

## **The Intersection of Migration and Sexual Initiation among Haitian Youth**

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## **Abstract**

Substantial evidence links urban residence to earlier sexual initiation. However, this approach fails to acknowledge geographic mobility among youth. Migration and sexual initiation are deeply intertwined, both in their timing and motivations. To address this gap I examine how migration shapes sexual initiation and health among youth. I first draw on data from the Haiti DHS to conduct discrete-time event history analysis and parse out the effects of residence and migration. Findings reveal that among female youth, the point of migration, not simply residence or ever migrating is the strongest predictor of sexual initiation. Among male youth, ever migrating is the strongest predictor whereas the likelihood of sexual initiation decreases at migration. Second, to describe how youth experience these changes during migration, I draw on the Haitian Youth Transitions Study, which prospectively interviews youth. Preliminary analyses reveal that the migration processes is a critical component of change on these domains.

# **The Intersection of Migration and Sexual Initiation among Youth Migrants in Haiti**

## **Introduction**

The transition to adulthood in developing countries is undergoing dramatic transformations, and many rural youth view migration as the most promising option for a productive future. Burgeoning globalization facilitates exposure to new ideas and potential opportunities, and the increased availability of transportation and communication infrastructures facilitates geographic mobility and exposure to novel ideas about how youth should be experienced (Behrman & Sengupta 2005). As a result, many youth are revising their expectations beyond traditional roles and delaying long-established markers of adulthood, such as marriage and family formation (Quisumbing & Hallman 2005). Instead, they desire the anticipated returns to education and more commonly initiate sexual activity with someone other than a spouse or future spouse (Mensch, Grant, & Blanc, 2006). The experiences of migration and sexual initiation are critical components that youth experience and are deeply intertwined, not exclusively in their occurrence, but also in the factors that drive change in both of these domains.

Despite the prevalence of youth migration, little is known about youth migration and the dramatic shift in both structural and ideological contexts that youth experience as migration unfolds. Haiti is an ideal setting to examine the intersection of youth migration and sexual initiation. Seventy percent of all its internal migrants are youth (Metz et al. 2001); the escalating demand for education, cultural values that encourage migration, and land pressures that restrict farming opportunities act jointly to encourage geographic mobility among young people (Bredl 2011; Mintz 2010; Schwartz 2009). Time concurrent with migration is the period when many young people initiate sexual activity. Relative anonymity and an ever-more threatening environment in Haiti's urban areas (Brockerhoff & Brennan 1998; Kolbe & Hutson 2006) stand in stark contrast to the heavy involvement of the extended family and community in the supervision of rural youth (Edmond et al. 2007). Current migration perspectives also fail to incorporate an understanding of youth as a unique developmental and life course phase (Tienda et al. 2007).

To address the gap in the current literature on the co-occurrence of migration and sexual initiation, I examine how the migration experience shapes the timing of sexual initiation and key indicators of sexual and reproductive health and fertility ideals during this period. I address

several key questions using a combination of data sources. First, I conduct discrete-time event history analysis using the 2005-06 Haiti Demographic and Health Survey (DHS) to illustrate the broader patterns of migration and migration timing. Using a large nationally representative survey is useful for painting a broad portrait on the timing of migration and sexual initiation. However, it cannot explain how individuals change during this critical transition.

Second, to compliment this approach, I use data from the Haiti Youth Transitions Study, which I collected in southeast Haiti in 2011 and 2012. A cohort of rural youth was identified for participation at the conclusion of primary school when youth have a high propensity to migrate. Most previous migration research identifies migrants at their destination, and conclusions are plagued by selectivity concerns. These designs also neglect how migrants may change during the migration process and prevent comparisons to those from their natal homes. The Haiti Youth Transitions Study used a prospective design to interview youth in their rural homes, prior to migration, and follow-up with them after many underwent migration. This innovative approach allows for comparisons before and after migration and between migrants and non-migrants.

### **Who Are Youth Migrants?**

For developing-country youth, the transition to adulthood occurs in an environment that is dramatically different, even from what their parents experienced (Lloyd 2005). This change is due to multiple and interdependent demographic, social, and economic changes which are being experienced around the world. The increased circulation of ideas, values, attitudes, culture, and language lead youth to develop new ideas about what their futures should hold and how they should achieve these ideals (Guillén 2001; Sklair 1999).

