unmarried woman accepts a young man as her lover, he is expected to visit her regularly, and it is considered good form for the parents to leave them alone. Such informal relationships may last as long as a year. Following engagement a girl's fiancé is expected to visit her at night, and they will sleep together without objection from her parents (if that was not already the case).

Several other factors help explain contemporary premarital sexual relationships (Griffiths, 1990; Kalule-Sabiti, 1995; Mulindi, 1992; Schapera, 1971; Solway, 1990). The decline of polygyny and the absence of many young men at labour centres reduce the chances that women can marry early, and make them more willing to accept the advances of a lover. With the increasing emphasis on monogamy, young women may have sex with a man to prevent him moving to another woman, or to prove to him that she is able to bear children. Financial hardship and aspirations may further entice young women (and sometimes young men) to engage in premarital sexual relationships with partners who can provide for them, including older 'sugar-daddies' and 'sugar-mummies'. Cash income from wage migration makes it easy for men to attract and seduce women.

Data and methods

The analyses presented in this paper are based on sample survey data and focus group data. The survey data analysis is based on the 1995 Botswana Adolescent Reproductive Health Survey (BARHS). The survey was conducted in October 1995 by SIAPAC for Population Services International (for details, see Botswana Social Marketing Programme, 1996). The BARHS survey contains reproductive health information on a random sample of 2410 males and females aged 13–18 living in the urban townships of Lobatse and Francistown. Both townships have many similarities, particularly in terms of ethnic composition (almost exclusively Tswana), level of urbanization, immigration, access to government services and HIV prevalence.

In each of the two townships, respondents were selected using a multi-stage sampling design. First, 30 enumeration areas were selected using maps with numbered households. In each area a starting household was identified for inclusion in the sample. Additional households were selected using a pre-designed walk pattern. Next, within each selected household one eligible respondent (aged 13–18) was selected for interviewing. If the selected household contained more than one eligible respondent, the respondent who would have his or her birthday next was selected. Interviewers made up to three attempts to conduct an interview. Interviewing continued until approximately 1200 respondents in each township had been interviewed. In the analysis, 33 of the 2410 interviews were dropped due to missing values on the key control variables, resulting in a working sample of 2377 respondents.

A description of the sample is shown in Table 1. By design, a roughly equal number of interviews were conducted in Francistown and Lobatse (1155 and 1222 respectively). Just over 50% of the respondents were females, 41% of respondents were aged 13–14, 27% aged 15–16 and 32% aged 17–18. The majority of respondents were enrolled in school at the time of the survey (76%), and 53% of all respondents had attended secondary school. Nearly two out of three respondents (63%) reported living in a female-headed household. Even though information on marital status was not

Table 1. Characteristics of the sample

	Township		Total
	Francistown	Lobatse	
Age			
13–14	37.6	44.4	41.1
15–16	25.7	27.2	26.5
17–18	36.7	28.4	32.4
Gender			
Female	50.4	50.8	50.6
Male	49.6	49.2	49.4
School enrolment status			
Not in school	18.4	29.5	24.1
In school	81.6	70.5	75.9
Secondary education			
No	39.7	53.1	46.6
Yes	60.4	46.9	53.4
Female-headed household			
No	34.3	40.0	37.2
Yes	65.7	60.0	62.8
No. of cases	1155	1222	2377

collected, given the mean age at union of 19.6 for females and 26.6 for males (Lesthaeghe, Kaufmann & Meekers, 1989), it can be safely assumed that few, if any, respondents are married or living together. Overall, the Lobatse and Francistown samples look similar, although respondents in the latter township tend to be a bit younger, and hence more likely to be in school.

Qualitative information is obtained from focus group interviews on the causes and consequences of schoolgirl pregnancy in urban Botswana. The interviews were conducted in December 1995, on the premises of the University of Botswana in Gaborone. Separate interviews were conducted with a group of seven male second-year university students, and with a group of five female second-year university students. All focus group participants were Tswana aged 19–22. Both discussion sessions were conducted in English (the *lingua franca* in urban Botswana), and moderated by one of the investigators and an assistant. These focus group interview data are used to illustrate adolescents' motivations for engaging in sexual relationships, and to illustrate the potential role of parents and the educational system.

