



Published in final edited form as:  
*ABNF J.* 2004 ; 15(6): 109–115.

## Reducing Health Disparities Through Culturally Sensitive Treatment for HIV+ Adults in Haiti

Jessy G. Dévieux, PhD, Robert M. Malow, PhD, ABPP, Michèle M. Jean-Gilles, PhD, Deanne M. Samuels, PhD, Marie Marcelle Deschamps, MD, Maxi Ascencio Jr., MA, Larissa Jean-Baptiste, MA, and Jean William Pape, MD

### Abstract

There is a critical need to deliver empirically validated interventions to underserved populations. Haiti, the country most heavily affected by the AIDS epidemic in the Caribbean, accounts for approximately 50% of all cases in the region. Poverty, disparities in access to healthcare, and socio-political instability are among the reasons why the country has been ravaged by the disease. Ongoing projects in Haiti have shown that integrated prevention and care in resource poor settings are feasible and can be successful, as evidenced by a 50% drop in incidence among pregnant women since 1993. The AIDS prevention program has embarked on a comprehensive effort to culturally adapt a cognitive-behavioral stress management program for Haitian HIV+ individuals. The purpose of the program is to improve adherence to antiretroviral medication, reduce transmission to uninfected partners, and improve coping. This comprehensive approach is necessary to ensure the validity of the cross-cultural adaptation of this intervention.

### Keywords

Haiti; HIV; Cultural adaptation; CBSM; Adherence

---

Unlike North and Latin America, where the rates of HIV/AIDS have either been reduced or have leveled off, the Caribbean remains the only region in the Western Hemisphere with steadily increasing rates of HIV (Camara, 2002). Within the Caribbean, Haiti has been the hardest hit, with an estimated 300,000 cases, or approximately 50% of the region's total (UNAIDS, 2003). Reductions in HIV incidence suggest, however, that this figure may be closer to 180,000 (Pape, 2004). Multiple factors have led to this level of prevalence in the country including poverty, limited access to healthcare, socio-political instability, and lack of coordination among the various entities doing work in the field (Hempstone, Diop-Sidibe, Ahanda, Laurent, & Heery, 2004). The adaptation of interventions utilized successfully in more developed countries may be one of the most important routes by which the impact of the HIV epidemic in developing countries may be ameliorated.

The effect of health disparities, driven by a combination of socioeconomic disadvantage and cultural distinctions (Page, 2004), has contributed to the increasing spread of HIV worldwide. Researchers have coined the phrase "structural violence" (Farmer, 1996) to describe an environment in which chances of acquiring a disease, along with lack of access or barriers to care are dependent on structural forces beyond the control of the individual. These forces or factors may include poverty, gender inequality, and racism or class bias. Living in a vulnerable environment, in combination with engagement in health-damaging behavior where the degree of choice of lifestyle is restricted and being exposed to unhealthy, living and working

conditions, further exacerbate the vulnerabilities of disadvantaged populations (Whitehead, 1991). Researchers further suggest that the worsening social and political situation, specifically in Haiti, may be having a negative effect on health (Farmer, 2004), though there is evidence that some indicators, for example infant mortality, are improving (Pape, Deas Van Onacker, Cayemittes, Deschamps, Verdier, Severe et al., 2004).

In the early 1980s, the U.S. media widely reported that Haitians were the source of the AIDS epidemic and this led to a recommendation by the U.S. Food and Drug Administration to ban Haitians from donating blood (Dubois, 1996). This recommendation, along with the inclusion of Haitians in CDC's list of HIV risk groups, was a contributory factor in the high levels of denial surrounding HIV/AIDS issues in Haiti (St. Cyr-Delpe, 1995). The disproportionate impact of the epidemic on Haiti is starkly highlighted when actual figures are compared: there may be roughly equivalent numbers of individuals living in Haiti and the U.S. with HIV, however, the Haitian population is only approximately 3% that of the U.S. (UNAIDS, 2003; CDC, 2003). As of 1998, only 60% of the Haitian population had access to health services (UNAIDS/WHO, 2004) and estimates are that only approximately 2,800 Haitians were receiving antiretroviral therapy, though the actual need is close to 40,000 (Pape et al., 2004; UNAIDS/WHO, 2004).

Disparities affect not only access to care, but also rate of progression of AIDS. A study of a sample of 42 individuals in Haiti before the widespread availability of antiretroviral medication found that time to AIDS (5.2 years) and time to death (7.4 years) was almost twice as fast in the Haitian sample compared to progression in developed countries (Deschamps, Fitzgerald, Pape, & Johnson, 2000). The researchers hypothesize that this fast progression may be due to poor nutrition, high rates of community-acquired infections and tuberculosis.

