

SMART AFRICA

4th Annual Conference

Child Behavioral Health in

Sub-Saharan Africa

**Bridging the Gap between Research,
Implementation, and Policy**

July 29th-31st 2019

Masaka, Uganda



Poster Abstracts

PREVALENCE AND FACTORS ASSOCIATED WITH AUTISM SPECTRUM DISORDER SYMPTOMS IN CHILDREN ATTENDING PAEDIATRIC NEUROLOGY CLINIC OF MULAGO HOSPITAL

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Background and Purpose: It is estimated that worldwide 1 in 160 children has an Autism Spectrum Disorder (ASD). The prevalence of ASD symptoms and the risk of being diagnosed with an ASD have been reported to be higher in children with neurologic disorders. The aim of the study was to determine the prevalence and factors associated with ASD symptoms among children attending paediatric neurology clinic of Mulago hospital.

Methods: This was a descriptive cross-sectional study on children aged 2 to 9 years attending the paediatric neurology clinic of Mulago Hospital. After obtaining consent and assent, a socio-demographic questionnaire was administered. Additional questions were asked to assess the pre-natal, birth and post-natal characteristics. Psychiatric co morbidity was assessed using screening questions from the MINI-KID. The Social Communication Questionnaire (SCQ) was administered to assess for ASD symptoms. Data Entry was done with EPIDATA 3.0 and Statistical analysis with STATA version 14.

Results: A total of 318 participants were recruited, their mean age was 5 years and 58.2% were male. The prevalence of significant ASD symptoms was found to be 45%. Females were significantly less likely to screen positive for ASD OR 0.48(0.24-0.98). Presence of expressive speech was also found to be negatively associated with significant ASD symptoms OR 0.09(0.04-0.2). History of delayed milestones was positively associated with significant ASD symptoms OR 3.30(1.59-6.84).

Conclusion and Implications: The prevalence of ASD symptoms is high in children with neurological disorders. ASD should be routinely screened for especially in children with delayed developmental milestones.

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CHILD LABOR IN GHANA: IMPLICATIONS FOR CHILDREN'S BEHAVIOURAL HEALTH

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Historically, in many African countries including Ghana, children's labor has been a major aspect of socioeconomic development. Most often, in Ghana, there is a general perception that children who are involved in child labor are simply engaging in work that is essential for their socialization. Younger children, especially girls from low-income families are socialized early into labor in the home and on the streets with implications for their health and wellbeing. Many of such children become their own agents of care at a younger age as parents use their labor to ensure survival of the family. There seems to be a conflict between the desire to preserve traditional cultural values, such as responsibility from early age, and the desire to eliminate child labor, in order to adhere to internationally recognized inalienable rights of children. The ambiguity surrounding what constitutes unacceptable or exploitative work, makes identifying cases of child labor a challenging task. In view of the fact that child labor is a controversial issue, this presentation, which is based on literature review, aims to discuss child labor with emphasis on current efforts in policy, research, and practice. The presentation will commence with the concept of childhood in the Ghanaian context. In addition, it will dilate on (a) the push and pull factors contributing to child labor, (b) implications of child labor for children's behavioural health, (c) legal framework, and (d) policies in place for tackling child labor. Given that child labor is a complex and multi-dimensional phenomenon that is associated with many factors, the presentation will conclude with suggestions on the role of social workers in addressing child labor. Emphasis will be placed on how social workers could be involved in the design and implementation of relevant and culturally responsive interventions that would help address the behavioral health needs of children and adolescents engaged in economic activities. This is crucial because child labor is a menace that is visible, but seems invisible and far from being addressed.

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HIV AND AIDS HEALTH KNOWLEDGE, AND ATTITUDES AMONG ADOLESCENTS LIVING WITH HIV IN SOUTHWESTERN UGANDA: DOES GENDER MATTER?

