

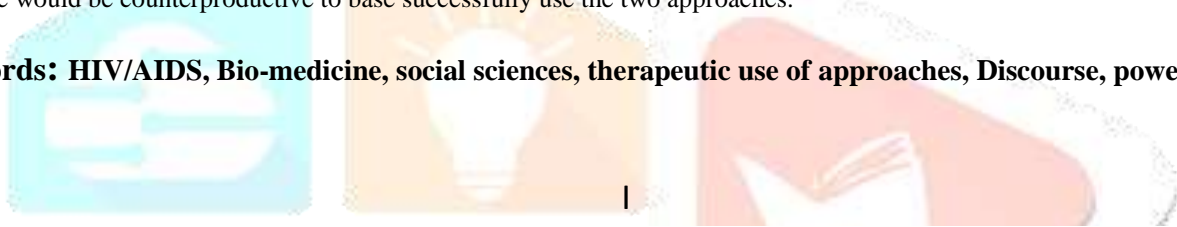
Debate between Biomedicine and Social Sciences: Critical View from HIV/AIDS Discourse.

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Abstract: During the 2000th centuries, through, the UNAIDS programmes and their intervention through the bio-medical approach to combat the HIV/AIDs pandemic, simultaneously felicitated to adopt different approaches or new kind of academic engagement, which are distinguished and reflecting the different perspectives, namely bio-medical and social sciences approach .Bio-medical approach is characterized by more scientific investigation, individualization and notion of market risk. This again related to the concept of market issues, analysis the loss profit benefits. On the other hand, social sciences approaches are characterized by community involvement and socio-cultural action. The concepts of social vulnerability are important concept in this approach. There is needed to be balance between two approaches that has to be leading principle in many HIV/AIDS prevention programme and its success. This two approaches move ahead together by the incremented affects by HIV/AIDS discourse. Especially, in Developing countries, discourse would be counterproductive to base successfully use the two approaches.

Keywords: HIV/AIDS, Bio-medicine, social sciences, therapeutic use of approaches, Discourse, power.



HIV is a profoundly social disease which is highly contested, and its causes and consequences are deeply embedded in social, cultural and political processes. As noted in many reports for the International AIDS agencies and a number of research papers portray HIV has always had social, as well as biomedical, both are significance. The social sciences continue to play a central role in responses to HIV beside bio-medical intervention. The term “social science” to include a verities of disciplines, such as anthropology, cultural studies, economics, geography, international relations, political science, social psychology and sociology.

Some questions are particularly pressing embedded deeply intimate social practices involved in HIV transmission. Sexual intercourse and the sharing of drug injection equipment are strongly shaped and regulated by cultural and social norms, and preventing HIV transmission demands a deep engagement with the social, cultural, and political factors that produce vulnerability and risk. To be effective, all HIV-prevention technologies from bio medical perspective, must engage with the lived world of those at risk for infection. Hence, the contemporary distinction between biomedical, behavioral, and structural forms of prevention functions to cloud our understanding of what effective prevention is and the mechanisms involved in its effectiveness.

The reflects of the entire history of HIV prevention, two narratives emerge: a biomedical and a social narrative. As noted as early as 1993, these two contesting interpretations contrast individualistic and collective views of disease. The focus of prevention in the biomedical narrative is on the individual members of populations who are understood as rational neo-liberal agents who, when counseled by experts, adopt the prevention technologies advocated or change their behavior to reduce HIV transmission. Within this narrative, failure to do so is interpreted as an individual weakness of some kind or a function of some “vulnerability” occasioned by “social structures” such as poverty or gender and community reaction . on the other hand , the social narrative, rather than focusing on individuals, is concerned with relations between persons and on how sexual and other practices that place persons at risk for HIV transmission are produced as well as transformed

to reduce risk. The focus is on communities and networks and the manner in which these collectives interact with the virus, with biomedicine, and with the state and other institutions and are thus enabled (or not) to respond effectively and sometimes creatively to the threat of HIV and AIDS.

We examined the responses of the biomedical and the social sciences to the challenges of HIV prevention—their collaboration and its absence. We argue that the dominant focus of HIV-related discourse and policies has always been biomedical with a particular emphasis on treatment. This has recently been so much so that the insights that social sciences might offer about the social life of the virus, a social life that is integral to its transmission and so to HIV as a medical entity, are occluded. The importance of biomedicine is clearly evident in the Joint United Nations Programme on HIV/AIDS (UNAIDS; 2006) timeline covering the defining moments in HIV from 1981 to 2006, and this importance has grown since 2006.

Joint United Nations Programme on HIV/AIDS timeline :

Year Twenty-Five Years of AIDS (1981–2006)

- 1981 Young gay man “diagnosed” with devastating immune deficiency in the United States
- 1982 Acquired immune deficiency syndrome (AIDS) named
- 1983 revealed in Africa Human immunodeficiency virus (HIV) was identified as the cause of AIDS and the heterosexual epidemic
- 1985 Test to detect HIV in infected persons with no symptoms developed—HIV test
- 1986 Global Network of People Living with HIV/AIDS (GNP+) founded
- 1987 Global Program on AIDS (World Health Organization) was established in recognition of a global epidemic
- 1987 First therapy for AIDS—AZT (zidovudine)—developed
- 1993 begins to decrease, the first major downturn in developing countries In 1991 to 1993, HIV prevalence in young pregnant women in Uganda and in young men in Thailand
- 1994 First treatment regimen to reduce mother-to-child transmission developed
- 1996 Comparatively successful antiretroviral treatment (ART) developed
- 1996 Joint United Nations Programme on HIV/AIDS (UNAIDS) formed
- 1997 Brazil becomes first developing country to provide ART through its public health system
- 2001 United Nations General Special Session on AIDS (UNGASS) is held in recognition of growing global concern
- 2001 Global Fund to Fight HIV, Tuberculosis, and Malaria established
- 2001 The 3 by 5 Initiative of the World Health Organization (3 million people on ART by 2005) developed

Year Twenty-Five Years of AIDS (1981–2006)

2004 Global Coalition on Women and AIDS launched

Source. Joint United Nations Programme on HIV/AIDS, 2006 Report on the Global AIDS Epidemic. Geneva, Switzerland: UNAIDS, 2006.

The different profiles of HIV epidemics, generalized and concentrated, underscore the central role played by social, cultural and political factors in the transmission of HIV. For example, it would be hard to understand the generalized, heterosexually driven epidemics within many African countries without reference to gender inequality, poverty and an unstable health infrastructure in many settings. In contrast, concentrated epidemics among people who inject drugs or men who have sex with men are driven by stigmatized practices (sharing injecting equipment, unprotected anal intercourse), and responses to those epidemics can be hampered by punitive laws and a lack of political will to provide harm-reduction measures (such as needle exchange and condoms) .

The responses of individuals, communities and governments to epidemics vary dramatically - again as an expression of, and shaped by, social processes. In many countries and regions, HIV has caused fear and discrimination, while in others, it has triggered responses of solidarity and community activism. The impact of HIV and AIDS on individuals, households and communities, as well as on nations and regions, also varies, with HIV and AIDS affecting the socio-economic, cultural and political fabric of countries and regions.

