

Sex differentials in the determinants of the multiple lifetime sexual partners among young people in South Africa

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Abstract

Background: A high number of sexual partners a person has in their lifetime is one of the main factors driving the high rate of the AIDS pandemic in sub-Saharan Africa.

Objective: The main objective of this study is to assess the potential factors influencing the multiple lifetime sexual partners among young people

Methods: The study used data extracted from the 2016 South Africa Demographic and Health Survey (SADHS). Univariate, bivariate and multivariate logistic regression analyses were used to establish the relationship between the multiple lifetime sexual partners and background variables.

Results: The bivariate results show that a higher percentage of males (80.5%) than females (58.5%) have multiple lifetime sexual partners. The binary logistic regression results table indicates that age, ethnicity, age at first sex, type of place of residence, employment status, and region were statistically significant for males whereas age, level of education, age at first sex, household wealth and region showed a statistical relationship on multiple lifetime sexual partners for females.

Conclusion: Young people are still engaging in risky sexual behaviours such as having multiple lifetime sexual partners which heightens their risk of an HIV infection.

Key words: Multiple lifetime sexual partners, HIV/AIDS, Young people, Males, Females, South Africa.

Introduction

The total number of sexual partners a person has in their lifetime is associated with health risks and sexually transmitted infections (Jackson, et al. 2019). Having numerous sexual partnerships contributes to the high HIV/AIDS pandemic rates in sub-Saharan Africa since people having multiple sexual partners at a time are most likely to have been diagnosed with HIV, less likely to have protected sex, less likely to disclose their HIV status to their sexual partners thus exposing them to the risk of infection (Mhele, 2017). The risk of an HIV infection is often strongly influenced by overall exposure to sexual encounters and unprotected sex

with those partners. In most cases, an HIV-negative person has a greater chance of encountering a person who is HIV-positive when exposed to a greater number of sexual partners (Parker et al., 2007).

A study conducted by Mhele (2017), about sexually active men in Lesotho, argues that having sexual intercourse with different partners has a risk of exposing one to contracting sexually transmitted infections (STIs), including HIV, which may result in infertility and miscarriage. Also, when one partner is diagnosed with an STI, they can infect other sexual partners especially when sexual intercourse occurs without the use of protective measures such as a condom (Mhele, 2017). Younger men were found to be more likely to have more lifetime sexual partners than older men, especially in many African countries where gender norms often have a huge influence on young people's risky sexual behaviours (Valerie et al., 2007). For instance, the belief that men cannot control their sexual desires often encourages the behaviour of having multiple sexual partners among men (Onoya et al., 2014). In the township of Alexandra in South Africa, boys often received complimentary labels for having numerous partners, whereas by contrast, men with only one sexual partner are perceived as not being real men or lacking in the foundation of 'real manhood,' abnormal, incapable of convincing females, and stupid (Selikow, 2004). Contrary to this acceptance among men, for women this behaviour is frowned upon with women being insulted and being labelled as a 'slut' or 'loose' (Onoya et al., 2014). Females often have more than one sexual partner when most need financial assistance for subsistence needs such as food, rent or school fees, and to afford luxuries such as fashionable clothing, entertainment, jewellery or cell phones (Onoya et al., 2014).

One strategy for controlling the spread of HIV is promoting safer sex behaviour among young people (Letamo and Mokgathe, 2013). Young people are less likely to practice safe sex in general for reasons such as pressure to engage in early and unprotected sex, forced sex, pressure to get pregnant, limited user-friendly reproductive health services and staff, negative and low perceptions about condoms and personal risk, and low perceived self-efficacy in preventive behaviour (Bankole et al., 2004). Having multiple or a high number of lifetime sexual partners exposes young people to contracting sexually transmitted diseases and HIV, which can be detrimental to their health (Statistics South Africa, 2020). Results from Statistics South Africa (2020) found that females aged 15–19 years already had an average of two-lifetime sexual partners, whilst those aged 30–34 years had an average of five sexual partners in their life. Males aged 15–19 years already had six sexual partners in their lifetime, whilst those aged 30–34 years had an average of eighteen sexual partners in their life (Stats SA, 2020). A high number of lifetime sexual partners continues to be a problem in South Africa and especially among young people as it contributes to the spread of HIV; as such it is imperative to find the underlying causes and predictors of this behaviour that contributes to the spread of HIV.