The first part of the analysis examines male and female patterns of adolescent sexual behaviour among urban Tswana. Dependent variables of interest include the percentage of male and female adolescents who are sexually experienced and their number of regular and irregular sexual partners during the past year. The second part of the analysis describes adolescents' perceptions of the advantages and risks of becoming sexually active, and the third part focuses on the sources of information that influence adolescents' reproductive health attitudes. Finally, multivariate logistic

regression analyses are used to examine the effect of schooling variables, household headship and sources of reproductive health information on the likelihood that an adolescent is sexually experienced.

Youths living in female-headed households are expected to be more likely to engage in sexual relations, because they are said to experience reduced parental control. The effect of being in school on sexual activity is not yet clear. On the one hand, females attending school are expected to be less likely to engage in sexual relations, for fear of pregnancy-related school dropouts (or expulsion). On the other hand, females who are in school are expected to be more prone to having affairs with sugar-daddies, who can help them pay their school fees. Neither of these factors is expected to affect males. Being in school also increases interaction with persons of the opposite sex, and reduces parental control. Youths who have attended secondary school have had higher levels of exposure to family life education, which should encourage responsible sexual behaviour. However, males who have attended secondary school may have higher levels of sexual activity because they tend to be more attractive sexual partners.

It is also important to examine how various persons and institutions may influence adolescent sexual behaviour. Parents and religious leaders generally disapprove of adolescent sexual activity, particularly for girls, but the literature suggests that they are rather passive, so their impact is expected to be limited. The media, peers and siblings are expected to promote Western values regarding romantic love and sexual permissiveness.

Findings

Patterns of adolescent sexual behaviour

Although there are growing concerns about the rapid increase in HIV infections, schoolgirl pregnancies and the economic difficulties of unmarried parents and their children, few statistical data are available on adolescent sexual behaviour, particularly for males. The BARHS data allow light to be shed on this issue. Table 2 shows the percentage of Tswana adolescents who are sexually experienced. As expected, the percentage of adolescents who have had sexual intercourse is low for the youngest age group, but increases rapidly with age. The results also show clearly that males tend to become sexually active at an earlier age than is the case for females. Comparison of males and females aged 15–16 shows that 41% of males in this age group are sexually experienced as opposed to only 15% of females. By ages 17–18, this gender gap has virtually disappeared (70% vs 65%, respectively).

The literature attributes this early sexual activity at least in part to diminished parental control over the sexual behaviour of unmarried adolescents (Dynowski-Smith, 1989). Focus group interview participants also argue that female-headed households are associated with diminished control of teenage sexual behaviour:

‘Kids will do anything they like, because the [single] mother won’t be able to exert control over them [...] They meet people, they meet men from outside. And these men, they sweet-talk them. And like, at the end of the day they get pregnant (male Tswana student).’

Table 2. Percentage of male and female adolescents who are sexually experienced (Francistown and Lobatse, 1995)

	13-14		15-16		17-18		Total	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Females								
Education								
<Secondary	0.9	438	14.5	76	73.6	53	9.5	567
Secondary+	4.4	68	14.8	210	63.7	358	41.2	636
Student								
No	1.4	73	26.3	80	74.5	243	51.3	396
Yes	1.4	433	10.2	206	51.2	168	14.0	807
Household head								
Male	1.1	186	16.5	115	65.0	137	25.1	438
Female	1.6	320	13.5	171	65.0	274	26.9	765
All females	1.4	506	14.7	286	65.0	411	26.3	1203
Males								
Education								
<Secondary	3.7	408	25.7	101	51.6	31	10.6	540
Secondary+	11.1	63	47.1	242	71.7	329	56.3	634
Student								
No	3.2	63	25.0	48	75.8	66	36.2	177
Yes	4.9	408	43.4	295	68.7	294	35.2	997
Household head								
Male	3.4	207	37.7	122	71.2	118	30.7	447
Female	5.7	264	42.5	221	69.4	242	38.1	727
All males	4.7	471	40.8	343	70.0	360	35.3	1174

The results shown in Table 2 indicate that male adolescents living in a female-headed household are slightly more likely to be sexually experienced (38% vs 31%), but for females there is very little difference (27% vs 25%). Moreover, when controlling for age there is no consistent pattern. In other words, after controlling for age the survey data do not provide any support for the claims that children of female-headed households exhibit less responsible sexual behaviour.

