Migration and, sexual and reproductive behaviour among young women in Ghana

By

Stephen O. Kwankye, Regional Institute for Population Studies (RIPS), University of Ghana, Legon.

Abstract

This paper uses data from the 2003 GDHS on women 15-24 years and attempts a comparison of migrants and non-migrants regarding their sexual and reproductive behaviour. It examines the variation between migrants and non-migrant young women in terms of the timing of first sex, first birth, condom use at first and last sex and pregnancy termination and investigates the factors that explain these variations. It tests the hypothesis that young migrant women are more likely to initiate sexual intercourse earlier than non-migrants. Again, condom use at last sexual intercourse is higher among young non-migrant women relative to their migrant counterparts. Among other things, the study finds migrants more likely to use condoms at both first and last sexual intercourse relative to non-migrants but finds not statistically significant variation between the two groups regarding pregnancy termination although a higher proportion of migrants than non-migrants reported ever terminating a pregnancy.

Introduction

Migrations have significantly increased during the 1980s and 1990s mainly because of environmental and particularly economic pressures (Oppong and Wery, 1994). As a consequence, people are more likely to migrate to seek better living conditions.

Poverty touches men as well as women, but the corresponding economic crisis affects them in different ways (Diop, 1993). According to Ulin (1992), the combined effects of family separation and reduced agricultural productivity encourage many women to abandon the safety of their village in the pursuit of a better life for themselves and their children in an urban environment. However, the newcomers find limited economic opportunities as they reach the urban centres. In addition, married or single women who have left rural communities challenge social customs by setting up independent homes, far from the family circle. Such a decision can imply a break with one's origins and a permanent change of residence. Without the family's support and the education and the job skills required in an urban setting, many of these migrant women quickly become dependent on other survival strategies that increase their risk of contracting HIV.

Sexuality was initially thought to be biologically and, hence, naturally determined. Recently, however, it has gained recognition as a socially constructed entity. The very nature of sexuality, including prescriptions regarding when, with whom and how people engage in sexual activity, is socially defined and varies over time and across space. Factors such as religion, class, gender, and culture are central determinants of patterns of premarital, marital and extramarital sex, and give meaning to those acts. Moreover, structural contextual forces, such as different morality environments also influence sexual behaviour (Laumann et al., 1994).

International migration, for instance, is a disruptive event that often entails family separation, weakened social networks and social isolation. The accompanied sense of anonymity and less stringent social control can lead to significant changes in sexual behaviours (Organista and Organista, 1997). At the structural level, migration is often associated with a highly uneven sex ratio that can have a dramatic effect on the dating market in both sending and receiving communities (Hirsch, 2003; Parrado et al 2004).

Thus, understanding the changes in sexual behaviour accompanying migration is particularly relevant in the context of reproductive health, including HIV/AIDS. Recent studies have documented a link between international migration and the spread of sexually transmitted infections (STIs) (Decosas and Kane, 1995; Herdt, 1997; Ronny and Verda, 2000). Gardner and Blackburn (1997) maintain that migrants, refugees and internally displaced persons have specific reproductive health needs because the process of moving often upsets family life and reproductive behaviour. Moreover, widespread cyclical and return migration implies that these risks also affect migrants' communities of origin (Magis-Rodriguez et al., 2004).

As such, sexuality is a realm of social behaviour that is likely to be greatly influenced by migration. The Ghana-Abidjan migration stream, for instance, is dominated by women.

This female migration is overwhelmingly circulatory in nature and composed of fairly young women, who are on average 23 years old and of whom 92% are unmarried. More than 80% of them have no formal education and therefore do not have the necessary qualifications and skills to enter the formal labour market. For 40% of them, their leaving for Abidjan was justified by poor job opportunities in Ghana. It is estimated that about 75% of these young Ghanaian migrant women in Abidjan are involved in prostitution in one form or another, where older migrants help newcomers in getting rooms and initiate them into the profession by actively introducing them to male clients (Anarfi, 1992).

In a similar vein but within a different context, studies among Latinos show that migration encourages the adoption of risky sexual behaviours that tend to heighten migrants' exposure to STIs, including AIDS (Magana and Carrier, 1991; Organista and Organista, 1997; Chaves, 1998; Magis-Rodriguez et al., 2004; Parrado et al., 2004).

Patterns of HIV/AIDS and high levels of teenage pregnancy and abortion complications have drawn national attention to youth reproductive health in Ghana. Teenage pregnancy and complications of unsafe abortion, a leading cause of maternal death among Ghana's young, are of critical concern to Ghanaian policymakers (Reproductive and Child Health Unit, 2001). By age 20, more than 85 percent of young women are sexually active, and 30 percent of all births are to women aged 15 to 24 (Fayorsey, 1995). But, as argued by Awusabo-Asare et al., (1993), the lack of information and taboos concerning sexuality leave young women ignorant of almost everything about their sexual and reproductive health, thus depriving them of some control over their own bodies.

Furthermore, young people's access to reproductive health information and guidance is limited, particularly if they are unmarried, by disapproving parents and service providers as well as by legal age restrictions. Thus, pregnant adolescent girls in Ghana are more likely to seek abortions than older women and are more likely to go to illegal providers. This is

because hospital staff, the police, and women themselves are often unfamiliar with the laws regarding access to safe abortion, and girls and women are sometimes turned over to the police for requesting services to which they are legally entitled (Awusabo-Asare et al., 1993).

Conflict situations and natural/environmental disasters resulting in drought and famine have led to spontaneous migration of people from one geographical location to another. Such often unanticipated displacements have the tendency to put the reproductive health of migrants, particularly the females among them, at risk. For example, in refugee camps, sexual activity becomes prevalent (Lawoyin et al, 2004). Similarly, the new migrant, faced with a new environment where jobs are not easily available may be forced to adopt coping strategies to adjust to the new environment. Some of these strategies may include the cultivation of sexual networks, which may put them at a high reproductive health risk.

In Ghana, for example, a new wave of migration is being observed. The new development involves children less than 18 years who migrate independently mainly from the northern savannah regions to southern cities and towns as well as cocoa producing areas and mining towns to find jobs in order to make a living on their own. The "*kayayei*"[1] phenomenon in Accra, Kumasi and other large towns in Ghana provides fertile grounds for high risk reproductive behaviours. Away from home and parental control/supervision, these young persons are exposed to a number of sexual and reproductive health as well as environmental hazards and risks by virtue of the fact that many of them live their lives virtually on the streets, earn inadequate incomes and are not able to afford good health care services.

