Bibliography on HIV/AIDS in Ethiopia and Ethiopians in the Diaspora: the 2007 Update, with an Emphasis on the ART Scale-Up

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Introduction

This is the sixth update of the bibliography on HIV/AIDS in Ethiopia and the Diaspora, the first one of which was published in this journal in 2003. The present update includes publications or presentations that appeared in 2007 and a few earlier works that were missed by the earlier updates.

This update again includes references to studies in all areas of HIV/AIDS research and relevant works on sexually transmitted infections (STIs) tuberculosis, and other co-infections in Ethiopia and Ethiopians in the Diaspora, as well as on sexual and contraceptive behavior, gender issues, and social and cultural attitudes, practices or conditions that affect HIV transmission. Also following the structure of the earlier updates, this issue presents all references under the following categories: 1) Earlier Bibliographies on HIV/AIDS and Related Social, Cultural and Economic Issues, 2) Basic Biomedical Research, 2) Epidemiological, Risk Factors, and Determinants Research, 3) Clinical Research, 4) Impact Research, 5 Intervention, 6) Monitoring and Evaluation, 7) Research on HIV/AIDS in Ethiopians in the Diaspora, with 8) Selected Websites Featuring HIV/AIDS in Ethiopia.

We used the same strategies as in the previous bibliographies to identify and catalog the references with the exception that we used the *List of Graduates 2006/2007* prepared by the Office of the Vice President for Graduate Studies and Research rather than the thesis lists prepared by individual departments. This permits an analysis of thesis subjects among the various University departments, a timely activity because of the rapidly increasing number of masters theses written in more academic departments, already reported in the 2006 Update. As in the previous bibliographies, we searched all 2007 references in the major databases, including MEDLINE, PsychINFO, Sociological Abstracts, and POPLINE using the key words "Ethiopia and HIV", "Ethiopia and AIDS", Ethiopia and reproductive health", and "Ethiopia and sexual behavior"

In addition to discussing all six areas of HIV/AIDS covered in previous Updates, this issue focuses on the anti-retroviral therapy (ART)-scale up, including voluntary counseling and testing (VCT), care and support, as well as HIV prevention in Ethiopia. The ART scale-up began in 2003 and accelerated with the provision of free treatment in January 2005, the launching of the Strategic Plan for Intensifying Multi-Sectoral HIV/AIDS Response (2004-2008) along with a number of strategically important documents, and stepped up support by international partners. These developments have contributed to make ART a central strategy in HIV/AIDS control in Ethiopia. This Update is structured as follows: after a brief description of the various ART scale-up initiatives, including their objectives, achievements and challenges, the text discusses various ART and related interventions based on a review of the 2007 literature, followed by the categorized reference listing. In this Update, we refer to some of the major studies in the text to facilitate access to sources relevant to the ART scale-up. Combined number/letter references are used, with the letters denoting the seven reference sections (B=Basic Biomedical Research, C=Clinical Research, D=HIV/AIDS Research on Ethiopians in the Diaspora, E=Epidemiological, Risk Factors, and Determinants Research, IM=Impacts Research, I=Intervention Research, M=Monitoring and Evaluation Research) and the numbers corresponding to the numbered references in the bibliography. We adhered to the international system of using the family name of authors but it was not possible to verify the names of all Ethiopian authors due to the occasional use of first names instead following customary practice.

This Update includes 324 citations, 313 (96.7%) of which appeared in 2007; 168 (52.09%) are theses, 79 (24.4%) journal articles, 45 (13.9%) published and unpublished conference papers, 26 (8.0%) reports, and 6 (1.9%) books and United Nations newsletter articles. Of the theses, 104 (61.9%) were MA theses, 46 (27.4%) MPH theses, 16 (9.5%) MSc theses, and 2 doctoral dissertations. MA theses outnumbered, for the first time, MPH theses, reflecting continued increase in interest in HIV/AIDS research in the Social Science and Education Colleges and various Development Institutes. The smaller number of total citations in this update than in 2006 is largely due to the large number (140) of citations for conference papers presented at the 2006 International AIDS Conference in Toronto.

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Intervention: Major ART Scale-Up Initiatives

The period from 2003-2006: The evolving response to the HIV/AIDS epidemic in Ethiopia as a collective effort of the government, international donors, national and international non-governmental organizations, community-based organizations, faith-based organizations, the private sector, and associations of PLWHA and individuals has been described in detail up until 2005 (I:49). The government of Ethiopia started a fee-based ART initiative in 2003 towards controlling the HIV epidemic and mitigating its effects. The cost to clients-- between US$289-346 per month--and even the subsequently reduced cost of $28 per month were unaffordable to the great majority of HIV-infected people. Starting in early 2005, the government provided free ART to individuals who could obtain economic eligibility certificates from neighborhood *kebeles* at 56 hospital ART sites. This restriction, made necessary by shortages of ART, was eliminated later in 2005 as funding and technical assistance from the Global Fund to fight AIDS, Tuberculosis and Malaria, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the Ethiopian Red Cross Society initiatives and several other sources became available. Ethiopia received from PEPFAR $254.7 million between 2004 and 2006 and was approved for over $400 million and 354 million for 2008 to support increasing access to prevention services, expanding entry points to ART, facilitating access to other forms of treatment and care, and improving patient support (I:93). Guided by the conceptual framework, implementation guidelines and targets set forth in the Ministry of Health's report Accelerating Access to HIV/AIDS Treatment in Ethiopia: Road Map for 2004-2006 was implemented. The second Road Map for Accelerated Access to HIV/AIDS Prevention, Care and Treatment in Ethiopia for 2007-2008/10 is being implemented. The National ART Strategic Communication Framework guided and supported the ART scale-up by identifying and advocating communication needs among all stakeholders and partners at all levels, from policy makers to community leaders and PLWHA associations. This included recommendations for greater community involvement and ownership of the program. It also emphasized the need for research activities on local and international ART uptake to help design, monitor and evaluate ART efforts and to address the issue of quality assurance in service delivery (I:10). Nevertheless, only 65% of the 100,000 PLWHA targeted by the Road Map for ART were receiving treatment. Reasons for this shortfall include inadequate treatment sites and health manpower, limited program and coordination capacity in pre-ART and ART, limited social mobilization for ART, especially among high-risk groups, lack of a pediatric focus as part of VCT and ART efforts, weak communication and implementation guidelines, and limited ownership by the supporting departments and institutes (I:91).

ART implementation and scale-up is being carried out as an integral part of the HIV continuum and not as a stand-alone service, with an emphasis on community participation to ensure continuum of care, universal coverage and sustainability. The implementation of the preventive, promotive and chronic care components of the comprehensive HIV intervention program is being facilitated by the decentralization of health governance to the *weredas* and *kebeles*, the development of the health extension program at household level, and the employment of counselors using the public health approach, described below. The Health Extension Program launched by the Ministry of Health in 2003 represents a community-based approach aimed at promoting a healthy environment and quality of patient care. Several independent performance reviews in 2005 reported modest improvements in most knowledge, attitudes (reduction in stigma and discrimination) and practices (condom distribution and use and increased demand for VCT), as well as the integration and expansion of VCT and the initiation of the prevention of mother-to-child transmission (PMTCT) program. Persisting challenges in 2006 that affected the implementation of the Strategic Plan (2004-2008) centered around the development of enough capacity to meet the rapid increase in demand for services (I:49). The public health approach was adopted and several initiatives were developed towards that objective.

