BALTIC JOURNAL OF SPORT & HEALTH SCIENCES
No. 3(118); 2020; 33–42; ISSN 2351-6496 / eISSN 2538-8347
DOI: 10.33607/bjshs.v3i118.962

Sexual Behavioral Patterns of Kenyan University Student-Athletes: Implications for Sports Managers

Elijah G. Rintaugu[1], Edna K. Thangu[1], Adewale Oyeyemi[2], Makama A. Monyeki[2]
Kenyatta University[1], Nairobi, Kenya
North-West University[2], Potchefstroom, South Africa

ABSTRACT

Background. The debate on whether participation in sports enhances or curtails risky sexual behavior among athletes continues. The purpose of the study was to establish the sexual behavior patterns and associated high risks among University student-athletes.

Methods. A cross-sectional survey research design was used to collect self-report data on sexual behaviors from university student-athletes (n = 151) who participated in a University sports tournament. Descriptive statistics of frequencies and proportions and inferential statistics of chi-square test of independent measures were used to analyze the data. Majority (65%) of the student-athletes were taking part in Ball games and Racket games (13.9%).

Results. About a third (33%) of the student-athletes had their first sexual debut while aged between 18 and 20 years, 60% had regular sexual partners, over 30% had more than one sexual partner and 67% would have sexual intercourse with strangers; only 58% of these would seek the sexual history of the strangers. More than half (55%) of the student-athletes frequently used condoms to prevent pregnancies and sexually transmitted diseases, but only 39% of them always used condoms with their sexual partners in the last six months. The participants' sexual behaviors differed significantly ($p < .05$) by their gender. Males tended to start having sexual intercourse earlier ($p < .002$), had more than one sexual partner ($p < 0.001$) and would always use condoms ($p < .001$) than females, but more females than males would have sexual intercourse with a stranger ($p < .001$).

Conclusions. Kenyan University student-athletes are sexually active and are faced with high risk sexual behaviors like multiple sexual partners and sexual intercourse with strangers. The difference in patterns of sexual behavior between male and female student-athletes calls for gender specific interventions by programmers, policy makers and health workers.

Keywords: sexual behaviors, student-athletes, sexually transmitted diseases (STD's).

INTRODUCTION

Early and unprotected sexual activities have a significant bearing on both current and future health status (Senn & Carey, 2011; Zabin & Kragu,1998). These are associated with numerous consequences such as high teenage pregnancies, sexually transmitted diseases (STD's) such as HIV/AIDS, dropping out of school, limited future opportunities for socio-economic growth and increased population (Ajayi, Marangu, Miller, & Paxman, 1998; Harvey & Spigner, 1995; Katindi, 2010). Numerous studies have been conducted on adolescents' sexuality in Kenya and the findings are unanimous that secondary school students engage in sexual risky behaviours of premarital sex and unprotected sexual intercourse (Ayiro, Oburu, & Othuro, 2013), had early onset of sexual intercourse (Ikamari & Towett, 2007; Khasani, 1985) and low use of contraceptives, and multiple sexual partners (Kabiru & Orphinas, 2008). Different interventions have been put in place to curtail engagement in early sexual activities among young people but the successes of these interventions programmes are suspect as young adolescents continue to engage in sexual risk taking behaviours (Kokotaila, Henry,

Koscik, Fleming, & Landry, 1996; Peretti-Natel, Guagliando, & Velger, 2004).

However, evidence suggests that playing sport enhances the social status of young people and the culture of sport influences their attitudes towards having sexual relations (Messner & Sabo, 1995). Sabo, Farrell, Barner, Melnick, and Miller (1997) reported a significant relationship between sports participation and less frequent sexual activity as well as lower pregnancy risk among school girls who played sports though not for boys. Sports participation is associated with lower risk of pregnancy among high school students (Miller, Sabo, Farrell, Barnes, & Melnick 1999). Similarly, Brown, Elis, Guernrina, Paxton, and Poleno (1997) documented a positive association between frequency of physical exercise and later age at first intercourse for adolescent girls. Also, Rome, Rybick, and Durant (1998) found that adolescent girls who participated in high school sport were less likely to have been pregnant than female non-athletes. Miller et al. (1999) opined that adolescents who play sports are less likely to have ever had sexual intercourse, have older age of onset of sexual intercourse and have higher rates of contraceptive use. Among a sample of 18–21 years, athletes engage in sexual activity more often and with more partners than non-athletes (Faurie, Pontier, & Raymond, 2004; Nattiv & Puffer,1991). In a university setting, Zill, Nord, and Loomis (1995) reported that female varsity athletes were about a third less likely than female non-athletes to report being parent by the twelve grades and male athletes were a third more likely to become a teen parent than their non-athletic counterparts.