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Background: Adolescent girls and young women are disproportionately affected by HIV and AIDS. According to UNAIDS, about 80% of adolescent girls and young women living with HIV are in Sub-Saharan Africa (SSA). In Uganda, the prevalence rate is four times higher in girls compared to boys. Having comprehensive HIV knowledge (i.e. knowledge of two major HIV transmission modes and ability to reject two most common HIV myths) is instrumental to the practice of safe sex and other HIV-risk reduction behaviors, including reduction of potential super-infection among those living with HIV. However, only 26% - 33 % of adolescents (15-19 years) in SSA, have comprehensive HIV knowledge. Moreover, there is paucity of literature that examines HIV knowledge among adolescent girls and boys living with HIV. Yet, with increasing rates of HIV prevalence among adolescent girls, understanding gender variations can aid targeted HIV prevention efforts in SSA. This study seeks to examine gender differences in 1) HIV prevention attitudes and 2) HIV/AIDS knowledge among adolescents living with HIV.

Methods: We analyzed baseline and 12-months post baseline data from an NIH-funded Suubi+Adherence study, a five-year randomized longitudinal trial (2012-2017). We recruited 702 adolescents living with HIV (mean age of 12.4 years at study enrollment), receiving care from 39 health clinics in southern Uganda. To examine gender differences in HIV knowledge and HIV prevention attitudes, we conducted Ordinary Least Squares models that adjust for clustering of adolescents within health clinics.

Results: Both boys and girls reported similar levels of HIV knowledge and prevention attitudes at baseline. However, at 12 months post baseline, boys were more likely than girls to report positive HIV prevention attitudes [$b=1.57$; 95%CI; 0.83, 2.33] and higher HIV knowledge [$b=0.46$; 95%CI; 0.18, 0.75]. In addition, age was associated with positive HIV prevention attitudes [$b=0.82$, 95%CI; 0.61, 0.1.03] and higher HIV knowledge [$b=0.25$; 95%CI; 0.18, 0.32].

Conclusion: Results point to higher HIV comprehensive knowledge among boys compared to girls. With the rapidly increasing HIV prevalence rates, there is need to strengthen the current HIV prevention efforts that target adolescents. Moreover, tailoring existing efforts to better equip adolescent girls with the correct HIV knowledge is critical to addressing HIV in SSA.

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MENTAL HEALTH EXPERIENCES OF STREET CHILDREN IN GHANA AND THE SUSTAINABLE DEVELOPMENT GOALS.

Authors:

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The World Health Organisation's (WHO) definition of mental health emphasises an individual's functioning at a level where s/he can contribute meaningfully to society. This requires that particular attention is paid to the mental health experiences of street children and adolescents in Ghana's bid to achieve the Sustainable Development Goals. Unfortunately, this has so far not been the case both in research and policy. This study seeks to add to the growing body of literature on street children by examining the level of psychological distress among street children and some of the factors that are associated with their overall wellbeing. The guiding framework for the study is the sustainable development goals which aim at leaving no one behind no matter the cost and a recently launched child and family welfare policy in Ghana - the first of its kind. A sequential explanatory mixed method approach was adopted for the study. A quantitative survey was conducted among 207 street children in Accra, Kumasi and Sekondi-Takoradi also known as Ghana's golden triangle cities. To examine prevalence of mental disorder and level of mental health problems, a series of chi-square (using K10 categorical variable) and univariate analysis of variance (using K10 total score) were conducted. To study predictors of mental health problem, we used multiple linear regression analysis and examine a set of perceived quality of life and social connection predictors. The results of the survey show that more than half of the respondents (51.7%) experienced severe mental disorder across the three cities. The finding that a high number of street children reported severe mental disorder following events of the last four weeks prior to the survey corroborates several studies on street children across various geographical contexts. The study also found that children who have low wellbeing and left home because of abuse or parental divorce were at greatest risk for anxiety/depression. Additionally, the association between wellbeing and anxiety/depression was stronger among boys than girls. Lower wellbeing in boys is associated with higher odds for anxiety/depression. This finding is quite compelling because lower wellbeing is usually recorded among street girls. Following the quantitative study, Photo Elicitation Interviews (PEI) aimed at obtaining a deeper understanding of their everyday experiences has been conducted with 11 street boys and girls in Accra. The PEI involved giving disposable camera to the children to capture images around four themes that were drawn from the survey namely poverty, safety and aspirations, everyday experiences. This study addresses significant global child education, health, and development challenges. Hopefully, results from both the quantitative and qualitative studies will inform policy and intervention development for street children and move Ghana towards achieving agenda 2030.