Youth and their families use diverse and complex strategies to adapt to the demands of changing global contexts. Independent youth migration, experienced when youth migrate separately from their parents, is one family-based strategy, but it receives scant attention in the academic literature. Most current literature integrating migration and family processes emphasizes children left behind by migration and those who follow or move with parents (Tienda et al. 2007). Independent youth migrants cannot be ignored; theirs is a common reality, whereby they leave their natal homes without their parents seeking educational and economic opportunities (Punch 2007). Furthermore, advocacy and rights groups are concerned for these

migrants' well-being, but empirical evidence on causes and processes are limited. Hence, a more comprehensive youth migration research agenda is imperative (Tienda et al. 2007).

Despite the widely used term, independent youth migrants are neither alone, nor outside the family system. Often they migrate with friends and kin, receive financial support from their natal families, and reside with kin at their destination (Thorsen 2010). Parents often continue to exert authority over them (Castellanos 2007), and residing with kin reinforces existing social ties (Hareven 1982). Educational and labor opportunities often directly motivate youth migration (Punch 2007). Moreover, these direct motives may also be rooted in a coming-of-age process and play a role in family formation. For example, migration may signal maturity in the eyes of community members and generate the requisite financial resources for adulthood (Schwartz 2009). Migration also exposes youth to new environments, ideas, and potential partners.

### **Rural and Urban Differences in Sexual Health and Initiation**

Considerable variability exists between rural and urban youth when examining sexual initiation and sexual health indicators. Examining current place of residence reveals substantial differences in early family formation behaviors and sexual and reproductive health knowledge between rural and urban residents. For instance, findings from the 2005-06 Haiti DHS reveal that the average first birth among rural Haitians occurs at age 21, whereas urbanites experience a first birth at age 26 (Macro International 2006). Additionally, rural youth report less HIV/STD knowledge and are less willing to procure condoms and other modern contraceptive methods. The extent to which rural migrants become more like urbanites, remain similar to ruralites, or are a uniquely selected group remains one of migration's fundamental questions (White & Lindstrom 2005). Most conclusions determine that the destination context is the most important factor shaping migrants' fertility outcomes, and it may have stronger effects for those who migrate at younger ages (Kulu & Milewski 2007). However, how youth migrants adopt new attitudes and behaviors is unclear.

A commonly invoked micro-economic explanation is that migration transforms the opportunity costs of early child bearing and other potential consequences of unprotected sex (Easterlin & Crimmins 1985). If this is uniquely the case, rural-to-urban migrants may forgo early romantic relationships and lower their desired fertility due to the high opportunity costs of

marriage, childbearing, and even courtship, when more educational and labor opportunities are available. However, there are likely additional factors at play as well.

A further factor to consider is that youth migrants experience dramatic changes in their social environments, often without the protection of family supervision or health knowledge. Rural Haitian life is organized around the *lakou*, a cluster of several small houses of extended kin. Parenting responsibilities and resources are shared, and young people customarily receive parental support from multiple adults (Edmond et al. 2007). In contrast, this system wanes in urban areas, which are less hospitable and often violent (Kolbe & Hutson 2006). Although kin may receive youth, the motives are not purely altruistic, and a receiving family may leverage a migrant youth's welfare to receive additional resources from the sending family (Gibbison & Paul 2006). In their new destinations, youth migrants may encounter less supervision and less psychosocial support, thereby experiencing more vulnerability.

Additionally, rural Haitian youth are not exposed to HIV, STD, and pregnancy prevention information to the same extent as more urban youth; though groups that provide these educational services visit rural schools, their outreach activities are concentrated in the cities and towns where the groups are based. Hence, rural youth may encounter their new urban environments with considerably less knowledge and experience than their new urban peers.

Other characteristics of the new environment include exposure to new ideas through new peer groups and media sources. Migrant youth encounter new peers who expose them to novel ideas at a time when peer influences are particularly important (Collins & Steinberg 2006). They also experience increased access to media through internet cafes, television, and movies. These media sources have both positive and negative aspects, but the pro-sex messages may be particularly appealing and salient to youth (Arnett 2002). These perspectives argue that rural youth enter their new environments unequipped to negotiate the new risks and challenges they face. This combination may mean that migrant youth more commonly engage in unprotected sex than non-migrants.

