

ORIGINAL RESEARCH ARTICLE

Examining ethnic differences in age at sexual debut among adolescent girls in the Gambia

DOI: 10.29063/ajrh2021/v25i3.9

Mat Lowe^{1*} and Bomar Mendez Rojas²

Society for the Study of Women's Health (SSWH), The Gambia¹; Pan American Health Organization, Tegucigalpa, Honduras²

***For Correspondence:** Email: sswhgambia@outlook.com; Phone: +220 3058287

Abstract

Whether age at sexual debut is influenced by adolescents' ethnicity has not been examined in the Gambia. The aim of this study was to assess ethnic differences in age at sexual debut among girls in 24 rural Gambian settlements. A cross-sectional household survey of 181 respondents aged (10-19 years) was conducted among girls belonging to the three main ethnic groups (Mandinka, Fula and Wolof). Descriptive statistics and ordinal logistic regression were used to show the onset of sexual intercourse and describe the patterns of sexual debut by ethnic group among respondents. All the analyses were conducted in Stata 12.0. The study findings showed that the lowest median age at sexual debut is among Mandinka and Wolof girls (14 years). The results of ordinal logistic regression indicate that girls in the Mandinka and Wolof ethnic groups are approximately 20% less likely to initiate sex at an early age than girls in the Fula ethnic group. On the other hand, girls with more than 1 year of education are less likely to initiate sex at an early age than those with less than 1 year of education. It was also found that girls who live with their mothers are 71% less likely to have an early sexual debut than those who do not. These findings suggest ethnic differences in age at sexual debut among girls in the Gambia. The findings also highlight the importance of female education and living with a mother in reducing the chances of early sexual debut among adolescent girls. (*Afr J Reprod Health* 2021; 25[3]: 78-82).

Keywords: Sexual debut, Gambia, adolescent girls, ethnicity, sexual encounter, age at marriage

Résumé

La question de savoir si l'âge au début des rapports sexuels est influencé par l'origine ethnique des adolescents n'a pas été examinée en Gambie. Le but de cette étude était d'évaluer les différences ethniques d'âge au début de la relation sexuelle parmi les filles de 24 établissements ruraux gambiens. Une enquête transversale auprès des ménages auprès de 181 répondants âgés de 10 à 19 ans a été menée auprès de filles appartenant aux trois principaux groupes ethniques (mandinka, peul et wolof). Des statistiques descriptives et une régression logistique ordinale ont été utilisées pour montrer le début des rapports sexuels et décrire les modèles de débuts sexuels par groupe ethnique parmi les répondants. Toutes les analyses ont été menées dans Stata 12.0. Les résultats de l'étude ont montré que l'âge médian le plus bas au début des rapports sexuels est celui des filles mandingues et wolof (14 ans). Les résultats de la régression logistique ordinale indiquent que les filles des groupes ethniques mandinka et wolof sont environ 20% moins susceptibles d'avoir des relations sexuelles à un âge précoce que les filles du groupe peul. En revanche, les filles ayant plus d'un an d'éducation sont moins susceptibles d'avoir des relations sexuelles à un âge précoce que celles ayant moins d'un an d'éducation. Il a également été constaté que les filles qui vivent avec leur mère sont 71% moins susceptibles d'avoir des débuts sexuels précoces que celles qui n'en ont pas. Ces résultats suggèrent des différences ethniques d'âge au début des rapports sexuels parmi les filles en Gambie. Les résultats soulignent également l'importance de l'éducation des femmes et de la vie avec une mère pour réduire les chances de débuts sexuels précoces chez les adolescentes. (*Afr J Reprod Health* 2021; 25[3]: 78-82).