The public health approach to ART service scale-up: In response to the shortcomings of the ART program up until 2006, specifically the insufficiency of treatment sites and personnel, the Ministry of Health launched in 2006 an intensive program of expanding the ART sites network in rural areas and of rapidly increasing the number of health staff by training and employing mid level health personnel. The public health approach to ART scale-up agreed on by WHO member states in 2006 towards the goal of universal access to comprehensive HIV/AIDS prevention programs, treatment, care and support by 2010 involves training and retaining adequate health manpower, development of standardized and simplified clinical tools, reference material and job aids, as well as task shifting. This includes shifting some of the less complicated tasks from highly qualified physicians to nurses and in turn from nurses to lower level nursing assistants and community health workers and counselors, as well as the development of standard, simplified guidelines and drug regimens. Ethiopia, along with 6 other African countries and Haiti, is implementing the task-shifting approach with considerable success (I:56, 145), as evidenced by the rapid ART scale-up discussed below. Task shifting was pioneered in Ethiopia in 2006 and involves capacity building of clinical nurses to prescribe first-line ARVs for stable patients and provide chronic HIV care, the use of trained non-health professional counselors. The revised ART Guidelines (I:99) are based on the public health approach to ART,

provide direction for program managers and service providers, and facilitate the planning and implementation of a safe and effective ART program. Such selective task shifting from physician/specialists to clinical nurses and non-health professional counselors will help free up physicians and specialists to concentrate on complex cases and to allow them to mentor nurses and others to assume more responsibilities in a systematic and sustainable manner. The expansion of the health extension program provides further resources complimenting these facility-based efforts with the planned training and assignment of two female health extension workers per health post in about 12,500 rural *kebeles* by 2008. By providing outreach services in their respective *kebeles* they are expected to advocate creating a healthy environment and healthful living and thus contribute to mitigating the impact of the disease (I:49).

The public health approach is being implemented and expanded together with the upgrading and decentralization of the health services in Ethiopia. The expansion and upgrading of health centers to serve as ART sites was facilitated when the 2004-2008 Strategic Plan assigned a larger role to the health sector when it delegated the Ministry of Health to spearhead the national leadership of national response to HIV/AIDS and the HAPCO (HIV/AIDS Prevention and Control Office) to coordination, resource mobilization, and monitoring/evaluation functions under the direction of the Ministry of Health. Coordination and integration of the ART program into the health care system will be essential to ensure continued service delivery, care and support.

The revised VCT Guidelines (I:96) consider the improved availability of ARVs and better treatment of opportunistic infections, which are important in expanding provider-initiated testing and counseling in health facilities thus increasing access. The new guidelines also reflect a major shift towards more diversified approaches that include, in addition to diagnostic and voluntary counseling and testing, expanded provider-initiated, couple, youth-friendly and home-based models. The counseling and testing activities of community counselors and other new cadres working within the framework of the public health approach, as well as infant diagnosis using virological tests (DNA-PCR) are also covered by these guidelines. We have not found reports on operational aspects or any difficulties encountered by individual ART facilities using the public health approach and expect these topics to be addressed by future research projects. The revised pediatric HIV/AIDS care and treatment (I:94), and management of opportunistic infections in adolescents and adults (I:95) guidelines supplement the above ART guidelines.

By upgrading health centers as a key entry point for HIV patients seeking care, the total number of sites in the country providing free ART was increased from 32 (all of them hospitals) in early 2006 to 272 (154 health centers, including 4 NGO clinics, and 118 hospitals) by September 2007 (I:1). Moreover, the number of VCT sites was increased from 658 sites in 2005 to 1005 sites and of PMTCT sites from 32 to 408 during that period (8:I). By September 2007, 109,552 persons had started ART and 82,248 patients were alive and on ARVs (anti-retroviral drugs). During the two-year period from June 2005 to September 2007, the number of patients receiving chronic HIV/AIDS care increased from 13,329 to 187,770. Whereas 75% of all people 15 years and older who had ever started ART by early 2005 were males, 55.6% of them were females by September 2007. Similarly, the proportion of children in need of ART who started treatment increased from 1% to 5.1% and that of patients living outside of Addis Ababa also increased during that 32 month period, from 25% to 67% (I:22, 98). Decentralization of ART services to a larger number of health centers in the regions and large-scale in-service training for different cadres of health service workers were associated with this sharp increase in coverage. Decentralization is expected to increase access by taking services closer to rural areas and small towns, reduce transport and related costs to patients and families, and increase adherence and enrolment in care and ART services early in the course of the disease. The Ministry of Health uses the health network model in selecting new ART sites to facilitate linkages between services at hospital, health center and community levels.

Private sector and community responses: The Ministry of Health began in 2007 to facilitate the provision of free ART at 13 private hospitals, nearly all of them in Addis Ababa, and is planning to include private hospitals at the regional level to further improve access to ART services. Enlistment of private hospitals in the free ART rollout is also expected to increase the quality of services because they are better equipped than some regional public health centers (I:18). Studies are needed to show ART utilization and adherence patterns, quality of care, as well as patient profiles and service delivery of private ART sites. Another important event in the private sector in 2007 was the establishment of the National Network of Positive Women Ethiopians (NNPWE). The two basic goals of NNPWE are to 1) contribute to national and regional efforts to mitigate the effects of HIV/AIDS through greater involvement of women living with HIV/AIDS and their PLWHA associations in HIV/AIDS prevention/control, treatment, care, and support, and 2) build the capacity of PLWHA and their associations to deal with the impacts of HIV/AIDS and facilitate access to different services (I:103). A growing number of community-based organizations, including *Idirs*, Women's and Youth Associations, Anti-AIDS Clubs and Faith-Based Organizations have become involved in prevention, care and support activities (I:49, 93).

Millennium AIDS Campaign Ethiopia (MAC-E): The MAC-E Campaign was structured in three phases with the mandate to accelerate HIV/AIDS prevention, treatment, care and support services in terms of speed, volume and quality. It identified three major underlying and interlinked program gaps in the ART program during the 2003-2006 period: insufficient demand creation, HIV status awareness, and treatment seeking (I:97). During Phase I of the campaign (November 2006-January 2007), as a result of promoting increased demand and uptake through intensified social mobilization efforts and increasing capacity at VCT and ART entry points and services, 705,619 persons could be tested; this is more than double the target of 320,000 and eight times higher than the VCT uptake during the pre-campaign period. All regions except Addis Ababa surpassed their targets. Achievement of these unusually high rates within a 2-month period was associated with extensive social mobilization and providing 85% of the above 705,619 tests through an outreach program. Although only slightly over half of the target to start 20,000 people on ART was achieved, this was nevertheless a significant increase from the pre-intervention period. Although Phase I showed high demand for testing and treatment at the community level, several gaps were noted. They included weak TB/HIV collaboration, particularly recruitment from retrospective TB treatment cohorts and provider-initiated HIV counseling and testing (PIHCT), insufficient pre-ART linkage with ART, lack of focus on pediatric VCT and ART, and supply shortages, especially of drugs for other infections and STIs, as well as lack of human resources. These deficiencies were addressed in Phase II (I:97).

In Phase II (February – August 2007), 982,452 people of the 1.8 million target population (53%) were tested, 77% of the targeted 40,710 new patients were started on ART, and 57% of 97,234 patients targeted for chronic HIV/AIDS care were enrolled. The HIV positivity rate increased from 5.4% in Phase I to 7.3% in Phase II due to inclusion of a larger proportions of high-risk people in Phase II (97:I). During the first 3 months of the 12-months long Phase III, which extends from September 2007 to September 2008, 91.3% of the 750,000 target population were tested for HIV. Whereas a VCT uptake of over 100% was achieved in Dire Dawa (179%), Harari (171%), Tigray (125%), Oromia (113%), Somali (108%), Addis Ababa (94%), and 90% in Amhara, the performance in Gambela (35%), Afar (26%) and Benishangul (11%) Regions, and SNNPR (52%) was considered unsatisfactory during the first quarter of the third phase. Program mangers concluded that linkage and referral have to be strengthened to improve this situation (I:92). Moreover, PMTCT uptake, which has traditionally been performing poorest, was unsatisfactory during Phase III. Between September and November 2007, only 8.3% of the target population of 6,410 pregnant women but 91.4% of the general target population were tested. Program managers recommended that a combination of PMTCT-focused forums and special events be held at the national, regional, *wereda* and community levels, the availability, distribution, managerial responsibility and status of PMTCT combination therapy be improved, and the various approaches used in the PMTCT programs of the Regional HAPCOs and Health Bureaus be clearly defined. This last recommendation is particularly urgent since most regions failed to include PMTCT as a MAC-E Campaign target. Sustainability of social mobilization and sensitization, the primary strategy to increase access to care and treatment, could not be ascertained due to incomplete reporting during Phase III (I:88). Thus while 5,285 of the country's 6,392 *kebeles* conducted community conversations involving an estimated 5.6 million people in Phases I and II, only Amhara and Dire Dawa (1,844 *kebeles*) reported these social mobilization activities in Phase III. After implementation of MAC-E Phase III, all 11 administrative regions launched their own regional MAC-E plans but no information is available on their experiences.