The South African government has made efforts to reduce the occurrence of risky sexual behaviours among young people through providing free condoms, information on HIV/AIDS and mass media campaigns, yet,

multiple sexual partnerships and lack of condom use persist (Mabetha and De Wet, 2018). There is a need for behavioural intervention whereby young people are given extensive information on the risks of having more than one sexual partner at a time and having unprotected sexual intercourse. Such interventions can take place when there is adequate research and information on the targeted population and the factors that influence the increase in total number of lifetime sexual partners.

The Theory of Planned Behaviour (TPB) by Icek Ajzen was developed in an effort to predict human behaviour (Ajzen, 1991). The theory proposes that attitude towards the behaviour, subjective norms, and perceived behavioural control influence the behavioural intentions of human beings (Asare, 2015). The theory begins with behavioural intention, which is the motivational factor that influences behaviour (Asare, 2015). This is followed by the attitude towards the behaviour, which is the belief that acting in a certain way will have either favourable or unfavourable consequences for the individual (Asare, 2015). The subjective norm is when there is social pressure to either perform or not perform a given behaviour. This is the belief about whether the behaviour will be approved or disapproved by others, such as family, friends or romantic partners (Asare, 2015). Perceived behavioural control refers to how easy or difficult it is to perform a behaviour of interest according to people's perceptions (Asare, 2015).

In the context of risky sexual behaviour among young people, one sexual risk behaviour might be having multiple/ high number of lifetime sexual partners (behavioural intention). If young people know the positive outcomes of having one sexual partner, such as the prevention of STIs, they are most likely to have a positive attitude toward the behaviour and to adopt that risk reduction behaviour (attitude toward a behaviour). Young people may continue to have one sexual partner, but the perception that family, peers or romantic partners not approving of that behaviour might hinder intentions to have one sexual partner (subjective norm). Having the confidence in the ability to be with one sexual partner at a time is associated with practising that behaviour. If a young person finds it difficult to be with one sexual partner at a time, he is less likely to do so because of the lack of confidence in the ability to do so (perceived behavioural control), as such he might continue to have multiple sexual partners which might lead to a high number of lifetime sexual partners.

This study will assist in shedding light on the topic at hand, such that planners will find it easier to create interventions suited for this population. Also, for upcoming studies, this study will provide a base for literature for other scholars by adding to the existing literature and explaining using other factors that might not have been touched on before about the risks and prevalence of total lifetime sexual partnerships. This study, therefore, seeks to explore different factors that can explain young people having sexual intercourse with numerous lifetime sexual partners.

A few studies have attempted to investigate the predictors of the total number of sexual partnerships, yet most have not touched on young people aged 15-24 year in South Africa. Some of the few studies conducted

have focused on women aged 15-49 years, men and women aged 50 years and above, and people aged 25-45 (Simelane et al., 2021, Jackson et al., 2019, Todd et al., 2009) while other studies are outdated (Wiederman, 1997, Chan et al., 2003, de Sanjose et al., 2008). This paper focuses on the total number of sexual partners a young person has in their lifetime. Whether in a series of monogamous relationships or having relationships that overlap in time, the total number of lifetime sexual partners is an important key indicator of HIV in South Africa. At their age, young people are most likely to experiment by having sexual intercourse that is at most times unprotected and having more than one sexual partner at a time (Manu et al., 2022). This puts them at risk of infection for STIs and HIV. The information on the total number of lifetime partners assists in determining the sexual activity of an individual and their risk of an HIV infection. A higher number of total lifetime sexual partners is considered risky behaviour in this paper.

The dependent variable used from the SADHS data set was “total number of lifetime sexual partners”. Respondents were asked, “in total, with how many different people have you had sexual intercourse in your lifetime?” (NDoH et al., 2019). The possible responses were ‘0’, ‘1’, ‘2’ and so forth up until ‘95’ and ‘98’ if they did not know. For this study, the total number of lifetime sexual partners was coded ‘1’ for those who had, ‘zero or one sexual partner’ and ‘2’ for those who had, ‘more than one sexual partner. This variable was chosen with the consideration that “lifetime” sexual partners would mean that some of these relationships were multiple or concurrent at one point. The main objective of this study is to assess the potential factors influencing the of the multiple lifetime sexual partners among young people.

Methods

Data

The study used data extracted from the 2016 South African Demographic and Health Survey (SADHS) which belongs to the National Department of Health (NDoH), based on a sample carried out by Statistics South Africa, technically assisted by the ICF International and funded by the United States Agency for International Development (USAID) (National Department of Health et al., 2019).