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IMPLEMENTING THE ADAPTED MULTIPLE FAMILY GROUP (DANG-MALGU) INTERVENTION IN GHANA: KEY CHALLENGES AND LEARNING OPPORTUNITIES

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Background: Child behavioural health is the outcome of the interaction that takes place between a child's emotions and behaviours, their ability to function in everyday life and their concept of self. There is a growing recognition in Ghana that investing in child behavioural health is important. As part of the SMART Africa Center funded by NIMH, SMART Africa-Ghana team is implementing a pilot randomized clinical trial that seeks to address serious child disruptive behaviours in Ghana. This presentation describes the implementation of the study, challenges encountered during the process, and key lessons learned.

Methods: The SMART Africa-Ghana study is implemented in three arms: 1) control group, 2) parent-peer facilitated multiple family group (MFG) intervention group, and 3) SHEPs (school health education program coordinators) facilitated MFG intervention group, covering two districts (Sagnarigu and Tamale Metropolitan Area) in the Northern region of Ghana. Out of the targeted 180 child-caregiver dyads, the team has recruited 68 dyads in the control arm. Prior to the selection, consultative meetings had been held with stakeholders from the Ghana Education Service, school authorities, and parent teacher associations to introduce the study to them and feedback was received on the adapted MFG Manual. Subsequently, the study team worked closely with school authorities to do pre-selection and selection of pupils within the ages of 8 – 13 years. Selected pupils and their caregivers were separately briefed on the study objectives and provided details about the study procedures. Informed consent in the presence of witnesses and assent were obtained from the caregivers and pupils respectively to participate in the study. After conducting screening and baseline assessments, participants were distributed the mental health wellness materials. The team concluded 8th week assessments.

Discussion: Few challenges were encountered along the way. Some challenges encountered during this process include some caregivers who do not have mobile phones and therefore made it difficult to reach out to them to participate in the processes. There were also inconsistencies with some of the contact phone numbers that were provided by some caregivers. There is also high expectation from participants that the study will be the solution to their family challenges.

Conclusion: This presentation described challenges encountered during the implementation of the study. Some key lessons learned are working closely with identifiable stakeholders that facilitates study coordination, the effective scheduling of families for the study activities and the deepened understanding of child disruptive behaviour issues among the study population. We observe that child disruptive behaviour is gradually being discussed among participating school authorities and parents/care-givers as a result of the efforts of the study. That will likely help minimize stigma about child behavioural health issues among families and school authorities.

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ENGAGEMENT AND CAPACITY BUILDING IN DEVELOPING SCHOOL MENTAL HEALTH IN KENYA: A PROCESS PAPER

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The paper is recounting of our journey in this multicountry study strengthening school and community mental health. The multi-stakeholder fervor of this partnership implies bolstering advocacy, research and policy development in child and adolescent mental health in tandem. This paper focuses on two areas of experience that we have in developing mental health service in Kenya school context.

First, we documented the South-South partnership and local stakeholder engagement experience. Within the global mental health framework, our engagement process combines a strong South-South collaboration with each of the African partners building ties, competencies and bridging child mental services gaps.

Next, we share our pre-implementation planning experience for the Multiple Family Group intervention. The specific inquiry embedded under this project is the local adaptation of a community based, group delivered, task-shifting implementation approach of evidence based intervention that strengthens family to address child disruptive behavior problems, ‘the multiple family group’ intervention first developed in New York and now under scale-up in Uganda. In the last two years the Kenya team has been working on engaging stakeholders and collaborators to adapt the manual and prepare for implementation. We are now in the process of collecting data in two intervention schools and one control school, all in Kiambu County. We share the Kenyan team’s partnerships and engagement model roping in the Ministry of Health, Ministry of Education and other non-governmental stakeholders as an effort towards making collaborations more bottom-up in its focus. The process paper focuses on the following areas: Our experiences in adapting the MFG manual to the Kenyan context, engaging with schools and finally, sharing and training our partner Basic Needs Basic Rights Kenya in the intervention implementation.

