# **ORIGINAL RESEARCH ARTICLE**

# Age differences and protected first heterosexual intercourse in Ghana

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### Abstract

Age differences between partners, where females are relatively younger than their male partners, can negatively affect power dynamics and subsequent negotiations for safe sex practices with implications on unplanned pregnancies and STIs transmission. This paper examines the effects of age differentials on condom use at first sex. Using a weighted sample of 925 women drawn from the fifth round of Ghana Demographic and Health Survey and applying complementary log-log model, the probability of first sex being protected vis-à-vis partner age differences are estimated. The results suggest that females' being ten or more years younger than their male partners at first sex was a significant indicator of non-protection while at age intervals 1-4 and 5-9 years, the probability of protected sex inflates significantly. The results demonstrate that large age disparities between partners pose a significant barrier to protection during first sex and strategies have to be developed to altering wrong perceptions associated with intergenerational sex, particularly, in settings such as Africa where gerontocratic tendencies pervade not only social relationships but sexual as well. (*Afr J Reprod Health 2012; 16[4]: 58-67*).

## Résumé

Les différences d'âge entre les partenaires, chez qui les femmes sont relativement plus jeunes que leurs partenaires masculins, peuvent affecter de manière négative la dynamique du pouvoir et des négociations ultérieures sur les pratiques sexuelles sans risque avec les implications sur les grossesses non planifiées et de la transmission des IST. Cette étude examine les effets des écarts d'âge sur l'utilisation du préservatif au premier rapport sexuel. A l'aide d'un échantillon pondéré de 925 femmes tirées de la cinquième phase de l'Enquête Démographique et de Santé du Ghana et de l'application du modèle log-log complémentaire, la possibilité de protéger le premier rapport sexuel vis-à-vis des différences d'âge entre des partenaires a été estimée. Les résultats suggèrent que le fait que les femmes sont au moins dix ans plus jeunes que leurs partenaires masculins lors du premier rapport sexuel, était un indice significatif de non-protection tout en intervalles d'âge de 1-4 et de 5-9 ans ; la possibilité de rapports sexuels protégés est gonflée de façon significative. Les résultats montrent que les disparités d'âge entre les partenaires constituent un obstacle important à la protection lors de leur premier rapport sexuel et les stratégies doivent être élaborées pour modifier les perceptions erronées qui sont liées au sexe intergénérationnel, en particulier, dans des milieux comme l'Afrique où les tendances gérontocratiques envahissent non seulement des rapports sociaux, mais sexuels aussi (*Afr J Reprod Health 2012; 16[4]: 58-67*).

Keywords: age mixing, intergenerational, first sex, protection, Ghana

# Introduction

This article examines the effect of age differences between partners on condom use during first sex. Over the last decade, age-mixing or intergenerational sex in sub-Saharan Africa has attracted much attention in research on reproductive health issues. This study attempts to build on previous studies that have investigated the phenomenon of age-mixing and protective sex. Studies have demonstrated that intergenerational sexual relations contribute to HIV and other STI rates, partly due to power imbalances, which can constrain negotiation for safe sex practices. In sub-Saharan Africa, this phenomenon is believed to play a key role in the spread of HIV among young females and adolescents<sup>1</sup>. For example, a study in Kenya among the Kissimus found that approximately 27% of females between 15-19 years were infected with HIV while only 5% of their older counterparts were infected. Age mixing has been suggested as a probable risk factor among the adolescents given that among men, infection rates are higher in older men<sup>2-4</sup>. Whereas

it is difficult to curtail intergenerational sex entirely, protective sex is believed to have a potential of reducing the intended negative effects associated with the phenomenon. In the short- to long-term, protective sex can have positive implications for quality reproductive health with net effect on family planning interventions as well as attempts meant to reduce the burden of sexually transmitted infections (STI), especially, HIV/AIDS.

Although the extant literature on the prevalence of intergenerational sex in sub-Saharan Africa is not wide, some anecdotal evidence confirms the existence of the practice. Among the popular reasons that older men who engage in this practice proffer is that younger or adolescent women have minimal chances of being infected with HIV and other STIs<sup>5-7</sup>. Luke and Kurz<sup>8</sup> contend that this perception is understandable when weighed against the notion that having sexual intercourse with relatively younger females could purge any sexually transmitted infection, including HIV. Fuglesang<sup>9</sup> instructively observed that "with the AIDS pandemic, the fear of HIV infection leads men to seek out young girls of tender ages for sex, normally referring to younger partners as 'spring chickens' and 'luxury cars' because they are regarded as new, 'clean' and 'pure', and therefore free of STD/HIV infection" (p. 1252).