It is important to note that although the Demographic and Health Survey (DHS) collects some data on the migration status of respondents, not much analysis has been done using this variable in relation to other sexual and reproductive behaviour variables including age at first sex, first marriage, first birth, contraceptive knowledge and use, desired number of

[1] Kayayei is the plural of kayayoo which is a term made up of two words, 'Kaya' and 'yoo' originating from Hausa (a foreign dialect) and Ga (a local Ghanaian language for people from the Greater Accra Region) respectively for a female porter at transport parks and market centres in the cities.

children, pregnancies terminated, etc. Against this background, therefore, this study uses the Ghana Demographic and Health Survey (GDHS) data to answer the following research questions: What are the socio-demographic characteristics of young female migrants vis-à-vis their non-migrant counterparts? How do migrants compare with non-migrants in all sexual and reproductive behaviour indicators for which data are available including age at first sex, marriage and birth, contraceptive knowledge and use, abortion incidence, among others? What factors affect the differences (if any) between young female migrants and non-migrants with regard to their sexual and reproductive behaviour? What sexual and reproductive health risks are young female migrants exposed to due to their separation from their families and places of origin?

The study tests two main hypotheses: (i) young migrant women are more likely to initiate sexual intercourse earlier than non-migrants and (ii) young migrant women are less likely than their non-migrant counterparts to use condoms at their first or last sexual intercourse. The results of these two hypotheses will enable us compare the reproductive behaviour of sexually active young migrant women to that of their non-migrant counterparts for the purpose of influencing policies which will ensure the effective integration of migration into HIV/AIDS intervention programmes with particular reference to young women in the country.

Data and Methodology

The study utilises data from the 2003 Ghana Demographic and Health Survey (GDHS). The GDHS collected data on the duration of stay at the place of enumeration of the respondent, in addition to other sexual and reproductive behaviour variables including age at first sexual intercourse, first marriage and first birth, contraceptive knowledge and use (including use of condoms at first and last sexual intercourse) and whether or not respondents have ever terminated a pregnancy. There is also information on other background

characteristics of the respondents including their age, level of education, marital status, place of residence and religious affiliation.

The study classifies all women aged 15-24 years who indicated that they had lived "always" at the place of enumeration as young non-migrants and others in the same age group who stated some number of years of stay at the place of enumeration as young migrants. All those classified as "visitors" in the dataset were, however, excluded from the analysis. This broad classification is, however, limited by the difficulty in determining whether by stating some duration of stay (in years) at the place of enumeration the woman has indeed migrated across a defined geographical boundary to qualify as a migrant[2], noting that the place of origin was not indicated vis-à-vis the place of enumeration. It is therefore possible that some of the migrants so classified may not be migrants by internationally accepted definition. The interpretation of the results of the analysis should bear in mind this limitation which arises because no specific question was asked on the migration status of the respondents in the GDHS.

Reproductive behaviour is used to describe people's sexual practices including how they consciously or otherwise try to avoid or prevent an unplanned or unwanted pregnancy or a sexually transmitted infection or both. These behaviours in one way or the other have effects on childbearing and could expose one to some reproductive health risks. A person's attitude to these sexual practices could also result in early or later timing of first sex, first marriage or first birth, the use or non-use of contraceptives and decisions pertaining to the termination of an unwanted pregnancy. An individual's reproductive behaviour is thus, linked to his/her sexuality which in this study describes the context within which the sexual act takes place which may have some implications for the social, economic and health development of the individuas involved.

[2] Migration is defined as "… a form of geographical mobility or spatial mobility between one geographical unit and another, generally involving a change of residence from the place of origin or place of departure to the place of destination or place of arrival" (United Nations, 1958).

The study relies on simple bi-variate analysis of the background characteristics of the respondents with reproductive behaviour variables, in each case comparing migrants and non-migrants and controlling for age. Throughout the analysis, respondents of age 15-19 years are also compared with their counterparts of age 20-24 years. In the bi-variate analysis, the chi-square technique is employed to test the level of significance of the variation between the migrants and non-migrants. Further analysis is done using both multiple linear regression and logistic regression models to measure the relationship between migration status and other background characteristics of the young woman, on one hand, and reproductive behaviour variables notably the age at first sexual intercourse and first birth, condom use at first and last sexual intercourse and pregnancy termination on the other. Multiple linear regression analysis is used in respect of the first two reproductive behaviour variables as dependent variables, while for the last three, logistic regression analysis is employed.

Results

The results of the analysis are divided into three: background characteristics of the respondents, sexual and reproductive behaviours that may determine the pre-disposure of young women to reproductive health risks and the measurement of the relationship between the background characteristics and reproductive behaviour variables. In each case, the young women are compared in terms of their migration status i.e., whether migrants or non-migrants.

Background Characteristics

The 2003 GDHS sampled a total of 2,113 women of age 15-24 years (excluding those who were classified as visitors). Of this number, 1,216 (57.5 percent) were migrants and 897 (42.5 percent) were non-migrants. Among the migrants, a relatively higher proportion (51.3 percent) is in the age group 20-24 years compared to 15-19 years (48.7 percent). In contrast,

most of the non-migrants are younger: 58.5 percent in the age group 15-19 compared with 41.5 percent in the age group 20-24.

Table 1 shows the pattern of distribution by migration status and the level of education, marital status, type of place of residence and religious affiliation of the respondents. From the table, we observe that a higher proportion of the migrants (17 percent) have no formal education compared to the non-migrants (14 percent). Among either migrants or non-migrants the proportion with no education appears higher among women of older ages (20-24 years) than the younger ones (15-19 years). It is also to be noted that although majority of either group have middle or junior secondary school (JSS) education, we have a relatively higher percentage of the 15-19-year-old than the 20-24-year-old migrants having this level of education in contrast to the non-migrants among whom the reverse is the case. However, while there is apparently no difference between migrants and non-migrants with respect to higher education, a higher proportion of persons aged 15-19 years have secondary or senior secondary school (SSS) education irrespective of migration status.