Notwithstanding the importance of social science, an increasing tendency to neglect the social sciences in HIV prevention, treatment and care has been noted, following what might be regarded as an intense period of “bio-medicalization” of the HIV response . This is a cause for concern as the social sciences are essential to complement, strengthen and situate biomedical research, as well as independent fields that can identify additional ways forward in the global pandemic. Maintaining a critical perspective on developments within the HIV field is important, but is often a risky endeavour in a field dominated by biomedical research. Alternatively, collaboration between the social and biomedical sciences, seen by many as essential for progress within the epidemic, can be a complex and testing process .

Using the example of “treatment as prevention” Barry Adam considers how we might overcome the tensions between biomedical and social approaches to HIV prevention . He argues for a robust social science research agenda that focuses on locally embedded practices, in contradistinction to biomedical approaches that offer technological developments without reference to social and community needs. Further Adam makes the pointed observation that any intervention in the epidemic, whether it is understood as “biomedical”, “behavioural” or both, requires community engagement and mobilization in order to stand any chance of success.

A number of contributors take up the challenge of understanding how local needs do or don’t mesh with the aims of biomedical research with reference to large, international trials of biomedical HIV prevention technologies. Kathleen MacQueen reflects on the challenges of integrating social, behavioural, biomedical and ethical perspectives based on her long engagement in biomedical HIV prevention trials . She notes that “[s]ocial scientists are now integrated as members of biomedical HIV prevention trial research teams, yet social science is minimally integrated with the science of biomedical HIV prevention”. MacQueen’s paper reminds us that social scientists working in HIV research often feel that they have no choice but to either adapt to the priorities of biomedicine and public health or maintain an autonomous HIV social science agenda outside of biomedical research . From MacQueen’s words such an opposition is insufficient to effectively enfold social science within biomedical prevention trials, and she argues for closer collaboration in trial design, despite the potential tensions.

Catherine Montgomery and Robert Pool offer an example of social scientists engaging in biomedical prevention trials, with reference to their experience on the Microbicides Development Programme (MDP) 301 trial of the microbicide candidate PRO 2000 . They describe how anthropological research conducted throughout the trial revealed that trial participants often understood and made use of the microbicide gel in ways that were completely unanticipated by trial researchers. However, despite recognition that social science methods generated valuable insights into the conduct and outcomes of the trial, the existing hierarchy of evidence within the randomized controlled design meant that these findings had limited impact on the conduct of the trial itself. Despite the difficulties in reconciling different epistemologies and versions of evidence, Montgomery and Pool conclude that the well-funded integration of social science within the MDP 301 trial demonstrates the advantages of social and biomedical researchers working together and is an approach that should be pursued and maintained.

The other contributors to the supplement consider the political, organizational and structural aspects of HIV programmes and how these aspects affect the outcomes of HIV programmes. The paper by Ashley Fox, Allison Goldberg, Radhika Gore and Till Bärnighausen critically reviews efforts to conceptualize political commitment in HIV responses and the linkages between political commitment and “success” in those responses, such as declines in HIV infection rates and AIDS-related mortality .The paper addresses what political commitment means across a number of dimensions, and suggests how it should be assessed in resource-limited and resource-rich settings. We believe the contribution of Fox and her colleagues responds to calls to further develop conceptual tools to frame and understand country responses to HIV.

Rachel Robinson has a similar goal: to understand why some countries appear to respond more effectively to HIV than others [. In contrast to Fox and colleagues’ focus on political commitment, Robinson studies a number of organizational and structural determinants of HIV outcomes, analyzing the historical development of family planning and reproductive health services in sub-Saharan Africa. Robinson shows that countries with the greatest declines in HIV prevalence and incidence were significantly more likely to have well-established family planning and reproductive health service networks. She also finds that epidemiological outcomes are associated with population policies, relative wealth, cultural diversity and colonial history. The findings other study suggest that family planning organizations should be strengthened to assist in country responses to HIV, but that this type of “structural intervention” may take many years to become well established.

Kathrin Frey and Daniel Kübler shed light on the difficulties of sustaining HIV social science research and multidisciplinary approaches to HIV in their analysis of funding policies in Switzerland .They describe the shift from a dedicated funding mechanism for HIV social science research to a model in which HIV social scientists apply and compete for funding through a national, generalized peer review model. The result has been a dramatic reduction in the number of HIV social science research projects developed and funded in Switzerland. Many readers will have observed similar shifts in their own countries and regions as the push continues to “normalize” HIV’s place in public health responses and funding mechanisms. Whether there is a need for specialized social science funding programmes within the global HIV epidemic, and whether such funding may need to be considered “normal” for many other diseases, is a debate that is sure to continue.

II

The terms “biomedicine” (and “biomedical”) have different origins and trajectories in English, German (“Biomedizin”), and French (“biomédecine”), but very similar meanings today. “Biomedical” first appeared in the writing of American and British authors in the 1920s, followed a decade later by “biomedicine” (or “biomedicine”). The American Medical Dictionary (1923) defined it as “clinical medicine based on the principles of physiology and biochemistry”, rather than on the “art of healing”, or the expertise physicians gained through

their practice. Thus, from the onset, biomedicine and biomedical research were understood as a kind of medicine that was closely associated with experimentation and the laboratory rather than doctor's knowledge and the clinic. At present, "biomedical research" is used almost interchangeably with "medical science" or "laboratory medicine", i.e. to designate a form of medical research based on experimentation in the laboratory and framed by knowledge in the natural sciences, such as physiology or bacteriology.

Bio-Medical Aspects of HIV/AIDS:

Biomedical prevention interventions I HIV/AIDS treatment include the use of condoms, the use of vaccines, the use of microbicides, penile circumcision, treatment of sexually transmitted infections (STIs) and the use of antiretroviral drugs by HIV-negative people (post-exposure prophylaxis and pre-exposure prophylaxis) and HIV-positive people (effective treatment to prevent transmission).

Biomedical prevention interventions aim to reduce the risk of HIV transmission by either reducing the risk that an exposure to HIV happens or by reducing the risk associated with after an exposure occurs. Some biomedical prevention interventions are considered highly effective at reducing the risk of HIV transmission. These include: The consistent and correct use of condoms .The consistent and correct use of antiretroviral treatment (ART) by people living with HIV to maintain an undetectable viral load .The consistent and correct use of oral pre-exposure prophylaxis (PrEP)