Thus, it appears that the nexus between sport participation and sexual activity is mediated by gender and age. For example, Miller, Sabo, Farrell, Barners, and Melnick (1998) found that athletic participation for girls was associated with lower frequency of sexual intercourse, fewer sex partners and higher age at coital onset, higher rates of contraceptive use and high rates of past pregnancy than girl non–athletes. Male athletes on the other hand, reported higher rates of sexual experience, more partners and use of birth controls (Miller et al., 1998). Faurie et al. (2004) found that both male and female student athletes had higher number of sexual partners than other students. Similarly, athletes continue to engage in risky unprotected sexual activities with random partners and are also involved in crimes including rape (Benedict, 1998). Sexual risky behaviours may be more acute among university student athletes in sub-Saharan Africa because they mostly live in campuses without boundaries or security, peer pressure, economic problems and lack of user friendly recreational facilities (Mulu, Alemagehu, Alemayebu, & Agumasie, 2014). Other contributory factors would include living away from parental patronage, congested living conditions, alcohol consumption, lack of religiosity and lack of lecturers' control (Rintaugu, Mwisukha, & Amusa, 2012).

However, the results of studies on sexual behaviours of university students in Africa have not been consistent. For example, 37% of the male and 49% of the female students in Uganda were reported not to have had sex previously (Agardh, Tumwine, & Ostergren, 2011), but 39% of university students in Ethiopia were reported to have had their first sexual intercourse at the mean age of 17 years, have multiple sexual partners and practice sexual intercourse without condoms even when dealing with one regular sexual partner (Mulu et al., 2014). In Nigeria, 67% of female undergraduate athletes would use one form of contraceptive or another, preferably the male latex condom to prevent unwanted pregnancies and to regulate menstrual periods (M. Mgbor & E. G. Mgbor, 2003). Conversely, male student athletes in Botswana showed higher engagement in most of the determinants of high-risk sexual behaviours and inconsistent condom use (Sebele, 2009). In Kenya, there was no difference on knowledge of sexual risk taking behaviours, mode of transmission and voluntary counselling testing (VCT) for HIV/AIDS between male and female university athletes (Gitonga, Njororai, & Wahome, 2003).

Based on the foregoing, it is obvious that more studies are needed before firm conclusions could be made on the role of sport participation and sexuality in Kenyan university athletes. The purpose of this study was to examine the sexual behaviours, i.e. sexual history, sexual partners, sexual orientation, risk behaviours and contraceptive use of university student athletes in Kenya. Therefore, it was hypothesized that university athletes' sexual risky behaviours will not be mediated by their gender. This hypothesis was apt as previous studies have shown that risky sexual behaviours are varied based on the athletes type of sport, age, gender and playing experience. This kind of study have potential implications for programmers, policy makers, university administrators, coaches and

health workers and team managers to assist university athletes lead health lifestyles.

Theoretical Framework

A number of theories have been utilized to underpin sport participation and sexual activity. These theories include social control theory, cultural theory, exchange theory, and culture resource theory. Control theory is buttressed on the belief that young people with substantial amounts of unstructured and unsupervised time are more likely to engage in risky behaviour than those constructively engaged (Zill et al., 1995). At the same time athletes may avoid sexual intercourse that put them at risk of unwanted pregnancy that they see as potentially damaging to their continued participation, ability to compete or long range goals to earn an athletic scholarship and play in college. Under cultural theory sport is viewed as a cultural site for the construction of traditional or hegemonic masculinity serving as an institutional training ground for manhood (Messner & Sabo, 1995). Therefore, cultural expectations attached to masculinity may encourage boys to initiate sex, to be sexually aggressive with girls and regard sexual conquest, as a validation of male adequacy (Zilbergeld, 1993). Playing sports enhances the social status of both boys and girls and culture of sport influences their attitudes towards having sexual relations. Boys have opportunities for sexual experiences with girls and girls have to secure male affection and commitment or popularity in return for sexual favours. Exchange theory postulates that both females and males derive benefits from athletic participation that may influence their sexual behaviours. Student athletes engaged in high risk behaviours due to worshipping, confidence, privileged status (Wallin, 2016) constant presentation of opportunities for sex, popularity among women and the behaviours of coaches and sponsors instilling a sense of entitlement (Ikamari & Towett ,2007).

