PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
J Hum Ecol, 51(1,2) 66-72 (2015)
DOI: 10.31901/24566608.2015/51.1-2.09

Perceived Risk Behaviours Related to Teenage Pregnancy among University Students in Limpopo Province, South Africa

J.T. Mabunda[1*], R.T. Lebese[2], M.S. Maputle[3] and P.K. Chauke[4]

[1,2,3]Department of Public Health, [4]Departmnent of Agricultural Economics and Agribusiness, University of Venda, Private Bag X5050, Thohoyandou, 0950, South Africa
E-mail: [1]<jabu.mabunda@univen.ac.za>, [2]<rachel.lebes@univen.ac.za>, [3]<sonto.maputle@univen.ac.za>, [4]<peakay@univen.ac.za>

KEYWORDS Illicit Sex. Condoms. Alcohol. Unintended Pregnancy

ABSTRACT Teenage pregnancy can be used as one of the indicators of high risk sexual behaviour. This study determined the prevalence and explored the perceived risk behaviour related to teenage pregnancy among university students. A qualitative cross sectional descriptive design was adopted. A self-administered questionnaire was used to collect data from a stratified randomly selected sample of 281 female students registered in the university. Descriptive analysis was done. The results showed a prevalence of 28.1% and most (62.6%) were above 20 years. Levels 1(22.2%) and 2 (34.7%) were mostly affected. Majority of the students had a high knowledge on the risk of unprotected sex regarding pregnancy (82.5%), Human immunodeficiency virus transmission (84.2%). Despite the high knowledge, risk behaviours identified were: low regular condoms use (43.4%), having multiple sexual partners (30.9%), and non-use contraceptives (50.5%). Other risk behaviours related to illicit sex were going to disco or parties (43.5%) and alcohol (28.5%). The factors reported to be influencing indulgence in sex were: loved by the boyfriend (45.9), prove fertility (22.4), keeping the boyfriend (43.4%) and boyfriend asked for the baby(32.7%).Strategies to prevent teenage pregnancy should include development of participatory programmes that will promote change of behaviour and social responsibility.

INTRODUCTION

According to Odejimi and Bellingham-Young (2014), teenage pregnancy remains a major global challenge with Africa reporting higher rates as compared to other continents. In the Sub-Saharan African countries, one in five adolescent females gave birth each year. In some African countries, 30-40 percent of all adolescent females experience motherhood before the age of 18 years (Jewkes et al. 2001). Harrison (2008) explains that the chance of falling pregnant increases with age. At the age of 15 the ratio of the number of girls reporting sexual activity to the number who fall pregnant is 13:1. With age the ratio decrease to 7:1 at 16 years and to 3:1 from 17 years onwards. The situation may also be related to increased levels of unprotected sex. Engaging in unprotected sex with multiple partners increases the likelihood of unplanned or unintended consequences that may have long-term effects such as unplanned pregnancy, educational interruptions and sexual transmitted infections (STIs) (Moilanen et al. 2010; Moilanen 2014). This usually affects teenagers who initiate intercourse at young ages because they are more likely to have high number of sexual partners and are less likely to use contraceptives (Moilanen 2014).

According to Moilanen et al. (2010), the average level of sexual risk (based on number of sexual partners and condom use) increased through age 18. The period entails both active decision making and unplanned consequences of life choices. Adolescents become active agents for shaping their lives; they select higher education, relationships or marriage, occupation, and parenthood. Unfortunately, many critical decisions made are not based on thoughtful planning, and choices made in the moment may influence future options (Moilanen et al. 2010). Excessive decision making autonomy and early dating may trigger other proximal processes that ultimately give rise to risky sexual behaviour (Moilanen 2014).

Family structure was reported as the sole demographic predictor of initial levels and growth in sexual risk-taking behaviours (Moilanen 2014). Teenagers living in single-mother households, showed higher initial status values than teenagers living with two biological parents. It is believed that this behaviour does not appear to be due to inadequate maternal control. Instead it is believed to be due to single mothers modelling romantic or dating behaviour, which shape the teenager's sexual attitudes and behaviour. As an example, teenagers who lived

in households with their mother and step father of mother's boyfriend may be particularly likely to experience this type of modelling due to instability of these relationships. Negative peer modelling can also encourage increases in sexual risk taking (Moilanen 2014). However, Powers (2004) argues that family structure is strongly affected by a set of unobserved family-level traits that also affect family formation. He further mentioned that there may be mediating factors that influence family structure and non-marital childbearing. The factors may include the frequency of parental conflict, the quality of the parenting environment, and the nature and context of mother-daughter communication (Power 2004).