First sex occur under two broad circumstances: coerced and wanted. Of significant interest to public health discourse is coerced sex that can have far-reaching consequences on reproductive health outcomes given that it is unlikely to be protected<sup>10</sup>. When first sex is unprotected, whether coerced or wanted, the chances of subsequent sexual intercourse also occurring without any form of protection can be high. This is more probable when debut sex does not result in any unwanted outcome such as STI or pregnancy. In fact, high rates of pregnancies have also been reported among women younger than their partners by three years or higher<sup>11</sup>. There is also evidence that females whose first sex was unprotected are more exposed to engaging in multiple heterosexual relations compared to women who used condoms at first sex<sup>12</sup>. While some amounts of studies have explored the circumstances surrounding first sex, age differences between partners and protective

sex have been less explored<sup>13</sup>. In the case of Ghana, to the best of our knowledge, no such empirically published study was identified. This paper therefore seeks to examine how age differences affect condom use during first sex. Ultimately, the paper contributes to the discourse on intergenerational sex.

### **Conceptual issues in intergenerational sex**

There are two theoretical perspectives that seek to explain age-mixing sexual relations. Essentially, these thoughts are related to the Giddens<sup>14</sup> structuration theory. Giddens' theory attempts to offer explanations that underpin individual actions. According to Giddens<sup>14</sup> what people do is influenced by their individual abilities as well as constraints and opportunities in their immediate and remote contexts. Individuals are seen to be active players in shaping norms and cultures of their immediate context in reverse causality.

The first perspective that attempts to explain age mixing in sexual relations argues that younger women relative to their partners are passive victims of structural and cultural forces that influence women's reproductive choices. These forces, including economic limitations, peer and parental umpires and male chauvinism influence younger females to go for older partners. From this perspective, agency behaviours are interpreted as being determined by the wider social, cultural and economic circumstances<sup>7, 8</sup>. Some parents have, for found to be initiators of instance, been intergenerational sexual relations of their daughters, particularly, with men who have economic means to support their families. There are also instances where parents (in most cases, mothers) have cautioned their daughters not to be pregnant for poor boys<sup>15</sup>.

Polygamy, which is prevalent in many African societies promote age mixing. For olderpolygamous-men, they perceive relationship with younger females as means of enhancing their selfesteem and image<sup>16</sup>. In a largely patriarchal environment where men's sexual gratifications are tied to women's sexuality regardless of the circumstances, safe sex negotiation can be extremely hindered<sup>17</sup>. Protected sex then becomes the responsibility of men, who incidentally believe

that condoms reduce sexual pleasure<sup>5</sup>. These circumstances then limit women's power in intergenerational relationships to formation and termination. Once relationships are established, negotiation power within tilts towards men and protected sex decisions are subsequently determined by men<sup>8</sup>.

Among implicit and explicit strategies older men use to manipulate their younger partners is continuous provision of gifts to their partners. Where these gifts are significantly valuable, girls have been found to have minimal say as to whether sex is protected. In an urban South African study, for instance, it was found that young girls in relationship with older men felt obliged to engage in unprotected sex once valuable gifts were provided<sup>18</sup>. Generally, acceptance of gifts makes demands for protected sex difficult for young women<sup>19</sup>. many There are also psychological nuances that hinder young women from insisting on protective sex. This arises from fear of losing their "breadwinners" given that intergenerational sex is mainly underpinned by financial motives. Luke and Kurz<sup>8</sup> have pointed out that girls who wish for economically profitable relationships do not push the condom issue strictly since condoms are associated with infidelity and mistrust<sup>19</sup>. Men sometimes too use physical violence to avoid discussions about safe sex matters. Females fearing violence of their partners are thereby compelled to abandon any discussions concerning safe sex practices<sup>8</sup>.

The alternative perspective draws attention to agency power, recognising younger females as rational and dynamic decision-makers to negotiate terms and conditions of their relationships<sup>20</sup>. The agency power-within matter-of-factly asserts that women, through their socialisation processes attach substantial importance to their sexuality as important resources to depend on for needs. To this end, women may choose to employ this resource to mine monetary and other gains from their partners, whether older, same age or younger. This could also lead to concurrent sexual relationships which discount personal risks in exchange of rewards and favours<sup>8</sup>. There are evidences to support this agency point of view. For instance, younger females who engage in sexual relationships with older men may be motivated by the desire of finding love and marriage.<sup>20</sup> The perception is that older men are marriageable since they are economically secured and in a position to accept responsibility for unwanted pregnancies<sup>5, 15</sup>. In a study by Madise, Zulu and Ciera<sup>21</sup> some evidence were found to suggest that financial motivations were the main reason for sexual activeness of women. However, in a qualitative study, some participants indicated that exchange of gifts and money in relationships was only routine aspects of dating but does not necessarily imply transactional sex per say<sup>22</sup>.