METHODS

Study design and sample. A cross-sectional analytical survey design technique was used in this study. Data were collected during the Kenya Universities Sport Association (KUSA) annual tournament organized to select the best Kenyan university teams to represent the country in regional and continental university games. The eleven universities were competing in Ball games (i.e. Soccer, volleyball, handball, basketball, rugby, netball, hockey), athletics, martial arts (i.e. Karate, taekwondo, judo), racket games (Table tennis, tennis, badminton), swimming and board games (Chess and Scrabble).

Stratified random sampling techniques were used to ensure equal representation of participants in terms of the type of sport, nature of universities (private/public) and gender. The tournament took four days and was played in a league format where teams/athletes amassing the most points were declared winners. The study targeted athletes who were voluntarily going to take part in the study. From the 200 participants who volunteered to take part in the study, 151 questionnaires were analysed representing a return rate of 75%. These student athletes had a mean age of 20.6 ± 2.68 (standard deviation) other demographic details are summarized in Table 1.

Research Instrument. Self-administered questionnaire named Sexual Behaviour Survey of Athletes (SBSA) was utilized for data collection. Questionnaires were administered to the players in the playing field/courts/indoor facilities with the assistance of respective coaches and team captains. The questionnaire had two sections where section A sought information from participants regarding their demographic data such as age, gender, year of study, degree programme pursued, sponsorship, residence and type of sport. Section B raised specific questions on sexual behaviour of athletes. These included age of first sexual intercourse, sexual orientation, current sexual life, methods of preventing pregnancy and condom use. These were weighted on forced options of Yes and No. The instrument was validated by a team of lecturers who are specialists in research methods and health education. The draft questionnaire was modified based on their observations, and suggestions were incorporated before pre-testing. The instrument was pre-tested among 34 student athletes who did not take part in the main study. The instrument demonstrated an acceptable reliability coefficient of $r = .83$, using split-half method, and was considered adequate for data collection.

Ethical considerations. Informed consent was obtained from university athletes according to established guidelines (Thomas, Nelson, & Silvermann, 2011). All the participants gave verbal assent and signed written informed consent after reading and getting explanations on the purpose of the study. The informed consent included voluntary

participation, opportunity to leave the study and options of not responding to uncomfortable questionnaire items without attracting penalties. Participants were duly informed that their responses were used for research purposes and confidentiality will be maintained.

Data analysis. Descriptive statistics (means, standard deviations, frequencies) was calculated for all variables. In addition, inferential statistics of chi-square test of independent measures was employed to test the differences between males and females in all variables.

RESULTS

Results in Table 1 show that 89 (58.9%) of the participants were males and 62 (41.1%) were females. Most of the respondents (n = 73; 48.9%) were between 19 and 21 years of age. Seventy (48.3%) were in their first year of study. Eighty-one (63.8%) participants were doing their studies on government sponsorship and 46 (36.2%) were self-sponsored. Sixty-nine (54.3%) participants were living on campus while 58 (45.7%) were living off campus. The majority of the participants (n = 94; 65.3%) were taking part in ball games followed by 20 (13.9%) who were in racket games.

Table 2 shows that 23 (16.7%) have had their first sexual encounter before 12 years, 30 (21.7%) between ages 13 and 15 years, 23 (16.7%) between ages 16 and 17 years, 45 (32.6%) between ages 18 and 20 years, and 17 (12.3%) after their 20th birthday. More Male students-athletes significantly started having sexual intercourse earlier than their female counterparts (χ^2 = 16.42, p < .002). With regard to sexual preferences 7 (12.7%) of the females would have sex with other females, 46 (83.7%) would have sex with males and 2 (3.6%) would have sex with both males and females. For the males, 83 (98.8%) would have sex with females while 1 (1.2%) would have sexual intercourse with other males. There were significant differences between responses from males and females (χ^2 = 86.1, p < .001), indicating higher preferences for heterosexual partners rather than homosexual partners by both gender.