Multisectoral Plan for Universal Access: Because the national AIDS response is one of the country's development priorities, the Ethiopian government developed the national Plan for Accelerated and Sustained Development to End Poverty (PASDEP), which includes a HIV/AIDS component that was adapted from the Ethiopian Strategic Plan for Intensifying Multisectoral HIV/AIDS Response 2004-2008 (SPM) (I:93). This 2007-2010 Plan is an outcome of the multisectoral efforts to meet the goals of PASDEP and the country joining the international commitment to move towards universal access to HIV prevention, treatment, care and support by 2010. This Plan, which will serve as the main implementation framework for Ethiopia's AIDS response until 2010, was developed in collaboration with government ministries, civil society and international partners. It was based on various national exercises, including the single point prevalence estimate, a costing of HIV/AID commodities, the National Social Mobilization Strategy, the Health Sector Road Map for Accelerated Access to HIV Prevention, Care and Treatment, and several international initiatives. According to the Single Point Prevalence Estimate by the Ministry of Health, 2.1% of the Ethiopian, 7.7% of the urban and 0.9% of the rural population were HIV-infected, with 258,260 persons, including 15,716 children, in need of ART in 2007 (E:66). The Plan also incorporates the results of the Ethiopia National Health Facility Survey 2005 on the operating capacity of health care facilities and the capacity of the health care infrastructure in Ethiopia to respond effectively to the HIV/AIDS epidemic within the framework of the national intervention strategies (I:59). The Multisectoral Plan's targets include: increasing condom use in the population from 10% in 2007 to 60% by 2010, increasing the proportion of people seeking treatment for STIs to

94%, 9.27 million people will be counseled and tested for HIV just in 2010, increasing the proportion of eligible people receiving ART from 32% in 2007 to 100% (or 397,000 clients) by 2010, increasing the proportion of HIV-positive pregnant women to 80%, 50% of PLWHA to receive care and support, to provide care and support (chronic care) to 43% of orphans and vulnerable children and 50% of the estimated 560,000 people living with HIV (PLHIV) by 2010, establishing HIV/AIDS information centers in all schools by 2010 and provide 100% access to primary health acre services by 2008. Sixteen programs are being implemented to achieve universal access to HIV prevention, treatment, care and support, all of them summarized in the Multisectoral Plan(I:93).

Notwithstanding the major achievements made in ART scale-up between 2005 and 2007, the Multisectoral Plan identified five challenges its implementation faces to reach its objectives, all of which had been identified earlier in the ART rollout. They are 1) insufficient human resources, 2) weak health infrastructure, transportation and general systems, 3) inadequately coordinated and integrated efforts and activities of the various partners from the national to the facility level, low level of response of institutions, inadequate leadership at all levels, 4) low level of mainstreaming activities and efforts, and 5) inadequate translation of discussions from various advocacy works, community dialogues, and workplace interventions into feasible or realistic actions at grass root level as indicated by the absence of concrete action plans in most communities. Moreover, although the PASDEP and SPM plans emphasize the importance of a multisectoral approach as a major guiding principle of HIV/AIDS prevention and control (I:93), multi-sectoralism has been weak in Ethiopia in the past. This points out the need for operational health services and ART research on how to create an environment and mechanisms necessary to strengthen the multisectoral approach and optimize its effectiveness in HIV/AIDS prevention and control, from the central level down to the ART site and community levels.

Biomedical Research

Only 10 (3.1%) of the 324 references in this year's update were classified as dealing with basic biomedical questions. On a percentage basis, there has been a steady, approximately 33%, drop every year over the last three years in this category – 7.2% in the 2005 update and 4.8% in the 2006 update. The reduction is presumably due, at least in part, to the termination of the ENARP research program and an apparent dearth of strongly HIV or TB-related publications from the Armauer Hansen Research Institute (AHRI). There were two publications from ENARP and only one from AHRI in 2007. One of the ENARP papers involved comparative dried blood, plasma, and milk specimens for HIV burden assessments while the other was a more basic immunology study. The AHRI publication concerned cutaneous leishmaniasis. One would hope that the human - scientists, technicians, maintenance workers, others - and equipment resources at both these institutions will not be allowed to wither away. The renovation and expansion of tuberculosis diagnostic and research capability at St. Peter's Hospital may also enable the recruitment of some of this human capital.

More encouraging was a publication (B:7) by Shiferaw *et al.* evaluating the microscopic observation drug susceptibility (MODS) assay for the detection of drug resistant *Mycobacterium tuberculosis.* The importance of this work cannot be understated. Drug resistant TB is an enormous problem but nearly all patients who are compliant with treatment and provided the appropriate drugs after correct diagnosis of their condition can be cured. Lack of drug susceptibility testing (DST) makes provision of the right drugs a matter of guesswork. Using the relatively inexpensive and low technology MODS test, it is possible to detect drug resistance within one to two weeks – instead of three weeks or more, with more laborious and less efficient effort, and to adjust the treatment regimen accordingly. While the authors correctly note that the assay was developed in Peru, the Peruvian researchers were aware of unpublished reports of the assay components used for research purposes with the BCG vaccine strain at AHRI in the 1980s just before the AIDS epidemic, and the accompanying TB problem, expanded in Ethiopia. This example reinforces the notion that basic research is vital for the eventual translation of findings and techniques to public health laboratories. DST capacity is also critical for the management of malaria, HIV, and other infectious diseases. Basic biomedical researchers can help to develop inexpensive and appropriate techniques as well as to evaluate new technologies before they are adopted in general practice.

Epidemiological, Risk Factors, and Determinants Research

One hundred of 324 (30.9%) references in this Update were classified in this category. Studies on knowledge, attitudes and practices in relation to HIV risk among students, unemployed youth, street children, commercial sex workers, and adult men and women, as well as research on sexual violence against, women, children and domestic female workers predominated, as in previous years. Several studies focused on other problem areas covered in the past, including the impact of opportunistic infections in HIV/AIDS, determinants of reproductive health, the causes and health consequences of early marriage, and social ostracism associated with pregnancy-related fistula. Three studies involved molecular typing of HIV-1 and *Mycobacterium tuberculosis*, an area becoming increasingly relevant in the search for drug resistance with the continuing ART rollout. One of these studies reported was the first to report drug resistance in HIV-1 subtype C in

northwestern Ethiopia and recommended routine drug resistance monitoring (E:55). Evidence of drug resistance was also found in Ethiopian immigrants to Israel in 2007 (D:3), although it is not known if these mutations developed from use of antiretrovirals in Ethiopia or Israel. About another dozen issues that have not or only lightly been researched in the past were addressed in 2007. They included several studies examining the dynamics of the HIV epidemic from the continental (Africa) to the community levels (E:47, 61, 84, 87), noting continuing leveling off of prevalence rates. Using a the new laboratory-based BED HIV-1 incidence assay, the incidence of HIV infection among antenatal clients was estimated to have declined from 7.7% in 1995 to 2.0% in 2003, a trend following prevalence changes (E:93). Development projects subject to the influx of people from other areas were identified, as elsewhere in Africa, to be potentially vulnerable to the spread of HIV (E:2), pointing to the need for the parallel development of preventive and therapeutic programs. Another emerging factor in HIV transmission is men having sex with men, including sexual abuse of male children (E:50, 60, 80). Only two studies examined knowledge, attitudes, practices and behavior in relation to HIV risk in rural areas (E:100; I:101). The relatively faster spread of the HIV epidemic in rural than urban communities, where the great majority of the Ethiopian population resides and where HIV-related attitudinal and behavioral parameters have changed least, requires further studies in the more isolated parts of the country.

