ORIGINAL ARTICLE

Awareness and use of and barriers to family planning services among female university students in Lesotho

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Background. Unwanted pregnancy and sexually transmitted infections (STIs) among young women can be prevented through dual protection (i.e. condom use plus another method). Unmet needs for contraception and rates of unintended pregnancy among young women are high in the developing world.

Aim. To assess the level of awareness of contraceptives and utilisation of family planning services among young women, and barriers that hinder effective use of such services.

Methods. In a quantitative descriptive survey, 360 female undergraduate students at the National University of Lesotho responded to a hand-delivered self-administered questionnaire.

Results. Awareness of family planning was high (97.5%). The condom was the most commonly known and used family planning method. The level of sexual experience and the prevalence of contraceptive use were high. Access to services was good. There were some misconceptions, e.g. that contraceptives other than the condom, such as natural family planning (4.7%), the vaginal ring (3.3%) and male or female sterilisation (2.8%), can prevent STIs. Married status was associated with current use of contraceptives, and having been formally taught about family planning was associated with the belief that it causes cancer. The unmet contraceptive need in the sample was 24.9%.

Conclusion. Levels of awareness and utilisation of family planning services are high among female students at the University of Lesotho. There is a need to introduce family planning teaching based on accurate facts into the school curriculum.

Unintended pregnancy, unsafe abortion and sexually transmitted diseases including HIV infection continue to be a major reproductive health problem, globally and in Africa.[1-4] Family planning can reduce the number of deaths among women by preventing unintended pregnancies, which account for about 30% of all births in sub-Saharan Africa.[5,6] In Lesotho almost one-third of currently married women have an unmet need for family planning, 11% for spacing their children and 20% for limiting childbearing. In 2004, 38% of births in Lesotho were unwanted and 12% were mistimed (wanted later), and 41% of all births to women under age 20 were unwanted.[7]

Providing sexual health and contraceptive services in an age-appropriate environment and manner is of importance to young women.[2] Barriers still remain to effective use of family planning services, especially in this age group,[7] among whom lack of adequate knowledge and awareness has been found to be associated with failure to use contraceptives.[1] Lack of detailed and accurate information on contraceptives has resulted in reluctance to adopt family planning methods, as some potential users want to know their side-effects and contraindications.[8-11] Among university students in Ethiopia only about 44% had ever heard about emergency contraceptives and less than 10% had accurate knowledge regarding when to use them.[10] In a study in Nigeria major factors that influenced the choice of contraceptives for users were convenience and effectiveness.[12]

Comprehensive sex education is often lacking and contraceptive use remains low among adolescents and young women.[13] The majority of sexually active adolescents and young women do not always use a condom.[14] The needs of young adults in this regard should be met by providing access to basic reproductive health information and youth-friendly services that will enable them to take control of reproductive health decisions.[15] Access to contraceptive services, including emergency contraception, will prevent the consequences of unprotected sexual intercourse such as unintended pregnancy and unsafe abortion.[10]

The aim of this study was to assess the level of awareness of contraceptives and utilisation of family planning services among young women in Lesotho, and barriers that hinder effective use of such services.

Method

Sample and procedure

The research design was a quantitative descriptive survey in which 363 female undergraduate students aged 18 years and over (mean age 22.6 years, standard deviation 3.4 years, range 18 - 40 years) from four randomly selected faculties (education, health sciences, humanities and social sciences) of the National University of Lesotho responded to a self-administered structured questionnaire. A simple and systematic random sampling was used to select participants for the study. Foreign students were excluded. The questionnaires were administered at all 8 female student halls of residence. A sampling interval of 3 was used. We also located sites where off-campus students were concentrated and administered the questionnaire to them, following a similar procedure.

Ethical clearance and approval to conduct this research was obtained from the Research, Ethics and Publication Committee of the National School of Public Health, University of Limpopo, the Medunsa Research Ethics Committee, MREC/PH/32/2009: PG, and the National University of Lesotho. Informed consent was obtained from study participants.

