

# **Adverse Life Events and Delinquent Behavior among Youth Living in Nairobi's Informal Settlements**

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## **Abstract**

Adverse life events, including sexual and physical abuse or exposure to violent behavior, are associated with negative outcomes such as depression and other psycho-social impacts that heighten the likelihood of risk behavior. However, there has been little interrogation of the prevalence and consequences of adverse life events among sub-Saharan African youth living in urban slums where adversity is pervasive. The purpose of this study is to examine the extent to which experience of adverse life events (e.g., exposure to violence in the family and experience of sexual or physical abuse) predicts delinquent behavior among 3,064 males and females aged 12-19 years living in two slum settlements in Nairobi. In addition, we examine whether self-esteem, religiosity, and parental monitoring moderate the relationship between adverse life events and delinquent behavior. Overall, 54% of young people had experienced at least one adverse life event, while 9% had experienced four or more adverse life events.

## **Background**

A vast literature from the global north shows that experience of adverse life events, such as sexual and physical abuse or exposure to violence, is associated with negative outcomes. For example, childhood sexual abuse may lead to depression and other psycho-social impacts that can make young people more likely to engage in risky behavior (Kendall-Tackett, Williams, & Finkelhor, 1993; Nelson et al., 2002; Widom, 1999). Sexual abuse has been linked to teenage drug and alcohol use, younger age at first intercourse, as well as, teenage parenthood (Brems, Johnson, Neal, & Freeman, 2005; Fiscella, Kitzman, Cole, Sidora, & Olds, 1998; Koenig et al., 2004; Lesser, Koniak-Griffin, Gonzalez-Figueroa, Huang, & Cumberland, 2007; Mugisha, Arinaitwe-Mugisha, & Hagembe, 2003). However, there has been very little interrogation of the prevalence and consequences of adverse life events among youth in urban slums in sub-Saharan Africa. Yet, slums are ubiquitous in most African cities and the UN Population Fund estimates that 72 percent of sub-Saharan Africa's urban population currently lives under slum conditions (UNFPA, 2007). These informal settlements or slums are characterized by widespread poverty; lack of basic infrastructure; limited socio-economic opportunities; and extreme deprivation, which heighten the risk for violence and crime (UNFPA, 2007).

The purpose of this study is to examine the extent to which experience of adverse life events (exposure to violence and experience of sexual or physical abuse) predict delinquent behavior among young people living in two slum settlements in Nairobi. In addition, we examine whether self-esteem, religiosity, and parental monitoring moderate the relationship between adverse life events and delinquent behavior.

## **Method**

### **Setting**

Korogocho slum, which is located 12 kilometers from the Nairobi city center, is one of the most congested slums within the city. Viwandani slum is located 7 kilometers from the Nairobi city center and is situated in the industrial area. The two slums have different demographic profiles. Many of the residents in Korogocho have lived there for many years. Viwandani, on the other hand, attracts a youthful, highly mobile migrant population seeking employment in the industries. Both slums have limited access to formal health, education and other social services in large part because the “informal” or “squatter” nature of these settlements has meant that these areas have been marginalized by the local and national governments. Consequently, the settlements are characterized by poor housing, sanitation and infrastructure, high unemployment rates, limited opportunities for formal education, and high rates of violence (African Population and Health Research Center, 2002, 2008).

## **Data**

We will use data collected during a 3-year prospective cohort study – the Transitions to Adulthood Project (TTA). The TTA study, which is part of the larger Urbanization, Poverty, and Health Dynamics (UPHD) project, is nested in the Nairobi Urban Health and Demographic Surveillance System (NUHDSS). The NUHDSS collects longitudinal health and demographic data from residents living in Korogocho and Viwandani slums. By the end of 2007, the NUHDSS had about 60,000 residents in over 23,000 households. The TTA study followed a cohort of randomly selected NUHDSS residents aged 12-22 years (at baseline) to identify protective and risk factors in their lives, and to examine how these factors influence various markers of the transition to adulthood.

## **Procedures**

The baseline survey was conducted between October 2007 and June 2008. The survey collected information on, among other details, sociodemographic and behavioral characteristics; parent-child relations; and adolescents’ concerns, aspirations and perceived life chances. The development of the questionnaire was largely informed by existing instruments that have been used and validated in various settings (e.g., Jessor, Costa, & Turbin, 2002; National Study of Youth and Religion, 2002). Prior to conducting the fieldwork, the questionnaire was also reviewed by an international panel of experts and pilot-tested among adolescents in villages within the two slums but outside the demographic surveillance area. The questionnaire was translated from English to Kiswahili. The original and translated versions were then reviewed by bilingual researchers and interviewers to ensure comparability. Interviews were conducted in Kiswahili, the national language. Two follow-up surveys were conducted: Wave 2 (March-August 2009) and Wave 3 (April-August 2010).

During the first wave, 4,058 youth (50% males) aged 12-22 were interviewed. This number reflects a 77% response rate among eligible randomly-selected youth aged 12-22 years who were resident in the NUHDSS (N=5,281). Overall, refusals were low (<5%) among youth whom fieldworkers were able to reach and the relatively low response rate is mainly attributable to difficulties in locating some of the youth given the high mobility of residents in the area (Beguy, Bocquier, & Zulu, 2010). Respondents were more likely to be from Korogocho ( $p < .05$ ) and to be younger ( $p < .10$ ) than eligible non-respondents. Respondents did not differ from eligible non-

respondents by sex. In Wave 2, 62.3% (2,527) of those interviewed in Wave 1 were re-interviewed. In Wave 3, 1,923 of these youth were re-interviewed.

### **Planned analyses**

Descriptive statistics will be computed to describe respondents' social and demographic characteristics (at baseline), engagement in delinquent behavior, as well as their exposure to adverse life events (physical abuse, sexual abuse, exposure to violence in the family – as assessed by whether respondent has ever watched his/her mother or mother figure being beaten). Delinquent behavior will be assessed using a composite 7-item index measuring the frequency with which youth engaged in delinquent behaviors such as carrying weapons, selling drugs or alcohol, and fighting with others. Using linear regression analysis, we will examine the extent to which adverse life events and sociodemographic variables measured at baseline predict delinquency at follow-up among the sub-set of respondents who report no delinquency at baseline. Since some households had more than one adolescent, models will be adjusted for cluster effects.

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