### Data, analytical framework and measurement

This article uses data drawn from the women's file of the 2008 Ghana Demographic and Health Survey (GDHS08). The GDHS08 represents the fifth round of ongoing demographic and health surveys under the auspices of Macro International in, mostly, developing countries. The survey followed two-stage proportional sampling. Thirty households were randomly selected from each EA in the respective regions followed by household sampling. In each household selected, all eligible women were interviewed, resulting in 4916 valid respondents. The robustness and quality of DHS for such national level analysis is widely acknowledged. Of the 4916 women, a weighted sample of 925 women who knew their ages and those of their first sexual partners was used for the analysis. Since the main explanatory variable "age difference between partners" does not exist in the original data set, partners' age at first was subtracted from the female partner's age at first sex. This manipulation limited the data to weighted number of 925 women and incidentally aged between 15 and 24 years.

The dependent variable used for this paper is whether condom was used at first sex or not. In an era of STIs, protected sexual intercourse is one of the surest means of reducing infections. It is estimated that consistent and correct condom use at every sexual episode assures about 90%-98% protection against infections. Nevertheless, condom use is a function of several distal and proximate variables. One of such key determinants of condom use is individual's negotiation skill, which can be conveniently measured by age

intervals between partners, especially in sub-Saharan Africa where old age necessarily commands respect and authority.

Age difference between partners is used as the main explanatory variable. Research thus far has not established any threshold of describing partners as "older".<sup>11</sup>. However, Landry and Forrest<sup>23</sup> have argued that even age difference of one year is an accepted cut-off depending on the research focus. Therefore, in this study, age difference is measured at three levels; 0-4 years, 5-9 years and 10+ years. Although motivations around first sex being protected or not are unavailable, there are some individual background variables that allow us to arrive at some reasonable conclusions as far as protective sex is concerned. These explanatory variables are education (none, primary, secondary and tertiary); household wealth quintile (poorest, poorer, middle, higher and highest); residence (region and urban-rural residence); age; socio-cultural factors (religion and ethnicity); circumstances surrounding first sex (wanted or forced) and beliefs about causes of HIV (whether HIV can be caused by superstition or not). Some of the covariates were re-coded to avoid voluminous analysis. For instance, in terms of ethnicity, the four dominant ethnic groups in Ghana - Akans, Mole-Dagbanis, Ewes, and Ga-Dangme were maintained while smaller groups including Guans, Gruma, Mande, Grussi and other unsolicited groups were put together to form the "Others" group. In the case of religion the recoding resulted in the following main categories: Catholics, Protestants (Presbyterians, Methodist Pentecostals/Charismatic, and Anglicans), Moslems and Traditional believers.

It must, however, be pointed out that there are probable temporal relationships between the outcome variable and some of the covariates. For instance, an individual might have had some improved formal education at the time of the survey compared to the time first sex occurred. Similarly, a household whose wealth status was poorer might have improved to middle or richer. Similar temporal effects may exist for spatial variables such as region and residence, which are easily influenced by patterns of population movements, but not for a covariate such as ethnicity, which is not dynamic. In the light of such probabilities, there is a need for caution in interpreting results.

Apart from the basic descriptive statistics, complementary log-log parameter estimation methods are used to examine how age differentials between partners at first sex influences condom use. Although the outcome variable, condom use, has been measured at binary level, which allows the use of binary logistic regression, the symmetrical assumption of binary logistic does not always make this possible, especially when there are hints of asymmetry. For instance, only 28% as against 78% of the respondents used condoms during their first sex, an indication of asymmetry in the outcome variable. Under such circumstances, an alternative estimation method, complementary log-log regression, becomes a suitable, convenient and preferred procedure for this paper. Characteristically, DHS data is hierarchical, thus individual respondents are nested within households. This makes independent conjectures about respondents invalid. To this end, robust standard errors approach in STATA that allows for estimating parameters for complex survey designs are used.