Adolescents and young adults make decisions about condoms based on their approximations of risk in each sexual partnership. Most likely this is because youth will stop using condoms in the context of serious relationships, with many switching to other forms of contraception (Moilanen 2014). In a study conducted among teenage mothers in one of the hospitals in South Africa revealed that despite the availability and accessibility of resources, young people do not utilize the services. The study further reported that thirty six had never used contraceptives. Reasons for non-utilisation of condoms or contraceptives include; thought that they would not fall pregnant, using sexual relations and pregnancy to achieve marriage, a custom for some communities in South Africa to prove fertility by having a baby before marriage (De Villiers and Kekesi 2004).

Substance abuse is also a predictor of risky sexual behaviour. Alcohol consumption has been associated with sexual risk taking, including unprotected consensual sex. Alcohol often contributes to unplanned sexual activity with a new or "casual" partner (Brown and Vanable 2007). Heavy episodic drinking has been related specifically to unplanned sex, unprotected sex, and having multiple sex partners in the college students (Hingson et al. 2003). A study by Hilde (2014) revealed affirmed increased risk of sexual assault to girls who indulged in alcohol.

A qualitative study was conducted to determine the knowledge, attitude and practice among university students regarding teenage pregnancy (Lebese et al. unpublished). The results informed development of the questionnaire of this study. Therefore the purpose of this study was to determine the prevalence of pregnancy at the university and explore the contributing sexual risk behavioural factors as perceived by the female students.

METHODOLOGY

Study Design

A quantitative cross sectional descriptive design was used to determine the prevalence and explore the perceived sexual risk behaviours among university students.

Sample

A total of 281 female students from all the eight schools were selected**.** The university is one of the rural universities in Limpopo Province comprising of eight schools namely, Agriculture, Education, Environmental Sciences, Health Sciences, Human and Social Sciences, Law, Management Sciences, Mathematics and Natural Sciences. Probability stratified random sampling of students at different year levels in the university,being a female and aged between 18 and 30 years constituted the sample. Students were selected from all the schools to ensure that responses provided reflected the views of all females from all the schools including all the levels from the first year to the final year.

Instrument

A structured questionnaire comprising of 49 questions was used to elicit students' perceived sexual risk factors. The questionnaire consisted of closed questions. The questionnaire was structured to capture students' demographical information, reproductive health and risk awareness, sexual behaviour and unintended pregnancy, risk behaviours for illicit sex, attitude, knowledge and perception towards Human immunodeficiency virus (HIV) or STIs, HIV preventive measures, perceived factors influencing abstinence from sex, perceived factors influencing indulgence in sex and experiences of pregnancy. In order to ensure validity and reliability of the instrument, pre-testing was done with 20 students to check typographical errors and possible ambiguities. The students that participated in the pre-test were not included in the main study. The sequence of the questions and minor typographical errors were corrected.

Data Collection

Recruitment and collection of data was done by two lecturers and five students from the School of Health Sciences. A self-administered questionnaire was distributed to all undergraduate students using lecture rooms. The consent forms were collected separately to prevent any link to the questionnaire. Students were instructed not to write their names on the questionnaire to ensure anonymity. The research assistants were available in the lecture rooms while the students were completing the questionnaires to ensure that the place is quiet and prevent sharing of the information. All questionnaires from the 281 students were received.

Data Analysis

Descriptive analysis was applied to analyze data using a Statistical Package for Social Sciences version 21. Cross tabulation between selected variables was done. Results arepresented in summary frequency tables and charts.

Ethical Considerations

All students were informed about the nature of the study and were given the option of withdrawing from the study or to omit answering certain questions without any negative repercussions. Anonymity and confidentiality were assured. Ethical approval for the study was obtained from the Research and Publications Committee of the university before data collection. Students also concerted to informed consent.

RESULTS

The results are organized into six sections: Demographic Characteristics; reproductive health status of the university; attitude, knowledge and perception regarding pregnancy and HIV/STIs; and perceived factors influencing abstinence and indulgence in sex.