With the trend of HIV/AIDS interventions increasingly shifting from top-down to community and family approaches, three relevant attitudinal and behavioral issues need to be mentioned. First, studies of community attitudes towards HIV exposure of women and female genital cutting (E:20, 23) can indicate to what degree the public will support the control of practices jeopardizing female sexual rights and reproductive health. Second, the study of social relations, particularly the influence parents, peers, and school AIDS clubs on the sexual behavior of adolescents (E:8, 25; I:75), needs to be pursued for different social, ethnic and residential (urban/rural) groups in the search for more effective communication methods. Third, the problem of HIV stigma, the reduction of which is increasingly being considered central to effective programs in HIV/AIDS prevention, care and treatment in Africa, was addressed by only two studies (E:73, 86; M:18). There is a need for the development of measures that can capture the complexity of HIV stigma in a variety of contexts and ensure appropriate evaluation of stigma-reduction programs (M:18). Four studies dealt with the knowledge, attitudes and HIV risk of people with physical and sensory impairment (E:5, 33, 42, 63), another area which received little attention in the past.

Clinical Research

In this category, there are 19 references, or 5.9% of all references. This compares with 35 references (8.9%) and 21 references (13.7%) for this section in the 2006 and 2005 updates, respectively. Fourteen of the 2007 references were published in peer-reviewed journals and one was a letter to a journal in response to a peer-reviewed article.

Particularly noteworthy in this section was an investigation (C:1) of pneumocystis pneumonia (PCP) in HIV+ patients without TB or with atypical TB. Although PCP is thought to be rare in Africa compared to Europe or North America two decades ago, Aderaye *et al.* found that PCP accounted for nearly one-third of these cases. Importantly, increased use of PCP preventative therapy and/or HAART can prevent an epidemic of PCP in immunodeficient Ethiopian patients. PCP prophylaxis was an important intervention in reducing morbidity in HIV-infected patients in the northern hemisphere before the availability of HAART. Two conference presentations (C:6, 9) and one thesis (C:16) on the immune reconstitution inflammatory syndrome (IRIS) in patients receiving HAART are timely as drug treatment increases for patients in Ethiopia. Further investigation of this issue is certainly merited. Three studies (C:2, 10, 11) evaluated and compared manifestations of tuberculosis in HIV-infected and uninfected patients and another three studies (C:3, 13, 18) evaluated neurological manifestations in patients with HIV.

Increasingly, it is anticipated that clinical research will have an intervention orientation. In fact, intervention research, as indicated below, has more than tripled as a percentage of references from the update two years ago and now accounts for nearly half of the references in this update.

Impacts Research

Eleven of the references in this Update (3.4%) dealt with impacts of the HIV/AIDS epidemic in Ethiopia, about half the number in the 2006 Update. As in 2006, most studies focused on psychological impacts experienced by people living with HIV/ADS (PLWHA) and orphans. New themes in the 2007 studies included socioeconomic and psychological impacts on women and on a teacher training institute in particular. Few studies have been carried out on impacts on social relations at the family and neighborhood levels among different social and cultural groups, which are relevant for developing communication and advocacy approaches by local communities. More studies are also needed on adaptive and coping economic behavior of rural households experiencing HIV/AIDS, where populations are least prepared to deal with the epidemic.

Intervention Research

The largest number of the 324 citations in this Update are, for the first time, in the Intervention category (n=158, 48.8%). This reflects the trend from biomedical and epidemiological to intervention studies that was also noted in the 2005 and 2006 updates. About two-thirds of both the MPH and MA/MSc theses in the Intervention category dealt with either VCT or ART issues and most of the others with care and support as well as reproductive health services and other HIV/AIDS prevention issues. Studies of the use of new intervention approaches and early results of several ART pilot programs at the community level carried out in 2007 provide valuable information on experiences gained and can help to guide the up-scaling of the national multi-sectoral HIV/AIDS program.

Anti-retroviral treatment (ART): Most studies dealing with issues related to ART focused on treatment accessibility and drug adherence. The first comprehensive longitudinal and multisectoral ART, care and support, a demonstration project in Ethiopia, managed by the Ministry of Health and two NGOs and involving the resources of a referral hospital and those of its community and local government in Addis Ababa, reported on the treatment of the first 3,765 AIDS patients. This project, considered to be a success, points out the need of such projects to establish strong relationships among partners, to integrate ART services within existing health care structures, to transfer some elements of medical care to local health centers, and to develop incentives to train and strengthen staff (I:80). A doctoral thesis reported that HAART decreased the prevalence and mortality in TB patients in a regional hospital in southern Ethiopia. This study concluded that treatment outcome may be further improved by counseling, testing and treating patients early in the disease process and making treatment available in less accessible rural areas (I:67, 68). Although radio and television messages promoting ART are potentially useful, especially in urban areas, they need to be more sensitively targeted at different social and cultural groups (I:158).

Although drug adherence levels in African countries have been relatively high compared to those reported from industrialized countries, considerable variations exist among countries, including Ethiopia, in regard to definitions of defaulting and systematic measurement of adherence of clinic populations (M:17). One study of drug adherence reported a considerable discrepancy between adherence (100%) and satisfaction with treatment (64%). Major factors in this relatively low patient satisfaction rate included distance to ART sites and long waiting lines, being away from home, use of holy water (*tsebel*), social stigma of using ARVs, and forgetting to use drugs (I:3). Several investigators reported geographical distance to be a major barrier to the accessibility, utilization and adherence of ART. Studies of drug non-adherence at four regional and district hospitals identified distance between place of residence and ART site or pharmacy, in addition to the more widely reported personal, family and drug related factors as important (I:8, 120, 142). Similarly, a preliminary spatial study of the ART sites used by all clients in Ethiopia in December 2006 revealed a relationship between distance and utilization rates at the zonal and community levels, although these results need to be confirmed with current census population data and HIV prevalence data at the community level (I:73). However, geographical accessibility to treatment, an important factor in planning and implementation of HIV/AIDS programs, may not be a significant factor in all areas. For example, mathematical modeling to predict the impact of increasing the number of ART sites in South Africa found no linear relationship between treatment accessibility and catchment size of ART facilities and that substantially increasing a catchment area would increase accessibility by only a few percent (I:147). In addition to these and other "rational" factors, misinformation and traditional concepts of health and illness must also be considered in studies in drug adherence (I:16).

Social, economic, religious and legal challenges of the ART scale-up were addressed by several studies. Two sociological studies examined social, including religious, challenges PLWHA face in seeking ART, providing useful information for VCT counselors (I:62, 150,157). Common use of holy water was reported by two sociological studies, which reported that this practice may both jeopardize ART adherence and expose many users living around those springs to other health risks (IM:7; I:66). A preliminary report on the PEPFAR Faith-Based Initiative in collaboration with the Ethiopian Orthodox Church to support a comprehensive approach to AIDS care and ART by considering the use of holy water (I:44) indicates the need for culturally sensitive studies of this development. Results of a pilot project by a social services agency in Addis Ababa show that both drug adherence and treatment outcome were improved by providing benefits tailored to meet families' medical and material needs and by participation in peer support groups. This treatment and support model, involving weekly meetings to discuss the importance of adherence and side effects, daily availability of a nurse, and participation in peer support groups (I:143) is best suited for implementation in urban areas featuring these resources. Two other issues not previously dealt with concerned attitudes of health professionals towards providing VCT and ART services to clients and the need for legislation to fully protect the human rights of PLWHA, not only at the work place but also in other public settings and in the domestic sphere (I:74,130). The development of a scale for measuring attitudes of physicians and nurses towards PLWHA and the finding

that professionals with less education had more negative attitudes towards clients represents a first attempt to facilitate the gathering of objective information on a sensitive issue which has important implications for the delivery of quality care (M:15). The economic impact of HIV/AIDS on companies and their provision of ART is another understudied area. A 6-year longitudinal and multinational study of six Eastern and Southern African countries, including Ethiopia, concluded that increased labor costs due to HIV were less than 3% at 10 of the 12 companies surveyed and that whereas treatment of HIV-positive employees is cost-effective for many larger firms, smaller ones have less capacity and inclination to respond to workforce illness (I:114).