# **Findings**

Of the 925 weighted respondents, 58% reported 1-4 years age intervals between their partner and themselves at first sex; 34% reported 5-9 years differences while 8% indicated 10 years or more intervals with first sexual partners. Condom use during first sex was generally low, a little over one-quarter (28%) of the sampled population. The context surrounding first sex, whether consensual or forced can have enduring effect on later reproductive behaviour<sup>10</sup>. It was also observed that approximately 74% of sex among the sampled population was consensual. The remaining 26% were forced into first sex. Decomposed by background socio-economic characteristics, the majority of respondents (69%) had had formal secondary education. In terms of household wealth, the pattern deviates from the theoretical pattern of approximately 20% at each quintile in a fairly distributed population. Women resident in richest households constituted 27% (the highest category). Respondents who identified themselves

as poorest were 9%. Fifty-two of the respondents were resident in rural areas. Akans formed more than half (57%) of respondents and in terms of religion; Pentecostal/Charismatic Christians were in the majority, 52% (Data not shown).

Protection against STIs is generally enhanced through consistent and correct condom use at each sexual encounter. Table 1 depicts bivariate analysis of the dependent variable (condom use at first sex) and other controls. The analysis shows that age difference of ten or more years tends to reduce the chances of condom use at first sex substantially. Consistent with earlier observations<sup>3</sup>, the study revealed that for women 10+ years younger than their partners, chances of condom use at first sex was approximately 13%. In contrast, at least more than one-quarter of those who were 1-4 years (29.74%) and 5-9 years (28.72%) younger than their male partners reported to have had protection at first sex. Chisquare test showed significant association between age differences and the use of condom at first sex.

Turning to other covariates, one could observe that higher formal education increased the likelihood of condom use at first sex. Close to three-fifth (59%) of women who had attained tertiary education indicated that they were protected during first sex. The reverse is seen among women without formal education; only 5% had protected sex at debut. It is also instructive to note that protective sex also increased with increase in one's household wealth index. For instance, 35% of those in richest households indicated condom use at their first sex whereas among the poorest, just a little around one out of every ten females (13%) did so.

Condom use during first sex also varied by residence; regional and rural-urban. From spatial perspective, reported protection at debut was highest in the Upper East Region where the proportion was about 36% and lowest in the Northern Region (10%). At the urban-rural interface, approximately 32% of respondents in urban communities in contrast to 19% in rural areas were protected against STIs at their first sexual encounter. Minimal variations are observed with reference to whether first sex was wanted or forced and interestingly, this variation was even contrary to expected pattern. That is, among those

 Table 1: Bivariate descriptive statistics on condom use at first sex and some selected independent variables

Variable	Number of	Condom at
	respondents	first sex (%)
Age difference*	-	
1-4	537	29.74
5-9	314	28.72
10+	73	12.54
Education*		
None	74	5.16
Primary	183	19.57
Secondary	632	29.76
Higher	32	58.54
Wealth index*		
Poorest	84	13.08
Poorer	189	18.27
Middle	216	27.11
Higher	253	29.07
Highest	183	34.89
Region*		
Western	74	14.64
Central	97	30.25
Greater Accra	159	30.42
Volta	68	32 32
Eastern	106	32.46
Ashanti	234	24.07
Brong-Ahafo	94	20.88
Northern	38	9 79
Unner Fast	31	35.82
Upper Bast	18	14 37
Residence*	10	11.57
Urban	483	31.62
Rural	403	19 30
Δ ge*	111	17.50
15-19	322	25.93
20-24	602	23.55
Religion*	002	24.70
Catholic	104	18.04
Protestant	187	34.00
Pentecostal	478	27.12
Moslem	116	18.07
Traditional	37	13.15
Fthnicity*	57	15.15
Akon	530	25.86
Ga/Dangme	550 77	23.80
Ga/Dangine	112	20.22
Ewe Mala Daghani	113	29.32
Others	100	20.44
Circumstances	105	16.15
surrounding firs sou		
Wanted	407	21.94
wanted Forced	407	21.04
Porcea Deliefe about source	140	20.30
Defiels about causes		
OI HIV"	272	27.00
Beliefssuperstition	5/2	27.90
Otherwise	547	28.37

\*p<0.001 (Chi-square)

who wanted sex, 22% used condom while for those who were forced, roughly 26% used condom, slightly higher than respondents who wanted.