### **Gendered Experiences**

Both migration and sexual initiation are heavily influenced by the gendered aspects of society. Concerns about girls' physical health and safety are more salient than those for boys', and girls become even more difficult to supervise post-puberty (Sommer 2010). During

fieldwork, multiple parents expressed concerns about girls' safety and explained that girls should not live alone or with people the family does not know well. Ideally, they should remain in the care of siblings or other kin. In contrast, female youth generally experience a more restrictive environment at home than male youth, and migration may be a means of seeking autonomy. It provides an opportunity to break with locally prescribed gender restrictions while maintaining family obligations through remittances or other behaviors (Castellanos 2007; Thorsen 2010).

Female youth may be more likely to experience any negative consequences of romantic and sexual relationships than males. Rigid gender roles in romantic partnerships and childrearing mean that transitioning into these roles cast a relatively heavier responsibility on female youth. In Haiti, there are consequences even of less serious romantic relationships; girlfriends commonly take on boyfriends' chores, such as laundry, and boyfriends restrict girlfriends' mobility. And, female youth are less able to escape the negative consequences of an unplanned pregnancy.

### **Context of Sexual Initiation in Haiti**

The context and patterns of sexual initiation and family formation in Haiti reveal that the initiation of sexual activity is critical transition. I select this transition over other potential transitions, such as first marriage, because the cultural context is such that young people most commonly experience sex before marriage. Descriptive findings from the 2005-06 Haiti DHS reveals that among female respondents aged 15 to 29, a third have not had sex, 17% have engaged in sexual activity and are not married or in a union, 30% are currently married or in a union and experienced sex at least one year before marriage, 15% experienced first sex before they were married or in a union but during the same year that the relationship began, 4% began sexual activity during a marriage or union. Among males aged 15 to 29 who have experienced sex, it occurs almost exclusively more than a year before first marriage of union. Additionally, over half of first births to women occur within two years of the experience of first sex, further underscoring the initiation of sexual activity as a critical life course transition during the transition to adulthood.

This analysis of the current literature spurs four specific questions:

- 1) How do place of residence (e.g. urban, town, rural), ever migrating, and the year of migration predict the likelihood of initiating sexual activity at any given age?
- 2) Will sexual and reproductive health knowledge (e.g., HIV, STI, pregnancy prevention) increase more rapidly for migrants than non-migrants from similar backgrounds?
- 3) Will migrants and non-migrants from similar backgrounds differentiate in their fertility expectation and acceptance of modern family planning?
- 4) Will migrants and non-migrants from similar backgrounds take divergent paths in the initiation of sexual activity?

## **Data and Method**

First, I examine how migration and the sexual initiation among Haitian youth are related in a nationally representative sample. I draw on data from the 2005-06 Haiti Demographic and Health Survey (DHS) and employ discrete-time event history analysis (Singer & Willett 2003). Second, to provide potential explanations for these patterns and explain how individuals change during the migration process, I draw on data collected during the prospective Haiti Youth Transitions Study.

### *The Haiti DHS and Discrete-Time Event History Analysis*

The Haiti DHS is a multi-stage stratified random survey that is designed to provide nationally representative information on the Haitian population. After households are identified, one household member completes the household questionnaire, and all women and a selection of men who are of reproductive age in the household complete an additional gender-specific questionnaire. For this study, I limit the sample to only those aged 15 to 29 who are regular residents of the selected household. The final sample includes 6,269 female and male youth aged 15 to 29. When used in event history analysis and youth enter the risk set at age 10, this translates into 50, 878 and 12,116 person-years for female and male youth respectively.

The dependent variable in this analysis is whether the individual initiated sexual activity in any given year. This is determined by the self-reported age at first sex. Residence in a rural area, a town, or a city for each year is indicated with time-varying dummy variables. These variables are calculated using survey administration data on current residence and self-reported information on the length of time living at the current residence and the type of location of



previous residence. The first migration variable is a time-stagnant ever-migrated variable; *ever migrant*, indicates whether the individual ever migrated after the age of ten. Next, I include a time-varying indicator that equals one at the age at which the individual migrates and equals zero at all other years. Finally, I include indicators for lagged and anticipatory effects of the migration year. The lagged variable equals one the year after migration, and the anticipatory variable equals one the year prior to migration. At all other years, these values equal zero. I also control for age (via self-report), age squared, and age cubed and household wealth calculated from the report of assets from the household questionnaire.