Table 1. Percent distribution of young women (15-24 years) by background characteristics and migration status

Background Characteristics	Migration status: Migrant 15-19	Migrant 20-24	Migrant Total	Non-migrant 15-19	Non-migrant 20-24	Non-migrant Total
Level of education						
No education	13.1	21.6***	17.5***	11.4	16.7***	13.6***
Primary	24.5	22.5	23.6	22.3	15.9	19.6
Middle/JSS	47.9	41.5	44.7	54.7	42.7	49.7
Secondary/Higher	14.5	9.9	14.4	11.6	24.7	17.1
Marital status						
Never married	83.7***	40.1**	61.4***	89.9***	45.2**	71.3***
Married	9.6	44.0	27.3	4.4	34.7	17.0
Living together	4.7	10.4	7.6	4.2	14.8	8.6
Formerly married	0.0	5.5	3.7	1.5	5.3	3.1
Place of residence						
Rural	40.0***	47.1	43.7	50.2***	47.8	49.1***
Urban	60.0	52.9	56.3	49.8	52.4	50.9

Religious affiliation						
No religion	2.0***	3.2***	2.6***	2.5***	3.2***	2.7***
Catholic	14.1	12.0	13.1	17.9	18.5	18.2
Protestant	20.4	17.2	18.7	17.7	24.7	20.6
Other Christian	50.0	52.5	51.3	41.7	35.8	39.3
Muslim	13.1	12.7	12.9	19.6	15.9	18.1
Traditional/spiritualist	0.4	2.4	1.4	0.6	1.9	1.1
Total %	100.0	100.0	100.0	100.0	100.0	100.0
Number	592	624	1,216	525	372	897

***p < 0.01; * *p < 0.05; * p < 0.10
Source: Computed from the 2003 GDHS dataset

Table 1 further shows that overall, a higher proportion of the non-migrants (71 percent) than the migrants were never married at the time of the survey. This is possibly due to the fact that more of the non-migrants were younger (i.e., in the age group 15-19 years) compared with the migrants who were relatively older. For some of the migrant women, their migration status could be tied to that of their spouses. As is expected, a higher proportion of the 20-24-year-olds among either migrants or non-migrants were married or living together with their partners compared with the 15-19-year-olds.

In terms of type of place of residence, it is seen that among the young migrants a higher proportion (56 percent) was resident in urban areas (i.e., areas with 5,000 or more population), with a relatively higher proportion of the younger migrants being resident in urban areas compared to their older counterparts. In contrast, however, there appears to be no significant difference in residential status among the non-migrants (49 percent in rural areas and 51 percent in urban places). A higher proportion of the older non-migrants were, however, more likely than the younger ones to live in urban places of residence.

With regard to religion, a little over half of the migrants belonged to other Christian religion (made up of Pentecostal and Charismatic believers) compared to a slightly more than a third of the non-migrants. On the other hand, a higher proportion of the non-migrants (18 percent) than the migrants (13 percent) reported to be affiliated to the Catholic Church. Respondents that were affiliated to Protestant religious faiths (19 percent of the migrants and

21 percent of the non-migrants) slightly out-numbered the Catholics in the sample. Furthermore, a higher proportion of the non-migrants (18 percent) than the migrants (13 percent) professed to be Muslim by religion while a negligible proportion (one percent) of either migrants or non-migrants reported to adhere to traditional/spiritual religion.

The application of chi-square showed that the young migrants of age 20-24 years varied significantly from their non-migrant counterparts in terms of education but no significant difference was found among the 15-19 year-olds. With regard to marital status, however, the reverse was found where the variation was more statistically significant among those of age 15-19 years relative to the 20-24 year-olds. Similarly, by place of residence, the variation between migrants and non-migrants was statistically significant within age 15-19 years only but in terms of religious affiliation, the two groups varied significantly at all ages.

Sexual and Reproductive Behaviour

The sexual and reproductive behaviour variables that are examined are age at first sexual intercourse, first marriage and first birth, pregnancy termination and contraceptive practice. The objective here is to compare migrants and non-migrants in terms of possible reproductive health risks they might be exposed to by virtue of their sexual and reproductive behaviour.

Age at first sex, marriage and birth

Early age at first sex has the tendency to expose young people to reproductive health risks including sexually transmitted infections (STIs), unplanned pregnancies, attempted abortion and its attendant complications. This is because of the high likelihood of early sexual intercourse often occurring without any conscious effort at protecting oneself from pregnancies and infections by using contraceptives. Against this background, the respondents were examined on the basis of which of them (migrants or non-migrants) were more likely to have earlier sex.

The analysis shows that overall, 36 percent of the migrants and 45 percent of the non-migrants had never had sex prior to the survey. This probably resulted from the fact that a much larger proportion of the non-migrants were younger (15-19 years) compared with the migrants. For women of 15-19 years, 66 percent of the non-migrants had never had sex compared with 58 percent of the migrants of the same age. However, among those aged 20-24 years, there was virtually no variation between the two groups i.e., 15 percent and 17 percent of the migrants and non-migrants respectively had never had sex (Table 2). From the table, it is consistent to state that while the proportion of migrants whose first sex occurred at ages less than 15 years was higher than the non-migrants in either of the age groups, the proportion of young women whose first sex occurred between age 15 and 19 years was higher among non-migrants compared with the migrants.

It is also noted that a still higher proportion of the migrants than non-migrants had their first sex taking place at age 20-24 years. This suggests that although there is a higher likelihood that young migrant women engage in relatively earlier sex than non-migrants, there is a tendency for migrants who do not start sex early to wait much longer than their non-migrant counterparts. There was a statistically significant variation between the migrants and non-migrants ($p < 0.001$) but not within 20-24 years. In terms of mean age at first sex, not much variation was found between migrants and non-migrants (16.7 for migrants and 16.6 for non-migrants), but the application of chi-square analysis showed young migrants to be statistically different from the young non-migrants ($p < 0.001$). Not included in the analysis in Table 2 are those who reported their first sex to have coincided with their first marital union (13 percent of all migrants and 12 percent among all the non-migrants).

Similarly, there is a tendency for migrant young women to be married at much younger ages than non-migrants. This is consistent with Landale's (1994) study among Puerto Rican women that found migrants to be more likely than non-migrants to form unions earlier

and to enter informal unions. In accordance with this observation, a higher percentage of the migrants in the current study married at ages less than 15 years compared with their non-migrant counterparts: 13 percent overall among the migrants and 10 percent for the non-migrants. At the same time, a higher proportion of the non-migrants (18 percent) than the migrants (14 percent) married at ages 20-24 years. The chi-square test, however, revealed no statistically significant difference between migrants and non-migrants either by proportion or mean age at first marriage.

The pattern of first birth follows a similar observation with respect to first marriage between the migrants and non-migrants i.e., migrants are still more likely to have earlier first birth relative to non-migrants but the variation shows no statistically significant outcomes between the two groups.