Interestingly, the results also show that education affects males and females differently. For females, when controlling for age the level of education attained has no clear impact on the likelihood of being sexually experienced, but being enrolled in school does. The percentage of females who are sexually experienced is much lower for those females who are enrolled in school than for those who are not (10% vs 26% for ages 15-16 and 51% vs 75% for ages 17-18). This effect may be caused by the combination of a relatively small number of pregnancy-related school dropouts, female boarding schools, and deliberate efforts to avoid sexual relations while in school.

For males, the opposite pattern emerges. That is, being in school does not have a consistent effect on sexual experience, but level of education does. It is noteworthy

Table 3. Percentage distribution of sexually experienced adolescents, by number of type of sexual partners during the last year (Francistown and Lobatse, 1995)

	Females	Males
Regular partners		
None	28.5	22.5
One	64.8	61.3
Two+	6.7	16.2
Irregular		
None	41.1	38.7
One	32.6	34.9
Two+	26.3	31.3
All partners		
None	24.1	15.2
One	19.3	21.8
Two+	56.7	63.0
No. of cases	270	395

Note: 46 sexually experienced females and 19 sexually experienced males omitted due to missing values.

that the policy requiring pregnant schoolgirls to drop out of school for one year does not affect young men (in theory, they can be expelled, but in practice this rarely happens). The results also indicate that male adolescents with secondary education are much more likely to be sexually experienced than those with lower levels of education, even after breakdown by age. The latter finding is consistent with arguments that males from higher socioeconomic groups find it easy to attract girls. In addition to having a high educational status, which makes them attractive marriage partners, these young males are likely to be relatively well off.

The distribution of adolescents by number and types of partners during the last year is shown in Table 3. Overall, 24% of sexually experienced females ($n=270$) and 15% of sexually experienced males ($n=395$) reported that they did not have a sexual partner in the past year. The majority of both males and females reported that they had two or more partners in the past year. Even though it is often believed that males tend to be more sexually active than females, the percentages of males and females who had two or more partners are very close (63% and 57% respectively).

Respondents were also asked about their number of casual and regular partners. The WHO/GPA standard definition of a regular partner is someone with whom one has had a relationship for more than one year. This definition is problematic for adolescents, because the long time period implies that the majority of relationships are classified as casual, thereby making it difficult to differentiate between high-risk and low-risk relationships. To overcome this problem, this study defined a casual partner

as someone with whom one did not have or does not plan to have a serious relationship, while a regular partner is defined as a partner with whom one does have or intends to have a serious relationship. Breakdown by type of sexual partner (regular vs casual) shows that it is common for both males and females to have one or more irregular sexual partners. For example, 33% of females reported having one casual partner in the past year, and 26% reported having two or more casual partners. For males, the corresponding figures are 35% and 31% respectively. By contrast, only 7% of females and 16% of males reported having two or more regular partners. Comparison of the findings for regular and casual partners indicates that a considerable share of youths have regular as well as casual partners.

Perceived advantages and risks of becoming sexually active

The above findings demonstrate that the traditional norms prescribing premarital abstinence are no longer adhered to, and suggest that different values operate in contemporary Tswana society. Contemporary values are now examined that may respectively encourage and discourage sexual activity. All respondents were asked to list what they believed were the good things about being sexually active for youths. The question was open-ended. Up to three responses were recorded. The results are shown in Table 4. Despite the earlier noted high levels of sexual activity, only 11% of females and 23% of males indicated that there were good things about being sexually active. Those in the older age group (aged 17–18), among whom the majority were sexually experienced, were better able to articulate the good things about being sexually active. However, even among this group only 19% of females and 41% of males reported that there are any good things about being sexually active.

Although very few females believe there are good things about being sexually active, the most commonly mentioned are love and pleasure (10% and 9% respectively for those aged 17–18). For males, love, pleasure and status clearly stand out as the most important reasons for becoming sexually active (21%, 26% and 18% respectively for ages 17–18). Marriage and childbearing, which were such important status indicators in traditional society, are each mentioned by only 2% of all females and 1% of males.