The survey used a two-stage stratified cluster sampling design (NDoH et al., 2019). The first stage involved a selection of 750 Enumeration Areas (EAs) using systematic random sampling with probability proportional to size. The second stage involved the selection of 20 dwelling units per EA, again using systematic random sampling (NDoH et al., 2019). In the final analysis, a nationally representative sample of over 15,000 dwelling units was selected and 11,083 households were interviewed (NDoH et al., 2019). Of those interviewed, there were 8,514 women aged 15–49 and 3,618 men aged 15–59 (NDoH et al., 2019). For purposes of this study, the study sample comprised 787 males and 1535 females aged 15–24 years who have had sexual intercourse and are unmarried.

Description of Variables

Dependent variable

The outcome variable in this study was the total number of lifetime sexual partners. Respondents were asked, “in total, with how many different people have you had sexual intercourse in your lifetime?”. The possible responses were ‘0’, ‘1’, ‘2’ and so forth up until ‘95’ and ‘98’ if they did not know. For this study, the total number of lifetime sexual partners was coded ‘1’ for those who had, ‘zero or one sexual partner’ and ‘2’ for those who had, ‘more than one sexual partner’.

Independent variables

The independent variables used in this study include the following: socio-demographic characteristics; age, type of residence, ethnicity, province, highest educational level, age of household head, sex of household head; socio-economic variables include work status, wealth status; and behavioural variables are age at first sex, HIV testing and condom use.

Statistical analysis

IBM SPSS version 27 software was used to compute and analyse the data. The analysis was done at three levels. First, descriptive analysis was done to examine the distribution of the study variables. Second, the chi-square test was used to assess the association between lifetime sexual partners and each independent variable. This method was carried out by cross tabulating the dependent (multiple lifetime sexual partners) with the independent (socioeconomic, demographic and behavioural) variables, with the significant level being at $p < 0.01$ and $p < 0.05$. Thirdly, multivariate binary logistics regression was used to identify factors influencing the multiple lifetime sexual partners by considering socioeconomic, demographic and behavioural variables.

Limitations

This study used secondary data analysis; as such, the researcher has no control over purpose, choice, or method of data collection. Questions on the number of lifetime sexual partners may be biased as they involve reflective measures of sexual risk behaviours, and respondents may not recall their sexual behaviour over the past 12-month period correctly. There is a possibility of underestimation or dishonesty in sexual risk behaviours among young female respondents since they are usually shy to discuss issues around sexuality and they are also influenced by cultural beliefs that people are not allowed to talk about sex in public settings; as a result, this leads to under-reporting of sexual behaviours of young people. Most of the variables were found not to be significant on a multivariate analysis level as such it was observed that the problem was with the dataset. It would be advisable for the enumerators to check on the content and coverage errors of the data such that, when analysed, there are no difficulties encountered.

Results

Background characteristics of young people

Table 1 shows the background characteristic of young people. The results are stratified for males and females separately, allowing for a better understanding of the different needs of both sexes.

The results reported higher percentages for males (59.3%) and females (62.9%) aged 20-24 years. In terms of ethnicity, majority were males from black population (93.4%) as compared to their female (92.4%) counterparts. The highest percentage was reported among males and females with secondary education with 86.7%. In terms of work status, 79.9% of males were not working as compared to 86.7% of females. Majority of females had sex at 15 years and above (91.0%) than their male counterparts (79.4%). In terms of age of the household head, the highest percentage was reported among females aged 35 years and above at 76.9% than 72.4% of males. Females who used condom during sex with the most recent partner were 68.1% as compared to females with 57.3%. HIV testing is more prevalent among females (83.7%) than males (66.6%). The highest percentage reported was above 40% among females and males who were poor, 62.1% of females resided in urban areas as compared to 60.9% of males. Majority of females and males resided in Gauteng (24.8% and 23.1%).