Mots-clés: Débuts sexuels, Gambie, adolescentes, appartenance ethnique, relations sexuelles, âge au mariage

Introduction

Age at sexual debut, or first sexual intercourse, according to Carazos-Rehg *et al.*¹ is a normal part of human development. However, it also has harmful consequences including sexually transmitted infections (STIs), out-of-wedlock

pregnancies and abortions for women who begins sexual activity in teen years²⁻⁵. In the Gambia, it is reported that 15 percent of women age 20-49 had sex before age 15 and 42 percent before age 18⁶. The proportion of unmarried young women who ever had sexual intercourse also ranged from 13% for females and 37% for males⁶. Many studies in

the vast field of adolescent sexual and reproductive health have demonstrated that the timing of sexual debut of adolescents is linked to a wide range of factors including ethnicity. Ethnicity is an important factor mediating age at sexual debut among adolescents in many African countries⁷ and some studies have concluded that ethnicity may be more significant than socio-economic factors in influencing adolescent's age at sexual debut⁸⁻¹⁰. Despite the significant effect of ethnicity on age at sexual debut, no studies have been conducted in the Gambia to examine ethnic differences in age at sexual debut. The few studies that have been conducted have focused mainly on age and gender differences in sexual debut. A study of adolescent sexual and reproductive health¹¹, for instance, estimated age at sexual debut between young Gambian males and females but did not assess ethnic group differences in age at sexual debut among this population group. The sample size for this study was also not large enough and cannot be generalized to the total population of adolescents. Another study reported that sexual debut for women and men in the Gambia occurred between the ages of 15 and 18 years, with median ages of 16 for women and 17 for men¹². However, no statistical assessments were performed in this study to determine the significance of the association between ethnicity and age at sexual debut¹². Therefore, the aim of this study is to extend these studies by assessing ethnic differences in age at sexual debut among adolescent girls in the Gambia. This information can be used by policy makers and program managers to mitigate the effect of ethnicity on early sexual initiation among adolescent girls.

Methods

This study was based on a larger research project addressing teen pregnancy and early marriage in the Gambia¹³, which involved the collection of quantitative data in one phase through a cross-sectional household survey and qualitative data in another phase through focus group discussions and key informant interviews. The project is currently being implemented in 24 rural settlements in Lower Baddibu District in the North Bank Region of the Gambia. Lower Baddibu District has a population of 17,961. It had the second-lowest recorded median age at marriage (17.3 years) in a national

survey⁶. Farming and animal rearing remain the mainstays of the local economy of Lower Baddibu District.

The study included a sample of 181 female respondents aged (10-19 years). The sample was selected in two stages. First, all the 24 settlements in Lower Baddibu District were randomly selected and grouped under the three main ethnic groups, Mandinka, Fula, and Wolof, with probability proportional to population size. Further stratification by age was then done and those eligible to be interviewed in each ethnic group of settlement were adolescent girls aged (10–19 years). When the Fieldworkers arrived in the selected settlement, a systematic sampling approach was used to select households followed by convenience sampling to select respondents within each household. Two respondents aged (10- to 19-year) were selected from each household.

A paper-based, semi-structured questionnaire was used to conduct face to face interviews with respondents. The questionnaire collected data on characteristics of respondents (age, marital status, ethnicity and age at sexual debut). Age was assessed by the question "How old were you at your last birthday?"; Marital status was assessed by asking respondents "What is your marital status now: are you currently married?" Responses were "Never married" and "Currently married". Ethnicity was assessed by the question "What is your ethnicity?" Responses were "Mandinka, Fula and Wolof". Age at sexual debut was assessed by the question "Have you ever had sexual encounter?", If so, "How old were you when you first had sexual encounter?" This question was asked midway through the interview, after numerous sensitive questions had been asked about the respondents' personal life including marriage, gender roles and so on. The questionnaires were adapted from a similar study in Ethiopia¹⁴ and from the Demographic and Health Survey of the Gambia⁶.

For the data analysis, a descriptive analysis of data on characteristics of the survey respondents was first performed presenting the median time to first sexual encounters. Ordinal logistic regression was then performed to quantify the association of predictors in the initiation of an active sexual life. For this purpose, a dependent variable was created with three categories: has not initiated sexual life, initiated sexual life before 15 years of age, and

initiated sexual life between 15 and 18 years of age. Adjusted ORs were calculated by entering all variables at the same time. All the analyses were conducted in Stata 12.0.