In the focus group interviews, respondents strongly emphasize that female (but not necessarily male) sexual activity is often motivated by economic factors:

‘We are living at times when, you know, when you are teenagers you have to dress, you have to get something, you have to be . . . You know, there is sort of a standard you have to live up to [...]. And you know parents cannot afford to give their kids all this. And, you know it is like kids are forced somehow. They feel that they have to live up to that standard. That is why they end up meeting people and get pregnant. You would not find a teenager going out with a man who can't give them anything (female Tswana student).’

‘Nowadays, everyone wants money [...] Young women, they want a guy who has money, who has a good car, who has a BMW or Mercedes-Benz, who can take care of them, who can provide for them (male Tswana student).’

The low percentage of respondents who report any advantages of becoming sexually active appears inconsistent with the relatively high level of adolescent sexual

Table 4. Percentage of male and female adolescents reporting various good things about youths being sexually active (Francistown and Lobatse, 1995)

	13-14 %	15-16 %	17-18 %	Total %
Females				
Any advantages	4.9	9.1	19.0	10.7
Pleasure	1.0	2.8	8.5	4.0
Children	1.2	1.8	2.2	1.7
Marriage	1.2	1.1	4.9	2.4
Love	2.0	5.6	10.0	5.6
Status	0.8	2.8	4.6	2.6
Money	0.0	0.0	0.2	0.1
No. of cases	506	286	411	1203
Males				
Any advantages	6.6	28.0	40.6	23.3
Pleasure	3.6	11.1	21.1	11.2
Children	0.6	2.3	1.7	1.5
Marriage	0.0	1.8	1.7	1.0
Love	3.2	14.3	25.6	13.3
Status	1.3	10.2	17.8	8.9
Money	0.0	0.0	0.0	0.0
No. of cases	471	343	360	1174

Note: multiple response question.

activity in Tswana society. However, given the major efforts to reduce the spread of the HIV virus, teenage sexual activity may be discouraged by the knowledge of the potential negative consequences. Respondents were asked if people who become sexually active face any risks, and if so, to identify these risks (up to three responses were recorded). Table 5 shows the results. While few youths were able to identify the good things about being sexually active, 84% of females and 84% of males identified at least one risk of being sexually active. Even among those in the youngest age group (ages 13-14), 81% of females and 68% of males reported that being sexually active implies certain risks.

Among female adolescents, pregnancy is the most often mentioned risk of sexual activity for all age groups. Even among women aged 13-14, more than three out of four women (76%) are aware that sexual activity may lead to pregnancy. Among males, awareness of the risk of pregnancy is also high (62% overall), but becomes widespread a little bit later, mostly after age 15. Only 38% of males aged 13-14 noted that pregnancy is a risk of sexual activity, compared with 74% for ages 15-16 and 81% for ages 17-18.

Both males and females are well aware that sexual activity involves the risk of contracting AIDS and other sexually transmitted diseases (71% of females and 79% of males). For both males and females the percentage increases with age, but even

Table 5. Percentage of male and female adolescents reporting various risks associated with becoming sexually active (Francistown and Lobatse, 1995)

	13-14 %	15-16 %	17-18 %	Total %
Females				
Any risks	80.6	87.1	87.8	84.6
Stigma	0.2	1.1	0.7	0.6
Pregnancy	76.3	79.2	80.8	78.5
STD/AIDS	64.2	75.9	77.9	71.1
Pain	0.2	0.0	0.0	0.1
None	5.9	4.6	6.6	5.8
No. of cases	506	286	411	1203
Males				
Any risks	67.9	93.9	96.9	84.4
Stigma	1.7	0.9	4.7	2.4
Pregnancy	37.6	74.1	80.8	61.5
STD/AIDS	60.5	88.9	91.9	78.5
Pain	0.6	2.9	1.9	1.7
None	10.8	2.9	1.4	5.6
No. of cases	471	343	360	1174

Note: multiple response question.

among the youngest age group, 64% of females and 61% of males are aware of the risks of sexually transmitted diseases. The findings strongly suggest that recent HIV prevention campaigns, and related campaigns, have been extremely successful in reaching and informing young adolescents about reproductive health risks, and indicate that these efforts should be continued. A very small percentage of youths indicate that sexual activity can cause youths to be stigmatized, and a few youths also mentioned that having sex could be painful.