Measure

The structured questionnaire included five sections. Section A included 6 items on socio-demographic characteristics. Section B had 10 items on awareness and knowledge of contraceptives and family planning (e.g. 'Have you had any formal (classroom) teaching on family planning throughout your years of schooling?' and 'Which family planning method/s can prevent sexually transmitted infections and HIV/AIDS?'). Section C (12 items) explored the attitudes of participants to contraceptives and family planning (e.g. 'Practising family planning is associated with ... Having a happy family'). Response options in this section ranged from 1 = strongly agree to 5 = strongly disagree. Section D (9 items) covered experience with the use of family planning methods and services (e.g. 'Are you or your partner currently using any family planning method?'), and section E (16 items) covered barriers to family planning services (e.g. 'Have you ever been turned away/refused services by a family planning provider during working hours for any reason?').

The design of the instrument was guided by findings reported in the literature. The content validity of the questionnaire was ensured by using standardised reproductive health tools as a guide while preparing the questionnaire and through consultation with a senior researcher. The questionnaire was pre-tested with 20 university students (they were excluded from the study) and refined according to feedback.

Data analysis

Of 400 questionnaires distributed 363 were returned, giving a response rate of 90.8%. When the returned questionnaires were checked for completeness 3 were found to have missing pages, leaving 360 available for analysis. Epi Info was used for descriptive and chi-square statistics.

Results

Sample characteristics

Of the 360 female students whose responses were analysed, the majority (68.1%) were between 20 and 25 years old. More than three-quarters (78.6%) were single, and almost all were Christians (96.1%) and black Africans (97.8%). Over two-thirds of the participants had four or fewer siblings; 35% had one or two siblings, while 35.8% had three or four siblings (Table I).

Awareness of contraceptives and family planning

Awareness of contraceptives and family planning was 97.5% among respondents. The majority of the respondents (69.4%) had come to know about family planning while they were in the secondary school level of education. The most common first source of information about contraceptives and family planning was classroom discussion and teaching (57.8%), while the Internet was the least common first source (4.4%). Other sources of family planning information included health workers/hospitals, mass media, friends and relatives. More than half of the participants (55.8%) had had classroom teaching on family planning at one or more stages of their education. Secondary school was the most common level of classroom teaching, followed by the tertiary level of education and primary school. The majority of the respondents (92.8%) felt that contraceptive use and family planning should be taught in the classroom as part of the normal education curriculum. Approximately equal proportions of respondents thought that family planning should be taught at primary (43.1%) and secondary school (44.7%) (Table II).

Knowledge of contraceptive methods

Almost all the participants (99.2%) had knowledge of at least one modern contraceptive method. The most common methods known about were condoms (95.0%), the Pill (79.2%), injectables (75.6%) and

Table I. Socio-demographic characteristics of female students at the National University of Lesotho who completed the study questionnaire (*N*=360)

Variables		*N*	%
Age (yrs)	<20	55	15.3
	20 - 25	245	68.1
	26 - 30	45	12.5
	31 - 35	6	1.7
	>35	2	0.6
Faculty	Education	110	30.6
	Health sciences	55	15.3
	Humanities	54	15.0
	Social sciences	141	39.2
Marital status	Single	283	78.6
	Married	70	19.4
	Separated/divorced	4	1.1
	Widow	2	0.6
Religion	Christianity	346	96.1
	Islam	2	0.6
	Traditional	5	1.4
	Other	6	1.7
Ethnic group	Black African	352	97.8
	White African	3	0.8
	Other	1	0.3
Siblings	1 - 2	126	35.0
	3 - 4	129	35.8
	5 - 6	54	15.0
	≥7	20	5.6
	None or not stated	31	8.6

emergency contraceptive pills (61.4%), while the least known methods were the dermal patch (9.7%) and lactational amenorrhoea (10.8%) (Table III). Almost all the participants (96.7%) knew that condoms prevent sexually transmitted infections (STIs), including HIV, but some had the misconceptions that other contraceptives such as natural family planning (4.7%), the vaginal ring (3.3%) and male/female sterilisation (2.8%) can prevent STIs.