Results

Table 1 shows the onset of sexual intercourse by selected characteristics among adolescent girls. The lowest median age at sexual debut is among Mandinka and Wolof girls (14 years). Fifteen of the twenty-eight adolescent girls who have initiated their sexual lives are from the Mandinka ethnic group. The results of ordinal logistic regression indicate that girls in the Mandinka and Wolof groups are approximately 20% less likely to initiate sex at an early age than girls in the Fula group. On the other hand, girls with more than 1 year of education are less likely to initiate sex at an early age than those with less than 1 year of education. Finally, we found that girls who live with their mothers are 71% less likely to have an early sexual debut than those who do not.

Discussion

The aim of this study was to assess ethnic differences in age at sexual debut among adolescent girls in the Gambia. The study findings suggest ethnic group differences in age at sexual debut among adolescent girls. It was found that the lowest median age at sexual debut is among Mandinka and Wolof girls (14 years). The finding about the Mandinka and Wolof girls having the lowest median age at sexual debut may be due to social and cultural norms based on ethnicity, such as the practice of early marriages among adolescent girls of these ethnic groups. Findings from a previous study¹¹ reported that adolescent girls in the Wolof and Mandinka ethnic groups have a higher probability of marrying early. The study findings also revealed that girls with more than 1 year of education are less likely to initiate sex at an early age than those with less than 1 year of education. Consistent with previous studies, young females with no education are more likely to initiate early sexual debut¹⁷. The possible pathways by which education delays sexual debut in young females has been well documented. First, education enlightens young females about the potential harms of early sexual initiation through sex education programs

and subjects¹⁸. Second, formal education is able to build in young females a repertoire of resilience life skills such as assertiveness and, more importantly, the self-efficacy to postpone or delay sexual activity¹⁹. Young females with higher educational and vocational aspirations may also want to delay sexual intercourse because one of the negative outcomes of early sexual debut—teenage pregnancy—does not only carry a sanction of dismissal from school, but affects future prospects^{12,20}. The same implications are most often not associated with young females with no formal education. It was also found that girls who live with their mothers are 71% less likely to have an early sexual debut than those who do not. This finding is in agreement with the literature which points out that the traditional parental arrangement—living with the mother—is determinant for avoiding early sexual activity among adolescent girls²¹. There is growing body of evidence that parental presence may promote adolescent-parent communication on sexual and reproductive health issues^{22,23}. This again highlights the importance of the study finding that living with the mother is a protective factor against early onset of sexual life.

Although this study has examined ethnic differences in sexual debut, the findings were limited by several factors that ought to be pointed out. First, there are potential mediating effects or covariates on sexual debut that the current study did not examine such as socio-economic status, religion and social and cultural norms which may have had significant association with participants' initiation of sexual debut and first sexual encounter before marriage. However, the findings could still be situated in the context of current research on adolescent sexuality and marriage including studies¹⁻⁷ that provide detailed measurements of potential determinants of risky sexual behavior among adolescents. Second, responses in the study were self-reported and could be subject to social desirability bias. Specifically, exaggerating or denying sexual debut for fear of being socially sanctioned, for instance, may have impacted the study findings¹. Unfortunately, there is not an ideal method that exists for self-reported honesty¹. Despite these methodological limitations, the study has numerous strengths that distinguishes it from previous studies. It is the first study that has examined ethnic differences in age at sexual debut among adolescent girls in the Gambia. Second, the