Voluntary counseling and testing (VCT) and provider-initiated HIV counseling and testing (PIHCT) services: The topics of recent VCT and PIHCT studies showed greater diversification than in previous years. In addition to the accessibility and utilization of these services by the general client population at government facilities, several studies focused on pregnant women, couples, family planning clients, sexually abused children, physically handicapped persons, university students, STI and TB patients, military personnel, members of a PLWHA association, and government employees. While HIV awareness campaigns and increased accessibility to VCT services play a central role in early diagnosis and treatment of patients, other promising approaches, such as referral from dentists identifying clinical markers such as oral candidiasis also need to be considered (I:18). A thesis linking family planning service with VCT services from both client and provider perspectives provides valuable information on how to integrate these services for a client population that may be expected to increase in coming years (I:13). Another study of fertility decisions and the need for family planning among PLWHA also provides relevant information for family planners and HIV/AIDS counselors (I:88). A thesis with far-reaching implications for HIV treatment-seeking behavior among pregnant women found that women who had not been influenced by their male partners on HIV testing were 2.56 times more likely to accept HIV testing than those who were influenced by their partners (I:72). These findings reemphasize the need for further education efforts in family planning and primary health care providers in general. Problems arising out of couples using voluntary counseling testing services were pointed out by a study reporting that most respondents did not use these services because their partners already knew the HIV test results (I:38). Although this problem appears to be due primarily to the failure of VCT sites to record information for couples on an individual basis (mentioned below) it may also be due to confidentiality issues, as indicated by earlier low rates of instructing or training health staff in confidentiality and disclosure of HIV test results (I:59). A study on the relative accessibility of government and private counseling and testing sites showed that antenatal clients of government health institutions had better access to services than women who did not use the government ANC services. This finding highlights the need for greater integration and collaboration between government and non-government health institutions mentioned above (I:116). Acceptability of PIHCT among patients with TB, STIs and other co-infections with HIV is another issue requiring further research. In a hospital in southern Ethiopia, HIV testing was not accepted by two-thirds of HIV-coinfected TB patients, due to a combination of client and program factors, such as prior HIV testing, self-perceived risk of HIV infection, and place of testing at considerable distance from place of residence (I:67, 68). A considerably higher acceptance rate of HIV counseling and testing 66.2%) could be achieved for TB patients in six health centers in Addis Ababa even though barriers to acceptability were similar (I:28).

Prevention: A wider range of primary and secondary HIV prevention issues was addressed by researchers in 2007 than in earlier years. Promising but relatively neglected approaches to HIV/AIDS prevention, care and support services, including involvement of youth and communities and to determine perceptions and service preferences, as well as peer counseling among youth were examined by several studies (I:11, 17, 69, 115, 149). Surveys among high school students in Addis Ababa revealed that the AIDS hotline telephone service was a more accessible and convenient source of information on HIV risk and reproductive health issues than information and counseling services available at health institutions (I:77). Another innovative approach to overcoming high HIV risk behavior of adolescents are the preventive, care and support activities provided by members of youth organizations sponsored by NGO, government and faith-based organizations (I:17). This study concluded that special training in conflict management and better support are needed to make youth voluntarism more effective.

In 2007, most PMTCT information appeared in governmental reports planning and implementing programs in this important but lagging and little researched area. Continued low coverage of PMTCT needs was indicated by a study showing that more than half of the HIV-positive women were missed by the PMTCT program during the first visit to antenatal clinics (ANC) (M:6). According to another study, reasons for women not participating in prevention of PMTCT follow-up counseling before starting ARV prophylaxis include lack of community leadership and lack of in-depth knowledge of gender relationships as major factors; a related problem is the failure to collect and analyze gender disaggregated data during the delivery of CVT services (I:23).

The reproductive and family planning situation in Ethiopia, characterized by very low contraceptive prevalence and a high unmet need for contraception which has hardly changed in recent years, remains a major challenge to HIV preventive programs. According to the report Trends in Demographic and Reproductive Health Indicators in Ethiopia (I:75), the median age of marriage and age at first birth for women aged 25-49 did not change in rural areas between 2000 and 2005. These and most other reproductive indices remained among the lowest in sub-Saharan Africa, requiring further research on socioeconomic underpinnings of early marriage and advocacy for education. Quality of family planning services in regard to limited choice of available methods, insufficient information to clients, inadequate community-based reproductive health service sites, and inadequate training of providers (I:71) also demand further research One possible means of increasing community knowledge of and provision of reproductive health services is the use of community-based reproductive health agents (CBRHAs). A survey of CBRHAs revealed that personality traits and work experience were more strongly associated with their capacity to provide integrated services than demographic characteristics and that agents' gender and work-related characteristics were significantly associated with the number of clients they served (M:7). Such personal biases can perhaps be overcome by considering the reproductive health needs and preferences of clients in service delivery (I:36). One of the most extensive family planning programs integrated with behavior change communication approaches involved community-based contraception distribution, house-to-house individual education, peer education and formation of youth centers, establishment of AIDS clubs in school, and community advocacy though respected social, religious and cultural community leaders during a 9-year period. The program outcomes exceeded set targets in improving positive attitudes towards the use of contraceptives, increasing access to reproductive health care services, reducing risk behavior and stigma of HIV/AIDS and STIs and doubled the prevalence of family planning from 14.7% to 29.8%. A key to this success was the participatory involvement of the beneficiaries within the local cultural context (I:31). Although few studies have been undertaken on the possible integration of family planning and other reproductive health services with HIV/AIDS programs in Ethiopia, there is a growing interest in this strategy. The conceptual framework and opportunities for and challenges presented by an integration of reproductive health, family planning and HIV/AIDS programs formed the basis of an international conference in Addis Ababa. Rapidly growing evidence was presented indicating that this linkage may be an effective strategy for providing and expanding cost-effectively a wide range of services but additional research and pilot studies are required to develop and operationalize feasible programs in the diverse sociocultural, health and provider environment (I:26, 32).

Several studies of fertility regulation practices and sexuality were carried out in 2007 among different ethnic groups. They may contribute to making family planning and other reproductive health programs culturally acceptable to local populations and stimulate research among other ethnic groups. A study of the role of traditional Borana institutions in reproductive health promotion, fertility regulation and HIV prevention, together with the book published in 2005 by Ibrahim Amae Elemo on these institutions (cited in the 2006 HIV/AIDS Update), constitutes a valuable source of information on these cultural practices of the Borana Oromo. An anthropological study among the Arsi Oromo identified elements of Oromo customary law and protective traditional values and behaviors surrounding sexual relations that may be incorporated into HIV/AIDS communication. This study also cautions against the uncritical implementation of Western-dominated and defined human rights principles, such as gender equality (I:109). Another anthropological study, on the reproductive success of polygamously and monogamously married men and women indicate that marriage practices benefit first-married polygamous wives more than second and third wives, or monogamous wives. Since these effects are also reflected in the relatively larger number of children and their better nutritional status of first married polygamous wives (E:43) this information may help community health services in providing effective reproductive and HIV preventive services to families with different family structures.