Table 2. Percent distribution of young women (15-24 years) by reproductive health and migration status

	Migration status					
Reproductive	Migrant			Non-migrant		
Health indicators	15-19	20-24	Total	15-19	20-24	Total
Age at first sex						
Less than 15	19.1**	10.2	13.1***	17.8**	7.0	11.0***
15-19	80.9	74.4	76.5	82.2	81.3	81.7
20-24	-	15.4	10.4	-	11.7	7.3
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Number	246	519	765	180	300	480
Mean (years)	15.7***	17.2***	16.7***	15.4***	16.7***	16.6***
Age at first marriage						
Less than 15	19.0	11.5	13.1	17.3	7.8	9.8
15-19	81.0	70.9	73.0	82.7	70.1	72.6
20-24	-	17.6	13.9	-	22.1	17.6
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Number	100	375	475	52	204	256
Mean (years)	15.8	17.5	17.1	15.8	17.7	17.3
Age at first birth						
Less than 15	5.8	3.1	3.5	2.4	1.6	1.7
15-19	94.2	65.4	70.1	97.6	62.0	68.6
20-24	-	31.5	26.4	-	36.4	29.7
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Number	69	359	428	42	187	229
Mean (years)	16.9	18.6	18.3	16.9	18.8	18.4

***p < 0.01; * *p < 0.05

Source: Computed from the 2003 GDHS dataset

Contraceptive Practice and Pregnancy Termination

Four areas are of interest in the analysis on contraceptive practice: ever use of contraception, current type of contraceptive use, and condom use at first and last sexual intercourse. From the analysis, it is observed that migrants were more likely to have ever used a family planning method compared with the non-migrants. For example, as shown in Table 3, 63 percent of the migrants and 70 percent of the non-migrants reported never use for any contraceptives. Among either migrants or non-migrants, the likelihood of ever using contraceptives appears to relate directly with one's age, as smaller proportions of the respondents of 20-24 years reported to have never used any contraceptive method.

A similar observation is apparent for all methods of contraception ever used. For example, for modern methods, 31 percent and 25 percent of migrants and non-migrants respectively reported ever using. However, the distribution by age group indicates that 18 percent of 15-19 year-old migrants compared with 14 percent of their non-migrant counterparts had ever used any modern method of contraception. This compares with 43 percent of migrants and 41 percent of non-migrants 20-24 years who had ever used a modern method of contraception. This is to be expected because the older women are more likely to have better insights into contraceptive issues than the younger ones, considering that experience at sex is more likely to increase as one grows older.

Currently, just about 16 percent of the migrants and 12 percent of the non-migrants reported to be using a method of contraception. With regard to the specific methods currently being used, we note from Table 3 that the male condom is the most commonly used method (seven percent for migrants and six percent among non-migrants). It is followed by periodic abstinence (three percent for either of the two groups), with the pill as the third most commonly used method (about three percent among the migrants and two percent with respect to the non-migrants). Again, just about two percent of the migrants and one percent of

the non-migrants were using injections. The other methods received very low patronage among either migrants or non-migrants.

Table 3. Percent distribution of young women (15-24 years) by ever and current use of contraceptives and migration status

	Migration status					
	Migrant			Non-migrant		
Contraceptive Use	15-19	20-24	Total	15-19	20-24	Total
Ever use						
Never used	78.7*	47.9	62.9*	83.8*	50.0	69.8*
Used only folkloric	0.0*	0.5	0.5*	0.0*	0.3	0.1*
Used only traditional	3.2*	8.8	6.1*	2.7*	8.6	5.1*
Used modern methods	18.1*	42.8	30.8*	13.5*	41.1	25.0*
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Current use						
Not using	91.6	76.6	83.8	91.6	81.7	87.5
Pill	1.3	3.5	2.5	0.6	2.7	1.5
IUD	0.0	0.2	0.2	0.2	0.3	0.2
Injections	0.2	3.4	1.8	0.0	2.2	0.9
Condom	5.2	8.3	6.8	5.3	6.7	5.9
Female sterilisation	0.0	0.6	0.3	0.0	0.0	0.0
Periodic abstinence	1.2	4.7	3.0	1.7	4.8	3.0
Withdrawal	0.0	1.1	0.6	0.6	0.5	0.6
Other	0.3	0.6	0.5	0.0	0.3	0.1
Norplant	0.0	0.5	0.2	0.0	0.8	0.3
Female condom	0.2	0.5	0.3	0.0	0.0	0.0
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0
Number	592	624	1,216	525	372	897

* $p < 0.10$

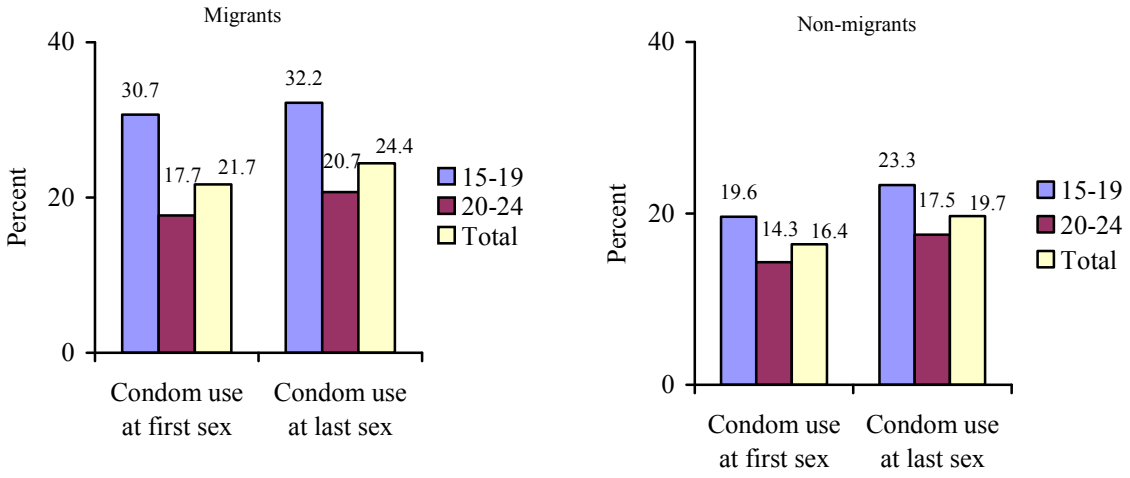
Source: Computed from the 2003 GDHS dataset

From the chi-square analysis (Table 3), it is shown that with respect to ever and current use of contraceptives, the variation between migrants and non-migrants did not register statistically significant results. Only ever use of contraceptives showed some significant differences ($p < 0.10$) between the migrants and non-migrants. For current contraceptive use, therefore, the results showed no statistically significant differences between the two groups.

It is further shown in Figure 1 that some variation exists between condom use at first and last sex among the respondents, with condom use at last sex being lower than during first

sex by some two and four percentage points among the migrants and non-migrants respectively. It is also observed that for either first or last sex, condom use was higher among the migrants than the non-migrants. For example, at first sex, about a quarter of migrants used condoms compared to one in five of the non-migrants. Similarly, at last sex, 22 percent of the migrants compared to 16 percent of the non-migrants reported to have used the condom. Another interesting observation which is quite contrary to the pattern of reported contraceptive use by age (Table 2) is that for condom use at either first or last sex, the 15-19 year-olds reported a much higher use of condoms than their older counterparts. Statistically, the results show a significant variation ($p < .05$) between the migrants and non-migrants among the 15-19 year-olds with regard to age at first and last sex but not for age 20-24 years.