Variables	Male		Female		Both sexes	
	N	%	N	%	N	%
Age						
15-19	321	40.8	569	37.1	890	38.3
20-24	467	59.3	966	62.9	1433	61.7
Ethnicity						
Black	735	93.4	1418	92.4	2153	92.7
Non-black	52	6.6	117	7.6	169	7.3
Level of education						
Primary or less	52	6.6	71	4.6	123	5.3
Secondary	682	86.7	1331	86.7	2013	86.7
Higher	54	6.9	133	8.7	186	8.0
Currently working						
No	629	79.9	1331	86.7	1959	84.4
Yes	159	20.2	204	13.3	363	15.6
Age at first sex						
Less than 15 years	163	20.7	138	9.0	301	13.0
15+	625	79.4	1397	91.0	2021	87.0
Age of household head						
15-24 years	139	17.7	223	14.5	363	15.6
25-34 years	78	9.9	130	8.5	208	9.0
35+ years	570	72.4	1181	76.9	1751	75.4
Sex of household head						
Male	401	51.0	504	32.8	906	39.0
Female	386	49.0	1031	67.2	1416	61.0

Condom used during last sex with most recent partner						
No	173	22.0	521	33.9	694	29.9
Yes	536	68.1	879	57.3	1415	60.9
Don't know	106	13.5	107	7.0	213	9.2
Ever been tested for hiv						
No	264	33.5	249	16.2	513	22.1
Yes	524	66.6	1285	83.7	1809	77.9
Household wealth index						
Poor	332	42.2	684	44.6	1016	43.8
Middle	180	22.9	324	21.1	505	21.7
Rich	275	34.9	527	34.3	801	34.5
Type of place of residence				0.0		0.0
Urban	479	60.9	954	62.1	1434	61.8
Rural	308	39.1	581	37.9	888	38.2
Province				0.0		0.0
Western Cape	63	8.0	136	8.9	199	8.6
Eastern Cape	112	14.2	236	15.4	348	15.0
Northern Cape	13	1.7	30	2.0	43	1.9
Free State	46	5.8	76	5.0	122	5.3
KwaZulu-Natal	141	17.9	317	20.7	457	19.7
North-West	55	7.0	94	6.1	150	6.5
Gauteng	195	24.8	355	23.1	550	23.7
Mpumalanga	67	8.5	138	9.0	205	8.8
Limpopo	96	12.2	152	9.9	248	10.7
Total	787	100.0	1535	100.0	2322	100.0

Relationship between multiple lifetime sexual partners and background variables

The results of the relationship between socioeconomic factors and the number of lifetime sexual partners are presented in Table 2. The results indicate that lifetime sexual partners are significantly associated with most demographic, socio-economic and behavioural factors. Table 2 indicates a significant association between lifetime sexual partners with age, place of residence, ethnicity, employment, age of household head and HIV testing among both males and females, while region, wealth, sex of household head and age of first sex are significantly associated with lifetime sexual partners only among females and education associated only with males.

Table 2: Relationship between multiple lifetime sexual partners and background variables among young people

Variables	Multiple lifetime sexual partners										
	Males			Females			Both sex			Chi-square p-value	Chi-square p-value
	One	Two or more	Total	One	Two or more	Total	One	Two or more	Total		
	%	%		%	%		%	%			
Age											
15-19	22.4	77.6	321	60.5	39.5	569	46.7	53.1	890	30.058 ^a	122.231 ^a
20-24	8.6	91.2	467	31.7	68.3	966	24.1	75.9	1433	0.000	0.000
Ethnicity											
Black	13.1	86.9	735	41.5	58.5	1418	31.8	68.2	2153	12.521 ^a	4.915 ^a
Non-black	30.8	69.2	52	52.1	47.9	117	45.6	54.4	169	0.000	0.027
Level of education											
Primary or less	19.2	80.8	52	43.7	56.3	71	33.3	66.7	123	9.043 ^a	0.605 ^a
Secondary	15	85	682	42	58	1331	32.8	67.2	2013	0.011	0.739
Higher	1.9	98.1	54	45.1	54.9	133	32.8	67.7	186		
Currently working											
No	16.4	83.6	629	43.1	56.9	1331	34.5	65.5	1959	10.493 ^a	2.309 ^a
Yes	6.3	93.7	159	37.3	62.3	204	23.7	76	363	0.001	0.129
Age at first sex											
Less than 15 years	12.3	87.7	163	35.5	64.5	138	22.9	77.1	301	0.608 ^a	2.863 ^a
15+	14.7	85.1	625	43	57	1397	34.3	65.7	2021	0.436	0.091
Age of household head											
15-24 years	4.3	95.7	139	36.3	64.1	223	24	76	363	13.692 ^a	12.937 ^a
25-34 years	16.7	83.3	78	30.8	68.5	130	25.5	74.5	208	0.001	0.002
35+ years	16.3	83.5	570	44.8	55.3	1181	35.5	64.5	1751		
Sex of household head											
Male	14.7	85.5	401	46.8	53.2	504	32.6	67.3	906	0.084 ^a	6.355 ^a
Female	14	86	386	40.1	59.8	1031	33	67	1416	0.771	0.012
Condom used during last sex with most recent partner											
No	12.1	87.9	173	39.9	60.1	521	33	67	694	0.562 ^a	0.913 ^a
Yes	10.3	89.7	536	42.4	57.6	879	30.2	69.8	1415	0.453	0.339
Don't know	46.2	53.8	78	51.1	48.9	135	49.8	50.2	213		
Ever been tested for HIV											
No	18.6	81.4	264	53.8	46.6	249	35.5	64.5	513	5.741 ^a	5.734 ^a
Yes	12.2	87.8	524	40.2	59.8	1285	32.1	67.9	1809	0.017	0.017