Approximately 80 percent of the more than 60 million people infected with the HIV since the epidemic was first detected more than 25 years ago were infected via sexual intercourse (The United Nations Joint Programme on HIV/AIDS [UNAIDS] 2007). Ironically, this mode of transmission is not particularly efficient. Early studies estimated the rate of HIV sexual transmission to be less than 1 per 2,000 for coital acts with an infected partner (Royce et al. 1997). Certain sexual practices are more efficient in facilitating HIV transmission than others. For example, receptive anal intercourse may have an efficiency as high as 1 per 10, although other studies have found it to be as inefficient as 1 per 6,000 (Shattock and Moore 2003). The high variability in the estimates of the efficiency of HIV transmission stems from two factors. First, because it would be unethical to observe HIV transmission in real time, studies of transmission are based on interviews with newly infected people. These studies may collect data over several months, during which multiple risky exposures could occur. Second, there is substantial biological variability in factors that facilitate infectiousness and susceptibility. For example, anything that increases the level of HIV concentration in blood will be associated with the efficiency of sexual transmission. Therefore, people who are acutely infected with HIV, who experience increased plasma viremia, or those who have advanced HIV disease would be more likely to transmit to their partners (Wawer et al. 2005). Other factors associated with increased transmission rates include concomitant and genital tract infections; other causes of local inflammation, stage of infection (acute, early, latent, or late); concurrent sexually transmitted diseases (STD) and co-infections; vaccines, which can increase viral load; and pregnancy (Chan and Ray 2007; Cohn 2004; Gray et al. 2005; Modjarrad et al. 2008; Ostrowski et al. 1997). The most prominent factor associated with decreased likelihood of becoming infected is male circumcision because the male foreskin contains many cells that can bind HIV (Bailey et al. 2007; Gray et al. 2007). Genetic factors which may alter the cellular receptors which can bind HIV, rendering some hosts less susceptible to HIV, and other genetic loci may make some people more capable of mounting an effective response to initial HIV infection (Rowland-Jones et al. 2001). It also is feasible that medication to inhibit HIV (i.e., antiretroviral therapy) may decrease the likelihood of an infected person transmitting HIV to his or her partner (Cohen et al.

2002). Unfortunately, despite the increased access to antiretroviral therapy, there are more than 2.5 million new HIV infections occurring across the globe (UNAIDS 2007). Some feel that increased access to antiretroviral therapy (Granich et al. 2009), or even providing antiretroviral therapy only to symptomatic individuals (Wagner and Blower 2009), might be able to drastically curb the rates of new infections. Others note, however, that before antiretroviral therapy can have an appreciable impact on the epidemic, all patients taking the medication would need to be fully adherent and have suppressed viral loads all the time; have optimal management for genital-tract inflammation, like sexually transmitted infections (STIs); and have to not increase risk-taking behavior on the belief that they may be less infectious. Thus, with the increased appreciation that lowering plasma HIV levels may make individuals less infectious, the translation to public health practice still is a work in progress. Programs designed to promote adherence and safer sex among substance users with HIV will continue to be extremely important. Substance use is a common denominator that influences the effectiveness of HIV transmission prevention efforts. Furthermore, as medication is increasingly being used as a part of HIV prevention interventions (e.g., pre-exposure prophylaxis), the role of alcohol in decreased adherence will be an essential consideration. It is therefore important to understand the current status of biomedical interventions for HIV prevention and, in some cases, the ways in which alcohol can impede these efforts.

The Search for an Anti-HIV Vaccine HIV resides in cells that are present in the genital tract and rectal tissues of HIV-infected men and women, and secretions from these cells contain both cell-free viral particles (i.e., virions) and cell-associated HIV (Anderson et al. 1991; Fideli et al. 2001; Quinn et al. 2000). Epidemiologic data, as well as data from animals and in vitro infections, suggest that either of these forms can be infectious (Anderson et al. 1991; Fideli et al. 2001; Quinn et al. 2000). The current group of microbicides act through several different mechanisms of action, including (1) vaginal defense enhancers that help maintain the acidic vaginal pH, which is protective against foreign microbes. This has been studied as both a gel that can be applied topically and through the development of efficient recolonizing bioengineered lactobacilli, because they produce the majority of the hydrogen peroxide that are ultimately responsible for the acidic vaginal environment. (2) detergents that disrupt microbial membranes. (3) entry or fusion inhibitors that target viral or cell receptors to prevent the sequence of viral binding, fusion, and entry; and (4) inhibitors of viral replication. Some topical microbicides that were evaluated in clinical trials, cellular sulfate and C31g (Savvyä), were shown to be ineffective in protecting against HIV transmission (Van Damme et al. 2002). However, the most recent large-scale efficacy trial comparing PRO2000, a microbicide to inhibit HIV entry, with an acidifying agent, Buffergel, suggested that those receiving PRO2000 had a 30 percent decreased risk of HIV transmission compared with a nongel comparison group and a placebo control group (AbdoolKarim et al. 2009). The women who were most adherent to using the PRO2000 gel, particularly those who engaged in unprotected intercourse, seemed to have even higher levels of protection. Because 30 percent efficacy is at a borderline level for public health significance, this first positive finding in a microbicide efficacy trial will not lead to immediate licensure of PRO2000. A second, larger study conducted by the Medical Research Council of the United Kingdom is underway in East Africa. If that study shows that PRO2000 is at least as effective as the levels of protection seen in the earlier study, HVTN 035, then it is very likely that PRO2000 could be the first licensed topical microbicide agent. Although there are microbicides being studied with varying mechanisms of reactions, the largest growth in microbicide research in recent years has been in the studies of the use of topical antiretrovirals for microbicidal protection. The first study of a topical antiretroviral compound evaluated topical tenofovir gel (Mayer et al. 2006). This study found that the gel was safe and well tolerated and, in a small subset of HIV-infected women, did not rapidly lead to the development of resistant strains. In addition, for about half of the women who participated in a pharmacokinetic substudy, detectable levels of tenofovir were found in the blood that would

be much lower than those used to treat HIV infections. These findings raise both concerns and hopes. The ability to absorb an antiretroviral drug topically delivered to the mucus membranes of the vagina could select for resistant variants because of the exposure of the viral particles in the semen of an infected partner to subinhibitory concentrations of medication. However, these results also might suggest that very high drug levels are being distributed to the genital tract submucosa, where the virus might normally try to replicate once it had infected superficial epithelial cells. Thus, the promise and concern about topical antiretrovirals will need to be carefully monitored in future clinical trials. Studies of topical microbicides have increasingly overlapped with studies of the use of systemic chemoprophylaxis (i.e., pre- or postexposure prophylaxis) to prevent HIV transmission (see below). Additional Biomedical and Barrier Approaches STD Control A number of intervention trials have been conducted to test the efficacy of improving the management of STDs as an HIV-prevention strategy. The results are mixed, however, depending on the stage of the epidemic. One early trial in Mwanza (Grosskurth et al. 1995) that trained healthcare providers to treat STDs and provided medication for STDs was shown to be efficacious in preventing HIV. However, subsequent trials have not found generalizable principles to demonstrate this strategy as effective. A study in Rakai, Uganda (Wawer et al. 1999), utilized home-based antibiotic treatment to prevent the spread of HIV and concluded that HIV acquisition was independent of treatable STDs. It is possible that prevention efforts that focus on STD control may work better during earlier stages of the epidemic, as was the case in Mwanza, but not Rakai, and may need to address a complex array of STDs, ranging from bacterial infections, like syphilis and gonorrhea, to chronic viral infections, like Herpes simplex. Male Circumcision Three randomized controlled trials have examined the utility of male circumcision as an HIV-prevention strategy among heterosexual men. These studies (Auvert et al. 2005; Bailey et al. 2007; Gray et al. 2007) all found that male circumcision significantly reduced the risk of HIV acquisition by approximately 50 percent among uninfected men. However, this approach may not be effective for other groups. For example among women, one study showed that HIV-infected men who were circumcised did not become less infectious to their female partners, which may be a result of increased sexual activity by the men too soon after the procedure (Wawer et al. 2008). The effects of male circumcision on men who have sex with men (MSM) have not been studied in clinical trials and would, at best, be protective only for men who did not engage in receptive anal intercourse. Use of Diaphragms Methods for Improving Reproductive Health in Africa (MIRA) trial examined the effectiveness of using a diaphragm with lubricant to prevent the acquisition of HIV among women in Zimbabwe and South Africa (Padian et al. 2007). The trial found that the use of diaphragms and lubrication, over and above the provision of condoms, did not afford woman added protection from HIV acquisition. Over the study period, the annual incidence among women who received diaphragms, lubricant, and condoms was 4.1 percent, whereas the annual incidence among women who only received condoms was 3.9 percent. Although the results indicated that the addition of diaphragms and lubricant was not better than condom use alone, the study was unable to assess whether the use of diaphragms and lubricant was more effective at preventing HIV infection than not using anything. Substance Abuse Treatment Substance abuse treatment is an important HIV-prevention strategy because people in treatment are less likely to engage in risky sexual behaviors (Needle et al. 1998) and inject drugs or share needles (Fuller et al. 2009). Substance abuse interventions that impact HIV prevention in the U.S. include pharmacotherapy (e.g., opioid substitution; although no pharmacologic interventions have been shown to be effective for stimulant use) and behavioral interventions, including harm reduction techniques (e.g., needle exchange programs for injection drug users), as well as group and individual therapy. Topical versus Oral Antiretrovirals to Prevent HIV Transmission Antiretrovirals may conceivably prevent HIV transmission by either reducing HIV concentrations in people who already are infected, or acting as preexposure prophylaxis (PrEP) or as postexposure prophylaxis