I then proceed with discrete-time event history analysis, in which logistic regression predicts the initiation of sexual activity in a given age. Model 1 includes a time-varying variables for residence—either rural, town, or city—and an indicator for whether the individual is ever a youth migrant. Model 2 adds a time-varying indicator for whether the individual migrated in the specified year. Model 3 adds both a lagged effect, for having migrated in the previous year, and an anticipatory effect for migrating the following year. Analyses are conducted separately for female and male youth.

### *Haitian Youth Transitions Study*

Participants in the Haitian Youth Transitions Study are 225 rural Haitian youth and their families. They represent a cohort of students systematically selected from a fixed geographical area using school records, at the completion of primary school in 2011. Both the target youth and a parent completed interviews in August/September 2011 and again in February/March 2012. The mixed-methods data collection strategy includes structured interviews with all individuals and additional semi-structured interviews with a portion of them. The structured interviews are grounded with a youth-focused life history calendar to improve interviewer rapport and respondent recall, while producing data that can be incorporated into quantitative analysis (Axinn & Pearce 2006; Luke et al. 2011).

Initial recruitment was successful; the research team successfully contacted and recruited over 90% of the targeted families. Additionally, follow-up was excellent, and less than 4% of the sample was lost to attrition. Successful follow-up, even among migrants, is due to meticulous administrative records, including photographs to confirm that it was the same individual, and recent improvements to the rural mobile phone infrastructure. When compared to the DHS

sample, three quarters of these households represent the fourth wealth quintile, so “poor,” but not poorest, with the other quarter evenly distributed from the other four quintiles. Also, the ages of the target youth closely match the distribution of students completing primary school in the DHS, with a mean of 16 years. During the time between the first and second wave of migration 25% of the youth left their rural home to reside in either a town or city. The majority of these youth were interviewed at their destination, a quarter were interviewed by telephone, and two individuals were interviewed while visiting their rural family.

The initial youth interview began with a youth-focused life history calendar, ideal for documenting sequencing and rapid changes across multiple domains, and was updated during the second interview. It also served as the base for more detailed structured interview questions on romantic/sexual, residential, educational, and labor domains. Several strategies were used to improve response accuracy on sensitive topics. In addition to carefully selected locations, participants were able to provide their responses by using a touch card which showed the written responses with corresponding visual images.

Turning to the outcome variables of specific interest to sexual and reproductive health, all youth respondents were asked to tell what they knew about HIV/AIDS; explain how someone can prevent HIV, AIDS, and STIs; report their desired number of children; explain how one might prevent pregnancy; and define family planning and explain whether they would use it, as well as why, or why not. Questions were asked in an open-ended format and later coded using an open coding scheme. Then I was able to classify responses into categories of level of knowledge. Participants also rated the acceptability of premarital sex, condom use, and contraceptive use (13 items total) on a 4-point Likert scale, using the touch cards to ensure anonymity. All survey questions were carefully constructed to use the phrases common in rural Haiti. For example, items use the word *planin* for family planning, rather than *kontraseptiv* for contraceptives.

Change on these key domains will be analyzed using multilevel models whereby multiple observations of the same individual are nested within individuals (Ruadenbush & Bryk. 2002

## **Results**

### *Event History Analysis with DHS Data*

Finding from the discrete-time event history analysis reveal the unique importance of the migration experience in the initiation of sexual activity (Table 1). In the first model, residence as

a time-varying covariate is an important indicator of sexual initiation. Among female youth, residence in an urban area increases the odds ratio of sexual initiation by three tenths compared to their rural counterparts. There are no significant effects for town residence compared to rural residence. Among male youth, town and urban residence increases the odds ratio of sexual initiation by approximately four tenths and three tenths respectively.

Among female youth, a time-stagnant indicator variable for ever being a youth migrant initially is associated with a significant increase in the odds ratio of sexual initiation in any given year. However, once accounting for the age at migration and any anticipatory or lag effects, this variable is no longer significant. Instead, the age at migration, as well as the lagged and anticipatory effects of migration, increase the odds ratios of sexual initiation by eight tenths, six tenths, and nine tenths respectively. Among male youth, the status of ever being a youth migrant doubles the odds ratio of sexual initiation in the complete model, whereas the time-varying covariates indicating the year of migration and a lagged effect reduce the odds ratio of sexual initiation. (The data structure prevents including an anticipation indicator.)