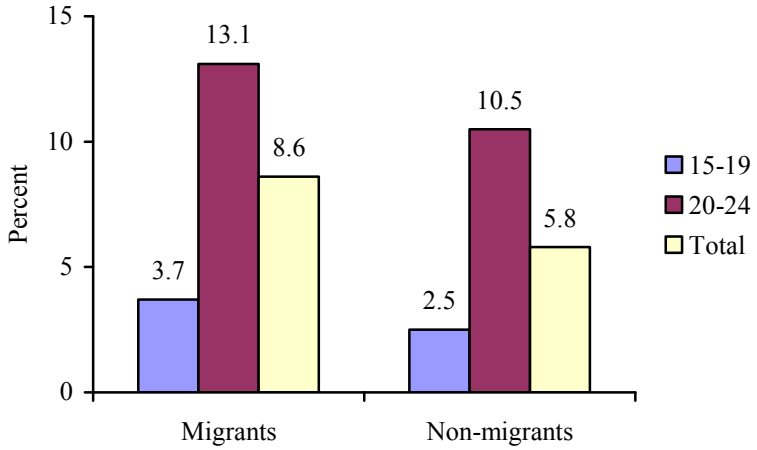
Figure 1. Percent condom use at first and last sex by migration status



Comparing the two groups under study with regard to pregnancy termination (by abortion), there is a relatively higher prevalence of pregnancy termination among the migrants than the non-migrants. Nine percent of the migrant young women reported ever terminating a pregnancy compared to six percent among the non-migrants. Again, as Figure 2 depicts, the likelihood of one terminating an unplanned pregnancy appears to relate directly with a

woman's age considering that for the migrants or non-migrants, a higher proportion of the 20-24 year-olds reported to have ever terminated an unplanned pregnancy. There was, however, no statistically recorded significance in the results between the two groups of study.

Figure 2. Pregnancy termination by migration status



Understanding the Factors Affecting Exposure to Reproductive Health Risks

The study used two techniques of multivariate analysis: one with a logistic regression and the second a multiple linear regression technique. For the logistic regression analysis, three dependent variables were used: condom use at first and last sex and ever termination of a pregnancy. In the multiple linear regression analysis, however, the dependent variables were age at first sexual intercourse and first birth. These dependent variables were used as plausible measures of one's exposure to reproductive health risks.

The use of condoms at sex (first and last) is considered as a conscious attempt on the part of the young woman to prevent either a pregnancy or a sexually transmitted infection or both. One's failure to use this protective device is therefore conceived in this study to constitute an exposure of the young but sexually active woman to reproductive health risks of an unplanned pregnancy and or STIs, including HIV/AIDS. In the case of pregnancy termination, the study considers the risk one is subjected to if the pregnancy is terminated outside the modern health facility and by a non-qualified medical practitioner. It is, however,

not possible to differentiate between pregnancies that were terminated outside and within the modern health for lack of information in the dataset.

Furthermore, the earlier one is exposed to sexual intercourse or first birth, the higher her exposure to reproductive health risks in terms of unplanned and early pregnancy, STIs including HIV/AIDS, obstructed labour, injury to the reproductive system and death in extreme cases. In the logistic and multiple linear regression analyses, the independent variables were the same namely, the respondent's migration status (i.e., migrant or non-migrant), current age, religious affiliation, educational level and type of place of residence (i.e., rural or urban). The primary objective was to find out how migrants vary from their non-migrant counterparts with respect to all the plausible measures of reproductive health risks a young woman may be exposed to.

The results of the logistic regression analysis are presented in Table 4. The results indicate that the independent variables together explained 18.4% of the variation in the use of condoms at first sexual intercourse among the young women compared to 29.9% of that of condom use at the last sexual encounter prior to the survey. In the case of pregnancy termination, it was 14.1%. The low percentage of the variation that is explained suggests that there are more variables that could be responsible for the use of condoms at either first or last sex and for the termination of pregnancies among the young women studied.

As is seen in Table 4, migrant young women are 0.41 times less likely to use condoms at first sexual intercourse compared to their non-migrant counterparts while at the last sexual intercourse prior to the survey, migrants are again 0.52 times less likely to use condoms than non-migrants (both at a $p < .001$). For pregnancy termination, however, the analysis does not show any statistically significant result although migrants are still less likely to terminate a pregnancy than their non-migrant counterparts. This is quite contrary to the results from a study on young female migrant workers in China, where Zheng et al (2001) report of a higher

likelihood of migrants experiencing multiple abortions than non-migrants. In Zheng et al's study, migrants were found to be more likely to resort to private and usually unqualified abortion service providers with the reason that their confidentiality would be better protected. Similarly, in an article captioned "Prostitutes, migrants need more sex education" in the "CHINAdaily" of 27th November 2005, 22.65 percent of single migrant women had undergone an abortion in Shanghai (http:/chinadaily.com.cn/English/doc/2005).

Furthermore, young women of 20-24 years are less likely than their younger counterparts to use condoms at their first or last sexual encounter. The results are, however, not statistically significant. In contrast, 20-24 year-old women are about 2.4 times more likely to terminate a pregnancy than others. These results are highly significant. It is also observed that young women who are resident in urban areas are 1.3 times more likely than their rural counterparts to use condoms at first sexual intercourse. In the case of condom use at last sexual intercourse and termination of a pregnancy, urban-dwelling young women are 1.6 and 1.7 times more likely to use a condom or terminate a pregnancy respectively compared with their counterparts in the rural areas.