Effective HIV/AIDS prevention efforts should address the context in which HIV is transmitted, such as interpersonal relationships, and community and cultural factors, in order to have the greatest chance for success. Researchers affirm that integrated prevention and care in resource poor settings in Haiti is feasible (Walton, Farmer, Lambert, Leandre, Koenig, & Mukherjee, 2004). Review of an *accompagnateur* program in rural Haiti, which involved full participation of the community in assisting HIV+ individuals, noted a reduction in social stigma attached to HIV due to involvement of community members in the daily lives of the participants (Behforouz, Farmer, & Mukherjee, 2004), improved weight gain and functional capacity, and found that 86% of the participants had undetectable viral loads (Koenig, Leandre, & Farmer, 2004). In another study, attention to cultural norms transformed an initially unsuccessful hospital-run effort to a successful one after encouraging a sense of ownership and initiative from community leaders and relying upon existing social structures to improve prevention efforts (Fitzgerald & Simon, 2001).

Cultural factors, such as normative multiple sex relationships, the clash between traditional vodou belief systems with biomedicine, and lack of education (Hempstone et al., 2004) interact synergistically to increase the prevalence of HIV. In a national study conducted in Haiti, even though 97% of those surveyed knew about the existence of HIV/AIDS, 24% of women and 14% of men believed that HIV could not be prevented (Cayemittes, Placide, Barrere, Mariko, & Severe, 2001). Furthermore, 35% of the women and 19% of the men surveyed knew that HIV could be prevented, but could not name any method of prevention (Cayemittes et al., 2001). Cultural and educational factors that make interventions more challenging among certain populations have been shown amenable to change. For example, a social marketing program, promoting the use of the Pante condom in Haiti, resulted in an increase in sales from 30,000/month to 600,000 in the space of approximately two years (Frank, 1995), with estimates of sales in 2002 greater than fifteen million (Pape et al., 2004).

Women and girls may be at heightened risk of HIV, particularly now that heterosexual transmission accounts for the majority of new cases in Haiti (CDC, 2004). Cultural traditions in which sex is usually not openly discussed with girls/women, and a cultural belief that promotes early sexual activity for boys (De Santis, Thomas. & Sinnett, 1999) are among the factors that may hinder initiation of protective behaviors among women. Data on street children in Haiti suggest that adolescent girls are two to three times more likely to be HIV or syphilis-infected compared to boys of the same age due to sex with older men, a statistic which also holds true in much of the Caribbean and Africa (Pape et al., 2004; AVERT, 2004). Furthermore, in a country in which few couples legally marry, bearing a man's child (and hence putting oneself at further risk for HIV) is one of the few ways in which a woman can legitimise her relationship with a man (Coreil, Barnes-Josiah, Augustin, & Cayemittes, 1996).

The World Health Organization reports that up to one-third of adolescent girls worldwide reported forced sex during their first sexual experience (WHO, 2002). A study among women in rural Haiti found that 54% of the women reported forced sex (Smith Fawzi, Lambert, Singler, Tanagho, Leandre, Nevil et al., in press). Factors related to economic vulnerability - having a relationship of longer duration and being in a relationship with a man who does construction work - as well as younger age and having STD-related symptoms were associated with forced sex. The authors recommend training/assistance with income-generating projects for women, as well as efforts to increase development and humanitarian aid, to address these issues. Among the same sample, economic vulnerability was also related to risk factors for chlamydia and/or gonorrhea; e.g. work as a domestic servant increased risk of STDs by four times (Smith Fawzi, Lambert, Singler, Koenig, Leandre, Nevil et al., 2003). A review of the social history of women and their contribution to Haitian society in the 20<sup>th</sup> century show that women have been significantly involved with farming, and the domestic food trade sector (N'Zengou-Tayo, 1998). Efforts to enhance women's current economic independence, therefore, can build on these already existing skills.

In Haiti, Vodou is integrated into all levels of society. As a system of belief, it does not directly proscribe utilization of Western medicine for the treatment of HIV, however, many Vodou practices may be antithetical to measures which may reduce or prevent transmission. For example, although there are female priests in Vodou, the system itself is syntonic with Haitian culture, which is heavily patriarchal and perhaps not conducive to women proactively protecting their health. Early on in the epidemic, HIV was often thought of as having supernatural causation, and even now more than 50% of females and 43% of males in a national survey believe definitely, or are unsure whether transmission occurs by supernatural means (Cayemittes et al., 2001). The mode of treatment that Haitians seek will therefore be dependent on beliefs about causation. This mapping on of traditional Vodou cultural beliefs onto the new reality of HIV, is similar to the syncretism that was practiced in the early days of the religion when practitioners linked their gods with Christian saints in order to hide their rituals from colonial powers. In an effort to integrate these beliefs into prevention programs, several organizations have actively utilized the knowledge, connections, and power to influence of Vodou priests to educate believers about HIV transmission (Fitzgerald & Simon, 2001; Barker, 2004).