Perceived factors affecting reproductive health attitudes

While these values represent a clear break with what was prescribed in traditional society, it is evident that these values are not (yet) consistent with contemporary patterns of sexual behaviour among Tswana teenagers. It may therefore be helpful to examine which sources influence adolescents' reproductive health attitudes. Focus group interviews suggest that parents are a less important source of information than schools. Parents may not (or not yet) be able to successfully influence adolescent reproductive health attitudes and behaviour because parents typically do not discuss such issues with their children, but rather leave this up to the teachers:

'It is not everybody in our society who can just sit down with their kids and talk about sex and related matters. But I think still that parents should learn to accept the situation as it is now [...] Parents should face reality. Parents should begin to talk to

Table 6. Percentage of male and female adolescents who perceive being influenced by various sources of reproductive health information (Francistown and Lobatse, 1995)

	13–14 %	15–16 %	17–18 %	Total %
Females				
Any source	93.5	94.8	93.7	93.8
Peers/siblings	52.6	53.5	59.4	55.1
Parents	57.5	60.1	60.8	59.3
Family members	30.6	36.0	28.5	31.2
School	42.9	36.7	25.6	35.5
Media	0.0	0.4	0.7	0.3
Health sector	8.9	15.0	15.1	12.5
Religion	1.4	0.7	1.0	1.1
Partner	0.0	1.8	3.7	1.7
No. of cases	506	286	411	1203
Males				
Any source	57.5	87.2	94.4	77.5
Peers/siblings	19.1	31.8	35.0	27.7
Parents	27.4	28.9	37.5	30.9
Family members	9.1	12.2	20.0	13.4
School	23.1	52.2	55.0	41.4
Media	7.6	24.2	31.9	19.9
Health sector	6.2	22.5	20.6	15.3
Religion	0.0	1.2	1.1	0.7
Partner	0.0	2.6	4.7	2.2
No. of cases	471	343	360	1174

Note: multiple response question.

their own children, if they can [...] They think it is the duty of the teachers (Tswana female).'

'In most cases, we are not taught about reproduction at home. It is totally left to the teachers. The parents, I don't know whether they are shy to talk about it (Tswana male).'

The survey questionnaire asked respondents which information sources or persons they considered to have been most influential regarding their attitudes towards reproductive health. Up to three responses were recorded. Table 6 summarizes the results of their perceptions of factors influencing their reproductive health attitudes. This table shows the percentage of adolescents who indicate their reproductive health attitudes were mostly influenced by peers or siblings, parents, other family members, school, the media, religion, health professionals and by their partner.

Overall, 94% of teenage females list a source that they perceive influenced their reproductive health attitudes. Females are most likely to report that their reproductive health attitudes have been influenced mainly by parents (59%), by peers or siblings

(55%) and other family members (31%), with only minor differentials by age. At first glance, the large influence of peers and siblings on female reproductive health attitudes may appear surprising, but one should keep in mind that peer influence might also discourage female sexual activity.

Schools have a substantial influence as well (mentioned by 36% of females), but that influence steadily diminishes with age, suggesting that the influence of schools diminishes when adolescents leave school. Only 13% of females perceive their reproductive health attitudes to be influenced by health sector personnel. The influence of media, religion and male partners on female reproductive health attitudes is negligible.

Males are less likely than females to indicate a source that they perceive to have influenced their reproductive health attitudes (78% overall), especially young males. Among males aged 13–14 only 58% mentioned such a source.

Males perceive that their reproductive health attitudes are being influenced by peers and siblings (28%) and parents (31%), but the influence of these sources increases with age. For example, the percentage of males reporting that peers and siblings influence their attitudes increases from 19% for the age group 13–14, to 32% for 15–16, to 35% for those aged 17–18. Likewise, the percentage of males influenced by schools increases rapidly with age, from 23% for the age group 13–14 to 55% for the age group 17–18. Other family members are not a very important source of influence, being mentioned by only 13% of males.