Care and support: A number of studies of patient care and support addressed the social, psychological and nutritional needs of PLWHA and the effectiveness and activities of organizations providing these services, including community-based and civil society organizations. Networking among providers of care and support services, an approach increasingly recognized as a means of exchanging information and experiences with meeting specific client needs and of learning about available services in different centers, was critically examined by one study (I:40). A study of the relationship between diet, food security and ART outcome reported that an improved diet in regard to acquisition of food aid, number of meals, and diversity of food was significantly positively correlated with functional improvement, increase in weight and CD4 count (I:117). These findings and another study reporting variable feeding options for HIV-positive infants (I:24) emphasize the need for qualitative and quantitative dietary studies among PLWHA and their families with different diets and the provision of food aid and income generating activities to determine and promote optimal diets for PLWHA of different ages as part of chronic AIDS care. The

publication by the Ministry of Agriculture and Rural Development in collaboration with FAO of a training manual for health workers involved with nutrition care for PLWHA constitutes a promising start in this direction (I:90). Several theses examined institutional and family settings and challenges in orphan care in Ethiopia, a largely neglected subject in the literature in the past. One study exploring the trade-offs and social dynamics of orphan care within extended families found rural-urban differences in the capacity to care for orphans and that there are multiple and reciprocal relationships in care-giving and care-receiving practices. The authors called for a contextual understanding of the orphan burden in the development of interventions that may consider care for four categories of extended families with different capabilities and resources (I:2). Two studies of the psychological impact of losing their parents and the role of civil society organizations in meeting the special needs of AIDS orphans indicate the severity of this problem and the need for appropriate care and supporting structures to mitigate these effects (IM:8; I:76).

Monitoring and Evaluation Research

Twenty references (6.2 %) were included in the Monitoring and Evaluation section, less than half of those in the 2006 Update. This decrease is due in part to the inclusion of a number of ART and VCT project evaluations in the Intervention section and the effect of the 2006 International AIDS conference. Examination of ART and VCT program monitoring and evaluation within the context of the ART scale-up facilitates a more comprehensive discussion of the continuum of activities and outcomes of these programs.

Monitoring and evaluation issues covered in earlier Updates include determinants of outcomes of HIV counseling, validation of lay diagnosis to determine TB/HIV-related mortality in Addis Ababa, and service delivery models for HIV counseling and testing. New areas considered by earlier studies reflect the rapid expansion of the various HIV/AIDS interventions, including assessment of ART monitoring, effects of scaling up ART on health care systems, treatment adherence monitoring and promotion policies in Ethiopia and East Africa countries, human rights protection during HIV testing in Ethiopia and east African countries, the use of antenatal clinic (ANC) surveillance data to evaluate PMCTC programs, the need to track expenditures of the increasing HIV/AIDS budget, development of different scales for measuring attitudes of health professionals and stigma, information management related vulnerable children vulnerable to HIV infection, and client-friendliness of model youth health centers. Some of these studies are discussed under the Intervention section. Clearly, the need for monitoring and evaluation research will increase in the future with the scale-up of ART and other interventions because of the increasing need for guiding, coordinating, modifying and streamlining ongoing projects and activities according to targets, changing situations and challenges, lessons learned, and available resources.

Diaspora Research

Only five studies on HIV/AIDS were prepared in the Diaspora in 2007, largely due to the limited number of international conference on AIDS last year. The studies addressed issues surrounding disease impacts and drug resistance, the potential contribution of health professionals in the Diaspora to HIV/AIDS efforts in Ethiopia, and the lack of information on the impact of HIV/AIDS on the Ethiopian community in the USA. One study provides evidence of antiretroviral drug resistance among Ethiopian immigrants in Israel (D:3) and another one on the relationship between psychological distress, psychosocial variables, T lymphocyte counts and viral load (D:1). The finding of the latter study that HIV-positive women had more social support and better immunological and infection indicators than men and that the better indicators were related to shorter duration of HIV positivity since diagnosis, differential gender and infection-linked adherence and more social support has many implications for home-based care. The increasing involvement of Ethiopian Diaspora health professionals in the ART scale-up and related HIV/AIDS efforts in Ethiopia through Diaspora-based health associations (D:2) and the creation of new websites (listed below) informing on HIV/AIDS initiatives, programs and resources in Ethiopia and the Diaspora are positive developments that warrants further advocacy and support.

Section 1. Earlier Bibliographies on HIV/AIDS and related Sociocultural and Economic Issues

1. Alemayehu E, Belachew T. Health science student research at Jimma University: Abstracts of all public health faculty graduate student research projects (1996-2004). Addis Ababa: Addis Ababa University Press, 2005.
2. Berhane Y, Haile Mariam D, Kloos H (Eds). Epidemiology and Ecology of Health and Disease in Ethiopia. Addis Ababa: Shama Books, 2006.
3. Center for Research Training and Information on Women in Development (CERTWID). An annotated bibliography of gender issues in Ethiopia. Vol. 1 & 2. CERTWID, Addis Ababa University, 2004.
4. Converse JP, Wuhib T, Mulatu MS, Kloos H. Bibliograhy on HIV/AIDS in Ethiopia and Ethiopians in the Diaspora. Ethiop J Health Dev 2003;17(Special Issue):33-85.
5. Converse PJ, Mulatu MS, Kloos H, Maile Mariam D, Wuhib T, Pankhurst A. Bibliography on HIV/AIDS in Ethiopia and Ethiopians in the Diaspora: The 2005 update. Ethiop J Health Dev 2006;20(1):60-70.
6. Ethiopian Public Health Association (EPHA). Extracts of MPH theses works by EPHA-sponsored

graduate students in public health. Addis Ababa: EPHA, 2004.
7. Family Health International, Impact, USAID. HIV/AIDS Prevention, Care and Support Across Faith-Based Communities: An Annotated Bibliography. Arlington, Virginia: Family Health International, 2007.
8. Kloos H, Mulatu MS, Converse PJ. Bibliography on HIV/AIDS in Ethiopia and Ethiopians in the Diaspora: The 2003 update. Ethiop J Health Dev 2004;18(1):57-64.
9. Mulatu MS, Kloos H, Converse PJ, Wuhib T, Pankhurst A. Bibliography on HIV/AIDS in Ethiopia and Ethiopians in the Diaspora: The 2004 update. Ethiop J Health Dev 2005;19(1):64-85.
10. Mulatu MS, Kloos H, Converse PJ, Mariam DH. Bibliography on HIV/AIDS in Ethiopia and Ethiopians in the Diaspora: the 2006 update. Ethiop J Health Dev 2007;21(1):70-91.

Section 2. Basic Biomedical Research

This section covers laboratory-based biomedical research, including studies on HIV structure, replication, and host immune responses; co-infection with other agents; development and testing of laboratory procedures; and other related laboratory studies.

1. Alemayehu BHG. Evaluation ultra-sensitive P24 Antigen and CBS-based DNA-PCR diagnosis of Pediatric HIV in Addis Ababa. MSc thesis, Department of Microbiology, Medical Faculty, Addis Ababa University, 2007.
2. Ayele W, Schuurman R, Messele T, et al. Use of dried spots of whole blood, plasma, and mother's milk collected on filter paper for measurement of human immunodeficiency virus type 1 burden. J Clin Microbiol 2007;45(3):891-895.
3. Gadisa E, Genetu A, Kuru T, et al. *Leishmania* (Kinetoplastida): species typing with isoenzyme and PCR-RFLP from cutaneous leishmaniasis patients in Ethiopia. Exp Parasitol 2007;115(4)**:**339-43.
4. Handzel ZT, Barak V, Altman Y, et al. Increased Th1 and Th2 type cytokine production in patients with active tuberculosis. Isr Med Assoc J 2007;9(6):479-83.
5. Kassu A, Diro E, Mengisdtu G. Altered serum profile of trace elements and retinol in tuberculosis patients and blood donors in the context of HIV infection in Gondar, northwest Ethiopia. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October, 2007, Abstract no. 83.
6. Merid Y, Yassin MA, Kumar R, Yamuah L, Aseffa A. Validation of the bleach methods for the diagnosis of tubercuosis. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, October 19-21, 2007, Abstract no. 39.
7. Shiferaw G, Woldeamanuel Y, Gebeyehu M, Girmachew F, Demessie D, Lemma E. Evaluation of microscopic observation drug susceptibility assay for detection of multidrug-resistant Mycobacterium tuberculosis. J Clin Microbiol 2007;45(4):1093-7.
8. Tensou B, Reniers G, Tekebash A. Evaluating the performance of the inter VA Model for determining mortaility in the adult population of Addis Ababa. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Abstract no. 62.
9. Tsegaye A, Ran L, Wolday E, et al. HIV-1 Subtype C gag-specific T-cell rsponse in relation to human leukocyte antigens in a diverse population of HIV-infected Ethiopians. J Acquir Immune Defic Syndr 2007;45(4):389-400.
10. Yassin MA, Ramsay A, Cambanis A, et al. Kassu A, Diro E, Mengistu G. Expedited smear microscopy approach for the diagnosis of tuberculosis. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 18-21 October, 2007, Abstract no. 46.