Household wealth index											
Poor	14.8	85.5	332	44.6	55.4	684	34.8	65.2	1016	0.165 ^a	7.788 ^a
Middle	13.3	86.7	180	35.5	64.5	324	27.7	72.3	505	0.921	0.020
Rich	14.5	85.5	275	43.6	56.4	527	33.6	66.4	801		
Type of place of residence											
Urban	10.9	89.1	479	39.2	60.8	954	29.7	70.3	1434	11.810 ^a	10.277 ^a
Rural	19.5	80.2	308	47.5	52.5	581	37.8	62.2	888	0.001	0.001
Province											
Western Cape	25.4	74.6	63	49.3	50.7	136	41.7	57.8	199	14.158 ^a	49.096 ^a
Eastern Cape	14.3	84.8	112	37.3	62.7	236	29.9	70.1	348	0.078	0.000
Northern Cape	23.1	76.9	13	43.3	56.7	30	37.2	62.8	43		
Free State	13	87	46	32.9	67.1	76	25.4	74.6	122		
KwaZulu-Natal	14.2	85.8	141	56.2	43.8	317	43.3	56.7	457		
North West	16.4	83.6	55	37.2	63.8	94	29.3	70.7	150		
Gauteng	8.2	91.8	195	34.6	65.4	355	25.3	74.7	550		
Mpumalanga	16.4	83.6	67	34.1	65.9	138	28.3	71.7	205		
Limpopo	16.7	84.4	96	48	52	152	35.9	64.1	248		
Total	14.4	85.8	787	42.3	57.7	1535	32.8	67.2	2322		

The results showed that 92.0% of males aged 20–24 had multiple lifetime sexual partners while 68% of females had multiple lifetime sexual partners. The results indicate a higher percentage of multiple lifetime sexual partners in the Free State (68.0%), Gauteng (67.2%) and Mpumalanga (66.5%). Concerning type of residence, the results indicate a higher percentage of having multiple lifetime sexual partners in urban than rural areas. The percentage of multiple lifetime sexual partners among urban males was 88.2% and 61.1% among urban females. The percentage of multiple lifetime sexual partners was higher among Black men (85.6%) and Black females (59.5%). The results showed an increase of multiple lifetime sexual partners with advancement in education with male with higher education having higher prevalence of multiple lifetime sexual partners (98.0%).

The results indicated that males and females who were working had a higher prevalence of multiple lifetime sexual partners (95.2% and 68.0% respectively). Wealth status is significantly related to the multiple lifetime sexual partners among the female population with those in the middle category (67.5%) reporting multiple lifetime sexual partnerships. The sex of the household head also showed a significant relationship with multiple sexual partnerships for females, whereby females in female-headed households (60.2%) reported higher percentages of having had multiple lifetime sexual partner. Males (95.1%) in households headed by persons aged 15–24 years reported higher percentages of lifetime sexual partners while females

(67.7%) in households headed by persons aged 25–34 years reported higher percentages of multiple lifetime sexual partners.

Age at first sex showed to be a significant variable to lifetime sexual partners for females only. Females who had their first sex at an age less than 15 years showed a higher percentage (69.5%) for multiple lifetime sexual partners. Both males and females who have ever tested for HIV reported having multiple lifetime sexual partner in their lifetime, with the variable showing a significant relationship. The percentage of lifetime sexual partners among males who had had an HIV test was 88.3% and 61.6% for females who had an HIV test.