Unlike for females, the media has quite an important impact on male attitudes, especially for older ones. The percentage of males who perceive that their reproductive health attitudes are influenced by the media ranges from 8% for ages 13–14 to 32% for ages 17–18. Among males aged 15 and older, about one in five believe that the health sector is an important factor affecting their attitudes regarding reproductive health, but among males aged 13–14 this influence appears negligible. Males perceive that religion and their female partners do not have a major influence on their reproductive health attitudes.

Factors affecting adolescent sexual experience

The factors affecting the likelihood that an adolescent is sexually experienced are now examined using logistic regression analyses. The results are presented in Table 6, for males and females. For males, the first model examines the effect of schooling indicators and of household headship, after controlling for age and place of residence. As suggested earlier, a male having secondary level education increases the odds of being sexually experienced, but neither current school enrolment nor the type of household has a significant effect. The second model shows the effect of various influences on reproductive health attitudes, after controlling for age and location. Males whose reproductive health attitudes are influenced by schools, the health sector, media or by their peers and siblings are more likely than others to be sexually experienced. Those who are influenced by their parents, on the other hand, are less likely to be sexually experienced.

The third model introduces all of these variables simultaneously. The results presented in Model 3 show that having secondary education more than doubles the

odds that a male is sexually experienced, even after controlling for age and other factors, but being enrolled in school or being raised in a female-headed household has no significant impact. Males who report being influenced by school, the health sector and the media are significantly more likely to be sexually experienced, while those who are influenced by their parents are less likely to have had sexual intercourse. After controls, peers and siblings have no significant influence on the likelihood that a male is sexually experienced ($p < 0.10$).

Table 7 also shows the corresponding models for females. The results show that having secondary education has no significant effect on the odds that a Tswana female is sexually experienced. However, unlike the case for males, females who are currently enrolled in school are significantly less likely than other females to be sexually experienced. As yet, none of the sources of reproductive health information has a significant effect on female sexual behaviour. The finding that there are such striking differences in the factors affecting male and female adolescent sexual activity has important policy implications and merits further investigation.

Conclusion

Throughout southern Africa there is a growing concern about the risks associated with adolescent sexual activity, particularly regarding unwanted pregnancy (including pregnancy-related school dropouts and the social and economic implications of unmarried parenthood) and the risk of HIV transmission. To help facilitate the design of policies to deal with the problems of today's adolescents, it is necessary to gain a thorough understanding of the contemporary patterns of adolescent sexual behaviour, as well as the factors that affect them. This paper addressed these issues using information from the 1995 Botswana Adolescent Reproductive Health Survey in conjunction with focus group interviews.

A number of important findings emerge from this study. First, the data show that Tswana adolescents become sexually active at an early age. This is the case for females and males alike, although males become sexually active at an earlier age than females. Among adolescents 15–16 years of age, four out of every ten males are sexually experienced, as opposed to about one out of every seven females. By the time they reach age 17 the majority of both male and female adolescents are sexually experienced. In other words, most youths are exposed to reproductive health risks. This implies that adolescent reproductive health programmes should focus on very young age groups. In order to reach youths before they become sexually active, these programmes should target youths approximately 13 years of age. For schools, this implies that intensive family life education courses are needed in the first year of junior secondary school. Moreover, given that it is not uncommon that 13-year-olds are still in primary school, such courses should also be taught in the final years of primary school.

This study also shows that many youths have irregular sexual partners, which may increase their risk of contracting a sexually transmitted disease. Among sexually experienced youths, 59% of females and 66% of males reported having at least one casual partner in the past year. Male focus group participants argue that males are expected to have multiple partners, but that females are not. However, the survey

Table 7. Odds ratios of being sexually experienced (adolescents aged 13–18, Francistown and Lobatse, 1995)

	Males			Females		
	(1)	(2)	(3)	(1)	(2)	(3)
Secondary+education	2.785***		2.517***	1.241		1.198
In school	0.958		0.814	0.373***		0.396***
Female head of household	1.146		1.142	1.010		1.045
Influence on reprod. health attitudes						
School		1.892***	1.572***		0.657**	0.762
Health sector		1.798***	1.703**		1.331	1.283
Religion		0.554	0.524		0.231	0.237
Media		1.715***	1.643**		0.296	0.440
Peers/siblings		1.526**	1.402*		1.026	1.014
Parents		0.601***	0.530***		1.324	1.338
Family		1.160	1.083		0.925	0.988
Age	2.035***	2.285***	2.006***	3.001***	3.369***	3.007***
Lobatse	1.226	1.087	1.072	0.697*	0.816	0.684**
No. of cases	1174	1174	1174	1203	1203	1203

*p<0.10; **p<0.05; ***p<0.01.

data show that both males and females often have multiple sexual partners. The difference between males and females is unexpectedly small, with 57% of sexually experienced females reporting they had two or more partners in the past year, compared with 63% for males.