The student athletes' responses on regular sexual partners, current sexual partners and sexual partners in the past one year are presented in Table 3. Results revealed that 82 (58.6%) of the respondents had regular sexual partners while 58 (41.4%) did not have regular partners. For the female respondents, 31 (57.4%) had regular sexual partners while 23 (42.6%) did not have regular partners. Among the males, 51 (59.3%) had regular sexual partners while 35 (40.7%) did not have regular sexual partners. The chi-square results (χ^2 = 4.05, p = .04) was significant, indicating that males generally tend to have regular sexual partners than females. In

Table 1. **Demographic details of the participants (n = 151)**

Demographic details	*n*	%
Gender		
Male	89	58.9
Female	62	41.1
Age (yrs)		
18	34	22.7
19–21	73	48.7
22–24	35	23.3
> 24	8	5.3
Year of study		
First	70	48.3
Second	29	20.0
Third	25	17.2
Fourth	18	12.4
Fifth	3	2.1
Sponsorship		
Government	81	63.8
Self	46	36.2
Type of Sport		
Ballgames	94	65.3
Athletics	11	7.6
Martial Arts	7	4.9
Racket Games	20	13.9
Swimming	6	4.2
Board Games	6	4.2
Sponsorship		
Government	81	63.8
Self	46	36.2
Residence		
Off-campus	58	45.7
On-campus	69	54.3

Table 2. **Cross tabulation of responses on the age of first sexual intercourse and sexual preferences**

Responses	Females		Males		Total		χ^2	*df*	*p*
	n	%	*n*	%	*n*	%			
Age of first sexual intercourse									
Below 12	8	15.4	15	17.4	23	16.7			
13–15	4	7.7	26	30.2	30	21.7			
16–17	6	11.5	17	19.8	23	16.7	16.42	4	.002
18–20	25	48.1	20	23.3	45	32.6			
After 20 yrs	9	17.3	8	9.3	17	12.3			
Sexual Preference									
Women only	7	12.7	83	98.8	90	64.8	86.17	2	.00
Men only	46	83.7	1	1.2	47	33.8			
Both	2	3.6	0	0.0	2	1.4			

Table 3. **Responses on regular sexual partners, current sexual partners and sexual partners in the past one year**

Responses	Females		Males		Total		χ^2	*df*	*p*
	n	%	n	%	n	%			
Regular Partners									
Yes	31	57.4	51	59.3	82	58.6			
No	23	42.6	35	40.7	58	41.4	4.05	1	.04
Current sexual partners									
Only one sexual	31	53.4	35	39.8	66	45.2			
More than one	11	19.0	33	37.5	44	30.1	50.89	2	.00
Don't have a partner	16	27.6	20	22.7	36	24.7			
Sexual partners in the past one year									
One	28	53.8	29	34.1	57	41.6	50.89	4	.00
Two	7	13.5	18	21.2	25	18.2			
Three	5	9.6	14	16.5	19	14.0			
Four	0	0.0	7	8.2	7	5.0			
Above four	12	23.1	17	20.0	29	21.2			

regard to current sexual partners, 66 (45.2%) of the respondents had only one sexual partner, 44 (30.1%) had more than one sexual partner while 36 (24.7%) did not have sexual partners. There were significant gender differences (χ^2 = 50.89, p < .001) indicating that males had more than one sexual partner (n = 33; 37.5%) than females (n = 11; 18%). The same table shows that 57 (41.6%) of the respondents had one sexual partner in the past one year, 25 (18.2%) had two sexual partners, 19 (14.0%) had three sexual partners, 7 (5.0%) had four partners and 29 (21.2%) had over four partners. Male athletes would significantly have at least two or more sexual partners than their female counterparts in the past one year (χ^2 = 50.89, p < .001).

The participants' sexual history with strangers and methods used to prevent pregnancy are presented in Table 4. Results showed that 97 (66.4%)

Table 4. **Sexual history with strangers and prevention of pregnancies**

Responses	Females		Males		Total		χ^2	*df*	*p*
	n	%	*n*	%		%			
Sexual intercourse with a stranger									
Yes	44	74.6	53	60.9	97	66.4	15.56	1	.000
No	15	25.4	34	39.1	49	33.51			
Seeking sexual history of the stranger									
Yes	29	51.8	54	63.5	83	58.9	5.09	1	.000
No	27	48.2	31	36.5	58	41.1			
Honest responses on sexual history of the stranger									
Yes	23	39.7	41	47.7	64	44.4	2.21	1	.130
No	35	60.3	45	52.3	80	55.6			
Methods to prevent pregnancy									
No method	12	23.5	14	16.5	26	19.1	75.2		
Birth control	5	9.8	15	17.6	20	14.7			
Condoms	27	52.9	49	57.6	76	55.9		3	.000
Withdrawal	7	13.7	7	8.3	14	10.3			
Condom use with the sexual partners in 6 months									
Not at all	14	28.0	8	9.3	22	16.2	21.4	3	.000
Rarely	9	18.0	12	14.0	21	15.4			
Occasionally	7	14.0	32	37.2	39	28.7			
Always	20	40.0	34	39.5	54	39.7			
Condom use in the last sexual encounter									
Yes	26	51.0	59	69.4	85	62.5	9.99	1	.020
No	25	49.0	26	30.6	51	37.5			