(PEP). In the latter case, the compounds are being used to prevent HIV acquisition in HIV-uninfected people. As mentioned above, research is increasingly examining the desirability of applying topical gels versus using pills to prevent HIV transmission, given that many of the antiretrovirals in prevention studies are available as oral antiretroviral compounds. Evidence supporting the use of PEP comes from the success of the prevention of mother-to-child HIV transmission (Conner et al. 1994), animal studies (Tsai and Follis 1995; Tsai et al. 1998), as well as a case– control study of prophylaxis after needle-stick injuries in health care settings (Cardo et al. 1997). Although no randomized controlled clinical trials have studied PEP, evidence from a retrospective case– control study of health care workers led to the adoption of PEP as standard of care in occupational studies (U.S. Public Health Service 2001). Following the recommendation for occupational PEP, several groups (Martin et al. 2004; Schechter et al. 2004) studied non-occupational PEP (NPEP) and, in general, people who received NPEP were more likely to decrease their risk behavior over time, making it an “educable moment.” In addition, although there were failures of NPEP, there was very little transmission of antiretroviral-resistant strains. In the vast majority of cases, individuals were either non-adherent to the regimen and/or continued to engage in risky practices shortly after completing the antiretroviral treatment. In both occupational and non-occupational PEP, treatment completion rates often are suboptimal because of side effects of many of the traditional three-drug regimens. An analysis by Bassett and colleagues (2004) found that because completion rates could increase with two-drug regimens, there might be a benefit to providing more simple regimens (Mayer et al. 2006). Other new approaches might use some of the better-tolerated drugs that inhibit the virus in unique ways (Mayer et al. 2009). In addition, the HIV Prevention Trials Network (HPTN) is embarking on a study to test the feasibility of an enhanced “Test, Link to Care, Plus Treat” protocol (TLC-Plus) (HPTN 065, HPTN 2010). The first signals to suggest efficacy in these trials may be available in the next 1 to 3 years, but many questions will remain. One of the major questions is whether individuals can take fewer doses of medication in order to protect themselves from HIV acquisitions, or one dose before or after a high-risk exposure. Another question pertains to the potential for developing resistance once the drugs are more widely used for chemoprophylaxis. Although concerns have been raised about how these drugs may be widely used for prevention because of their availability from physicians who treat people with HIV, as well as their availability internationally in generic formulations, studies of high-risk populations have not found significant numbers of people already using chemoprophylaxis (Liu et al. 2006; Mimiaga et al. 2009). This is a dynamic area; as new data become available, it will be important to monitor the uptake of PrEP among high-risk populations and particularly those who are using alcohol and other substances that might put them at risk for decreased adherence and subsequent HIV infection.

Treatment as Prevention There are several lines of evidence to support the suggestion that antiretroviral treatment will reduce the infectiousness of treated patients, including retrospective analysis (Musicco et al. 1994), prospective observation studies, and ecological data (Castilla et al. 2005; Quinn et al. 2000). Several recent studies in Africa of HIV-discordant couples (Kayitenkore 2006) found that among 32 people who acquired HIV over a 3-year period, only had an HIV-infected partner on antiretroviral therapy. The finding was replicated in a similar study of Ugandan patients initiating antiretroviral therapy; researchers reported a 98 percent reduction in the estimated risk of HIV transmission following the initiation of antiretroviral therapy (Bunnell et al. 2006). Although it has been suggested that wider-spread HIV testing and initiating antiretroviral therapy immediately in all patients could arrest the HIV epidemic (Granich et al. 2009), in settings where individuals are sexually active with multiple partners (e.g., MSM), medication adherence and safer sex practices become highly relevant issues. For example, despite the increasingly wide accessibility to antiretroviral therapy in San Francisco, the Department of Health there noted increases in incident HIV infection at the early part of this century, a finding that was replicated in Amsterdam (Dukers et al. 2002). To

assess whether behavioral disinhibition and suboptimal medication adherence could play a role in decreasing the expected major benefit of antiretroviral treatment, the HPTN has a major study under way (HPTN 05TN) that will follow 1,750 HIV discordant couples to assess whether early initiation of antiretroviral therapy has a beneficial effect in decreasing HIV transmission between partners. The Role of Alcohol and Other Drug Use in HIV Prevention Alcohol use is associated with unprotected intercourse (Brown and Vanable 2007; Colfax et al. 2004; Graves and Hines 1997; Kalichman et al. 2007). However, some evidence from cross-sectional and event-level studies contradicts this association (Klitzman et al. 2000; Morrison et al. 2003; Springer et al. 2007). Myriad challenges arise when working with people who use and abuse alcohol and other drugs. These challenges notwithstanding, recommending PrEP as a preventative strategy with this population may prove to be both feasible and effective. If PrEP is found to be effective in preventing the transmission of HIV, it will be of great importance to identify and test the feasibility of this secondary prevention strategy among high-risk substance-using populations in order to curb rising rates of HIV among this at-risk group. ?