An organizing framework for our work in Haiti is the use of technology transfer terminology and concepts when addressing the issues of project design and implementation. Primary among these concepts is the idea that if a program results in changes in the distribution of power, status or rewards in the receiving culture, it will be met with resistance (Kedia & Bhagat, 1998). We also abstract from Niehoff and Anderson's (1964) theories on the steps necessary to ensure success: 1) ideas for the planning and implementation of the new technology should be effectively communicated; 2) strong evidence of the probability of successful implementation must be demonstrated; 3) voluntary participation of the recipients should be sought; 4) local

cultural patterns should not be disrupted; and 5) the project must be flexible enough to be modified in the face of the new conditions in the transfer site.

There is a critical need to deliver effective, empirically validated interventions to under-represented and understudied groups to eliminate health disparities. The specific aims of this Haiti pilot program are to 1) translate a research-based intervention for persons living with HIV/AIDS into linguistically appropriate and culturally sensitive interventions for HIV+ Haitian adults; and 2) evaluate the ecological validity of the translated instruments and interventions with a pilot group of patients from the GHESKIO (Groupe Haitien d'Etude du Sarcome de Kaposi et des Infections Opportunistes) Centers. The objectives are to increase adherence to antiretroviral drugs and to promote adherence to preventive measures to reduce the transmission of HIV to non-infected sexual partners. The hypotheses are that in comparison to a control group, individuals assigned to the experimental group intervention will show greater reductions in psychological distress, greater adherence to combined antiretroviral therapy, greater risk behavior reduction and healthier immune functioning.

## QUALITATIVE RESEARCH

The increased uses of qualitative approaches are partially driven by the effort to improve the quality of healthcare (Tripp-Reimer & Doebbeling, 2004) and by the need to understand the intricacies of effecting social change (Shortell, 1999). Methodological triangulation or the choice of utilizing qualitative methods (cultural adaptation and focus groups) as a component of research practice, acknowledges the fact that purely quantitative methods are inadequate for obtaining certain types of information. Power (2002) notes that qualitative methods have demonstrated applicability in areas where the social phenomena are personal and sensitive, such as research in the area of HIV. Qualitative research can be used to identify and describe the cultural and social factors that may hinder use of services (Pope, van Royen, & Baker, 2002) or perhaps behavioral change.

This project was conceptualized as a cultural feasibility study, as explained by Coreil and colleagues (1998), incorporating behavioral, social and ethical issues in the formative phase of development, in addition to actively engaging the surrounding community. This research involved the use of focus groups, and interviews with community members and local researchers. Focus group participants, members of the Community Advisory Board (CAB), represented individuals from various professions including educators, medical professionals, and representatives from the religious community, as well as HIV+ individuals. Selected recommendations of two focus groups, the task of which was to review the translated instruments for cultural appropriateness and rate components of the intervention, follow.

Based on Glenn and Glenn's (1981) dimensions that assess how a society organizes and transmits ideas, communication in Haiti, as it is in much of the developing world, is associative. That is, effective communication takes place face-to-face and between individuals. In keeping with this culturally acceptable mode of communication, participants in the focus groups suggested that members of the CAB could refer HIV+ individuals to the study to facilitate the recruitment process. They also recommended that a "street informer/subject flow coordinator" be hired who could conduct home visits with participants to remind them of appointments and track them for follow-up. In the absence of telephones or other means of contacting participants, this recommendation was well received.

Facilitators posed the question of how to improve the chances of obtaining honest responses, especially with sensitive questions. CAB members suggested building rapport, gaining confidence of participants, and including "lie" scales in the assessment measures to double check for consistency. They also advised that the investigators invest in motivating the "front-line" staff as well as ensuring that staff have sufficient time and good working conditions in

order to make participants comfortable. Participants recommended that audio computer-assisted assessment technology not be used, as face-to-face interviewing would probably be more effective in this environment. Finally, participants recommended potential topics for the control groups including malaria, cervical cancer, hygiene, typhoid, dental health, and skin and eye diseases.

## CULTURAL ADAPTATION

Cultural adaptation is a complex undertaking. Content validity should not be insulated from cultural understandings. Initial hospital-based, education prevention approaches in a rural area in Haiti were unsuccessful due to lack of understanding of existing systems and protocols in the area. These approaches led to denial, passivity, and rumors that AIDS was an American conspiracy or the result of a curse. Young people in Haiti even coined a new phrase, the acronyms of which were the same for the acronyms for AIDS in the Creole language (SIDA) - Imaginary Syndrome to Discourage Lovers (Fitzgerald & Simon, 2001). New approaches therefore had to be developed which led to cooperation with partner agencies including churches and Vodou societies (Fitzgerald & Simon, 2001).