of the respondents would had sexual intercourse with a stranger, 83 (58.9%) would seek the sexual history of the stranger but only 64 (44.4%) of the respondents would expect honest response on sexual history of the stranger. More females ($n = 44$; 74.6%) compared to males ($n = 53$; 60.9%) would tend to have sexual intercourse with a stranger ($\chi^2 = 15.56$, $p < .001$), but more males ($n = 54$; 63.5%) than females ($n = 29$; 51.8%) would seek the sexual history of the stranger ($\chi^2 = 5.09$, $p < .001$). With regard to methods of preventing pregnancies and STDs, the majority of respondents would use used condoms ($n = 76$; 55.9%), while 14 (10.29%) would use withdrawal method and 26 (19.11%) will not use any methods. More males than females would use condoms to prevent pregnancies and STDs ($\chi^2 = 75.2$, $p < .001$), more often with their partners in the past 6 months ($\chi^2 = 21.4$, $p < .001$) and in their last sexual encounters ($\chi^2 = 9.99$, $p = .020$).

DISCUSSION

The aim of this study was to examine the sexual behaviours of university student athletes in Kenya. The findings showed that about a third (33%) of university student-athletes in Kenya had their first sexual debut while aged between 18 and 20 years, with male athletes having their first sexual intercourse earlier than female athletes. These findings are consistent with those of previous studies that reported that male youth would generally initiate sexual intercourse earlier

than their female counterparts (Ayiro et al., 2013; Goddard, 1995; Ikamari & Towett, 2007; Kabiru & Orphinas, 2008; Katindi, 2010; Khasani, 1985). It is interesting that 17% of the student-athletes have had their first sexual intercourse while aged below 12 years, indicating that some of the student-athletes in the present study were already exposed to risky sexual behaviour before enrolling for university education. Although the dual role of being an athlete and a student have been linked to creating an environmental milieu that increases the likelihood of athletes engaging in behavioural risks including sexual activity (Wechler et al., 2002), it is likely, as shown by our results, that age at first sexual debut may also contribute to student athletes' subsequent sexual behaviours. Generally, age has been associated with several measures of sexual behaviour including early first intercourse (Miller et al., 1997), ever having had sex (Harvey & Spigner, 1995) and life time frequency of sexual intercourse (Benda & DiBlasio, 1994).

With regard to sexual orientation/preferences, the majority of the student athletes would have sexual intercourse with the opposite sex. However, a result showing that about 13% of the female athletes would have sexual intercourse with other females may indicate the growing popularity of lesbianism among university students in Kenya. Perhaps, this is a reflection of the influence of westernization and that of the emerging human rights groups advocating the cause for lesbian and gayism (Kabiru & Orphinas, 2008).

It is notable that over 30% of the respondents (higher proportion in the males) had more than one sexual partner. Peretti-Watel et al. (2004) found that an increasing number of athletes publicly boast of uncontrolled sexual promiscuity among themselves and to their teammates. Miller et al. (1998) contend that sport participation is associated with higher levels of sexual activity. Kokotaila et al. (1996) revealed that for males in high schools, sport participation is associated with higher levels of sexual activity. Similarly, Faurie, Pointer and Raymond (2004) found that student-athletes had higher number of sexual partners than other students. Equally, male youth in secondary schools were more likely to be involved in sexual risk behaviours than female students (GOK, 2010). Cultural resource theory posits that sexual relations between males and females are negotiated and that these negotiations are largely structured by widely shared expectations about gender appropriate behaviour for dating and sexual situations (Miller et al., 1999).