Table 4. Logistic Regression models of factors affecting condom use at first and last sexual intercourse and, termination of a pregnancy

	Model 1: Condom use at first sex			Model 2: Condom use at last sex			Model 3: Ever terminated a pregnancy		
Variable	B	S.E.	Odds ratio	B	S.E.	Odds ratio	B	S.E.	Odds ratio
Age									
15-19 (RC)			1.000			1.000			1.000
20-24	-.286	.160	.073*	-.252	.194	.797	.896	.226	2.451***
Migration status									
Non-migrant (RC)			1.000			1.000			1.000
Migrant	-528	.157	.590***	-.744	.192	.475***	-.237	.185	.289
Place of residence									
Rural (RC)			1.000			1.000			1.000
Urban	.293	.153	1.340***	.442	.186	1.556**	.513	.192	1.671***
Education									
No education (RC)			1.000			1.000			1.000
Primary	.379	.308	1.461	1.228	.470	3.416***	.255	.309	1.291
Middle/JSS	1.107	.289	3.027***	1.619	.449	5.047***	.720	.285	2.054***
Sec./Higher	1.490	.324	4.438***	2.562	.479	12.962***	.325	.380	1.384*
Religion									
Catholic (RC)			1.000			1.000			1.000
No religion	-.207	.523	0.813	1.514	1.269	4.543	-.767	.507	.465
Protestant	.186	.516	1.204	1.912	1.261	6.764	-.918	.504	.399*
Other Christian	-.206	.501	.814	1.635	1.255	1.699	-.656	.468	.519
Moslem	-.910	554	.403	1.220	1.283	.903	-.797	.494	.451
Trad./spiritualist	.835	.742	2.305	3.126	1.537	22.779	-.041	.715	.960
Marital status									
Never married (RC)			1.000			1.000			1.000
Currently married	-.918	.196	.399***	-1.713	.269	.180***	1.258	.242	3.517***
Living together	-.772	.236	.462***	-1.159	.276	.314***	1.186	.288	3.273***
Formerly married	-.922	.355	.398***	-.052	.396	.949	1.898	.345	6.675***
Constant	-1.269	.519		-3.744	1.302	.	-3.691	.485	
No. of women	1218			1001			2062		
Model chi Square	156.462			212.697			125.743		
df	14			14			14		
R^2	.184			.299			.141		
-2 log likelihood	1170.017			798.335			987.612		
Sig.	.000			.000			.000		

***p < 0.01; * *p < 0.05; * p < 0.10
Source: Generated from the 2003 GDHS dataset

Another relevant outcome from the analysis is that the use of condoms either at first or last sexual intercourse increases with higher education. From the results in Table 4 for example, while young women with primary school education are 1.5 and 3.4 times more likely to use condoms respectively at first and last sexual encounter than their friends with no

education, the corresponding figures for others with secondary or higher levels of education are 4.5 and 12.9 times than their counterparts with no education. Similarly, the likelihood that a pregnancy would be terminated varies from 1.3 times for young women with either primary or secondary/higher level of education to 2.0 times among others with middle/JSS level of education compared with those with no education.

It is also seen that marital status has a statistically significant relationship with the three dependent variables (i.e., condom use at first and last sexual intercourse and pregnancy termination). However, for either first or last sex, young women of all the other marital status groups are less likely to use condoms compared with others who are never married. On the other hand, in terms of pregnancy termination, young women who are currently married are 3.5 times more likely to terminate a pregnancy compared with their never married counterparts. Similarly, young women who are living together or formerly married (widowed, divorced or not living together) are respectively 3.2 and 6.7 times more likely to ever terminate a pregnancy compared with the never married young women. Religion however, generally shows no statistically significant relationship with the use of condoms at first sex, last sex and the likelihood of a pregnancy being terminated.

Further analysis using the multiple linear regression technique was done to explore the factors that explain possible variation between migrants and non-migrants in age at first sexual intercourse and at first birth among the young women. Two models were run to determine the relationship between migration status and other background characteristics on one hand, and each of the two dependent variables, on the other. The analysis using age at first marriage did not produce meaningful results and therefore was excluded from the analysis as a dependent variable. The independent variables included in each of the models are the same as those used in the logistic regression analysis.

The results of the analysis are presented in Table 5. In either model, the independent variables explain just a small proportion of the variation in the dependent variable: 26.6% of age at first sexual intercourse and just 15.3% of that of age at first birth among the young women. Again, in the two models, migration status does not show any statistically significant relationship with either age at first sex or at first birth. This is to be expected because in the bi-variate analysis, the results showed that the variation between migrants and non-migrants was statistically significant among only the 15-19 year-olds with regard to age at first sex and no significance with respect to age at first birth.

Table 5. Multiple Regression models of factors affecting at first sex and first birth

Variable	Model 1: Age at first sex B	S.E.	Beta	Model 2: Age at first birth B	S.E.	Beta
Age						
15-19 (RC)	.000			.000		
20-24	6.373***	.514	-.052	1.751***	.209	.319
Migration status						
Non-migrant (RC)	.000			.000		
Migrant	.149	.486	.006	-.107	.163	-.025
Place of residence						
Rural (RC)	.000			.000		
Urban	-1.309***	.514	-.052	.219	.165	.051
Education						
No education (RC)	.000			.000		
Primary	-.481	.818	-.016	.272	.226	.058
Middle/JSS	-.398	.770	-.016	.654***	.218	.155
Sec./Higher	-.336	.949	-.007	.932***	.401	.094
Religion						
Catholic (RC)	.000			.000		
No religion	2.992	1.590	.039	.359	.415	.037
Protestant	.063	.811	-.002	.225	.278	.041
Other Christian	.961	.704	.038	-.106	.236	-.025
Moslem	-.325	.882	-.009	.252	.300	.042
Trad./spiritualist	-1.759	2 .194	-.016	-.648	.546	-.049
Marital status						
Never married (RC)	.000			.000		
Currently married	8.862***	.702	-.297	.409	.247	.095
Living together	7.879***	.914	.171	.332*	.292	.057
Formerly married	7.511***	1.336	.110	-.367	.340	-.050
Constant	5.533	.963		16.213	.364	
R^2	.266			.153		
df	14			14		
F	54.217			8.062		
Sig.	.000			.000		

***p < 0.01; * *p < 0.05; * p < 0.10
Source: Generated from the 2003 GDHS dataset

Furthermore, apart from the respondent's current age and level of education (secondary/higher) which showed a highly statistically significant result (p < 0.001), the other variables produced no statistically significant results. Women aged 20-24 years old showed a higher likelihood of having a first birth at a later age (1.7 times) compared with their 15-19 year-olds. In the case of education, while women with primary school education were 0.27 times more likely to have a later first birth than others with no education, women of

secondary or higher level of education appear to have a higher likelihood of 0.93 times than others with no education to have a later birth ($p < 0.001$).

The analysis also revealed the respondent's place of residence and marital status as producing statistically significant results ($p < .001$) with respect to age at first sexual intercourse. For example, young women of age 20-24 years are 6.4 times more likely to have a later first sex compared with others of 15-19 years. Again, young women who were resident in urban areas were found to be 1.3 times more likely than others in rural areas to have an earlier first sexual intercourse. It is also noted that young women of all marital statuses were more likely to have a later first sexual intercourse than others who were never married. Religion and education, however, produced no statistically significant results (Table 5).