Dévieux, Malow, Rosenberg and Dyer (2004), in adapting an intervention for a multi-ethnic group of recovering addicts in Miami, have relied on the concept of key dimensions of interventions as detailed in (Bernal, Bonilla, & Bellidol, 1995). These dimensions, persons (e.g. individual experiences), language (e.g. emotional expressions) and cultural knowledge and context (values/beliefs) are important to the process of tailoring/matching an intervention to best serve a cultural group. According to the researchers, these dimensions necessitate that facilitators have a broad knowledge of the culture, can speak to the participants on their level in language that they understand, and incorporate examples from the cultural realities of the ethnic groups to further invite participation and ensure a greater chance for information uptake and long-term behavior impact (Dévieux et al., 2004). An understanding of the ways in which culture may inhibit the uptake of knowledge are shown in the results of a study by Holschneider and Alexander (2003) which found that among young people 15–19, fewer lifetime sexual partners was significantly associated with low traditional gender norms. This finding suggests that prevention efforts may be violating accepted cultural standards. Efforts must therefore be made to acknowledge and adapt interventions to be culturally acceptable. In the current intervention, adapting lessons for the Haitian population has therefore led to incorporation of family concerns, and issues of traditional gender roles, religion, spirituality, and stigma.

A focus on language, connotative and denotative meaning, is especially important in the cultural adaptation process. Concepts salient in one culture may not transfer well across cultures. We include here an example of the process of cultural brokerage whereby translations and a review of the material for cultural appropriateness occur. The title of an assessment measure “Reduced HIV Concerns - Infectivity” was directly translated into Creole, “Enkyetid Enfektivite Jèm SIDA Redyi” meaning “Worry Infectivity HIV Reduced.” The cultural linguistic committee, aware that the purpose of the questionnaire was to assess changes in participants' perception of their level of infectivity since being on anti-HIV medication, arrived at an adjusted Creole translation, and deduced that an explanatory phrase was needed for clarity. The resulting phrase was therefore brought closer to the originally intended meaning: “Nouvo Konbinezon Remèd Kont Jèm SIDA a Fè Mwen Gen Mwens Tèt Chaje Sou Posibilite Enfekte Lòt Moun” or “The new HIV combination medications make me less worried about the possibility of infecting others.”

Training service providers who have participated in the modification of the manuals and assessment instruments will give them additional ownership in the intervention. Furthermore, it will build local capacity in behavioral interventions, and set the stage for the next phase of



the program-testing and dissemination of the interventions-which will be the basis of a future R01 grant application.

## INTERVENTION

Cognitive Behavioral Stress Management (CBSM) has been effectively used to improve immune function and increase adherence to antiretroviral therapy among HIV+ persons in the U.S. (Antoni, Cruess, Klimas, Maher, Cruess, Kumar et al., 2002; Antoni, 2003; Malow, Dévieux, Rosenberg, Capp, & Schneiderman, 2001). The overall goals of this CBSM project, as mentioned earlier, are to improve medication adherence, reduce transmission, and improve coping. Operationalized, these objectives translate into: increasing personal awareness of stress and coping strategies; teaching anxiety reduction skills e.g. PMR, relaxing imagery, and autogenics; modifying maladaptive cognitive appraisals using cognitive restructuring; enhancing cognitive, behavioral and interpersonal coping skills; and providing a supportive group environment and encouraging utilization of social support services. Based on social support theory, Bliese and Britt (2001) propose that when exposed to stressors, individuals in positive social environments will show lower levels of strain when compared to those in negative social environments, hence the focus, in this intervention, on group processes.

Specifically, the intervention includes information about: HIV disease and its treatment, including medication; negative effects of substance abuse and high risk sexual behaviors on the immune system and health; interpersonal conflict resolution skills; assertiveness training; and problem-focused and emotion-focused coping strategies. Individuals are likely to differ in preferred coping style at baseline (emotion vs. problem-focused). Therefore, encouraging participants to use those techniques that are most helpful and which provide the opportunity for a coping style-intervention strategy “match” may improve effectiveness (Martelli, Auerbach, Alexander, & Mercuri, 1987).

The intervention is a theory-based, manualized HIV prevention intervention using an interactive format. Culturally syntonc examples of assertiveness, social support, spirituality/religion are utilized frequently. In addition, elements of the intervention based on Western philosophy with its traditional emphasis on individualism, have been modified for the Haitian sample. Traditional CBSM is heavily focused on self whereas Haitian culture is “other” focused, e.g. what others or outside forces have done to you, or what you can do for your family/community. Therefore, the intervention was framed to be congruent with this focus. We adhere to the principles set forth by Wicklein (1998) that the degree of individualism vs. collectivism must be reflected in any program and that the more collectivist the culture, the greater the importance of systems in ensuring program success.

In this study, we will be collaborating with GHESKIO, a research, training and treatment center, located in the capital city of Port-au-Prince and dedicated to provision of integrated services including HIV (or HAART) medication for Haitian individuals. GHESKIO has 20 other centers around the country and has trained over 7,000 workers. It was important, and in line with our goal to respect already existing systems, to collaborate with this institution, as trust has been an important issue among Haitians due partly to the history of living under difficult socio-political conditions (Felix, 2002). All participants will be recruited from this center. At this point in the process, cultural adaptation has been completed, and we are awaiting final administrative approval before study implementation.