Section 3. Epidemiological, Risk Factors, and Determinants Research

This section includes studies on the epidemiology of HIV and other opportunistic infections, AIDS and related diseases, and risk and protective behaviors. It also covers research on the biological, psychological, socioeconomic, cultural, structural, and other contextual determinants of HIV transmission, spread and prevention.

1. Abate MG. Prevalence and factors related to sexual and physical violence among high school and technical school students of Butajira, SNNPR, Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
2. Abayou TK. The role of development: induced projects in the spread of HIV/AIDS: the case of Gilgel Gibe Hydro-Electric Project in Jimma Zone. MA thesis, Department of Social Anthropology, Addis Ababa University, 2007.
3. Abebe KK. Detection of recent human immunodeficiency virus type 9(HIV-1) infection and estimating its incidence rate in Ethiopia. MSc thesis, Department of Biology, Addis Ababa University, 2007.
4. Abera Y, Yeshiambaw A. Pregnancy related fistula: For women in rural Ethiopia a cause for social ostracism no less than HIV/AIDS. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 156562.

5. Abitew YD. Differences in knowledge, attitude and behavior between students with and without hearing impairment pertaining to HIV/AIDS: the case of Mekanissa School for the Deaf. MA thesis, Department of Special Education, Addis Ababa University, 2007.
6. Aboye GD. Adolescent's socio-demographic character tics and their perception of HIV/AIDS and risk taking behavior in preparatory school of Nazareth, Adama. MA thesis, Department of Developmental Psychology, Addis Ababa University, 2007.
7. Addissie A, Sellassie FE, Deressa W. Malaria and HIV co-infection in Hadya Zone, southern Ethiopia. Ethiop Med J 2007;45(1):9-17.
8. Aga WM. The influences of family, peers and school clubs on adolescents' sexual behavior and risk perception. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
9. Alamirew D. Sexual behavior, risk perception and knowledge about HIV/AIDS. MA thesis, Department of Statistics, Addis Ababa University, 2007.
10. Alemayehu R, Girmay M, Gobena A. Bovine tuberculosis is more prevalent in cattle owned by farmers with active tuberculosis in central Ethiopia. Vet J 2007; Aug 28 [Electronic publication: doi:10.1016/j.tvjl.2007.06019].
11. Ameni G, Aseffa A, Sirak A, et al. Effect of skin testing and segregation on the prevalence of bovine tuberculosis, and molecular typing of *Mycobacterium bovis*, in Ethiopia. Vet Rec 2007;161(23):782-6.
12. Amsalu S, Hurrisa Z, Nuri S. Tuberculosis in children, Northwest Ethiopia. Ethiop Med J 2007;45(2):159-163.
13. Andargie G, Kassu A, Moges F, et al. Low prevalence of HIV infection, and knowledge, attitude and practice on HIV/AIDS among high school students in Gondar, Northwest Ethiopia. Ethiop J Health Dev 2007;21(2):179-182.
14. Andualem B, Kassu A, Moges F, et al. Diarrhoea-associated parasites in HIV-1 seropositive and sero-negative patients in a teaching hospital, northwest Ethiopia. Ethiop Med J 2007;45(2):165-70.
15. Anore DA. Epidemiology and drug resistance pattern of mycobacterial isolates among HIV positive and HIV negative TB patients using conventional and molecular methods in southeast Ethiopia. MSc thesis, Department of Biology, Addis Ababa University, 2007.
16. Anteneh BD. Vulnerability of unemployed urban youth to high risk sexual health behaviors: a case control study in Gullele Sub-city. MA thesis, Department of Social Work, Addis Ababa University, 2007.
17. Asefa BS. The assessment of HIV risk behavior practices among adults in some selected sub-cities in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
18. Asfaw MG. Cryptosporidiosis and Isosporiasis among HIV-positive individuals under HAART at Yirgalem Hospital, southern Ethiopia. MSc thesis, Department of Biology, Addis Ababa University, 2007.
19. Atomsa SM. Female genital mutilation in Gindeberet District and attitude of the community towards the practice. MA thesis, Department of Social Psychology, Addis Ababa University, 2007.
20. yenew AA. The prevalence and attributes of domestic violence against women in Bahir Dar Town. MA thesis, Department of Social Psychology, Addis Ababa University 2007.
21. Begna BN. Poverty and HIV/AIDS epidemic: the case of Adama City. MA thesis, Institute of Regional and Local Development Studies, Addis Ababa University, 2007.
22. Bekere MB.Opportunistic intestinal coccidian and microsporadian infections among HIV-positive patients on antiretroviral therapy at Nekemte Hospital, East Wollega. MSc thesis, Department of Biology, Addis Ababa University, 2007.
23. Belihu BB. The exposure of women to HIV/AIDS: societal explanations. MA thesis, Department of Social Work, Addis Ababa University 2007.
24. Berhane F. Khat and alcohol use and risk of behaviour among in and out-of-school youth in Ethiopia. HIV Research Net Conference, Center for International Health, University of Bergen, Scandic Bergen City, Norway, October 11-12, 2007
25. Bhargava A. Desired family size, family planning and fertility in Ethiopia. J Biosoc Sci 2007;39(3):367-381.
26. Brewer D, Roberts JM, Potterat JJ. Human immunodeficiency virus and AIDS. 17th Meeting of the International Society for Sexually Transmitted Diseases Research 2007, Seattle, WA Abstract no. B1.
27. Dan M. *Treponema pallidum* and syphilis. 17th Meeting of the International Society for Sexually Transmitted Diseases Research Seattle, WA 2007: Abstract no. B8.
28. Degaga WB. An assessment of the causes and problems of commercial sex workers: the case of Adama City, Oromia Regional State. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
29. Degefe AH. An assessment of the dominant contributing factors to child sexual abuse in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
30. Deng KJ. Knowledge, attitude and practice about HIV/IDS among women of reproductive age in Gambela town. MPH thesis, Department of Community Health, Addis Ababa University, 2007.