Discussion

The finding that a higher proportion of the migrants had ever had sex suggests that movement out of their places of origin has exposed them to new ideas and challenges. Outside their homes, parental control on them breaks down and hence it is possible that they could be exposed to sex earlier than non-migrants. It is therefore understandable that a higher proportion of the migrants than the non-migrants would initiate sex at much younger ages. In the cities and towns, the poor migrants tend to find shelter at urban slums where they become vulnerable to initiating early sex as a coping strategy. Yet, those migrants who are able to avoid early sex are guided by the visibly negative experiences of their counterparts who had very early sex to postpone their sexual debut, as was found in this study.

Similarly, a relatively higher proportion of the migrants were found to have married for the first time at ages less than 15 years. This could be due to the fact that early sex could result in early pregnancy which could in turn lead to early marriage. In Ghana, it is quite common for marriages to be contracted or consummated shortly after the young girl is found to have been impregnated. This explains why the migrants were found to have relatively

earlier first births than the non-migrants. It has to be noted, however, that the mean ages at first sex, marriage and birth did not reveal any significant variations between the migrants and their non-migrant counterparts.

Migrants were found to have a higher contraceptive use than non-migrants (both for ever use and current use). This is to be expected due to the fact that movement outside one's place of origin could expose her to contraceptive information and advocacy that could lead to a decision to practise some form of contraception. This is especially the case if the destination area is urban where in Ghana more contraceptive information and advocacy is higher compared with the rural areas. This is also consistent with the finding in this study that a higher proportion of the migrants were resident in urban areas compared with the non-migrants. Migrants, however, were less likely to use condoms as protection against infection or pregnancy at either first or last sex compared with non-migrants.

It was also found that although a higher proportion of migrants and non-migrants used condoms at last sex relative to first sex, the difference between first and last sex was not substantial. This shows that not much difference exists between the 15-19 and 20-24 year cohorts as far as the attitude of sexually active young women to safe sex is concerned with respect to the use of condoms in Ghana.

Another important finding was a higher use of condoms among much younger female migrants and non-migrants (15-19 years) compared with older ones (20-24 years). This may be due to the fact that the much younger ones are largely unmarried and hence are consciously desirous to avoid any pregnancies while their counterparts who are 20-24 years may be married and consequently, may not be too much in a hurry to prevent births. However, the fact that the currently married young women showed a higher likelihood to terminate a pregnancy compared with their never married counterparts suggests that when given the opportunity they will prevent the pregnancies rather than waiting to become

pregnant before resorting to abortion which could be detrimental to their reproductive health. Unmet need for contraceptives could therefore be high among married young women in Ghana. Attention is therefore drawn to the urgent need for education on how to avoid unwanted pregnancies to target both the married as well as the unmarried.

Furthermore, while a higher proportion of the migrants reported to have ever terminated a pregnancy, the practice was more common among the 20-24 year-olds either as migrants or non-migrants. This is, however, consistent with the fact that condom use as a method of contraception was relatively lower among the 20-24 year-olds and consequently, unwanted pregnancies could be higher among them compared with the 15-19 year-olds, thereby, resulting in a higher rate of induced abortion. This calls for concern because while one would think that they are interested in having the pregnancies, a situation which explains why they do not practise condom use, resorting to pregnancy termination is a clear indication that they did not want to be pregnant at the time they did. This situation therefore depicts a real case of an unmet need for pregnancy prevention measures. It should however, be noted that the timing of the termination of the pregnancies is not known since the data did not make provision for such information.

The logistic regression models run on condom use at first and last sex as well as pregnancy termination provided useful insights into the reproductive health practices of migrants and non-migrants. From the results, migrants were about 0.41 and 0.53 times less likely to use condoms at first sex and last sex respectively than non-migrants. This finding confirms the second hypothesis of the study that young migrant women are less likely than their non-migrant counterparts to use condoms at their first or last sexual intercourse.

The results from the logistic model on pregnancy termination showed urban dwellers to be 1.6 times more likely to terminate a pregnancy than rural dwellers. This also is linked to exposure to ideas in an urban setting relative to the rural environment. In the urban

areas, social control mechanisms that may be exerted on young women not to tamper with a pregnancy may be non-existent. Such a situation could have some influence on the attitude of town or city dwellers towards pregnancy and termination. Besides, the social exposure of the urban-dwelling young woman may expand her knowledge and increase her access to sources and methods of pregnancy termination.

On the variation between migrants and non-migrants with respect to age at first sex and first birth, the regression models did not provide results to validate the first hypothesis of the study that young migrant women are more likely to initiate sexual intercourse earlier than non-migrants. This is in spite of the result of the bi-variate analysis that a relatively higher proportion of the migrants than non-migrants had first sex at ages less than 15 years. The results, although not statistically significant, point to a later age at first sex but a lower age at first birth among the migrants. Further research is hereby recommended to investigate into greater detail the effect of migration on age at first sex and first birth among young women in Ghana.

On the other hand, the regression model on age at first birth indicated a result suggesting that young women aged 20-24 years had their first births later than others of 15-19 years. This could suggest that between the two age cohorts, age at first birth does not appear to have increased, a situation which is very much unexpected because in the whole country, age at first birth has recorded increases between the early 1990s and 2003 (See Ghana Statistical Service et al., 1994, 1999 and 2004).

Overall, the variation in the dependent variables namely, condom use at first and last sex, termination of pregnancy, age at first sex and first birth that was explained by the independent variables was found to be quite low (i.e., below 30 percent). This calls for further research to broaden the analysis to cover more variables in order to understand the relevant factors involved.

Conclusions and Recommendations

The study has brought out a number of issues that require policy attention. First, young migrant women tend to initiate sex relatively later than non-migrants although a higher proportion of the migrants had their first sexual encounter at younger ages than the non-migrants. Secondly, the migrants are more likely to marry earlier than their non-migrant counterparts. There also appears to be a close connection between early sex and early marriage. Thirdly, migrants tend to have ever used or are current users of contraception. Yet, migrants are less likely than non-migrants to use the condom both at the first and last sexual encounters. This suggests that more efforts should be made to educate young migrants on the use of condoms as one key strategy against HIV/AIDS and other STIs in Ghana.

Again, it has been noted that migrants are less likely to terminate a pregnancy than non-migrants, a practice that was found to be more common among the 20-24 year-olds compared to the 15-19 year-olds. This was consistent with the finding that contraceptive use among the 20-24 year-olds was lower and, therefore, a higher incidence of unplanned pregnancies could not be ruled out among this category of respondents. Furthermore, pregnancy termination was found to be higher in the urban than in the rural areas. There was also a suggestion that age at first birth appears to have registered some decline considering that young women of 20-24 years had their first births later than their younger counterparts.