The intervention includes ten 2-hour sessions. In the U.S. version, all participants, experimental and control, have a one-on-one meeting with a nurse on adherence issues. Since the GHESKIO center already includes adherence meetings as a standard service to clients, this component was eliminated from the intervention. The plan is to enroll 28 male and 28 female participants. Half will be randomly assigned to the CBSM intervention and half to the Health Promotion

Condition intervention. Criteria for entry include being HIV+ and currently taking antiretroviral medications.

The format of experimental intervention will begin with a 15 minute check-in during which participants review what happened over the previous week in relation to goals set in previous meeting, stressors, and whether they were able to practice relaxation techniques from the week before. The check-in will be followed by a relaxation practice, and the session will conclude with the didactic portion of the session, e.g., adherence, stress, coping, anger management, or assertiveness.

The Health Promotion Comparison, or control condition, was designed to be time- and attention-equivalent to the experimental condition. It includes HIV/AIDS standard care information, as well as topics suggested in the focus groups, as detailed previously. The identification of the content and accompanying audiovisual materials has been part of the adaptation process between the Haiti and U.S. research teams.

Finally, the program sequence includes recruitment and informed consent, intake assessment (1 + hours), intervention (10 sessions), discharge assessment and 3-month follow-up assessment. Participants will be given approximately \$5 for pre and post-assessment, \$2.50 at each session, and \$10 at the 3-month follow-up (exchange rate varies but \$1 US approximately equals 36–40 Haitian gourdes).

The expected outcomes of the study are that, in comparison to the Health Promotion condition, the experimental participants will have higher levels of adherence to their antiretroviral medication regimen and engage in higher levels of protective behaviors in order to reduce transmission to their uninfected partners. In addition, we hypothesize that experimental participants will have a greater understanding of the negative effects of high-risk sexual behavior on the immune system. Finally, we predict that experimental participants will internalize the teachings on the nature of stress and coping on health by exhibiting higher levels of adaptive cognitive appraisals, conflict resolution skills, and increased utilization of social support compared to those in the control condition.

## CONCLUSIONS

A comprehensive approach, encompassing an assessment of outcome effectiveness and ability to be replicated, is necessary to ensure the validity of cross-cultural adaptations of intervention processes. Interventions with the goal of reducing disparities among international populations living with HIV/AIDS can be developed from existing interventions when ecological validity and cultural sensitivity are given priority in outcome research. These interventions hold promise in removing social, cultural and linguistic barriers that have precluded better health outcomes for underserved and understudied populations.

Issues of cultural adaptation may be more challenging when conducting interventions in a different country as opposed to conducting one among an ethnic minority population within the U.S. The AIDS Prevention Program at Florida International University has had success with the former and will now attempt the latter. As part of this study, we are making a concerted effort to involve local staff and researchers at all stages in the development of the project which should increase participation and help ensure longevity of the program. Pettit (2000) notes that especially in marginalized rural areas, allowing people to participate in the process, by defining priorities and finding solutions that fit their realities, interventions have a greater chance of being perpetuated. We hope to move towards the model proposed by Flaskerud and Winslow (1998) who conceptualize a community health perspective wherein the responsibility for well-being and health is moved away from the individual and towards communities that provide access and resources for improved health.

Cooper, Hill and Power (2002). through extensive review of the literature, have identified several factors associated with improved health in disadvantaged populations. These include intensive recruitment and follow-up, encouraging community commitment/involvement, multifaceted approaches, cultural appropriateness of intervention, and system level support after the end of the study period. We have attempted to follow these recommendations and if successful, plan to disseminate the intervention to community-based treatment service providers in Haiti and the LLS.

Evidence is accruing that the many interventions to reduce the transmission of HIV in Haiti are showing some positive results. Pape and others (2004) in a conference presentation noted that the national HIV seroprevalence, evaluated by testing pregnant women at their first antenatal visit, decreased from 6.2% in 1993 to 3.1% in 2003. In addition, the opening of two new medical schools (Farmer, 2004), gives hope to the possibility of increased local solutions to the epidemic. Furthermore, it has not been studied, but the sense of injustice caused by the CDC classification of Haitians as a risk group may have created unity among Haitians in the light against AIDS. While economic conditions have worsened, leading to more female commercial sex workers in the streets and more women being raped, factors which theoretically should lead to an increase in HIV levels, in fact statistics may be declining, due possibly to the fact that governments of all political ideologies have made the fight against AIDS their priority and have joined hands with the private sector.

The picture that outsiders have of Haiti is one of poverty, need and suffering. However, it should not be forgotten that the Haitians are a proud people and that this pride has allowed them to maintain perseverance in the face of unmentionable suffering. This pride stems from their successful overthrow of colonial government in the 1800s, and their ability to withstand the embargos and sanctions of the colonial powers for many years. Haitians have sublimated their pain into beautiful works of art that are traded and valued throughout the world. The intervention therefore must take this pride into account and not make assumptions that Haitians are simply willing acceptors of all that donors have to give. Adoption of a new technology will be encouraged if a sense of ownership is cultivated (Scheraga, Tellis, & Tucker, 2000), and when the collaborators reduce the appearance of being patronizing and are able to convey to the Haitian populace that the new intervention will be beneficial to them (Wicklein, 1998).