Attitudes towards family planning

The majority of the respondents correctly indicated the following as benefits of family planning: control of birth and child spacing (85.8%) and prevention of unplanned or unwanted pregnancy (93.6%). With regard to perceived negative effects of family planning use, half of the respondents (50.3%) believed that it could enhance unfaithfulness among married women, 40.6% that contraceptives are unreliable, 23.6% that they cause cancer, and 17.3% that family planning decreases sexual pleasure. The majority had positive attitudes towards family planning overall, agreeing with the following statements in rank order of frequency: 'Couples care for one another' (86.2%), 'Improves standard of living'

Table II. Awareness of contraceptives and family planning among female students of the National University of Lesotho (*N*=360)

Variables	*N*	%
Aware of contraceptives	351	97.5
Family planning use for birth control	349	96.9
Level of education at which subjects came to know about family planning		
Primary	55	15.3
Secondary	250	69.4
Tertiary	46	12.8
Sources of information on family planning		
Hospital/health workers	103	28.6
Mass media	172	47.8
Internet	16	4.4
Friends/relatives	169	46.9
Classroom	208	57.8
Formal class teaching	201	55.8
Level of formal teaching		
Primary	21	5.8
Secondary	151	41.9
Tertiary	33	9.2
Schools should teach family planning	334	92.8
Level of education at which family planning should be taught		
Primary	155	43.1
Secondary	161	44.7
Tertiary	21	5.8

Table III. Knowledge of contraceptive methods among female students of the National University of Lesotho (*N*=360)

	Affirmative responses	
Variables	***N***	**%**
Oral pills	285	79.2
Injectables	272	75.6
Intra-uterine device	135	37.5
Implants	94	26.1
Condom	342	95.0
Spermicides	116	32.2
Emergency pills	221	61.4
Dermal patch	35	9.7
Vaginal ring	88	24.4
Lactational amenorrhoea	39	10.8
Female sterilisation	147	40.8
Male sterilisation	141	39.2
Natural family planning	164	45.6
Don't know any	3	0.8

(85.7%), 'Protects mother's health' (83.5%), 'Having a happy family' (75.0%), 'Helps mother regain strength' (74.8%), 'Protects children's health' (72.2%), 'Loving with peace' (71.8%), 'Husband loves wife' (70.7%), 'Brings closer relationship' (55.9%), and 'Beauty lasts with few children' (51.5%).

Experience of participants with contraceptives and family planning

The majority of the respondents (55.3%) were currently using a contraceptive method. The condom was the most common, used by 47.2% of all respondents and 78.0% of current contraceptive users. The reasons for use among current family planning users were to prevent pregnancy (43.9%) and to prevent STIs (38.9%) (Table IV). One-third of respondents (36.7%) were not using any family planning method at the time of the study; of these, 15.2% were not using them because of fear of side-effects of modern contraceptives, 14.4% wanted to get pregnant, and over half were not sexually active (57.6%). Forty-two of the respondents (11.7%) had discontinued one or another form of contraceptive in the past because of side-effects of the method used.

Access and barriers to family planning services

About two-thirds of the participants (64.4%) indicated that they could easily access family planning services and 61% that services were always available to most of them. One-third was very satisfied with the services (32.5%) and one-quarter were partially pleased (22.5%). Only a few participants (6.4%) were not happy with the available family planning services. Most (77.8%) indicated that the services were close to them, the closest service centre being within walking distance for 48.1% and a 'taxi drop' for 31.1%. Two-thirds of the respondents (61.9%) were aware of the availability of family planning services on the university campus. Almost half of the respondents (42.2%) used health centres for family planning services, followed by dedicated family planning services (20.8%), public hospitals (10.6%), pharmacies (12.8%) and private hospitals (3.6%).