These patterns of adolescent sexual behaviour represent a clear break with the traditional norms regarding sexual behaviour. The data further show that today's adolescents do not think becoming sexually active is advantageous because it may lead to marriage or offspring (although that could be important later in life). Few youths are able to list specific advantages of being sexually active, but among those who do, pleasure, love and status appear most important.

The large majority of both male and female adolescents recognize that becoming sexually active involves reproductive health risks, including pregnancy and infection with the HIV virus or other sexually transmitted diseases. This finding is important, as several recent HIV prevention campaigns, as well as the recent incorporation of family life education in the school curriculum, aim to educate youths about these issues. These results suggest that the reach of these programmes is good, although more effort needs to be devoted to educating young males (aged 13–14) about the risks of pregnancy.

In Botswana, as in many other African countries, there is considerable debate about the question of who is responsible for providing adolescents with the necessary reproductive health information. In the past, such information was routinely provided by means of the initiation ceremonies, but today that is no longer the case, and adolescents need to obtain such information from other sources. This study indicates that female adolescents appear most responsive to information provided by peers, parents and teachers. Males, on the other hand, are most responsive to information obtained from schools (especially when they are older), and to a lesser extent to information from parents, peers and the media. Most importantly, unlike females, males become more responsive to these sources of information as they get older. These findings suggest that schools probably have the most potential for providing reproductive health information to both male and female adolescents. Expanding and improving reproductive health information through schools will also have an important indirect effect, because high-quality information provided through schools is likely to also improve the quality of the information youths obtain from their peers.

The finding that young males appear to respond little to any of these sources of reproductive health information suggests that it may be worthwhile for policymakers to devote more efforts to target these younger males. As noted above, one way of doing this may be by teaching intensive family life education earlier in the school curriculum.

Finally, the analyses show that male and female adolescent sexual activity is affected by very different factors. After controlling for other factors, male adolescents are more likely to have engaged in sexual relations if they have secondary level education. This was expected, as such males tend to be more attractive sexual partners. Males are also more likely to have engaged in sexual relations if their reproductive health attitudes are influenced by information from teachers, health workers or the media. These findings are consistent with the fact that both the media and the educational system emphasize values of romantic love, which often include

sexual activity. It is therefore important to ensure that these sources of information also promote family planning and safe sex. As expected, males who are influenced by their parents are less likely than others to have been sexually active.

Female sexual behaviour, on the other hand, is not influenced by these factors. None of the indicators of influences on reproductive health attitudes is significant, and in many instances the effect is in the opposite direction than is the case for males. Likewise, having secondary level education does not significantly increase the likelihood of a female being sexually active, but those girls who are enrolled in school are less than half as likely to have had intercourse than those who are not in school. This finding is consistent with the policy that schoolgirls who become pregnant need to drop out of school for one year, a policy that was implemented as a deterrent to schoolgirl pregnancy. The potential selection bias, caused by sexually active girls who become pregnant not being students, is unlikely to have a significant effect on this finding, as the annual pregnancy-related dropout rate is only about 3% for secondary schools, and less for primary schools (Meekers & Ahmed, 1999). Furthermore, scattered evidence indicating that most schoolgirl pregnancies are conceived not during the school year, but rather during school breaks (Dynowski-Smith, 1989) confirms that being in school reduces the odds that a girl is sexually active. This finding shows that any fears that the school system may facilitate irresponsible sexual behaviour, because it implies less parental control and increased opportunities for interacting with someone from the opposite sex, are unfounded. In fact, the evidence suggests that the school system provides the most promising opportunity for teaching youths about responsible and safe sexual behaviour.

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