## References

- Antoni MH. Stress management effects on psychological, endocrinological, and immune functioning in men with HIV infection: empirical support for a psychoneuroimmunological model. *Stress* 2003;6:173–188. [PubMed: 13129811]
- Antoni MH, Cruess DG, Klimas N, Maher K, Cruess S, Kumar M, et al. Stress, management and immune system reconstitution in symptomatic HIV-infected gay men over time: effects on transitional naive T cells (CD4(+)CD45RA(+)CD29(+)). *American Journal of Psychiatry* 2002;159:143–145. [PubMed: 11772706]
- AVERT. AIDS Around the World. 2004. Retrieved May 15, 2004, from <http://www.avert.org/aroundworld.htm>
- Barker K. Diffusion of innovations: A world tour. *Journal of Health Communication* 2004;(Suppl 1): 131–137. [PubMed: 14960409]
- BehforBehforouz HL, Farmer PE, Mukherjee JS. From directly observed therapy to accompagnateurs: Enhancing AIDS treatment outcomes in Haiti and in Boston. *Clinical Infectious Disease* 2004;38:S429–436.
- Bernal G, Bonilla J, Bellidol C. Ecological validity and cultural sensitivity for outcome research: Issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *Journal of Abnormal Child Psychology* 1995;23:67–82. [PubMed: 7759675]
- Bliese PD, Britt TW. Social support, group consensus and stressor-strain relationships: Social context matters. *Journal of Organizational Behavior* 2001;22:425–436.



- Camara, B. 20 years of the HIV/AIDS epidemic in the Caribbean: A summary, Caribbean Epidemiology Centre Report. 2002. Retrieved October 24, 2004, from <http://www.carec.paho.org/documents/20-years-aids-caribbean.ppt>
- Cayemittes, M.; Placide, MF.; Barrere, B.; Mariko, S.; Severe, B. Enquete mortalite, morbidite, et utilisation des services. Haiti 2000 [Demographic and Health Survey]. Calverton, Maryland: Ministere de la Sante Publique et de la Population. Institut Haitien de l' Enfance et ORC Macro; 2001.
- CDC. Cases of HIV infection and AIDS in the United States. 2002. HIV/AIDS Surveillance Report 2003;14:22.
- CDC. HIV/AIDS in Haiti. 2004. Retrieved October 22, 2004. from. <http://usembassy.state.gov/haiti/wwwucdchiv.doc>
- Cooper LA, Hill MN, Powe NR. Designing and evaluating interventions to eliminate racial and ethnic disparities in health care. *Journal of General Internal Medicine* 2002;17:477–486. [PubMed: 12133164]
- Coreil J, Barnes-Josiah DL, Augustin A, Cayemittes M. Arrested pregnancy syndrome in Haiti: Findings from a national survey. *Medical Anthropology Quarterly* 1996;10:424–436. [PubMed: 8873027]
- Coreil J, Losikoff P, Pincu R, Mayard G, Ruff AJ, Hausler HP, et al. Cultural feasibility studies in preparation for clinical trials to reduce maternal-infant HIV transmission in Haiti. *AIDS Education and Prevention* 1998;10:46–62. [PubMed: 9505098]
- De Santis L, Thomas JT, Sinnett K. Intergenerational concepts of adolescent sexuality: Implications for community-based reproductive health care with Haitian immigrants. *Public Health Nursing* 1999;16:102–113. [PubMed: 10319660]
- Deschamps M, Fitzgerald DW, Pape JW, Johnson WD Jr. HIV infection in Haiti: Natural history and disease progression. *AIDS* 2000;14:2515–2521. [PubMed: 11101063]
- Dévieux JG, Malow RM, Rosenberg R, Dyer JG. Context and common ground: Cultural adaptation of an intervention for minority HIV infected individuals. *Journal of Cultural Diversity* 2004;11:49–57. [PubMed: 15453004]
- Dubois L. A spoonful of blood: Haitians, racism and AIDS. *Science as Culture* 1996;6:7–43.
- Farmer P. On suffering and structural violence: A view from below. *Daedalus* 1996;125:261.
- Farmer P. Political violence and public health in Haiti. *New England Journal of Medicine* 2004;350:1483–1486. [PubMed: 15071121]
- Felix R. Hidden treasure under the Rabi tree: A group worker's journey from Haiti to the U.S. *Social Work with Groups*. 2002;25:117–126.
- Fitzgerald DW, Simon TS. Telling stories of people with AIDS in rural Haiti. *AIDS Patient Care* 2001;15:301–309.
- Flaskerud JH, Winslow BJ. Conceptualizing vulnerable populations health-related research. *Nursing Research* 1998;47:69–78. [PubMed: 9536190]
- Frank RA. The private sector and condom distribution: We can do more. *Aids captions* 1995;2:10–13. [PubMed: 12347573]
- Glenn, ES.; Glenn, CG. *Man and mankind: Conflict and communication between cultures*. Norwood, New Jersey: Ablex; 1981.
- Hempstone, H.; Diop-Sidibe, N.; Ahanda, KS.; Laudent, E.; Heery, M. HIV/AIDS in Haiti: A literature review, USAID/Health Communication. 2004. Retrieved October 24, 2004, from <http://www.jhuccp.org/africa/haiti/LitreviewAIDSen.pdf>
- Holschneider SO, Alexander CS. Social and psychological influences on HIV preventive behaviors of youth in Haiti. *Journal of Adolescent Health* 2003;33:31–40. [PubMed: 12834995]
- Kedia BL, Bhagat RS. Cultural constraints on transfer of technology across nations: Implications for research in international and comparative management. *Academy of Management Review* 1998;13:559–571.
- Koenig SP, Leandre F, Farmer PE. Scaling-up HIV treatment programmes in resource-limited settings: The rural Haiti experience. *AIDS* 2004;18(Suppl 3):S21–25. [PubMed: 15322480]
- Malow R, Dévieux JG, Rosenberg R, Capp L, Schneiderman N. A cognitive-behavioral intervention for HIV+ recovering drug abusers: The 2000–05 NIDA-funded AIDS Prevention Center study. *Psychology & AIDS Exchange* 2001;30:23–26.