When the controls were assessed separately, significant association with the dependent variable (condom use at first) were observed. To ascertain their collateral effect, multivariate models of complementary log-log were constructed. The results are shown in Table 2. From the results, no significant differences are found between age differences of partners and protected intercourse in relation to women who were 1-4 years or 5-9 years younger than their sexual partners. The same cannot be said of respondents whose partners were 10+ years older than them. For example, those younger than their partners between 5-9 years at debut sexual experience were 2.62 (p<0.05) times more likely to use condom compared to those who were ten or more years younger than the male partner. Controlling for other relevant factors, the probability of unprotected sexual intercourse remains higher than the reference, although there is decline in magnitude and level of significance.

Other significant correlates of use or non-use of condom included formal education attained. That is, higher probabilities of use of condom corresponded to increasing level of formal education. As shown in Table 2, between those without any formal education and those with primary education, the differences are not significant. However, women with secondary and higher education were about 5 and 11 (p < 0.05) times higher in the probability to have protected sex than respondents without formal education. While some earlier studies have found association between household wealth and unprotected sex, no statistically significant differences exist for wealth status in this study. Although those within the middle class were more exposed to condom use at first intercourse; this was not significant. Regionally, females in the Central Region were found to have greater probabilities of condom use during first sex. The least likelihood of protection occurs in the Brong-Ahafo Region (0.93; p<0.10). Mole-Dagbani's showed the highest likelihood of first sex being protected, with the probability ratio of 3.42 (p<0.05). Forced sex at debut correlated with about 30% chances of non-protection,

compared to those who wanted, although the likelihood was not significant.

# **Discussion and Conclusions**

This paper drew on 925 samples of women between ages 15-24 years obtained from the 2008 Ghana Demographic and Health Survey. The focus of the paper on age differences between partners was borne out of the increasing emergence of the "sugar daddy" phenomenon in sub-Saharan Africa, explained by several forces with potentially deleterious consequences for safe sex practices. With first sex having a substantial impact on later reproductive health upshots, condom use at first sex was used as proxy for safe sex. The study was, therefore, limited to first sex. The study was essentially situated within the structure-agency generic framework of Giddens<sup>15</sup> (1984), which draws attention to how individual decision making processes are influenced by social norms and circumstances.

In both bivariate descriptive results and multivariate statistical analysis, strong and positive evidence were found to support the argument that large age differences between partners is a risk factor for unprotected first sex. This is consistent with existing body of knowledge on intergenerational sex. Pylypchuk and Marston<sup>12</sup> have observed that women one to four years younger than their partners at first sex do not usually report unprotected and multiple later sexual partners compared to those reporting five or more years younger than their partners. Similarly, Mercer and colleagues<sup>13</sup> have made parallel revelations based on data from the 2000 British Survey of Sexual Attitudes and Lifestyle ('Natsal 2000).

Apart from the main explanatory variable, education showed salient effect on protected sex, especially among females who have attained formal tertiary education. As has been consistently espoused in the social sciences literature, education provides significant safety nets for many people to escape the throes of negative health habits that include measures individuals take to guard against unprotected sex. These may include negotiations for safer sex, knowledge and understanding of sexual risk, as well as formal

		Compler	nentary log-log models		
Variable	Partial model exp(b)	95% CI	Full model exp(b)	95% CI	
Age difference					
1-4	2.55**	1.358-4.801	2.47*	0.959-6.363	
5-9	2.62**	1.374-5.032	2.57*	0.964-6.881	
10+			_		
Education					
None					
Primary			2.90	0.577-8.949	
Secondary			5.21**	1.316-20.648	
Higher			10.65**	2.204-51.501	
Wealth index					
Poorest			_		
Poorer			1.52	0.547-4.225	
Middle			2.07	0.744-5.783	
Higher			1.96	0.741-5.211	
Highest			1.72	0.550-5.436	
Region					
Western			_		
Central			4.10**	1.600-10.508	
Greater Accra			1 84	0 671-5 059	
Volta			3.49*	0.916-13.339	
Eastern			2.90**	1 094-7 721	
Ashanti			1.58	0.612-4.089	
Brong-Ahafo			0.93*	0 214-4 046	
Northern			2.32**	0 707–7 645	
Upper East			2.40	0 773-7 494	
Upper West			1.12	0 293-4 307	
Residence				01290 11007	
Urban					
Rural			0.66	0 395-1 104	
Age					
15-19			_		
20-24			1.43	0.700-1.866	
Religion				01/00 11000	
Catholic					
Protestant			1.07	0 454-2 549	
Pentecostal			1.00	0 498-2 041	
Moslem			0.46*	0.202-1.069	
Traditional			0.45	0.092-2.209	
Ethnicity			0.15	0.092 2.209	
Akan					
Ga/Dangme			1.02	0.487-2.171	
Ewe			1.09	0 500-2 377	
Mole-Daghani			3 42**	1 389-8 467	
Others			1 84	0 844-4 022	
Circumstances			1101	010111 11022	
surrounding firs sex					
Wanted					
Forced			1 30	0 826-2 074	
Beliefs about causes			1.50	0.020 2.074	
of HIV					
Beliefs			0.79	0 519-1 219	
superstition			0.12	0.017-1.217	
Otherwise			_		
Model summary					
N	889		887		
-2 log	525.91		475.79		
Wald chi2(2)	8.89**		99.95***		