The process paper reflects on unique learnings and opportunities in rolling out intervention and building capacity in Kenyan researchers, child and adolescent mental health stakeholders in implementation research.

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GENDER, FAMILY COMMUNICATION AND SOCIAL SUPPORT FACTORS ASSOCIATED WITH HIV DISCLOSURE AND HIV-RELATED STIGMA AMONG ADOLESCENTS LIVING WITH HIV IN UGANDA

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Background and Purpose: HIV-related stigma has been documented as one of the greatest obstacles to reducing HIV spread, engagement in HIV treatment, and poor mental health functioning among people living with HIV (PLWH), including children and adolescents. While social support and disclosure are essential for adherence and HIV treatment protocols, the fear of stigma and discrimination prevents PLWH from disclosing their status. Yet, for children and adolescents growing up with HIV –with no opportunity for normal transition through adolescence due to stigma, it is important to identify support systems, to promote acceptance and improve their health outcomes. This study examined family communication and social support factors associated with HIV disclosure and HIV-related stigma among adolescent boys and girls living with HIV in Uganda.

Methods: Data from an NICHD-funded *Suubi+Adherence* study (N=702), implemented in Uganda, were analyzed. A total of 702 HIV positive adolescents (boys =306, girls =396), ages 10-16 years were recruited from 39 health centers in the study area. Regression analyses were conducted to determine family communication (frequency and level of comfort communicating with caregiver), and social support factors (family cohesion, perceived child-caregiver support and social support from classmates, teachers and caregivers), associated with HIV disclosure, disclosure comfort, and HIV internalized and anticipated stigma.

Results: While girls reported higher levels of family communication, family cohesion and social support from multiple sources, they had lower odds for HIV disclosure and lower disclosure comfort, compared to boys. In addition, higher level of comfort communicating with caregiver was associated with both HIV disclosure and disclosure comfort. Moreover, support from within the school environment, i.e. from teachers and classmates, was uniquely associated with both HIV disclosure and HIV internalized and anticipated stigma.

Implications and Conclusions: Low levels of HIV disclosure and disclosure comfort among adolescent girls point to the need for targeted HIV stigma-reduction interventions. In addition, programming aimed at improving HIV care and treatment outcomes among adolescents should consider incorporating both family communication strengthening and HIV stigma reduction strategies, to improve HIV-health related outcomes. Moreover, our findings point to schools as potential for implementing adolescent's HIV stigma-reduction interventions and programs, especially in low-resource countries.

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RACIAL CENTRALITY, NON-ADULT PARENTAL SOCIALIZATION & DEPRESSION AMONG BLACK ADOLESCENTS IN THE UNITED STATES: AN INTERSECTIONAL EXAMINATION

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Background & Purpose: Recent studies have demonstrated that rates of depression are increasing among Black populations in the United States, with the highest upward trend in rates of depression among Black youth. Psychologists have identified the need to evaluate the influence of racial/ethnic socialization processes as a potential buffer against deleterious mental health. Yet, much emphasis has concentrated on understanding parents as primary socialization agents. The current investigation takes an intersectional within-group (ethnicity and gender) approach to assess the role of racial centrality and moderating influence of non-parental adults as racial/ethnic socialization agents in shaping Black adolescents' depression.

Methods: We utilize data from the National Survey of American Life – Adolescent Supplement (NSAL-A) (N=1,117; n=810 Black-American and n=360 Black-Caribbean adolescents) to deploy an intra-categorical intersectional descriptive analytic approach, using multivariable logistic regression models (odds ratios with corresponding 95% confidence intervals). Four series of regression models were implemented: non-stratified; ethnic-stratified, gender-stratified, and fully stratified models; whereby we controlled for well-known relevant potential confounders (i.e., age, parental education, household income, academic performance, household primary spoken language, and health insurance). Racial centrality (range 1.0-4.0) and non-parental adult network discussions of racism (range 1.0-7.3) were ordinal scales.

Results: The mean racial centrality score was 3.4 indicating high levels of racial centrality; wherein the mean reported non-parental adult network discussions of racism was 1.66 indicating relatively low levels of this influence. In non-stratified regression models, higher levels of racial centrality was associated with lower odds of depression; wherein higher reports of non-parental adult discussions of racism was associated with increased odds of depression. The statistically significant interaction of the two primary independent measures, resulted in a decreased odd of depression. These relationships varied when considering ethnic-specific, gender-specific, and fully-stratified models.