Table 1: Descriptive statistics of female participants aged 10 to 19 years

Variables	%	Median age at first sexual encounter (years)	Number of girls that had sexual intercourse	Log rank test (p-value)	Adjusted OR ¹ (95% CI)
Ethnic group					
Fula	32.4	16	9	0.016	1
Mandinka	37.5	14	15		0.78 (0.22, 2.74)
Wolof	29.9	14	4		0.80 (0.18, 3.49)
Years of education					
0 years	4.96	13	15	0.006	1
1 to 6 years	37.2	13.5	6		0.48 (0.14, 14.9)
7 to 9 years	41.3	16	6		0.69 (0.06, 7.36)
10 to 12 years	16.5	18	1		0.73 (0.05, 10.8)
Live with mother					
No	28.9	14.5	17	<0.000	1
Yes	71.1	15	11		0.29 (0.12, 0.68)
Total	100	15	28		

1= Adjusted OR were obtained via ordinal logistic regression entering all the predictors simultaneously

study estimated that previous studies on adolescent sexuality in the Gambia were smaller in sample size and no statistical tests were performed in those studies to determine the significance of the association between ethnicity and age at sexual debut.

Conclusion

The present study has extended previous studies on sexual debut among adolescent girls in the Gambia. The findings showed that ethnicity may make a difference in age at sexual debut among adolescent girls in the Gambia. The findings also highlight the importance of female education and living with a mother in reducing the chances of early sexual debut among adolescent girls.

Acknowledgements

The authors are grateful to the participants for sharing their insights and to the research team, namely, Mariama Bojang, Alhagie Gaye, Karamo K. Kinteh, Marie Noel Mendy, Momodou A. Jallow and Omar Touray for their tireless efforts to collect the data.

Ethical approval

Approval for this study was granted by the Scientific Coordinating Committee (SCC 1651v1.1) Medical Research Council The Gambia (MRCG) at the London School of Hygiene and

Tropical Medicine (LSHTM). The study was also approved by the Joint Gambia Government/ MRCG Ethics Committee (SCC 1651v1.2). Informed consent including (verbal and written consent) was sought and obtained from the adolescent girls and their parents.

Funding

Funding for this work was provided by the Canadian International Development Research Centre (IDRC) under the Grant Agreement 108927. The authors' views expressed in this study do not represent the views of the IDRC or the Canadian Government. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Conflict of interest

No competing interests were disclosed.

Contribution of authors

The study was conceptualized, design and written by Mat Lowe. He collected and analyzed the data, and wrote the first and final draft of the paper. Bomar Mendez Rojas also contributed to the data analysis.