Factors associated with multiple lifetime sexual partners among young males and females in South Africa

Table 3 presents the results of multivariate analyses of factors associated with multiple lifetime sexual partners using logistic regression modelling for young men and women. The table indicates that age, ethnicity, age at first sex, type of place of residence, employment status, and region were statistically significant for males whereas age, level of education, age at first sex, household wealth and region showed a statistical relationship on lifetime sexual partners for females.

Table 3: Determinants of the multiple lifetime sexual partners among young people

Variables	Males				Females			
	Sig.	Exp(B)	95% C.I.for EXP(B)		Sig.	Exp(B)	95% C.I.for EXP(B)	
			Lower	Upper			Lower	Upper
Age group								
15-19		1				1		
20-24	0	3.656	2.006	6.666	0	3.746	2.906	4.827
Ethnicity								
Black		1				1		
Non-black	0.003	0.161	0.047	0.544	0.437	0.804	0.463	1.395
Level of education								
Primary or less		1				1		
Secondary	0.437	1.452	0.567	3.721	0.953	1.017	0.575	1.799
Higher	0.095	11.116	0.657	187.972	0.041	0.483	0.24	0.971
Currently working								
No		1				1		
Yes	0.022	3.707	1.212	11.337	0.315	0.831	0.579	1.192
Age at first sex								
Less than 15 years		1				1		
15 years +	0.057	0.467	0.213	1.023	0.002	0.501	0.322	0.782
Age of household head								

15-24		1				1		
25-34	0.073	0.269	0.064	1.13	0.066	1.629	0.969	2.741
35+	0.045	0.306	0.096	0.975	0.354	0.846	0.593	1.206
Sex of household head								
Male		1				1		
Female	0.37	1.289	0.74	2.244	0.106	1.233	0.957	1.589
Condom used during last sex with most recent partner								
No		1				1		
Yes	0.353	1.353	0.715	2.561	0.101	0.814	0.637	1.041
Ever been tested for HIV								
No		1				1		
Yes	0.886	1.043	0.588	1.85	0.105	1.299	0.946	1.784
Household wealth index								
Poor		1				1		
Middle	0.712	0.868	0.408	1.844	0.039	1.409	1.017	1.95
Rich	0.592	0.754	0.268	2.122	0.909	1.02	0.726	1.433
Type of place of residence								
Urban		1				1		
Rural	0.002	0.212	0.081	0.559	0.189	0.801	0.576	1.115
Region								
Western Cape		1				1		
Eastern Cape	0.018	4.75	1.301	17.347	0.458	1.238	0.705	2.174
Northern Cape	0.259	3.251	0.419	25.208	0.761	1.161	0.443	3.048
Free State	0.055	4.581	0.967	21.705	0.722	1.138	0.559	2.317
Kwa Zulu-Natal	0.032	4.137	1.133	15.101	0.014	0.504	0.292	0.869
North West	0.032	6.335	1.171	34.263	0.347	1.389	0.7	2.756
Gauteng	0.029	4.013	1.15	14.003	0.296	1.321	0.784	2.226
Mpumalanga	0.093	3.465	0.814	14.748	0.194	1.525	0.807	2.88
Limpopo	0.079	3.409	0.869	13.368	0.722	0.892	0.475	1.675
Constant	0.039	7.925			0.784	1.139		

The regression results revealed that males aged 20-24 were 3.66 ([95% CI 2.006-6.666]) times more likely to have had more lifetime sexual partner as compared to those aged 15-19 years. Similarly, females of the same age were 3.75 ([95% CI 2.906-4.827]) times more likely to have had more lifetime sexual partners as compared to those aged 15-19 years. Non-black males had significantly lower odds of having multiple lifetime sexual partners as compared to the black (aOR 0.16 [95% CI 0.047-0.544]). Females with higher education were 0.48 ([95% CI 0.24-0.971]) times less likely to have multiple lifetime sexual partners than those with primary education or less. Regarding employment status, males who were working were (aOR 3.70 [95% CI 1.212-11.337]) times more likely to have multiple sexual partners as compared to those who were not working. Age at first sex was significantly associated with multiple lifetime sexual partnerships