- Martelli MF, Auerbach SM, Alexander J, Mercuri LG. Stress management in the health care setting: Matching interventions with patient coping styles. *Journal of Consulting and Clinical Psychology* 1987;55:201–207. [PubMed: 3571673]
- Niehoff AH, Anderson JC. The process of cross-cultural innovation. *International Development Review* 1964;6:5–11.
- N'Zengou-Tayo M. 'Fanm se poto Mitan: Haitian women, the pillar of society. *Feminist Review* 1998;59:118–142. [PubMed: 12294236]
- Page, B. Use and misuse of culture: A core issue in health disparities; Paper presented at the NIDA Workshop Advancing Research to Reduce Drug Abuse and HIV Health Disparities; Bethesda, MD. 2004 Jun.
- Pape, JW.; Deas Van Onacker, JD.; Cayemittes, M.; Deschamps, MM.; Verdier, RI.; Severe, PD., et al. Haiti's response to the AIDS epidemic: A success story; Poster session presented at the annual meeting of the International AIDS Conference; Bangkok, Thailand. 2004 Jul.
- Pettit J. Strengthening local organization: "Where the rubber hits the road. *IDS Bulletin* 2000;31:51–61.
- Pope C, van Royen P, Baker R. Qualitative methods in research on healthcare quality. *Quality & Safety in Health Care* 2002;11:148–152. [PubMed: 12448807]
- Power R. The application of qualitative research methods to the study of sexually transmitted infections. *Sexually Transmitted Infections* 2002;78:87–89. [PubMed: 12081190]
- St Cyr-Delpe, M. On the eve of destruction. In: Reid, E., editor. *HIV and AIDS: The Global Interconnection*. West Hartford, Connecticut: Kumarian Press; 1995. Retrieved on November 4, 2004, from <http://www.undp.org/hiv/publications/book/bkchap06.htm>
- Scheraga CA, Tellis WM, Tucker MT. Lead users and technology transfer to less-developed countries: Analysis, with an application to Haiti. *Technology in Society* 2000;22:415–425.
- Shortell S. The emergence of qualitative methods in health services research. *Health Services Research* 1999;34:1083–1090. [PubMed: 10591274]
- Smith Fawzi MC, Lambert W, Singler JM, Koenig SP, Leandre F, Nevil P, et al. Prevalence and risk factors of STDs in rural Haiti: Implications for policy and programming in resource poor settings. *International Journal of STD & AIDS* 2003;14:848–853. [PubMed: 14678595]
- Smith Fawzi MC, Lambert W, Singler JM, Tanagho Y, Leandre F, Nevil P, et al. Factors associated with forced sex among women accessing health services in rural Haiti: Implications for the prevention of HIV infection and other sexually transmitted diseases. *Social Science & Medicine*. in press
- Tripp-Reimer T, Doebbeling B. Qualitative perspectives in translational research, *Worldviews on Evidence-Based Nursing*. 2004;(3rd Quarter Suppl):S65–72.
- UNAIDS. AIDS epidemic update: December 2003. 2003. Retrieved May 13, 2004, from <http://www.unaids.org/en/other/functionalities/ViewDocument.asp?href=http://gva-doc-owl/WEBcontent/Documents/pub/P>
- UNAIDS/WHO. Haiti: Epidemiological fact sheets on HIV/AIDS and sexually transmitted infections. 2004. Retrieved October 23, 2004, from <http://www.who.int/GlobalAtlas/PDFFactory/HIV/EFSPDFs/EFS2004HT.pdf>
- Walton DA, Farmer PE, Lambert W, Leandre F, Koenig, Mukherjee JS. Integrated HIV prevention and care strengthens primary health care: Lessons from rural Haiti. *Journal of Public Health Policy* 2004;25:137–158. [PubMed: 15255381]
- Whitehead, M. The concepts and principles of equity and health. WHO; 1991.
- Wicklein RC. Designing for appropriate technology in developing countries. *Technology in Society* 1998;20:371–375.
- WHO. World report on violence and health. Geneva: World Health Organization; 2002.