References

1. Cavazos-Rehg PA, Krauss MJ, Spitznagel EL, Schootman M, Buchholz KK, Peipert JF, Sanders-Thompson V,

- Cottler LB and Bierut LJ. Age of sexual debut among US adolescents. *Contraception*. 2009 Aug;80(2):158-62. doi: 10.1016/j.contraception.2009.02.014. Epub 2009 Apr 23. PMID: 19631791; PMCID: PMC3064497
2. Pettifor AE, van der Straten A, Dunbar MS, Shiboski SC and Padian NS. Early age of first sex: a risk factor for HIV infection among women in Zimbabwe. *AIDS*. 2004 Jul 2;18(10):1435-42. doi: 10.1097/01.aids.0000131338.61042.b8.
3. Kaestle CE, Halpern CT, Miller WC and Ford CA. Young age at first sexual intercourse and sexually transmitted infections in adolescents and young adults. *American Journal of Epidemiology* 2005 161(8), 774–780.
4. Speizer IS, Fotso JC, Davis JT, Saad A and Otai J. Timing and circumstances of first sex among female and male youth from select urban areas of Nigeria, Kenya, and Senegal. *Journal of Adolescent Health* 2013 53(5), 609–616
5. Rector R. E, Johnson K. A, Noyes L. R and Martin S. The Harmful Effects of Early Sexual Activity and Multiple Sexual Partners among Women: A Book of Charts. The Heritage Foundation, Washington, 2003
6. Demographic and Health Survey: Gambia bureau of statistics Banjul. Maryland, USA: The Gambia ICF International Rockville; 2013.
7. Odimegwu C and Somefun OD. Ethnicity, gender and risky sexual behaviour among Nigeria youth: an alternative explanation. *Reprod Health*. 2017 Jan 31;14(1):16. doi: 10.1186/s12978-017-0284-7.
8. Sambisa W, Curtis SL and Stokes CS. Ethnic differences in sexual behaviour among unmarried adolescents and young adults in Zimbabwe. *J Biosoc Sci*. 2010;42(01):1–25. 19.
9. K Mmari and Sabherwal S. A review of risk and protective factors for adolescent sexual and reproductive health in developing countries: an update. *J Adolesc Health*. 2013;53(5):562–72. 20.
10. Brodish PH. An association between ethnic diversity and HIV prevalence in sub-Saharan Africa. *J Biosoc Sci*. 2013;45(06):853–62.
11. Lohani S, "Adolescent sexual and reproductive health in the Gambia." (2018). Electronic Theses and Dissertations. Paper 3108. <https://doi.org/10.18297/etd/3108>
12. Amo-Adjei J and Tuoyire DA. Timing of sexual debut among unmarried youths aged 15–24 years in subSaharan Africa. *Journal of biosocial science*. 2018;50(2):161-77
13. Addressing Teen Pregnancy and Early Marriage in The Gambia. <https://www.idrc.ca/en/project/addressing-teen-pregnancy-and-early-marriage-gambia>
14. Gage A. Coverage and Effects of Child Marriage Prevention Activities in Amhara Region, Ethiopia. 2009. https://www.measureevaluation.org/resources/publications/tr-09-70/at_download/document
15. Lowe M, Joof M and Rojas BM. Social and cultural factors perpetuating early marriage in rural Gambia: an exploratory mixed methods study [version 3; peer review: 2 approved] *F1000Research* 2020, 8:1949. doi.org/10.12688/f1000research.21076.3
16. https://linus.nci.nih.gov/brb/samplesize/sdpap_survival.html
17. Asante K, Nketiah-Amponsah E, Andoh-Arthur J, Bofo IM and Ampaw S. Correlates of Early Sexual Debut Among Sexually Active Youth in Ghana. *Int Q Community Health Educ*. 2018 Oct;39(1):9-17. doi: 10.1177/0272684X18811016.
18. Lindberg LD and Maddow-Zimet I. Consequences of sex education on teen and young adult sexual behaviors and outcomes. *Journal of Adolescent Health* (2012) 51(4), 332–338.
19. Fonner VA, Armstrong KS, Kennedy CE, O'Reilly KR and Sweat MD. School based sex education and HIV prevention in low- and middle-income countries: a systematic review and meta-analysis. *PLoS One*. 2014 Mar 4;9(3): e89692. doi: 10.1371/journal.pone.0089692.
20. Mumah JN, Mulupi S, Wado YD, Ushie BA, Nai D, Kabiru CW and Izugbara CO. Adolescents' narratives of coping with unintended pregnancy in Nairobi's informal settlements. *PLoS One*. 2020 Oct 29;15(10):e0240797. doi: 10.1371/journal.pone.0240797.
21. França MTA and Frio GS. Factors associated with family, school and behavioral characteristics on sexual initiation: A gender analysis for Brazilian adolescents. *PLoS One*. 2018 Dec 10;13(12):e0208542. doi: 10.1371/journal.pone.0208542.
22. Madkour AS, Farhat T, Halpern CT, Godeau E and Nic Gabhainn S. Early adolescent sexual initiation and physical/psychological symptoms: a comparative analysis of five nations. *J Youth Adolesc*. 2010 Oct;39(10):1211-25. doi: 10.1007/s10964-010-9521-x.
23. Gambadauro P, Carli V, Hadlaczky G, Sarchiapone M, Apter A, Balazs J, Banzer R, Bobes J, Brunner R, Cosman D, Farkas L, Haring C, Hoven CW, Kaess M, Kahn JP, McMahon E, Postuvan V, Sisask M, Värnik A, Zdravec Sedivy N and Wasserman D. *PLoS One*. 2018 Feb 8;13(2):e0191451. doi: 10.1371/journal.pone.0191451. eCollection 2018.