whereas both sexes who had sex at 15 years and above had lower odds of having multiple lifetime sexual partners (aOR 0.467 [95% CI 0.213-1.023]; aOR 0.501[95% CI 0.322-0.782]) than those who had sex before 15 years. Males from households headed by head age 35 years and above times had lower odds of having multiple lifetime sexual partners as compared to those headed by heads aged 15-24 years (aOR 0.306 [95% CI 0.096-0.975]). Type of place of residence showed a significant association with multiple lifetime sexual partnerships whereby males who resided in rural areas were found to be less likely to have multiple lifetime sexual partnerships (aOR 0.212 [95% CI 0.081-0.559]). Regarding household head, females who were in the middle and rich were more likely to have multiple lifetime sexual partners than those who were poor (aOR 1.409 [95% CI 1.017-1.95]). Males from North-West, Eastern Cape, Free State, KwaZulu Natal and Gauteng had more odds (aOR 6.33 [95% CI 1.171-34.263]; aOR 4.75[95% CI 1.301-17.347]; aOR 4.58 [95% CI 0.967-21.705]; aOR 4.13 [95% CI 1.133-15.101] and aOR 4.01[95% CI 1.15-14.003]) of having multiple sexual partners than those in the Western Cape. Also, females in KwaZulu Natal were less likely to have multiple lifetime sexual partners as compared to those in the Western Cape (aOR 0.50 [95% CI 1.017-1.95]).

Discussions

This study aimed to access the potential factors influencing the sex differentials in the determinants of multiple lifetime sexual partners among young people of South Africa.

This study indicated that multiple lifetime sexual partnerships associated with age for both males and females. The results show that males and females aged 20-24 years had a higher prevalence of having multiple lifetime sexual partners as compared to those aged 15-19 years. This result coincides with the finding of other studies (Otutubikey and Nwabuaewe, 2007; Hadish et al., 2017) which is surprising since multiple sexual partnerships are mostly attributed with younger people (15-19 years) because of their curiosity and likelihood to experiment with different sexual partners at a time (Kar et al., 2015). Nonetheless, it may be possible that with life transitions from childhood to adulthood, entering the labour market and having freedom away from family members, young people may outgrow the behaviour of committing to one sexual partner as a result of perceiving having multiple sexual partners as more acceptable for their age group (Paulsen et al., 2011; Vamos et al., 2020; Yeboah et al., 2022).

The study indicated multiple lifetime sexual partnerships were associated with ethnicity for males only. It was observed that non-black males had lesser odds of having multiple lifetime sexual partners as compared to black males. The results found were consistent with other studies (Zuma et al., 2010; Onoya et al., 2015; Doyle et al., 2017; Mah, 2019). This observation could be explained by the cultural norms and gender imbalances among the black population which still fuels multiple sexual partnerships by encouraging males to have more than one sexual partner and defines manhood as being able to have more than one partner.

Having more than one sexual partner is often considered a norm for males, but it is frowned upon when a female does it and she is considered shameful. Girls are often expected to be well-behaved, while for boys, having multiple sexual partners means having a higher social status, power and defines manhood in a community (Otutubikey and Nwabuawele, 2007; Onoya et al., 2015).

Another factor that was associated with multiple lifetime sexual partnerships was employment status for males. Males who were working had a higher prevalence of having multiple lifetime sexual partnerships and these results were consistent with other similar studies (Madise et al., 2007; Mutenheri, 2014; Mhele 2017). Having money, driving expensive cars and living in expensive houses often fuels the involvement of men in multiple sexual partnerships, thus confirming that being wealthy increases the chances of having more than one sexual partner among males. They use their money to tempt needy or greedy people into their networks of sexual partners by taking advantage of poor and desperate people who need food and money (Jana et al., 2008; Mhele, 2017).

This study revealed that having multiple lifetime sexual partners was associated with the level of education among the females and not the males. Females with higher levels of education had lower odds of having multiple lifetime sexual partners. This finding was also observed by other studies (Zuma et al., 2010; Mlambo et al., 2016). Lower odds of multiple lifetime sexual partners among these young people may be attributed to greater sexual and reproductive health literacy exposure, knowledge of HIV/AIDS and contraceptives which empowers them to make healthier decisions on their sexual matters.

Moreover, the study revealed an association between multiple lifetime sexual partners and age at first sex. Young people who had first sex at the age of 15 years and above had lower odds of having multiple lifetime sexual partners. This finding is consistent with other studies (Pettifor et al. 2004, Ma et al., 2009; Zuma et al. 2010). This supports that having sex at an early age may determine the sexual behaviour of a young person throughout their life, and if one behaviour such as having more than one sexual partner is established then it may be difficult to change. Also, an early sexual debut increases the chances of HIV infection because of the longer period of exposure (Zuma et al., 2010; Mhele, 2017).