Table 2: Co	mplementary	log-log model	of condom	use at firs	t and age	differences	between	partners in	Ghana

\*\*\*p<99%; \*\*p<95%; \*p<90%

education providing sources of peer support and social capital<sup>25</sup>. It is, therefore, not surprising to observe that females with higher formal education were over ten times likely to have had protected first sexual intercourse. Edström and Khan<sup>25</sup> further points out that the role of education in truncating intergenerational sex and possible STIs transmission is significant. That notwithstanding, formal education has been found to fuel the spread of HIV in Zambia which feeds into sexual risk taking in a continent where more than half of HIV infections are attributed to heterosexual intercourse<sup>26</sup>.

With reference to ethnicity, most of the ethnic groups showed discordant relationship with protection (condom use) at first sex except among those identified as Mole-Dagbani's. Mole-Dagbanis (with significant Moslem population) are known to have strict restrictions against premarital sex and particularly, pregnancy before marriage. It is, therefore, possible such sanctions elicit fear of unprotected sex and that might have accounted for this observation. Gauged against figures associated with Akans who have more permissive sexual norms following abolishing of female puberty rites, such assumptions are more probable.

Although there is evidence that all other things being equal, females from poor households are at a higher risk of having their first sex earlier and also being unprotected<sup>19</sup>, no statistically significant evidence is found in this study to support such assertion. Nevertheless, at the descriptive level, the proportion of females with first unprotected sex was higher among those from poor households. Recent evidence from sub-Sahara Africa on the interface between poverty and sexual risk taking is discordant with earlier views that pointed to poverty as one of the key drivers for risky sexual behaviour subsequent STI infections. Awusabo-Asare and Annim<sup>27</sup> have, for instance, found that risky sexual behaviour in Kenva is driven more by improved wealth rather than poverty. These fussy associations between wealth status and noncondom use is not unusual except that most of the earlier studies have focused on recent sex, at which point this paper deviates. More recently, Luke<sup>28</sup> found uniform risk of non-condom use

among the Kisumu of Kenya who engaged in intergenerational sex relative to wealth.

The policy suggestion that emanates from the study is in respect of interventions that are able to address large age differences between partners. The fact that age difference of more than ten years induces non-condom use at first sex with implications for later reproductive health events means that efforts at improving reproductive health of women, particularly, young women need to take into account strategies that can restrain females' from entering into such relationships. Certain that women with high formal education are more likely to have first sex protected based on our findings; female education has to be given priority which can counteract the chances of unprotected sex and more especially, first sex which can have life-time effects on reproductive behaviours and health. In the light of this, current programmes such as Capitation Grant and School Feeding programmes must be extended to all parts of the country, particularly, in poverty-stricken communities. This is because adolescents who are from such backgrounds are more vulnerable to older men who are likely to use economic resources to influence establishing and sustaining relationships with younger women. On the side of men who, in the Africa setting are favourably predisposed social and economic power have to be included in programmes meant to reducing sexual risk taking equally require programmatic attention. The point of mutual or shared risk among sexual partners needs emphasising. On this account effective media campaigns should be instituted with the main message on changing social norms, especially those that promote sexual relationships between older men and younger women.

Results that have emerged from this article demonstrate the risks (non-use of condoms) associated with females having sex with men ten or more years older. The effect of decade and over age disparities on unprotected first sex remains significant even after controlling for the effects of other socio-economic variables. Among the controls, education proved substantially robust in shaping protection during first sex among the respondents. In an era of high levels of HIV/AIDS in sub-Saharan Africa compared to other regions, it is quite important that, large age differentials

between partners be tackled as an integral component of educational efforts aimed at reducing risky health behaviours and obviously, improving female education promises to be one of such areas of concentration in order to yield the expected results in multi-culturally environment such as Ghana.

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