Demographic Characteristics

Majority (69.8%) of the students belonged to other religions while 11 percent were Catholics and 14.6 percent were Protestants. Most of the students (68.7%) were living on campus while 30.6 percent were living outside campus. Most of the students (39.5) were living with single parents, 40.2 percent with both parents and 14.9 percent with non-relatives while only 4.3 percent were living with relatives. Based on data in Table 1, most of the students were from the Schools of Environmental sciences (17.1%) and Health Sciences (16.0%) and the least number of the students (2.5%) were from the School of Law.

Table 1: Sample distribution

	Frequency	*Percent*
Agriculture	27	9.6
Law	7	2.5
Mathematics and Natural sciences	44	15.7
Human and Social sciences	37	13.2
Environmental sciences	48	17.1
Management sciences	39	13.9
Education	34	12.1
Health sciences	45	16.0
Total	281	100.0

n=281

Table 2 shows that most of the students' age (48.4%) were in the range 21-25, 35.9 percent in the less than twenty range while the least (14.2%) were in the 23- 30 range, and 4 (1.4%) students did not disclose their age.

Table 2: Age distribution

Age category (years)	*Frequency*	*Percent*
< 20	101	35.9
21 – 35	136	48.4
26 – 30	40	14.2
Undisclosed	4	1.4
Total	281	100

n=281

Based on the data in Table 3, out of the 281 students, 119 (42.3 percent) reported having been pregnant.

Seventy-nine (28.1%) students reported falling pregnant while at the university. Levels 1 (22.2 percent) and 2 (34.7%) were mostly affected. Out of the 281 students, 72 (25.8%) agreed that it was unintended pregnancy. Out of those that indicated unintended pregnancy, cross tabulation with risk behaviours showed that 32 (44%) attended discos/ bashes. Thirty-seven (13.4%) agreed to induced abortion.

Table 3: Reproductive health status

Factor	*Frequency*	*Percent*
Have You Been Pregnant (n=281)		
Yes	119	42.3
No	162	57.6
At What Level of Your Schooling Did You First Fall Pregnant (N=119)		
Secondary	40	33.6
University	79	66.3
At What Level of the University Did You First Fall Pregnant (n=79)		
Level 1	19	24.0
Level 2	27	34.1
Level 3	10	12.6
Level 4	21	26.5
Unintended Pregnancy (n=278)		
Yes	72	25.8
No	19	71.2
Not sure	88	2.9
Induced Abortion (n=276)		
Yes	37	13.4
No	23	85.5
Not sure	63	10.8

Sexual Behaviour Risk Factors

Table 4 presents the sexual risk behaviour of respondents. The majority of students (67.6%) used a condom during their first sex encounter. The table also reveals that a substantial proportion (43.4%) always used a condom while a reasonable proportion (39.9%) used condoms either some of the times (25.3%) or quite often (14.6%). It is a matter of serious concern though that almost one in every 11 students (10.7%) never used condoms when indulging in sexual activities. Many students (69.8%) consented to first sex encounter with most (63.7%) reported having one sex partner. Less than half (44.3%) of the respondents were consistent in always using contraceptives.

Table 4: Sexual risk behaviours

	Frequency	*Percent*
Condom Use		
Never	30	10.7
Sometimes	71	25.3
Always	122	43.4
Often	41	14.6
First Sex Encounter Consent (N=266)		
Consented to it	196	69.8
Against my consent	70	30.2
Number of Sexual Partners		
One	179	63.7
Two	45	16.0
Multiple	42	14.9
Condom Use First Time		
No	85	32.3
Yes	178	67.6
Oral Contraceptive Use		
No	142	55.2
Yes	114	44.3
Some times	1	0.4

Table 5 shows risk behaviours of illicit sex. The categories rarely, sometimes and often were collapsed to ease discussion. Risk factors related to illicit sex were: going to disco, clubs or parties (45.6%), smoking cigarettes 14.6 percent and 29.9 percent drink alcohol while 9.7 percent smoked marijuana.