From the above, it can be concluded that young migrant and non-migrant women are exposed to reproductive health risks in different respects and within different contexts. For the migrants, this could be the result of the social and parental controls that these young women lose once they leave their places of origin at early ages. With most of them currently resident in urban settings, it is possible that they may be lured into early sex and subsequently, into early marriage. In the light of these findings, there is the need for a more comprehensive study to be carried out nationwide using quite a definite definition of who a migrant is rather

than a proxy measure as was used in this study. Such a study will also have the advantage of investigating some of the reasons why the migrants migrated and at what ages they did so in addition to when some of the reproductive events (including first sex, marriage, birth, contraceptive use and pregnancy termination) took place i.e., before or after migration. These are issues on which the data used in this study were limited.

Secondly, Ghana is fast moving away from a rural dominated population to a more urban society. The traditional attention that research has drawn towards addressing problems of the rural areas must be reconsidered. More emphasis should be placed on urban areas, particularly on the reproductive health risks of young migrants in the cities and towns. This is especially important as there is currently in Ghana a wave of north-south independent migration of children largely dominated by women into southern Ghanaian cities and towns.

Thirdly, while one cannot discourage completely the migration of children, it is important to stress the urgent need for District Assemblies especially in the predominant child migrant sending areas to team up with community and traditional leaders, community based non-governmental organisations (NGOs) to initiate awareness creation programmes on the reproductive health risks that young migrants in particular, could be exposed to when they are away from home. As part of these programmes, parents should be urged to encourage and most importantly, financially support their children to at least pursue education to basic school levels. This will provide them with some relatively attractive employable skills prior to migration so that they will be well positioned for further education or skill re-training to ensure that they can compete for jobs at their destination areas.

Finally, in the nation's advocacy and behaviour change communication programmes, particularly on HIV/AIDS and reproductive health risks prevention, the vulnerability of the young migrant woman should not only be integrated as a component of the programmes but should be emphasised. A strong partnership should be forged between

HIV/AIDS and reproductive health programme implementing agencies as well as the electronic and print media to execute this agenda throughout the country. This will involve increased attention on the reproductive health risks which young migrants are exposed to without necessarily down-playing the young migrants' contributions to socio-economic development.

References

Anarfi, J. K. (1992). *Sexual networking in selected communities in Ghana and the sexual behaviour of Ghanaian female migrants in Abidjan, Côte d'Ivoire,* in Tim Dyson, Sexual Behaviour and Networking: Anthropological and Sociocultural Studies on the Transmission of HIV. Derouaux-Ordina, Liège, p. 233-47.

Awusabo-Asare, K., Anarfi, J. K., Agyeman, D. K., (1993). Women's control over their sexuality and the spread of STDs and HIV/AIDS in Ghana. *Health Transition Review,* vol. 3, suppl., p. 1-13.

Chavez, L. 1998. Shadowed Lives. Undocumented Migrants in American Society. Fort Worth, TX: Harcourt Brace College Publishers.

Decosas, J., & F. Kane. 1995. Migration and AIDS. Lancet, 346(8978): 826-828.

Fayorsey, C. 1995. *Adolescent Reproductive Health Issues in Ghana*. Legon, Ghana: Sociology Department, University of Ghana; Population Impact Project, University of Ghana. 1995. *Adolescent Fertility and Reproductive Health in Ghana*. Legon, Ghana: Population Impact Project, University of Ghana (December).

Gardner R. & Blackburn R. (1997). People who move: New reproductive health focus. Population Reports Series J (45): 1-27.

Ghana Statistical Service (GSS) and Macro International Inc. (MI). (1994). *Ghana Demographic and Health Survey 1993*. Calverton, Maryland.

---------- (1999). *Ghana Demographic and Health Survey 1998*. Calverton, Maryland.

Ghana Statistical Service (GSS), Noguchi Memorial Institute for Medical Research (NMIMR) and ORC Macro. 2004. *Ghana Demographic and Health Survey 2003*. Calverton, Maryland.

Herdt, G. (ed.) 1997. Sexual Cultures and Migration in the Era of AIDS: Anthropological and Demographic Perspectives. Oxford: Clarendon Press.

Hirsch, J.A. 2003. A Courtship after Marriage: Sexuality and Love in Mexican Transnational Families. Berkeley, CA: University of California Press

Landale, N.S. (1994). Migration and the Latino Family: The Union Formation Behavior of Puerto Rican Women. *Demography.* Vol. 31, No. 1, pp. 133-157.

Laumann, Edward O., Stephen Ellingson, Jenna Mahay, and Anthony Paik, editors. 2004. The Sexual Organization of the City. Chicago: University of Chicago Press.

Magana, J. and Carrier, J. 1991. Mexican and Mexican American male sexual behavior and the spread of AIDS in California. *Journal of Sex Research* 21(3): 425-441.

Magis-Rodriguez, C., C. Gayet, M. Negroni, R. Leyva, E. Bravo-Garcia, P. Uribe, & M. Bronfman. 2004. Migration and AIDS in Mexico: An Overview Based on Recent Evidence. *Journal of Acquired Immune Deficiency Syndromes* 37 (Supplement 4): 215-226.

Oppong, C., Wéry, R. (1994). *Women's Roles and Demographic Change in Sub-Saharan Africa,* IUSSP, Policy and Research papers.

Organista, K. C., & P.B. Organista, P. B. 1997. Migrant Laborers and AIDS in the United States: A Review of the Literature. AIDS Education and Prevention, 9(1): 83-93.

Parrado, E. A., Flippen, C. A., and McQuiston, C. 2004. Use of commercial sex workers among Hispanic migrants in North Carolina: Implications for the spread of HIV. Perspectives on Sexual and Reproductive Health, 36(4): 325-347.

Reproductive and Child Health Unit. 2001. "Brief on Adolescent Health Programme in Ghana." Accra, Ghana: Ministry of Health.

Ronny S. & S. Varda. 2000. Migrant Populations and HIV/AIDS - The Development and Implementation of Programmes: Theory, Methodology and Practice. Unesco/Unaids: Paris.

Ulin, P. R. (1992). African women and AIDS: negotiating behavioural change. *Social Science and Medicine,* 34 (1), p. 63-73.

United Nations. (1958). *Multilingual Demographic Dictionary*. Population Studies No. 29., United Nations, New York.

Xia Guomei. (2005). Prostitutes, migrants need more sex education. *CHINAdaily,* 27th November, http:www.chinadaily.com.cn/English/doc/2005.

Zhenzhen Zheng, Yun Zhou, Lixin Zheng, Yuan Yang, Dongxia Zhao, Chaohua Lou, Shuangling Zhao (2001). Sexual behaviour and contraceptive use among unmarried, young women migrant workers in five cities in China. *Reproductive Health Matters*. 9: 118-127.