Conclusions & Implications: Using a nationally representative sample of Black adolescents in the United States, we found significant variations in racial centrality and the moderating role of non-parental adult discussions of racism in shaping depression. These findings illuminate the need for future development of structurally- and culturally relevant interventions aimed at strengthening racial/ethnic socialization processes that extends beyond peer and adults in Black adolescents networks.

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EFFECTS OF THREE MODIFIED STRATEGIES ON AFRICAN IMMIGRANT MOTHERS STIGMATIZING ATTITUDES, AND BUILDING OPTIMISM FOR SEEKING PROFESSIONAL PSYCHOLOGICAL HELP

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Background and purpose of the Research: In 2016, 4.2 million Black immigrants were reported to be living in the U.S. The African immigrant population more than quadrupled since 1980 and this rapid growth is expected to continue. African immigrants in the U.S. are underrepresented in mental health research, and their mental health needs are largely unmet. African immigrants have also been identified as a vulnerable population due to structural barriers related to social inclusion with notable difficulties in accessing publicly funded health and service systems. African immigrant women's vulnerability, in particular, is heightened due to extreme stressors (e.g., separation from family support, changing gender role expectations and conflicts, financial concerns, social isolation, racism and discrimination, and difficulties navigating and negotiating social systems). These stressors serve as a catalyst for the emergence of mental health needs. Despite experiencing sometimes significant difficulties, African immigrant women rarely seek mental health services without significant impairments in functioning. Consequently, their children's mental health can also be seriously affected. Most often, they must contend with concerns of stigmatization from their cultural group in addition to their own perceptions about help seeking. Moreover, the traditional Western model of treatment can be incongruent with their cultural practices. As such, alternative, culturally sensitive, community-based approaches must be considered. In this study, the effects of three strategies *Protest*, *Education* and *Contact* (PEC) for changing stigmatizing attitudes, enhancing mental health literacy, reinforcing cultural protective factors and building optimism that seeking mental health care can be a potentially helpful step in a nonclinical, community support approach were examined.

Methods: Caregivers at community and faith-based organizations serving Africans were recruited for this study. A convenient sample of 64 African immigrant mothers were recruited and randomly assigned to the intervention or a control condition. The participants completed a questionnaire prior to and after completing the assigned condition (week 6, posttest). Paired sample t-test were used to examine program effects for the following domains: Perceived Devaluation Discrimination (PDD), Social Distance (SD), Perceptions of Stigmatization by others for Seeking Help (PSHOSH), Self-Stigma of Seeking Help (SSOSH), and Mental Health Knowledge.

Results: When posttest scores of participants in the PEC condition were examined relative to those in the comparison condition, program effects for PDD was revealed, with significant improvements in attributions towards person's including friends and families with mental illness ($M=3.3$, $SD=7.10$); ($t(24)=2.34$, $p = .028$). In addition, results showed significant improvements in attributions towards Self-Stigma of Seeking Help (SSOSH), with participants more likely to react favorably towards persons who sought professional psychological help ($M=4.2$, $SD=8.4$); ($t(25)=2.34$, $p = .016$). However, statistically significant difference was not found from pre to post assessment in the following domains: Social distance, perception of stigma by others seeking help, attitude toward seeking professional help and mental health knowledge ($p > .05$).

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Conclusion: Preliminary analyses of the post-caregiver data suggest that the PEC strategies are associated with perceived stigma and self-stigma of seeking professional psychological help. Namely, research participants who completed the PEC condition seemed more willing to interact with individuals with mental illness and agree that persons with mental-disorders benefit from medical and psychotherapeutic treatments and, therefore, have the potential to recover. At the proximal level, however, preliminary findings offer encouragement for the continued development and refinement of the three stigma-changing conditions, Posttest, Education and Contact for African immigrant mothers. In addition, the strategies tested in this study were relatively limited therefore future research to determine the immediate effects of the program over time may be warranted. Furthermore, finding has global mental health promotion implications. Although, there is much to be studied, a combination of stigma changing strategies like this has the potential to provide the outcomes and opportunities for addressing African immigrants' mental health service gap and mothers' mental health needs/challenges.