The results showed a lower prevalence of multiple lifetime sexual partnerships among males living with household heads ages 35 years and above. The assumption for this finding could be that older parents understand the consequences of having more than one partner at a time, and as such might encourage or simply forbid their children from practising such a behaviour. Older parents are also more likely to know about HIV/AIDS and the factors that encourage the spread thereof, including having multiple lifetime sexual partners.

In addition, the findings of this study revealed an association between multiple lifetime sexual partners and type of place of residence. Males who lived in rural areas had lower odds of having multiple lifetime sexual partners. This finding was observed in other studies (Shisana et al., 2015; Pilgrim et al., 2015) which is

surprising since rural areas are mostly associated with lack of knowledge and information on sexual reproductive health. Nevertheless, Palamuleni et al., (2007) stated that better standards of living are associated with living in urban areas; as such, one possible reason for the multiple lifetime sexual partners among urban males could result from having adequate resources to provide and sustain the needs of numerous sexual partners at a time (Ahinkorah et al., 2022).

Additionally, multiple lifetime sexual partnership is associated with the household wealth index. Females in the middle wealth category were more likely to have multiple lifetime sexual partners. The results of other studies (Akwara et al., 2003; Simelane et al., 2021), revealed that women with high levels of household wealth had significantly higher odds of reporting risky sexual behaviour than women from households with low or middle wealth. Exavery et al. (2015) pointed out that while men may have more than one sexual partner for respect, status, and honour, women are likely driven by attractiveness, peer pressure, and the need for vacations and entertainment. In most cases, poor people may be involved with more than one sexual partner to provide for necessities, but many also do this to obtain money for luxuries. The case of "sugar daddies" occurs especially among young women, who look for older people to provide financial assistance for purchases of expensive mobile phones and fashionable clothes to fit in with peers born from wealthier families. Additionally, males residing in the Free State, Gauteng and Mpumalanga had the highest proportion of multiple sexual partnerships while females residing in the Free State had lower odds of multiple lifetime sexual partners.

Conclusion

For the age group selected, young as they are, one would expect a lower number of sexual partnerships in their lifetime, yet what was found in this study is the exact opposite of that. Although it is well known that young people engage in sexual activities because of their curious nature of wanting to explore and experiment, the rate at which they are engaging with multiple partners is alarming and calls for an intervention. At the rate at which young people continue having multiple lifetime sexual partnerships, the opposite of the ambition of the 90-90-90 strategy could be the outcome where HIV infections could increase instead of decline. With the observed high percentages of lifetime sexual partnerships among young people and since most of the HIV infection is spread through unprotected sexual intercourse, and the chances of having sex with an infected person are high, the risk of infection of HIV might continue to affect many lives, especially of those that we refer to as the future of this country.

Recommendations

There is clear evidence from the results of the study among young people that there is a huge problem when it comes to behavioural change. Results have shown that the age and sex of the household head can

influence the number of lifetime sexual partners in the family. In a country bound by culture and tradition such as South Africa, there is a need to encourage sexual and reproductive health talks in the family. Socialisation begins in the family, where children are taught norms and values until they can go to school to learn more. Household heads need to start talking to their children about sexually related issues and the risks involved for one wanting to engage in them. This should be done without instilling fear, but rather by giving guidance and support.

The observed high percentages of lifetime sexual partners, especially among males, are rooted in the cultural norms and the gender inequalities between males and females, and also peer pressure, especially among males, where they are labelled as weak if they cannot have more than one partner. This stereotypical behaviour needs to change for the behaviour of young people to change. There should be programmes that not only focus on HIV prevention and treatment through condoms and testing but also interventions targeted at behaviour. These interventions could formulate strategies that could help young people know how behavioural change is fundamental in the fight against HIV. Also, young people should take this disease seriously and know that they could get infected, to protect themselves from it. The knowledge on the transmission, prevention and treatment of HIV should be taught intensively such that young people understand what their risky behaviours could lead to. It is therefore critical that parents, teachers, planners and policymakers become aware of the occurrence of these behaviours, the factors increasing their likelihood, and ways to prevent them.

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She published an article in 2020 titled "Determinants of HIV testing among young people aged 15-24 years in South Africa" extracted from her Honours research project with her co-author Professor Martin Palamuleni, in the journal of Gender and Behaviour. This article used data from the South African Demographic and Health Survey 2016 and in her results, she found that HIV testing is moderate among young people of South Africa.

Her research interests are sexual and reproductive health of mostly young people, gender issues and fertility patterns.