### *Haiti Youth Transitions Study*

All data from the Haiti Youth Transitions Study being used for analyses in this paper have been collected and processed. However, analyses are still incomplete. Preliminary analyses reveal patterns whereby migrants and non-migrants from the same rural areas are differentiating over time. Both the knowledge of young migrants and the acceptability of family planning are increasing more rapidly among migrants.

### **Conclusion**

This paper draws on two data sources to first illustrate the broader patterns of migration and initiation of sexual activity among Haitian youth and then describe how individuals change over time on specific sexual and reproductive health domains. Findings from event-history analysis using the DHS reveal that for female youth, the point of migration is most critical for the timing of first sex. Among male youth, the point of migration actually decreases the likelihood of experiencing first sex. Instead, ever migrating increases the likelihood of sexual initiation at every point.

Preliminary analyses from the Haiti Youth Transitions Study reveal migration is a point of differentiation among rural youth. Additional explanations of the observed patterns will be enriched with the plentiful qualitative data that complimented the survey data collected in the Haiti Youth Transitions Study.

I will discuss the findings in the context of their implications during the transition to adulthood and pay particular attention to the gendered component of these experiences. These findings contribute to broader dialogs in the domains of migration, fertility, health, and the transition to adulthood.

**Table: Discrete-time event history model predicting sexual initiation among youth aged 15 to 29**

	Female Youth			Male Youth		
	Model 1 O.R. (S.E.)	Model 2 O.R. (S.E.)	Model 3 O.R. (S.E.)	Model 1 O.R. (S.E.)	Model 2 O.R. (S.E.)	Model 3 O.R. (S.E.)
Age (linear 10 to 29)	12.03*** (5.03)	12.22*** (5.11)	12.29*** (5.14)	5.35* (3.59)	5.29* (3.55)	5.02* (3.37)
Age squared	0.91*** (0.02)	0.91*** (0.02)	0.91*** (0.02)	0.93* (0.03)	0.93* (0.03)	0.93* (0.03)
Age cubed	1.00*** (0.00)	1.00*** (0.00)	1.00*** (0.00)	1.00* (0.00)	1.00* (0.00)	1.00* (0.00)
<b>Wealth Quintile (Middle = ref.)</b>						
Poorest	1.06 (0.06)	1.07 (0.06)	1.07 (0.06)	0.83 (0.08)	0.83 (0.08)	0.83 (0.08)
Poor	0.92 (0.05)	0.92 (0.05)	0.92 (0.05)	1.00 (0.09)	1.00 (0.09)	1.00 (0.09)
Rich	0.92 (0.05)	0.92 (0.05)	0.91 (0.05)	1.24* (0.12)	1.24* (0.12)	1.25* (0.12)
Richest	0.69*** (0.04)	0.69*** (0.04)	0.68*** (0.04)	1.11 (0.12)	1.12 (0.12)	1.12 (0.12)
<b>Time-varying residence (Rural= ref.)</b>						
Town	1.08 (0.05)	1.08 (0.05)	1.09 (0.05)	1.42*** (0.14)	1.42*** (0.14)	1.42*** (0.14)
Urban	1.33*** (0.06)	1.30*** (0.06)	1.31*** (0.06)	1.30** (0.13)	1.30** (0.13)	1.31** (0.13)
Ever migrant	1.14*** (0.04)	1.10** (0.04)	1.03 (0.04)	1.67*** (0.14)	1.77*** (0.16)	2.07*** (0.21)
<b>Time-varying migration</b>						
Moves this year		1.65*** (0.15)	1.78*** (0.16)		0.82 (0.12)	0.70* (0.11)
Lag- 1 year			1.56*** (0.16)			0.55*** (0.10)
Anticipatory effect- 1 year			1.97*** (0.17)			
Constant	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00*** (0.00)	0.00** (0.00)
DF	10	11	13	10	11	12
LR chi-square	533.71	562.2	630.6	183.6	185.8	198.02
N (person years)	50878	50878	50878	12116	12116	12116

\*\*\* ? .001, \*\* ? .01, \* ? .05

Source: Haiti Demographic and Health Survey 2005-2006

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