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ACCESS AND UTILIZATION OF FINANCIAL SERVICES AMONG POOR AIDS-IMPACTED CHILDREN AND FAMILIES IN UGANDA: EVIDENCE FROM A RANDOMIZED CONTROLLED TRIAL

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Background. Using savings products to promote financial inclusion has increasingly gained attention in Sub-Saharan Africa (SSA), yet little is known about mechanisms and relative importance of institutional and individual factors associated with saving performances. As governments and development partners continue to emphasize financial inclusion in SSA, it is important to understand the factors associated with savings behaviors and performance. Moreover, this will inform the next generation of asset-based policies and programs that address the wellbeing of vulnerable children and families. This paper examines the individual and institutional determinants for access and utilization of financial services among AIDS-orphaned children in southwestern Uganda.

Methods. Data were drawn from survey data and administrative bank record from *Bridges to the Future*, a NICHD funded longitudinal randomized controlled trial. AIDS-orphaned children (N=1410) were randomly assigned at school level to three study arms 1) Usual Care (N=496); 2) Bridges (N=402) receiving 1:1 match rate; and 3) Bridges PLUS (N=512), receiving 1:2 match rate. Children in all the three study arms received usual care for AIDS-impacted children in the study area, consisting of counseling, school lunches and scholastic materials. In addition to matched Child Development Accounts, children in treatment arm also received 12-sessions of workshop on asset-building and future planning, peer mentorship, and income-generating activity training.

Saving outcomes were measured by account opening and utilization, average monthly net deposit & total savings, total deposit & withdrawal times and saved any money during & after the intervention. Institutional factors included bank proximity, school banking, matching rate, and financial education. Individual factors included household wealth, child poverty, child labor, attitudes toward saving, and family saving. Two-level hierarchical linear regression models (HLM) and Hierarchical Generalized Linear Models (HGLM) were performed to correct the cluster effects of the school on saving outcomes. Likelihood ratio tests were performed to assess the joint significance of individual and institutional factors.

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Results. Results indicate that caregiver being employed significantly predicts more average monthly total savings, whereas children being employed was significantly associated less average monthly total savings and lower odds of saving any money. Near bank proximity, financial education to the children, and especially to the caregivers were associated with better saving performance. Higher match incentives only led to higher deposit frequency. The joint effects of institutional factors were statistically significant across all eight saving outcome indicators. Conversely, the joint effects of individual factors were only statistically significant for three saving outcome indicators: saved any money, average monthly total savings, and total deposit times.

Implications. Results have implications for asset building programs and policies in SSA areas to provide institutional opportunities for AIDS affected children to build economic resiliency. Special efforts should be focused on financial institution regulation and access, as well as financial education, especially educations targeting caregivers.

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SOUTH AFRICAN ADULT CAREGIVERS AS PROTECTIVE SHIELDS: SERVING AS A BUFFER BETWEEN PRECARIOUS NEIGHBORHOOD CONDITIONS, FOOD INSECURITY, AND YOUTH RISK BEHAVIORS

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Background: Low income youth in KwaZulu-Natal (KZN), South Africa are surrounded by serious threats including community violence, food insecurity, and the highest prevalence of HIV worldwide. Living in extreme poverty, these youth are at elevated risk for exposure to neighborhood violence, substance use, and instability, conditions which can exponentially increase their risk of HIV. Further, these conditions can also encourage youth to perpetrate violence and engage in criminal activity. However, some of these community “toxins” can be mitigated by the presence of protective caregivers. Adult caregivers can serve as “protective shields” buffering their children’s exposure to stressors associated with living and developing in dangerous communities. To do so in KZN, caregivers must protect both their children and themselves from community violence and the constant threat of food insecurity. In South Africa, 13 million people go hungry daily, and over half of the country’s 53 million people risk facing hunger in the future. The current study examines potential mediating effects of caregiver mental health on the relationship between neighborhood conditions (social cohesion, disorganization, and social control) and child risk behaviors.