Social Sciences Aspects of HIV/AIDS:

For Kippax, all effective interventions require a social transformation that a randomized controlled trial (RCT) cannot tell us how to achieve. *"Some of the bio-medics seem to fail to understand that people live in cultural and social worlds," she said. "Populations are likely to differ from one another and may respond very differently from one another."*

Watney (1987) picks up on this point by arguing: IV drug users, worker in the sex industry, black Africans, and gay men are carefully confined in the penal category of the "high-risk group," from which position their experience and achievements maybe safely ignored. In this manner a terrible ongoing human catastrophe has ruthlessly been denied the status of tragedy, or even natural disaster. (p. 72) The stigma that Haitians and other people of African descent faced once they were implicated as the vectors of the disease was harsh (Deacon, 2006). Every form of discrimination became justifiable, from verbal abuse to physical assault and in some cases evictions from their homes and refusal for other members of the community to work or associate with Haitians (Farmer, 2006). On the economical scale, a small Island nation that depended heavily on tourism and the money expatriate and other workers sent home, no longer could depend on those prospects. On a larger scale, strict immigration laws closed the US borders to any Haitian immigrant and furthermore, authorities 14 controlled their movement and restricted the ones who were already in the country (Fouron, 2013). Siedel (1993) does not see this occurrence of finger pointing by scientists as unique incident in the history of biomedicine isolated only to HIV/AIDS. He links this occurrence to 'blame the victim' mentality in which he argues, stems from long standing tradition of 'Medico-moral' discourse in the West. Siedel stresses: AIDS in common with other sexually transmitted diseases, like syphilis involves 'blaming others'. . . . The location of blame for disease in immorality or 'sin' of the Other is part of the older, religious tradition of using sexual taboos and prescribed behaviors to reinforce existing sexual orders, and other order patterns in the interest of the well and powerful. (Siedel, 1993, p. 180) Connecting this to Sub-Saharan Africa, as Siedel noted, it is important to acknowledge, how the morality factor in the initial response has not only contributed in the othering process, but also in its historical specificity in the way society made sense of their environment. Such acts have set the tone and the

trajectory of the HIV/AIDS discourse in the next three decades. The emphasis biomedicine placed on predetermined “risk groups” mainly the homosexual population, intravenous drug users, patients with hemophilia, Haitians immigrants, and other minority groups has manifested in several discursive forms in the global arena, produced and reproduced by various actors, mainly the international prevention efforts, scientific and biomedical researchers, and in the policies of Western donors countries and their proxies. 15 The biomedical explanation for the origin of AIDS linked Haiti as the gateway for the U.S. epidemic, fueled by the so-called voracious sexual appetite of America gay men vacationing in the Island. This claim was countered by the possibility that Americans could have brought the disease while visiting. In either case, more studies for the index case of the infectious outbreak would broaden the place of origin and further distance it from the West and the U.S. to Africa and specifically to Zaire (Gilbert et al., 2007). This was validated with genetic subtyping experiments that outlined a map that showed the U.S. strain of HIV-B to Haiti and from Haiti to Zaire as the ground zero of the epidemic (Peeters, 1994). The premise for this argument is that Africans who consumed primates in the central African forests in the form of ‘bush meat,’ tainted with Simian immunodeficiency virus (SIVsmm) which according to Santiago et al. (2006) is the precursor of human immunodeficiency virus type 2 (HIV-2). The Haiti as ‘gateway’ narrative builds on the assumption that Haitian workers who worked in Zaire in the late 1960s brought the disease back home, where they had contact with American gay visitors (Gilbert et al., 2007). Zoonotic transfers of viruses infecting primates in Africa to human hosts via consumption of bush meat is a bit uncharacteristic given the fact that Africans have lived with and consumed these animals even long before colonialism took place. So why would the jump occur now? Researchers have come up with many different hypotheses to answer this question. Clinician and epidemiologist Jacques Pepin worked in Africa since 16 the early 1980s, researching infectious diseases through historic data to explain the emergence of several infectious diseases, such tuberculosis, hepatitis, and syphilis. Analysis of data from tropical disease control programs of the colonial era in central Africa between 1930s and 1960s and other post-colonial period dating to 1990, implicated the colonial role in spreading infectious disease amongst the indigenous population while attempting to treat some of the tropical diseases prevalent in the area. In 2006, Pepin linked asymptomatic cases of HIV-2 infection in Guinea-Bissau to the historical treatment of tuberculosis (Pepin et al., 2006). In a subsequent publication, Pepin and Labbe (2008) using data from 1945 to 1990 to show the prevention and treatment measures devised by the colonialist to prevent the spread of blood-borne viruses such as syphilis, hepatitis, and yaw disease including the use of harsh drugs such as arsenic-containing compounds. As a consequence, this had destroyed the resistance of otherwise common disease in the area that as result destroyed the otherwise stable relationship between the host and pathogen (Pepin et al., 2006; Pepin & Labbe, 2008). Pathogens that may have otherwise interacted with their host without causing disease, in this case, the consumption of the bush meat tainted with SIV, could no longer have the same interaction. As Pepin and Labbe argue, “colonial medical campaigns were careless and often devised unsterilized syringe and needles, this facilitated the future of the epidemic” (Pepin & Labbe, 2008, p. 744). Where tropical disease prevention campaigns opened the window for the virus to interact negatively with its human host, the urbanization movements under colonial system opened the floodgates for mass human-to-human sexual transmission of the

virus (Pepin & Labbe, 2008). In either case, this discourse that still casts the blame to Africa and Africa's role in the origination of the disease is not without its share of criticism and questions of 'How' and 'Why' still remain unanswered. Marginal voices of advocates and scholars from Africa and elsewhere pushed to fight the power differentials. Most prominent amongst them were the voices of Richard Chirimuuta and Rosalind Harrison-Chirimuuta, in their book, *AIDS, Africa and Racism* (1987). They challenged the prevailing biomedical account, which they argued depicted Africans as primitive peoples living in isolated tribes cut off from civilization with diseases that are uncommon in the Western civilized world. They further objected to the idea that linked monkeys with Africans as reminiscent of racist Western colonial medicine, which saw Africans as evolutionarily closer to monkeys. The other contested issue for them was the prevailing notion that Africans were sexually unrestrained, and a sexually transmitted disease would therefore spread more rapidly amongst them than any other people (Chirimuuta & Chirimuuta, 1997, p. 166).

Social Construction of AIDS Thus is the Western biomedical construction of the African origin of the AIDS discourse. Africa, just barely emerging from the strong grips of Western colonialism had little to add to the discourse. An African proverb symbolizes the uneven power and knowledge dynamic in this situation between the writers of discourse and the subject of discourse as follows: "Until the lions have their own historians, tales of the hunt shall always glorify the hunters" (anonymous). Gilman (1998) notes the premise for shifting blame and the process of othering as follows: We need to locate the origin of a disease, since its source, always distant from ourselves in the fantasy land of our fears, gives us assurance that we are not at fault, that we have been invaded from without, that we have been polluted by some external agent. (p. 262)

Discourse of 'invaded from without' played a critical role in shifting the epidemiological geography from San Francisco to Haiti and from Haiti to Zaire. Likewise, the epidemiological paradigm of risk groups, which justifiably received its own share of criticism shifted to a more watered-down categorization of 'vulnerable groups' and finally to the current language of 'risk behaviors.' No matter how the language shifts the discursive practices of biomedical researchers retains the absolute power to 'validate' particular perception of the truth. What makes this research significant is the subject itself. HIV/AIDS discourse is a proverbial spider web. In the case of the spider web metaphor, there is one actor with multiple limbs weaving a complex web of silk strands, repeated and reinforced by one another to form the strongest net known in nature. The spider does not incorporate or collaborate with others to design its complex web. Likewise, the HIV/AIDS discourse controlled by the one dominant actor has so many thread like factors that are linked and interconnected to produce and reproduce the current dominant discourse, with little to no inclusion of other forms of knowledge or input. This is substantiated by the manner in which some Western scholars particularly epidemiologist, anthropologist, and other so called 'expert of African cultures' constructed and studied the disease. Yeboah (2006) draws correlation between today's HIV/AIDS discourse in Africa and the historical construction of biomedical discourse of disease in the continent as inherently racist. Yeboah asserts, "Sub-Saharan Africa's environment, its people, and their cultures were constructed as dark, barbaric, savage, hot, diseased, uncivilized, heathen, lost, and child-like" (Yeboah, 2006). This illustrates a discourse grounded on Western perception of race, driven by racial stereotypes and representation of existing xenophobia that is framed in epidemiological discourse. To understand the abovementioned analysis that cites colonial characteristics of xenophobia and racism, it is critical to refer back to the discourse during the discovery of the