It has been opined that despite the awareness of the consequences of having many sexual partners, young people still engaged in risky sexual relationships with multiple partners (Jepchirchir, 2009). In this regard, Wetherill and Fromme (2007) found that athletes engage in sex with more partners and engage in unsafe sex more frequently than non-athletes. Thus athletes who have more sexual partners are likely to have more opportunities for unsafe sex. In the present study, about 67% of the student-athletes would have casual sexual intercourse with strangers and only 58% of them would seek the sexual history of the stranger. Gitonga et al. (2004) opined that athletes are at risk of sexual overtures due to their extensive traveling to new and diverse environments. Moreover, athletes have been reported to exhibit carefree sexual behaviour, frequently change lovers and/are prone to seduction by strangers (Eboh, 1995). Contrary to the assumption that girls would be more restrained than boys in terms of sexual risk behaviour, we found more female student athletes than the males to have sexual intercourse with a stranger in the present study. This is contrary to the assertions that general sport participation among adolescent girls has been linked to decreased risky sexual behaviour such as less frequent sexual activity, delayed sexual debut, lower rates of pregnancy and higher rates of condom usage (Hershow et al., 2015).Possibly, in a university context, where traditional sex roles have been significantly challenged and deviant lifestyles are more likely tolerated a rise in the level of women's alcohol abuse and sexual risk behaviours are expected (Gill, 2002). Since girls have previously been reported to indicate a higher preference for having sex with older partners (Mokgwathi, 2011), it could be that the female student athletes in our study were having sexual encounters with strangers who were older than them.

Due to the scourge of HIV/AIDS in Africa and other parts of the world, intervention measures have zeroed down on abstinence, being faithful to a sexual partner and use of condoms. Findings of this study revealed that 56% of the respondents used condoms regularly to prevent pregnancies and STD's. This is somewhat contrary to previous assertions of inconsistent use of condoms and reduced rates of sexual activity and contraceptive use among school-athletes (M. Mgbor & E. G. Mgbor, 2003; Sabo, Miller, Farrell, Barner, & Melnick, 1999). Similarly, negative attitudes

towards condom use due to perceived reduction in sexual pleasure and the condom getting stuck in the females' partner have been reported among Kenyan University student athletes (Gitonga et al., 2004). However, contrary to the findings of Miller et al. (1999) that partner condom use was more common among female sport participants, we found more preference for condoms use among male student-athletes in the present study. The other methods used to prevent unwanted pregnancies were birth control pills among females and withdrawal among male athletes. However, these two methods leave the athletes vulnerable to sexually transmitted diseases and HIV/AIDS in particular.

Limitations. The findings of this study need to be interpreted with caution due to a number of limitations. First, the recall nature of the responses may have presented challenges to participants in pinpointing the actual time when some sexual activities (such as sexual debut and number of sexual partners) took place. Indeed, some of these sexual activities may have taken place when the athletes could have been under the influence of alcohol. Secondly, sexual matters are personal and full disclosure is both culturally and traditionally unacceptable. For example, it is demeaning and a taboo for females to disclose their sexual activities. Despite these limitations, the findings of the study shed light on the risky sexual behaviours of university athletes and have implications to the people closely related to the athletes such as sport managers.

CONCLUSIONS AND RECOMMENDATIONS

The university student athletes were sexually active and their sexual risky behaviours include multiple sexual partners and having sexual intercourse with strangers. The female athletes more than the males would tend to have sexual intercourse with a stranger and fellow female. It is imperative programme managers and policy makers, coaches, sport administration and health workers should explore gender specific interventions when addressing the problems of sexual behaviours among student-athletes in Kenya. It could be considered a paradox that student-athletes are mostly conscious of the health benefits of sports when they choose to participate, yet they would engage in risky sexual behaviours while participating in sports. Perhaps there is a need for the reconceptualization of health belief model and cultural resources theories to explain sexual behaviours among student athletes in African universities. Future studies need to unearth on whether sexual activities may vary based on the type of sport and experience in sport among the athletes. A comparative study involving athletes and non-athletes will be a worthwhile venture to buttress the guiding theories from an African perspective.

Disclosure statement. No potential conflict of interest was reported by the authors.

REFERENCES

Agardh, A., Tumwine, G., & Östergren, P. O. (2011). The impact of socio-demographic and religious factors upon sexual behavior among Ugandan university students. *PLoS One, 6*(8), e23670. https://doi.org/10.1371/journal.pone.0023670

Ajayi, A. A., Marangu, L. T., Miller, J., & Paxman, J. M. (1991). Adolescent sexuality and fertility in Kenya: A survey of knowledge, perceptions, and practices. *Studies in Family Planning*, *22*(4), 205–216. Retrieved from https://www.jstor.org/stable/1966477

Ayiro, L., Oburu, P., & Othoru, L. (2013). Sexual risk taking behavior among youth in secondary schools in Bondo District, Kenya. *Greener Journal of Educational Research, 3*(1), 1–6.