Table 5: Risk behaviour for illicit sex

Behaviour	*Frequency*	*Percent*
Disco	122	45.6
Smoking cigarette	39	14.6
Drinking alcohol	80	29.9
Smoking marijuana	26	9.7
Total	267	100

n = 267

Attitude, Knowledge and Perception Regarding Pregnancy and HIV/STIs

Majority of the students 82.5 percent were aware of the risk from unprotected sexand cross tabulation with sexual behaviour showed that only 61.4 percent used a condom with recent sex. Based on Table 6, majority ofstudents had high knowledge on transmission of HIV/STIs. About 92.1 percent of the students were aware of dangers associated with STIs, 84.2 percent transmission through unprotected sex, sharing sharp injectable 89.6 percent, contaminated blood transfusion 89.3 percent and infected mother to child during pregnancy 74.4 percent.

Table 6: Awareness on the mode of transmission of HIV

Mode of transmission	*Frequency*	*Percent*
STIs	258	92.1
Unprotected sex	236	84.2
Sharp injectables	251	89.6
Blood transfusion	250	89.3
Mother –to-child	209	74.4

n=281

Data in Table 7 shows that the students had high knowledge on HIV preventive measures, using new needles was 84.3 percent, regular con-

dom use 83.1 percent, faithful to one partner 79.3 percent and abstinence 81.5 percent.

Table 7: Knowledge on HIV preventive measures

	Frequency	*Percent*
Using New Needles (n=281)		
Not sure	14	5.0
Disagree	30	10.7
Agree	237	84.3
Regular Condom Use (n=279)		
Not sure	28	10.0
Disagree	19	6.8
Agree	232	83.1
Faithful to One Partner (n=281)		
Not sure	17	6.0
Disagree	41	14.67
Agree	223	9.4
Prime Way Abstinence (n=281)		
Not sure	17	6.0
Disagree	35	12.5
Agree	229	81.5

Perceived Factors Influencing Abstinence and Indulgence in Sex

Based on data in Table 8, majority of students (58.2%) reported fear of HIV/STIs, pregnancy and other diseases, 41.7 percent reported no interest in sex while for 34.7 percent it was being too young for sex as factors influencing abstinence.The categories yes, sometimes and always, and not really, definitely not and not at all were collapsed to ease discussion on factors influencing indulgence in sex.

Table 8: Factors influencing abstinence

	Frequency	*Percent*
Fear HIV/AIDS and other diseases	163	57.6
No interest	117	41.7
Too young for sex	34	34.7

According to Table 9, students reported uncontrolled sex urge 49.8 percent, friends 32.1 percent and university lecturers/ staff lure them to sex (36.2%) as factors that influenced them to indulge in sex. Majority (96.6%) reported that financial and material needs were not influencing indulgence in sex. Other significant factors reported were: sexual intercourse normal practice (19.9%), wanted boyfriend to love me (45.9%), boyfriend asked for a baby (32.7%), wanted to

Table 9: Perceived factors influencing indulgence in sex (n=281)

Factor	*Response*	*Frequency*	*Percent*
Uncontrolled Sex Urge	Never	139	49.5
	Sometimes	101	35.9
	Always	39	13.9
Friends Lure Me to Sex	Never	188	66.9
	Sometimes	69	24.6
	Always	21	7.5
Lecturers /University Staff	Never	179	63.7
	Yes	33	11.7
	Always	15	5.3
	Sometimes	54	19.2
Financial and Material Needs	Never	3	1.1
	Yes	1	0.4
	Not really	55	19.6
	Not at all	195	69.4
	Definitely not	27	9.6
Sexual Intercourse Normal Practice	Not sure	64	22.8
	Disagree	156	55.5
	Agree	56	19.9
Wanted Boyfriend to Love Me	Not applicable	4	1.4
	No	146	51.9
	Yes	129	45.9
My Boyfriend Asked for a Baby	Not applicable	2	0.7
	No	186	66.2
	Yes	92	32.7
Wanted to Prove I Can Have a Baby	Not applicable	6	2.1
	No	211	75.1
	Yes	63	22.4
I Wanted to Keep My Boyfriend	Not applicable	4	1.4
	No	154	54.8
	Yes	122	43.4

prove that can have a baby (22.4%) and wanted to keep boyfriend (43.4%).