epidemic in the West. Several defining moments can be traced to the initial response carried out by the biomedical field to not only make sense of the newly emerging infection, but also the technical nature it took to determine the description of the virus and its modes of transmission in the United States. These historical assessments allow us to see the discursive practices that shaped the trajectory of the HIV/AIDS discourse in SSA. Stereotypes that sustain and reproduce on the established social hierarchies of the poor, the marginalized, and race cannot be extracted from their 'historical specificity' no matter how much equality is promoted. Western prevention and policy will forever be referenced to the historical specificity of the prevailing discourse of this period, so long as the power imbalance exists between the West and Africa (Schoepf, 2001).²⁰ This is not to overlook the optimistic global efforts to create a world where healthcare is understood as universal human right for all, and where racism and stigmatization is considered deplorable offense in society's past mistakes. These conceptions are so important that it is enforced by the Western and the global institutionalization of medicine, formalized both in the United Nations charter and the World Health Organization, as fundamental right. The charter states: "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition" (Chisholm, 1949; Hogerzeil, 2006; WHO Constitution, 1948). Despite the ongoing efforts for a global social justice, the discourse of racism and othering can never be extricated from social practice regardless of what a theoretical charter guarantees. Barkan (1992) argues racism did not fade away from society simply because there is awareness of its danger, rather it went through a conversion process, "Racial differences are viewed in cultural terms, xenophobia has become more egalitarian, and the strife is no longer waged in the name of superiority. This transformation has been the retreat of racism" (Barkan, 1992, p. xii). This is also echoed by Martin Barker (1981, 1984). In his study of racist discourse in the United Kingdom, he introduced the concept of 'new racism' and points out two principals grounded in its formation. The first, unlike the archaic racism construct, is not restricted to enslavement of human and it does not display outward forms of discriminations. Instead, its functionality dominance of other cultures is exercised through an obscure means and it thrives on the concept of otherness. The second²¹ principal replaces the old notion of biological difference based on genetics to differences between cultures or nations, without any distinction between the two. The old understanding of race is now veiled as differences in culture or ethnicity. Barker calls this phenomenon 'pseudo-biological culturalism' (Coombe & Little, 2005, p. 7). He notes the idea is constituted in human nature as part of the othering process. "It is part of our biology and our instincts to defend our way of life, traditions and customs against outsiders - not because these outsiders are inferior, but because they belong to other cultures" (Barker, 1984, p. 78).

Debate between social sciences and Bio-medical aspects of HIV/AIDS:

The knowledge practices of international HIV discourse reflect the particular ways in which the Global AIDS system has developed. As perword of Charles Tayler :

... the meaning and norms implicit in these practices are not just in the minds of the actors but are out there in the practices themselves, practices which cannot be conceived as set of individual actions, but which are essentially modes of social relation, of mutual action .''

Particular generic biomedical knowledge is considered central to international AIDS policy because of the social relations between the key factors involved including the international organization and the international NGOs that take part in the reproduction of Global AIDS . from the early emergence of AIDS activism, the movement found ‘a place in the public domain in as much as the association involved bringing together many doctors, intellectuals and scientists ‘ (Caillon et al.2009:84).

This framing has positioned much policy thinking by bringing together biomedical imperatives, scientific expertise’s and the need to reach out globally as a way of thinking and acting . Such a perspectives grounds the global AIDS system and its institutions, framing, incentive and supporting particulars ways of know edging and acting as a ‘conceptual system’(Descombes,2014:301). The dichotomy between the social sciences and biomedicines turns into the question of how the social sciences to be are evaluated in terms of their relevance to global AIDS. The possibility of their inclusion becomes limited to how far different knowledge production practices can be rendered comprehensible within the global AIDS system as useful tools for and limited by implementation sciences . This view in turn is legitimated by the need for mutual action in solidarity to tackle a common technical objectives . . Such an approach frame and established a division of labour between different knowledge practices according to their perceived utility . At the same time, however , biomedical knowledge remains unchallenged as the over arching epistemological and conceptual system , unquestioned in its centrality to global AIDS relevance.

Focusing in on the definitions of implementation science is instructive here. According to the definition provided by the Fogarty International Centre of US National Institute Of Health (2016:1) , is

. . . the study of methods to promote the integrations of research findings and evidence into healthcare policy and practice . It seeks to understand the behavior of healthcare professionals and others stakeholders as a key variables in the sustainable uptake , adoption , and implementation of evidence-based interventions .

It aims

. . . to investigate and address major bottlenecks that impede effective implementation , test new approaches to improve health programming , as well as determine a casual relationship between the intervention and its impact.

This instrumental approach to the use of the social sciences selects and its limits the kind of research that is perceived as useful to the global AIDs policy needs. It does this by directly ratings the question of relevance, evaluating this according to bio medical understanding and utility. Here, , notions of implementation limit social science interest to policy delivery , that is to ‘translating policy into action ‘(Barrett, 2004:251). Policy in its broadest sense is quickly reduced to policy content’ as determined by bio-medicine and implementations concern – a technical matter beyond the scientific content associated with it . Policy content then becomes a truth claim about HIV and AIDS in general.

In this regards, Kippax and Holt stated that:

. . . social science is often reduced to behavioral research by funding bodies and by conference organizer , including the International AIDS society . . . overemphasis on behavioral research displays a poor understand of the range of social science research approaches and preference for individualized research paradigm .(2009:54).

III

HIV/AIDS Discourse:

Identified of HIV/AIDS in 1981 as a 'rare cancer' among Gay men in New York and California and argued that while HIV/AIDS would be serious but it was a limited problem, not a public issues (Meldrum, 1996). Today, talk of HIV/AIDS has become so much part of life there is a danger we switch off to it (Gilbert, 1998; Harbottle, 1998). Indeed Treichler (1999) argues that the HIV/AIDS epidemic has produced a parallel epidemic of socio-cultural meanings, definitions and attributions that she calls an 'epidemic of signification'. Although both the medical and linguistic (Social sciences) epidemics are crucial to understand, the social dimension is more pervasive and central than we are generally accustomed to believing. Until HIV/AIDS's simultaneous material and linguistic reality is understood 'we cannot begin to read the story of this illness accurately or formulate intelligent interventions' (Treichler, 1999, p. 18). The significance of the 'epidemic of signification' may well be due to the fact that HIV/AIDS has been 'media mediated' (Davenport-Hines & Phipps, 1994). HIV/AIDS is the first epidemic of the information age and as such has been widely reported by the media due to its newsworthiness. This allows the media to be significantly involved in defining images of HIV/AIDS using sophisticated information technologies to target people. Social Researchers as well as have noted that the language used in the media in relation to HIV/AIDS is, in many respects, similar to that used to talk about cancer. Cancer has been predominantly described using the language of war, a discourse that has commonly been used in the press to give meaning to HIV/AIDS as well (Sontag, 1991; Lupton, 1993; Brown, Chapman & Lupton, 1996). HIV/AIDS discourse: (1) depends on the personification of HIV/AIDS, (2) draws on and re-produces Othering discourses, in which various categories of people are cast as dark and threatening, (3) entrenches government positions on HIV/AIDS with opposition groups like the Treatment Action Campaign (TAC) having to deploy struggle tactics, (4) re-produces the dominant medical and scientific discourse of disease as the expert commentary on and investigative practices regarding the war, effectively silencing alternative voices, specifically those living with HIV/AIDS, and (5) draws on and re-produces various gendered discourses. We use the word discourse in this context in its Foucauldian (Foucault, 1972) sense, not as groups of signs but as practices that systematically form the objects of which they speak. Language and meaning is always contestable, which means that rather than language being a system of signs with fixed meanings, upon which everyone agrees, it is a site of variability, disagreement and potential conflict. Discourses, thus, are constructive as they do not simply describe the social world, but are the mode through which the world of 'reality' emerges. They contain subjects and construct objects (Parker, 1992) as well as knowledge and truth (Ramazanoglu, 1993). A discourse presents a coherent system of meanings attached to how 'truth' is formulated (Parker, 1992). In other words, the statements in a discourse cluster around culturally available understandings as to what constitutes a topic. The media and the construction of meaning The mass media plays a vital role in informing public opinion of key issues of the day (Parker, Kelly & Stein, 2001) and communicating knowledge about HIV/AIDS through the HIV/AIDS discourse (Tassew, 1995; Chatterjee, 1999). We, adopt the position that news presents socially constructed representations of reality, challenging the assumption of a single authoritative truth typical of modernism. This position allows for a critical stance towards taken-for-granted knowledge and an understanding that knowledge is historically and culturally specific (Burr, 1995). One definition of the role of the media is to entertain and inform the public (Meldrum, 1996, p. 74). However, the power of the media to set agendas and to construct, maintain and reproduce dominant discourses is often overlooked. In order for a story to be meaningful, events must be identified, contextualised and located within a range of known social and cultural identifications or 'maps of meaning'

(Hall, Critcher, Jefferson, Clarke & Roberts, 1978). The discourse, therefore, defines what significant events are taking place and offers powerful interpretations of how to understand these events. By (re)producing symbols familiar to their audience, reporters and editors 'proclaim the 'preferred reading' of a text' (Tuchman, 1991, p. 90). The initial discursive framework within which a topic is given meaning serves as a predictor of how the story will be understood from then on. Ryan, Dunwoody and Tankard (1991) propose that the frame gives meaning to the story by defining the types of information that will be considered acceptable and by pointing reporters to particular classes of sources. These 'primary definers' set the terms of reference for all future coverage and debate. 'Arguments against a primary interpretation are forced to insert themselves into its definition of 'what is at issue' — they must begin from this framework of interpretation as their starting-point.' (Hall et al., 1978, p. 58, original emphasis). As noted earlier, the initial framework for HIV/AIDS was 'a rare cancer', with the concomitant discursive framework of the necessity of waging war against the illness. A discourse of HIV/AIDS has been described in ways very similar to the manner in which cancer has been understood (Sontag, 1991) and, like cancer, has become a symbol of death and extinction, incorporating a fear of being overwhelmed by the 'Other' and portraying an image of decline (Karpf, 1988; Williams & Miller, 1995). A HIV/AIDS discourse has been pervasive in talk about cancer and HIV/AIDS (Sontag, 1991; Lupton, 1993; Brown et al., 1996). Cancer cells 'invade' or 'infiltrate' the body and patients are 'bombarded' with radiation in the hope of 'killing' the cancer cells during treatment. HIV/AIDS has been positioned as the 'enemy' against which campaigns are mounted in order to fight the adversary. Information, education and prevention are presented as the weapons of choice in this battle. A central contribution regarding identification and control of HIV/AIDS is made by medical science resulting in a 'detective' discourse in which rational strategies of deduction and detection are adopted to locate the 'villains' responsible for the 'crime' and then to 'punish' them (Brown et al., 1996). While there are similarities in the war discourse of cancer and HIV/AIDS, there are also differences. Cancer is understood to be a result of 'weakness' in the body. HIV/AIDS, on the other hand, is understood to have a greater element of personal will or intention. Getting HIV/AIDS through a sexual practice, injecting drugs, or by sharing needles is thought to be more intentional and therefore deserving of more blame (Sontag, 1991). Infants, children, women with unfaithful partners, rape survivors and surgery patients are generally portrayed as passive and innocent victims, while a 'guilty' party, typically HIV positive men, gay men, casual sex workers or intravenous (IV) drug users, are represented as the 'villain' by the media (Brown et al., 1996). The difference between the HIV/AIDS and cancer war discourse thus applies at the level of transmission. As a micro process HIV/AIDS is described similarly to cancer, as an invasion. It is seen as infiltrating a society, sometimes hiding for years. However, when focus shifts to transmission of the disease a different and older metaphor is invoked, that of pollution. HIV/AIDS is transmitted by the blood or sexual fluid of infected people or from contaminated blood products. This allows for the construction of what Sacks (1996) calls the 'diseased body' (p. 69), the polluter, the transmitter of disease, the infector. The diseased body draws on and reproduces othering processes centred on sexual orientation; gender and race (see later discussion). Thus, as pointed out by Sherwin (2001), the deployment of a war discourse with regard to HIV/AIDS is not innocent in its effects, or merely a useful way of mobilizing action around the disease. It invokes specific practices (e.g. aggressive technological strategies as opposed to, say, the development of coping), particular feelings (fear, dependence on the part of 'patients'; power, responsibility on the part of health practitioners) and power relations. It potentially deepens existing forms of oppression, while suppressing alternative ways of understanding HIV/AIDS. These additional criteria draw on Foucault's (1977; 1978) insights regarding the nature of power/knowledge and allowed the research to go beyond description, including an analysis that is politically and critically motivated. No frequency count of the number of instances in which a war discourse

was invoked was performed. However, in our reading it was clearly the dominant discursive framework within which social practices regarding HIV/AIDS are described. With this initial insight, we framed our analysis around a war discourse. We deconstructed the meaning of war and the categories of subjects (criterion three above) constructed in relations of power in a war. We utilised this analytical work to start understanding the implications of a war discourse in relation to HIV/AIDS. Specifically, we analysed how the particular subjects in a war are positioned, and what discourses (racial, gendered, medical) are simultaneously drawn on and reproduced in this positioning (criterion five above). This methodological step (i.e. framing our analysis around a war discourse) has meant that alternative (less dominant) constructions of HIV/AIDS as well as the implications of these were not accessed in our analysis. However, drawing on the work of others, specifically Sherwin (2001), we discuss some of the possible alternative constructions of HIV/AIDS in the concluding section. During the analysis, articles were kept in their respective years of publication so that changes over time could be charted. Extracts from the articles have been chosen for their relevance illustrating identified discourses and are printed with the date of publication in brackets. As all extracts come from the Daily Dispatch this information is not repeated each time.