Benda, B. B. & DiBlasio, F. A. (1994). An integration of theory: Adolescent sexual contact. *Journal of Youth and Adolescence*, *23,* 403–420.

Benedict, J. R. (1998). *Athletes and acquaintance rapes*. Sage Publications: Sage Series on Violence Against Women.

Brown, J. T., Elis, L., Guernrina, M. L., Paxton, D. M., & Poleno, P. (1997). The relationship between the frequency of exercise and the age of onset of sexual intercourse in an adolescent female. *Nurses Practitioner, 22*(2), 16–18.

Eboh, B. C. (1995). *Attitudes of Nigerians towards introduction of AIDS education in primary schools*. Paper presented at *NAHET 4th annual* national conference, NSUKKA, June, 7–10.

Faurie, C., Pointeir, D., & Raymond, M. (2004). Student athletes claim to have more sexual partners than other students. *Evolution and Human Behavior*, *25*(1), 1–8. https://doi.org/10.1016/S1090-5138(03)00064-3

Gill, J. S. (2002). Reported levels of alcohol consumption and binge drinking within undergraduate students' population over the last 25 years. *Alcohol and Alcoholism, 37,* 109–120. https://doi.org/10.1093/alcalc/37.2.109

Gitonga, E. R., Njororai, W. W. S., & Wahome, P. W. (2004). Evaluation of athletes' knowledge of HIV/AIDS:

The case of Kenyatta University, Nairobi-Kenya. *African Journal for Physical, Health Education, Recreation and Dance, 10*(3), 193–203.

Goddard, C. (1995). *Adolescent sexuality in Nigeria: The facts.* Washingon, D.C.: Advocate for Youth.

Government of Kenya. (2010). *Kenya Demographic and Health survey, 2008–2009: Final Report.* Nairobi, Kenya.

Harvey, S. M., & Spigner, C. (1995). Factors associated with sexual behavior among adolescents: A multivariate analysis. *Adolescence*, *30*(118), 253–264.

Hershow, R., Gannett,K., Merrill, J., Kaufman, B. E., Barkley, C., DeCelles, J., & Harrison, A. (2015). Using soccer to build confidence and increase HCT uptake among adolescent girls: A mixed methods study of an HIV prevention program in South Africa. *Sport in Society*, *18*(8),1009–1022. https://doi.org/10.1080/17430437.2014.997586

Ikamari, L. D. E., & Towett, R. (2007). Sexual initiation and contraceptive use among female adolescents in Kenya. *African Journal of Health Sciences, 14,* 1–13. doi: 10.4314/ajhs.v14i1.30841

Jepchirdir, H. (2009). *Sexual behavior change and HIV/AIDS infection among college students': Case study of Mosoriot teachers Training college* (Unpublished Master's Thesis). Kenya: Moi University.

Kabiru, C. W., & Orphinas, P. (2008). Factors associated with sexual activity among high school students in Nairobi, Kenya. *Journal of Adolescences*, *32*(4), 10–39. https://doi.org/10.1016/j.adolescence.2008.08.001

Katindi, S. J. (2010). *Youth fact book: Infinite possibility or definite disaster*. Nairobi, Kenya: Institute of Economic Affairs, Elite PrePress Limited.

Khasani, S. A. (1985). *Adolescent fertility in Kenya with special reference to high school teenage pregnancy and childbearing*. Nairobi: The Pathfinder Fund.

Kokotaila, P. K., Henry, B. C., Koscik, R. E., Fleming, M. F., & Landry, G. L. (1996). Substance abuse and other health risk behaviors in collegiate athlete's. *Clinical Journal of Sports Medicine, 6*(3), 182–189.

Messner, M., & Sabo, D. F. (1995). *Sex violence and power in sport, rethinking masculinity.* Freedom, CA.: The crossing press.

Mgbor, M., & Mgbor, E. G. (2003). Contraceptive use among female athletes in Midwestern Nigerian universities: A survey. *Journal of ICHPER-SD*, *XXXXIX*(4), 43–46.