DISCUSSION

In this study the prevalence of pregnancy was reported to be 28.1 percent. Majority (62.6 %) of the students were above 20 years which indicates that they are already young adults. According to literature, individuals within this age group are predisposed to engage in high risk behaviours. However, literature also shows that young adults make decisions about condom use based on their approximation of risk in each partnership (Manlove et al. 2011). Moilanen (2014) in a longitudinal study reported that sexual risk taking in this age group was associated with use of other forms of birth control and/ or being in a serious relationship. The study further reported that being in cohabiting or marital relationships reported lower levels of sexual risk between the ages of 20 and 23 years. The view is also supported by Pandey (2009) that teenagers move away from using condoms as they move into longer term relationships where non-barrier and hormonal contraceptives are preferred.

The present study further revealed that about 25.8 percent of students indicated that their pregnancywas unintended and thirty-seven (13.4%) agreed to have had induced abortion. The majority of the students (82.2%) were aware of the risk from unprotected sex but only 61.4 percent used a condom during their recent sex encounters. The results are however disturbing to note that as much as 17.4 percent of the students was not aware of the risk from unprotected sex and as a result about 30.9 percent were having more than one partner. The findings on use of condom during recent sex, however is higher than use by youths in Tanzania. (Lema et al. 2008). The study reported that only 37 percent youths used a condom during recent sex. However, in a study conducted in Brazil among undergraduate students, 74.8 percent of females used a condom during vaginal sex (Caetano et al. 2010).

A study conducted in two South African universities showed that despite the adequate knowledge on HIV/AIDS (77.7%) majority of the students scored very low in the transmission modes of HIV(Reddy and Frantz 2011). On contrary, in this study students had adequate knowledge in both transmission and preventive measures. However, although the students had high knowledge on HIV transmission and preventive measures, majority of were not using condoms and contraceptives during sex. The high knowledge does not appear to have motivated the students from indulging in unprotected sex; they continued to be exposed to multiple partners without any form of protection. Salway et al. (2014) have advocated for increased awareness towards the use of condoms for girls, especially to curb second pregnancies

Alcohol use and attendance of parties were reported among the students. According to Pallen et al. (2006), the biggest risk substance abuse or use confers to adolescent sexual behaviour is that they are more likely to engage in casual sex. A study conducted among United State college athletes with regard to heavy drinking reported that sexual risk-taking was twice as large in females as in males. The study further reported that female college students engaging in heavy drinking perceived less danger while consuming alcohol, and take more sexual risks, including unprotected sex with multiple partners (Huang et al. 2010). According to Bersamin et al. (2012), more frequent drinking may result in women spending more time in places often associated with an increased likelihood of casual sex and sexual risk taking, including bars and parties, which may contribute to this association. The study further stated that the risk behaviour may co-occur as a result of common personality factors, such as sensation seeking and impulsivity.

Other reasons contributing to sexual risk behaviours included: uncontrolled sex urge, boyfriends wanted to have a baby, wanted the boyfriend to love her, wanted to keep the boyfriend and wanted to prove fertility. A study by De Villiers and Kekesi (2004) identified other reasons as to achieve marriage and being pressured by boyfriend to have sex as a proof of love. The pressure often results in girls having little to say in a decision either to have sex or to use contraceptives. Almost all students (99%) reported that they were ashamed of the pregnancy. although they got support from the boyfriend, father and mother, the support was inconsistent. Most support was from the mothers.

CONCLUSION

The prevalence of teenage pregnancy is high among university students. Although teenage pregnancy is a multi-factoral problem, non–use

and inconsistent of condoms and contraceptives, alcohol use, number of partners have been found to be contributory risk factors to teenage pregnancy. If the health care workers are to deliver appropriate guidance and counselling, students need to be aware of these facts. Strategies to prevent pregnancy among university students could be improved by combining efforts with HIV awareness and prevention.

RECOMMENDATIONS

The following recommendations are advanced**:**

- First year and second year students are at high risk of unintended pregnancy, therefore they should be key targets for early intervention programmes.
- High rates of unprotected sex reported in the study suggest that intervention should also focus on the university students' ability to negotiate and establish protective sexual behavioural practices.
- Alcohol consumption, attendance of bashes and parties was also identified as risk behaviour leading to casual unprotected sex. Interventions should therefore be tailored to reduce alcohol related sexual risk taking.
- Strategies to prevent teenage pregnancy should include development of participatory programmes that will promote change of behaviour and social responsibility.

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