## Biographies

**Jessy G. Dévieux, PhD**, Florida International University, and co-director of the Florida International University AIDS Prevention Program. Research activities include prevention programs among adolescents, severely mentally ill adults, and HIV+ recovering drug abusers. She has published in the areas of psychosocial determinants of risk behaviors and cultural

adaptation of risk reduction interventions, among others and continues to develop translational research projects for underserved communities in the U.S. and internationally.

**Robert M. Malow, PhD, ABPP**, is a diplomate in health psychology, a clinical psychologist, a research professor of public health at Florida International University, and director of the Florida International University AIDS Prevention Program. Dr. Malow has conducted numerous HIV prevention studies with socio-economically disadvantaged, minority, drug-abusing, adolescent and adult populations, and has authored over 100 scientific publications, including several recent adolescent HIV prevention articles. Dr. Malow has had considerable experience as a Principal Investigator on several NIH funded projects including HIV prevention studies with high-risk adolescents, severely mentally ill adults, and HIV+ drug abusers.

**Michèle M. Jean-Gilles, PhD**, clinical pediatric psychologist, is a research assistant professor of public health in the AIDS Prevention Program of Florida International University. Her clinical and research interests include cross-cultural psychology - with particular emphasis on HIV prevention interventions, and eliminating other health disparities affecting underserved populations. She also has expertise in conducting group and family interventions for HIV/AIDS infected and affected individuals, and has published in this area. Research activities include intervention studies designed to reduce HIV risk behaviors among vulnerable populations of adolescents, families, and HIV + adults in South Florida, Africa and the Caribbean. She is also a Health Disparities Scholar for the National Center on Minority Health & Health Disparities.

**Deanne M. Samuels, PhD**, clinical health psychologist and a research consultant with the AIDS Prevention Program at Florida International University, has worked in the Caribbean and in East Africa, and is currently the liaison for the South Africa adolescent supplement grant. She has developed and conducted interventions for adolescents and persons living with HIV, as well as in other public health related areas.

**Marie Marcelle Deschamps, MD**, is secretary general of GHESKIO (Haitian Study Group on Kaposi's Sarcoma and Opportunistic Infections) in Haiti and a senior researcher at the Institut National de Laboratoire et de Recherches and Cornell Infectious Disease Unit in Haiti since 1983. She has been involved in the fight against AIDS and taking care of HIV infected/AIDS patients while working as an intern at the University Hospital in Haiti since 1979. As a fellow she went to the United States at the National Institute of Health in Bethesda, Maryland in 1982 and at the Centers for Disease Control in Atlanta in 1984. She joined the GHESKIO Group in 1983. and co-founded the GHESKIO Centers and became the Deputy Director of the Institution. She initiated the VCT/MTCT program in Haiti with the Haitian Ministry of Health and UNFPA (United Nations Population Fund) in 1999. She has been the recipient of the World Federation of Contraception and Health Award, and the "Legion of Merit" from France (President Chirac). She has published articles examining the disproportionate impact of HIV/AIDS on women: and she has been a pioneer in expanding the MTCT (Mother to Child Transmission) program nationwide in Haiti.

**Maxi Ascencio, Jr., MA**, head of the Counseling and Testing Unit at the GHESKIO Centers in Haiti, has more than a decade of experience as a clinician involved in the care of HIV/AIDS patients in Haiti. He serves as the project coordinator, assessment supervisor and lead group interventionist for the adaptation of the Cognitive Behavioral intervention for HIV+ adults in Haiti.

**Larissa Jean-Baptiste, MA**, a counselor at the GHESKIO Centers in Haiti, serves as the lead assessor and group interventionist for the adaptation of the Cognitive Behavioral intervention for HIV+ adults in Haiti.

**Jean William Pape, MD**, director at the Groupe Haitien d'Etude du Sarcome de Kaposi et des Infections Opportunistes (GHESKIO) Centers, holds a faculty appointment at Cornell University at the rank of Professor of Medicine. Dr Pape is a pioneer in HIV/AIDS, STI and tuberculosis research in Haiti. He has been the recipient of numerous awards throughout his illustrious career treating tuberculosis, HIV/AIDS and diarrheal diseases in the resource-poor country of Haiti. These include the United Nations Award for contribution to the fight against HIV/AIDS, the "Legion of Honor" from France (President Chirac), and election to the Institute of Medicine of the U.S. National Academy of Sciences.