Thirty of the respondents (8.3%) had been denied services in the past. The common reasons for this were not menstruating at the time of seeking the service, too young to start contraception, not married, too many clients, or arriving late. The majority of those who used family planning services (76.8%) regarded the hours of the services as convenient, but 23.2% did not. Religion was a barrier to use of modern contraceptives or family planning services for 27.2% of respondents. Over half of the respondents (55.6%) had discussed family planning use with their partners before taking part in this study, while 19.7% who were in a relationship had never done so. Some of the reasons given for not discussing family planning with the partner included fear of losing the partner, losing the partner, or partner unwilling to engage in such discussion. Of the respondents 28.9% indicated that their family supported their use of family planning and 16.4% that the family did not. Over half of the participants (52.5%) considered that the costs of family planning services were acceptable, but it was slightly too expensive or too expensive for 19.2% (Table V).

Table IV. Experience of contraceptive use among female students of the National University of Lesotho (*N*=360)

Variables	*N*	%
Currently using contraceptives	199	55.3
Methods currently used		
Oral pills	17	4.7
Injectables	21	5.8
Intra-uterine device	2	0.6
Implants	1	0.3
Condom	170	47.2
Natural family planning	14	0.4
Emergency pills	16	4.4
Lactational amenorrhea	1	0.3
Female sterilisation	0	0
Male sterilisation	1	0.3
Dermal patch	0	0
Vaginal ring	0	0
Other methods		
Contraceptives used to	3	0.8
Prevent pregnancy	158	43.9
Prevent STIs/HIV	140	38.9
Enhance sexual performance	4	1.1
Treat gynaecological conditions	3	0.8
Reasons for non-current use		
Afraid of side-effect	20	15.2
Desire pregnancy	19	14.4
Feel can't get pregnant	7	5.3
Not active sexually	76	57.6
Prevent pregnancy by other means	10	7.6
Discontinued use because of side-effects	42	11.7

Socio-demographic characteristics and contraceptive use

Chi-square analysis showed that age, number of siblings, religion as a barrier to contraceptive use and having been formally taught about family planning at school were not significantly associated with current contraceptive use. However, married women had a more positive attitude towards current modern contraceptive use than unmarried women (Table VI).

Furthermore, there was found to be a significant association between having been taught about family planning and the belief that it causes cancer (χ^2=8.85, p=0.0029).

Table V. Barriers to effective access and use of family planning services among female students of the National University of Lesotho (*N*=360)

Variables	*N*	%
Denied FP services		
Yes	30	8.3
Religion as a barrier		
Yes	98	27.2
Discuss FP with partner		
Yes	200	55.6
Partner agree use of FP		
Yes	186	51.7
Family support use		
Yes	104	28.9
Money as hindrance		
Yes	51	14.2
Cost of services		
Too expensive	29	8.1
Little expensive	40	11.1
Acceptable	189	52.5
Don't know	96	26.7

FP = family planning.

Sexual activity and unmet contraceptive need

Of the 360 respondents, 76 were not sexually active. Of the 284 sexually active respondents, 199 were currently using a form of family planning and 19 wanted to become pregnant. There were therefore 65 sexually active respondents who were not on any form of contraceptive and did not want to become pregnant, giving an unmet contraceptive need of 24.9%.