Miller, B. C., Norton, M. C., Curtis, T., Hill E. J., Schraneveledt, P., & Young, M. H. (1997). The timing of sexual intercourse among adolescents: family peer and other antecedents. *Youth & Society, 29,* 54–83. https://doi.org/10.1177%2F0044118X97029001003

Miller, K. E., Sabo, D., Farrell, M. P., Barners, G. M., & Melnick M. J. (1998). Athletic participation and sexual behavior in adolescents: The different worlds of boys and girls. *Journal of Health and Social Behaviors, 39*(2), 108–123. doi: 10.2307/2676394

Miller, K. E., Sabo, D. F., Farrell, M. P., Barnes, G. M., & Melnick M. J. (1999). Sports sexual behavior, contraceptive use and pregnancy among female and male high schools' students: Testing cultural response theory. *Sociology of Sport Journal,* 16, 2366–2387. https://doi.org/10.1123/ssj.16.4.366

Mokgwathi, M. M. (2011). Healthy risky behavior among secondary school students in Botswana. *African Journal for Physical Health Education Recreation and Dance, 17*(3), 481–488.

Mulu, T. Y., Alemagehu, W. Y., Alemayebu, B. M., & Agumasie S. D. (2014). Sexual initiation and factors associated with it among Addis Adaba university undergraduate students, Addis Ababa, Ethiopia. *American Journal of Health Research, 2*(5), 260–270.

Nattiv, A., & Puffer, J. C. (1991). Lifestyles and health risks of collegiate athletes. *Journal of Family Practice*, *33*(6), 585–590.

Peretti-Natel, P., Guagliando, V., & Velger, P. (2004). Risky behaviours among young elite-student athletes. *International Review for the Sociology of Sport*, *39*(2), 233–244. https://doi.org/10.1177%2F1012690204043467

Rintaugu, E. G., Mwisukha, A., & Amusa, L. O. (2012). Socio-demographic correlates of alcohol consumption among university athletes. *African Journal for Physical Health Education Recreation and Dance*, *18*(42), 939–954.

Rome, E. S., Rybick, L. A., & Durant, R. H. (1998). Pregnancy and other risk behaviors among adolescent girls in Ohio. *Journal of Adolescent Health, 22*, 50–55. https://doi.org/10.1016/S1054-139X(97)00160-2

Sabo, D., Farrell, M. P., Barner, G. M., Melnick, M. J., & Miller, K. E. (1997). *High school athletic participation, sexual behavior and adolescent pregnancy*. A preliminary analysis paper presented at the annual meeting of the American Sociological Association, Toronto, August 9.

Sabo, D., Miller, K. E., Farrell, M. P., Barner, G. M., & Melnick, M. J. (1999). High school athletic participation sexual behavior and adolescent pregnancy: A regional study. *Journal of Adolescent Health, 25*, 207–216. https://doi.org/10.1016/S1054-139X(99)00070-1

Sebele, M. K. (2009). *A comparative study on High risk sexual behavior of male student elite athletes, male student non- athletes and male students recreational sport participants at the university of Botswana* (Unpublished Master's Thesis). South Africa: University of Western Cape.

Senn, T. E., & Carey, M. P. (2011). Age of partners at first adolescent intercourse and adult sexual risk behavior among women. *Journal of Women Health*, *20*(1), 61–66. https://doi.org/10.1089/jwh.2010.2089

Thomas, J. R., Nelson, J. K., & Silvermann, A. L. (2011). *Research Methods in Physical Activity* (6th edition). Canada: Human Kinetics.

Wallin, P. (2001). *Are sports heroes more trouble prone?* SelfGrowth.com Retrieved June15, 2016 from http://www.selfgrowth.com/articles/Wallin7.html.

Wechler, H., Lee, J., Kueo, M., Seibring, M., Nelson, T., & Lee, H. (2002). Trends in college binge drinking during a period of increased prevention efforts: Findings from four Harvard school of public health college alcohol surveys: 1993–2001. *Journal of American College of Health, 50*(5), 203–217.

Wetherill, R. R., & Fromme, K. (2007). Alcohol use, sexual activity, and perceived risk in high school athletes and non-athletes. *Journal of Adolescent Health*, *41*(3), 294–301. https://doi.org/10.1016/j.jadohealth.2007.04.019

Zabin, L. S., & Kragu, K. (1998). The health consequences of adolescent sexual and fertility behavior in sub-Saharan Africa. *Studies of Family Planning*, *29*(2), 210–232. doi: 10.2307/172160

Zilbergeld, B. (1993). *The new male sexuality:* New York: Bantam Books.

Zill, N., Nord, C., & Loomis, L. (1995). *Adolescent time use, risky behaviours and outcomes: An analysis of national data.* Rockville, MD: Westat.

Received on August 18, 2020
Accepted on November 01, 2020