Methods: A secondary analysis of baseline data of 478 child-caregiver dyads was conducted. Data was drawn from the Collaborative HIV prevention Adolescent Mental health Program in South Africa (CHAMPSA; R01 MH55701). Multivariate analyses were used to identify direct, indirect and total effects of neighborhood stressors and caregiver mental health on child behavior.

Results: Mediation analysis showed significant indirect effects of neighborhood conditions on child risk behaviors $(.33)(.08)=.03$. The significance was tested using bootstrapping procedures. Caregiver mental health partially mediated the effect of neighborhood conditions on child risk behaviors. Improved neighborhood conditions were associated with better caregiver health $(b=.33, SE=.05, p<.05)$, which was associated with lower child risk behaviors $(b=.08, SE=.03, p <.001)$. After controlling for the mediator, neighborhood conditions remained significantly associated with child risk behaviors, consistent with partial mediation $(b=.06, SE=.03, p<.05)$. More specifically, multiple regression revealed, neighborhood cohesion $(B=.15, SE=.06, p<.001)$, disorganization $(B=.136, p<.05)$, and social control $(B=.08, SE=.02, p<.05)$ respectively, had statistically significant associations with caregiver mental health $(R^2=.128 F(4, 460) =16.95, p<.000)$. Lastly, 74% of caregivers reported having gone without food at least once in the past month.

Conclusion: Caregiver mental health is integral to the ability to provide an emotionally supportive environment that fosters optimal development of children. Families living in extreme poverty are often exposed to numerous community-level stressors. However, caregivers with healthy emotional wellbeing are better equipped in helping their children avoid risk taking. Fostering the adult protective shield for youth living in HIV-impacted communities can reduce the risk of children engaging in risky behaviors and aid in the prevention of HIV seroconversion. This has global HIV intervention research and care

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implications, as future interventions may benefit from addressing both child and caregiver mental health needs.

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EVALUATION OF A SAVINGS-LED FAMILY-BASED ECONOMIC EMPOWERMENT INTERVENTION FOR AIDS-AFFECTED ADOLESCENTS IN UGANDA: A FOUR-YEAR FOLLOW-UP WITH COST-EFFECTIVENESS ANALYSIS

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Background and purpose: Children who have lost a parent to HIV/AIDS, known as AIDS orphans, face multiple stressors affecting their health and development. Family economic empowerment (FEE) interventions have the potential to improve these outcomes and mitigate the risks they face. We present efficacy and cost-effectiveness analyses of the Bridges study, a savings-led FEE intervention among AIDS-orphaned adolescents in Uganda at four-year follow-up.

Methods: Intent-to-treat analyses using multilevel models compared the effects of two savings-led treatment arms: Bridges (1:1 matched incentive) and BridgesPLUS (2:1 matched incentive) to a usual care control group on the following outcomes: self-rated health, sexual health, and mental health functioning. Total per-participant costs for each arm were calculated using the treatment-on-the-treated sample. Intervention effects and per-participant costs were used to calculate the incremental cost-effectiveness ratios (ICERs).

Results: At 48-months, BridgesPLUS significantly improved self-rated health (0.25, 95% CI 0.06, 0.43), HIV knowledge (0.21, 95% CI 0.0, 0.41), self-concept (0.26, 95% CI 0.09, 0.44), and self-efficacy (0.26, 95% CI 0.09, 0.43) and lowered hopelessness (-0.28, 95% CI -0.43, -0.12); whereas Bridges improved self-rated health (0.26, 95% CI 0.08, 0.43) and HIV knowledge (0.22, 95% CI 0.05, 0.39). ICERs ranged from \$224 for hopelessness to \$298 for HIV knowledge per 0.2 SD change.

Conclusions and implications for child and adolescent behavioral health: Most intervention effects were sustained in both treatment arms at two years post-intervention. Higher matching incentives yielded a significant and lasting effect on a greater number of outcomes among adolescents compared to lower matching incentives at a similar incremental cost per unit effect. These findings contribute to the evidence supporting the incorporation of FEE interventions within national social protection frameworks.

Funding: National Institute of Child Health and Development at the National Institutes of Health (Grant #1 R01-HD070727-01, PI: FMS)