Discussion

The level of awareness of family planning in this sample of university students was high (98.3%). This finding was similar to (though not comparable to) that in a general population sample from the Lesotho Demographic Health Survey of 2004,[7] which showed that about 97% of women aged 15 - 49 years knew about at least one contraceptive method. However, a high level of contraceptive awareness does not always equate with good knowledge.[16,17] Over two-thirds of the study respondents (71.2%) had come to know about family planning during their secondary school education, and this agrees with some previous findings.[12] The majority of the respondents (93.3%) felt that family planning should be taught formally in schools as part of the academic curriculum. Secondary school may be the most appropriate academic level for formal teaching about

Table VI. Association between socio-demographic factors and attitude to current use of modern contraceptive methods (*N*=360)

Variables	Attitude to current use of modern contraceptives: Positive (*N* (%))	Attitude to current use of modern contraceptives: Negative (*N* (%))	Chi-square value	*p*-value
Age (yrs)				
≥23	77 (61.1)	49 (38.9)		
≤22	115 (59.0)	80 (41.0)	0.15	0.7029
Total	192	129		
Marital status				
Married	50 (74.6)	17 (25.4)		
Not married	146 (57.0)	110 (43.0)	6.89	0.0087
Total	196	110		
No. of siblings				
≤4	136 (58.6)	96 (41.4)		
≥5	46 (64.8)	25 (35.2)	0.86	0.3531
Total	182	121		
Religion against modern contraceptives				
Against	55 (63.2)	32 (36.8)		
Not against	96 (60.4)	63 (39.6)	0.19	0.6617
Total	151	95		
Formerly taught FP at school				
Taught	116 (62.4)	70 (37.7)		
Not taught	81 (57.5)	60 (42.6)	0.81	0.3681
Total	197	130		

FP = family planning.

family planning, and this has been propagated by Family Health International in sub-Saharan Africa.[18]

The most commonly known and used methods of modern contraceptives were condoms, the Pill, injectables, emergency contraceptive pills, female and male sterilisation, and the intra-uterine contraceptive device (IUCD). The level of awareness of emergency contraceptives in this study (61.4%) was similar to levels in studies among African university students (43.5 - 58%),[10,19] but lower than among American college students (94%).[20]

Marital unfaithfulness, an increase in promiscuity, decreased sexual pleasure, causing cancer and unreliability perceived as potential negative results of family planning by some of the respondents in this study. Although an association has been found between the use of the combined oral contraceptive pill and cervical and breast cancer, a causal relationship does not exist.[21] Five years' use of oral contraceptives reduces the risk of ovarian cancer by about 50%.[22] Family planning is an effective means of preventing pregnancy, yet 40.6% of respondents thought that it was unreliable. This is probably due to problems resulting from actual use of contraceptives as opposed to the expected typical use, or may reflect misconceptions people have about modern contraceptives. The copper T IUCD is about 99.2% effective,[23] while effectiveness of the combined oral pill is about the same or better if used correctly.

The prevalence of contraceptive use in this study was 60.5%, and the condom was the contraceptive method most widely used by participants (70.1%). Over half of non-users were not sexually active, and about a quarter were not using contraceptives because of the fear of side-effects. The latter has been noted by other researchers.[12,24] Some of the respondents had discontinued a form of contraceptive method in the past because of side-effects. Proper counselling of clients about possible side-effects has been found to reduce discontinuation of family planning for this reason.[24]

In this study, having received formal teaching on family planning was found to be associated with an increased perception of its negative effects. Other studies have also reported that a little education on sex and contraceptives reinforced common misconceptions about modern contraceptives in the majority of young women.[25-28] The calculated unmet contraceptive need in this study was 24.9%; this is slightly lower than the 31% estimated unmet need for Lesotho in general.[7]

Limitations of the study

Student accommodation was used in selection of participants. Although students living off-campus participated in the study, we looked for them in parts of the town where there is a high density of such students. This would have systematically excluded students who live off campus but not in the selected areas of high student density.

Conclusion

The level of awareness of family planning among undergraduate students of the National University of Lesotho was high, and a high proportion of participants had come to know about family planning while they were in secondary school. The overall perception of the benefits of contraceptives was positive, but a minority of respondents had misconceptions. The prevalence of contraceptive use in this study was also high, but a minority of the students had discontinued one or another form of contraceptives in the past because of side-effects, and 1 in 5 had an unmet need for contraceptives.

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