According to Green, the marginalization and exclusion is made possible through discursive characterization and representation, which portrays local knowledge as 'folklore,' 'supernatural,' and unworthy of occupying the same space as the science based biomedicine. Thus allowing biomedicine to become the only legitimate paradigm in which the human body and life itself can be inquired. As a way to critically examine the various factors contributing to the complexity of this discourse-laden epidemic and in effort to understand the struggles of power from those who subjugate and those who are subjugated, the study invokes the symbolic struggle for meanings in the 'representation' and 'characterization' in the realm of the global HIV/AIDS prevention efforts. This builds on an excellent body of work and analysis of a handful of scholars (e.g. Foucault, Richard Chirimuuta and Rosalind Harrison-Chirimuuta, Erni, Treichler, Stillwagon, Green, Sidel, and Vidal) arguing against the dominant undeviating biomedical account. Nonetheless, it is important to note, in order to resist or argue against the dominance of particular unfavorable or oppressive system it is essential to understand by what mechanism its dominance is expressed. According to Michel Foucault (1982) analysis of power relations, power is an active process that is marked by interplay of those affected by it. Therefore the processes of establishing power relations ranges from "whether power is exercised by the threat of arms, by the effects of the word, by means of economic disparities, by more or less complex means of control, by systems of surveillance, with or without archives, according to rules which are or are not explicit, fixed or modifiable, with or without the technological means to put all these things into action" (p. 792). Through this context the study explores how biomedical knowledge is formed in relation to power, and how that knowledge is maintained and reinforced in discourse as the only legitimate form of knowledge. In doing so, the study will layout the construction of the HIV/AIDS discourse and work to understand important guiding questions such as who controls, defines, and evaluates 'knowledge' in the context of HIV/AIDS prevention efforts in Sub-Saharan Africa and how is that knowledge used not to just reinforce power and dominance, but reinforce the priorities and motivations of the dominant actors? Secondly, the study explores the need for broader understanding of the social construction of the HIV/AIDS epidemic by looking into the historical and social arrangements of groups through the lens of other diseases and by taking into account marginal voices of advocates and people of Sub-Saharan Africa. Finally, it explores the effectiveness of the currently mandated HIV/AIDS behavioral health prevention methodology by asking whose knowledge matters?

Bio-power

The term discourse as laid out in this study is represented in every section of the paper. This is achieved by teasing out the important discursive practices that have contributed to the HIV/AIDS debate and by understanding the crucial factors and the roles each actor played in creating discourse. For instance, who is allowed to speak on particular subject, the manner in which they did the speaking, the historical connections,

and its outcome? Therefore, in the Foucauldian sense, discourse translates into defining the relationship between language and knowledge and how the two are closely interconnected to power. The actor that establishes what can be talked about also regulates what can be known. Likewise, the actor that establishes what can be known essentially controls not only the manner in which we should think but also how we make sense of our world through those thoughts. Foucault (1998) goes few steps further from the control of the mind through discourse to the control of the whole body and ultimately life itself by introducing the concept of “bio-power.” Tracing its roots to the 17th century, this concept conveys the discursive practices of contemporary nations and states and the method in which they attain control over their subjects “an explosion of numerous and diverse techniques for achieving the subjugations of bodies and the control of populations” (p. 140). This should not be confused with his other categories of instruments of power such as ‘Sovereign power’ which he defines as “the right to take life or let live” (Foucault, 1990, p. 136), typically exercised in unequal relationship between the sovereign (king) and non-sovereign (subjects), power is given to the sovereign through symbolic rituals. Such power is not always indefinite, the subject can bring the sovereign’s life to an end. This is more of an example of power in the classical sense and has no bearing in this study other than to distinguish it from the other instruments of power. In the modern rearrangement of power, the old way would not make sense particular in the West, which Foucault establishes his understanding and analysis of power. To make that jump, he notes a sweeping transformation had to occur, where the ultimate decider of life the sovereign was threatened. A good example is the American Revolution to resist the sovereignty of the British Empire or in Foucault’s country of origin the French Revolution, both occurring in the 17th century. Foucault (1984) argues the birth of a new form of power where “power. . . exerts a positive influence on life, that endeavors to administer, optimize, and multiply it, subjecting it to precise controls and comprehensive regulations” (p. 259). Foucault points out the shift, which he claims is observable through the ideology behind modern wars, and how they are waged or legitimized not in the name of the king, but rather for the protection and continuation of entire people. Paradoxically, through war both classical and modern states have exposed their subjects to death, but the difference now is that death is justified with preserving greater life, and the desire to save the greatest number. Foucault (1998) further explains this phenomenon as follows “the ancient right to take life or let live was replaced by a power to foster life or disallow it to the point of death” (p. 138). With this historical understanding of the two periods, Foucault divides power into two basic forms, connected and interlinked in two poles of development. “Primary form,” he notes is “centered on the body as a machine: its disciplining, the optimization of its capabilities. . . the parallel increases of its usefulness and its docility, and its integration into systems of efficient and economic control” (p. 139). The collective category for this he calls “disciplines: which is described as an ‘anatomy-politics of the human body’” (p. 139). The secondary is biomedicine as a tool “focused on the species body, the body imbued with the mechanics of life and serving as the basis of the biological processes: propagation, births and mortality. . . life expectancy and longevity” (p. 139). The two are categorized as “biopolitics of the population” (p. 139). This research is interested in both the ‘disciplining’ and the ‘species body.’ These two concepts exemplify the HIV/AIDS discourse. Treichler argues AIDS as lived “is metaphor, and this semantic work – the effort to make sense of ‘AIDS’ – has to be done” (Treichler, 1987). This statement is as true today as it was in the late 1970s, when Treichler and other social scientists started raising the question about the social construction of the disease. Treichler also stresses a dire need to explore the relationship between ‘signifiers’ and dominant discourse. It seems as though then, for Treichler (1987, 1999), the signifiers form the ‘reality’ from which we construct what is seen as ‘truth.’ Using this same pattern of discourse analysis noted by Foucault and Treichler, this study will explore the signifiers, which are themselves born out of the existing socio-cultural dynamics of the dominant power writing the prevailing discourse. This is achieved through an in-depth examination outside the dominant assembly line of epidemiological and biomedical understanding of the epidemic and into the multidiscipline sphere of discourse analyses entrenched in the post-structural social theorists’ debates to affect social justice for the marginalized and powerless.

IV

Final Remarks : some of these practical and ethical dilemmas are related to bio-medical approach which lead to adopt the social sciences paradigm to understand the socio-cultural embedded meaning of HIV/AIDS to yield to think a sustainable and long term impact has taken been against this pandemics . Where , bio-medical intervention against the pandemics can be very expensive , leaving little room for substantial funding for other preventive activities.

In the meanwhile, the conflicts appears to have been resolved through the social sciences approaches . In the context of developing world the social sciences approaches merits more supportive and constructive to combat the disease. On critical angle , the precedent of the disease gave birth to a period of HIV/AIDS disease which based on epidemiological construction of certain disease is guided , control and entrenched of marginalization , exclusion , and social control over HIV/AIDS patients , to inspire the social sciences investigation . . In this case , bio-medicine and its apparatus define and acknowledge the disease side by side articulated the notion of perfect body that would be make a distinguish from infected body . in this regards , Marshall and Hunt (2000) stated :

“ As with other development issues , HIV is about people ‘s control over their lives. Ultimately , it relies on people , realizing that their future lies in their hands “.

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