31. Dessie A, Abera B, Wale F. Seroprevalence of major blood-borne infections among blood donors at Felege Hiwot referral hospital, northwest Ethiopia. Ethiop J Health Dev 2007;21(1):68-69.
32. Dilie RM. Estimating couples' response to price changes in contraceptives: evidence from South Gondar Zone. MA thesis, Department of Economics, Addis Ababa University, 2007.
33. Dubale TG. Vulnerability of persons with disabilities to HIV infection, the case of deaf, the blind and the physically disabled in Gullele Sub-City of Addis Ababa. MA thesis, Department of Social Work, Addis Ababa University, 2007.
34. Edea WD. Gender based violence and the risk of HIV infection among women attending antenatal care services at HIV sentinel surveillance sites in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007
35. Egeno AY. Assessment of injection practice in Adami Tulu Jido Kombolcha Wereda, Eastern Shewa Zone, Oromia Regional State, Ethiopia. MSc thesis, Department of Pharmacoepidemiology and Social Pharmacy, Addis Ababa University, 2007.
36. Eshete MA. The impact of female genital mutilation on the health of women and girls: the case of Dessie Zuria Woreda. MA thesis, Institute of Regional and Local Development Studies, Addis Ababa university, 2007.
37. Esmael JK. Prevalence of high risk behaviors and the determinants of HIV sero-status and amount of VCT attendance in Bale Zone. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
38. Fenta TB. Investigating into the major factors responsible for the distribution of the HIV/ AIDS epidemic in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
39. Gebre HT. The interface between violence against women and the spread of HIV/AIDS: the case of women beneficiaries of he Society for Women and AIDS in Kebele 03/09 and 04/05, Arada Sub-City, Addis Ababa Addis. MA thesis, Institute of Gender Studies, Ababa University, 2007.
40. Gebre Medhin ST. Denial of rights, human rights abuses and violence against domestic workers in some selected areas of Addis Ababa. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
41. Gebreyesus SH. A challenge in the prevention of HIV/AIDS: an emergent public health problem; men having sex with men in Addis Ababa. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDC075.
42. Gezahegn GB. Knowledge and sexual behavior related to HIV/AIDS among adolescents with visual impairment. MA thesis, Department of Special Needs Education, Addis Ababa University, 2007.
43. Gibson M, Mace R. Polygamy, reproductive success and child health in rural Ethiopia: Why marry a married man? J Biosoc Sci 2007;39(2):287-300.
44. Girmay ST. Parental characteristics and female adolescent sexual behavior in Addis Ababa. Institute of Development Research, Addis Ababa University, 2007.
45. Hailu KG. Female adolescents' sexual practice and its influence on their environment. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
46. Hassen SM. Correlates of knowledge of reproductive health risks and practice: a case of Soddo Town High School adolescents, Wolaita Zone, SNNPR. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
47. Iliffe J, ed. The African AIDS Epidemic: A History. First ed. Oxford: James Currey, 2006.
48. Jara SM. Violence against women: the case of Kolfe Keranyo Sub-City. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
49. Jarsa ME. Patterns of intimate partner violence: the case of married women in two kebeles of Awassa Town. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
50. Jima DE. Sexual abuse of male children in Addis Ababa. MA thesis, Department of Social Work, Addis Ababa University, 2007.
51. Kassa B. Contraceptive hormones and HIV infection in female factory workers in one of the factories in Addis Ababa, Ethiopia. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDA015.
52. Kassaye KD, Woldemichael K, Wondafresh M, Haile A. Assessment of outcomes and determinants of HIV positive status disclosure in a hospital in southwest Ethiopia.18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Poster Abstract no. 23.
53. Kassu A, Andualem B, Nguyen Van N, et al. Vitamin A deficiency in patients with diarrhea and HIV infection in Ethiopia. Asia Pacific J Clinical Nutr 2007;16:323-328.
54. Kassu A, Mengistu G, Ayele B, et al. HIV and intestinal parasites in adult TB patients in a teaching hospital in Northwest Ethiopia. Trop Doct 2007;37(4):222-4.
55. Kassu A, Fujino M, Matsuda M, Nishizawa M, Ota F, Sugiura W. Molecular epidemiology of HIV type 1 in treatment-naive patients in north Ethiopia. AIDS Res Hum Retroviruses 2007;23(4):564-8.
56. Keago YK. Factors affecting the awareness of the use of condom: the case of Addis Ababa. MA thesis, Department of Statistics, Addis Ababa University, 2007.

57. Kebede G, Asnake M, Alemu B, Deneke K. Causes and consequences of early marriage in Amhara Region. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 156618.
58. Kebede MT. Vulnerability of female commercial sex workers to HIV infection in Zeway Town. MSc thesis, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, 2007.
59. Kifle BA. The relationship between sexual and marital adjustment. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
60. Kloos H, Mariam DH. Some neglected and emerging factors in HIV transmission in Ethiopia. Ethiop Med *J* 2007;45(1):103-7.
61. Kloos H, Mariam DH, Lindtjorn B. The AIDS epidemic in a low-income country: Ethiopia. Human Ecology Rev 2007;14(1):39-55.
62. Krmane HM. Child abuse and neglect in domestic servant child care: a risk factor assessment. MA thesis, Department of Developmental Psychology, Addis Ababa University, 2007.
63. Mehajeb YA. HIV/AIDS knowledge, attitudes and practices among persons with sensory disabilities in Addis Ababa: the case of ENAB and ENAD. MA thesis, Department of Social Work, Addis Ababa University, 2007.
64. Mengisti HW. Child sexual abuse in Addis Ketema Sub-city, Addis Ababa, from a gender perspective. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
65. Mengistu G, Ayele B. Visceral leishmaniasis and HIV co-infection in patients admitted to Gondar University hospital, northwest Ethiopia. Ethiop J Health Dev 2007;21(1):53-60.
66. Ministry of Health. Single point prevalence estimate. Addis Ababa: Federal HIV/AIDS Prevention and Control Office (FHAPCO),, 2007.
67. Mogessie MGM. Sexual orientation and practices of young people in Addis Ababa High School. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
68. Mulat ATH. High school adolescents' sexual practices: a case study of Debre Zeit Town. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
69. Mulatu AN. Parental characteristics and youth's sexual behavior in Bahir Dar Town, northwestern Ethiopia. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
70. Mulu A, Kassu A, Tessema B, et al. Seroprevalence of syphilis and HIV-1 during pregnancy in a teaching hospital in northwest Ethiopia. Jpn J Infect Dis 2007;60(4):193-5.
71. Negash TT. Youth substance abuse and HIV/AIDS in Adama Town. MA thesis, Department of Social Anthropology, Addis Ababa University, 2007.
72. No author cited. Ethiopia 2005: results from the demographic and health survey. Stud Fam Plann 2007;38(2):135-40.
73. Nyblade L, R. P, Mathur S, McQuarrie K, Kidd R. Disentangling HIV and AIDS stigma in Ethiopia, Tanzania and Zambia. Washington, DC: International Center on Women, 2003.
74. Shiferaw KB. Cultural practices that determine the subordinate position of women in the case of Gumuz Regional State. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
75. Shimelis T. The prevalence of HBV infection and its risk factors among attendants of VCT Center and ART Clinic at St. Paul's General Specialized Hospital. 18th Annual Conference of the Ethiopian Pubic health Association, Addis Ababa, 19-21 October 2007, Poster Abstract no. 18.
76. Shitaye JE, Tsegaye W, Pavlik I. Bovine tuberculosis infection in animal and human populations in Ethiopia: a review. Veterinarni Medicina 2007;52:317-.
77. Shume EB. Risky sexual behavior of HIV/AIDS and condom use among male daily laborers age 15 years and above in Kombolcha town, South Wollo, Amhara Region. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
78. Sona BD. Risk sexual behavior among college students and bar ladies: the case of Awassa. MA thesis, Department of Special Needs Education, Addis Ababa University, 2007.
79. Sulamo TA. Sexual behavior and perception about HIV/AIDS among young people: the case of Awassa College of Teacher Education. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
80. Tadele G. Ethiopian by birth, gay by nature, proud by choice. Paper presented at the International Conference on Disorganized Pleasures: Changing Bodies, Rights and Cultures 2007, Lima, Peru.
81. Tadele G. Adolescence in Ethiopia. In: Encyclopedia of Adolescence (ed. Arnett JJ). New York: Routledge, 2006.
82. Takele AK. Factors affecting female adolescent sexual reproductive health among in-school adolescents in Woreta Town, South Gonder: MA thesis, Institute of Development Research, Addis Ababa University, 2007.
83. Tamir TB. Assessment of status of commercial sex in females selling local beverage, their risk perception towards HIV infection and condom use in towns in Gojam. MPH thesis, department of Community Health, Addis Ababa University, 2007.
84. Tesfaye NR. The profile of acquired immunodeficiency syndrome (AIDS) in Ethiopian women: reflecting the sub-Saharan Africa trend. 4th IAS Conference on Pathogenesis, Treatment and Prevention Sydney, Australia, 2007. Abstract no. CDB015

85. Tizazu TW. Fertility desire among women living with HIV/AIDS in Addis Ababa: MA thesis, Institute of Development Research, Addis Ababa University, 2007.
86. Tolla SA. A study of university students' knowledge and attitude and the experience of PLWHA in relation to stigma and discrimination attached to HIV and AIDS. MA thesis, Department of Counseling Psychology, Addis Ababa University, . UNAIDS.
87. UNAIDS. 2007 AIDS Epidemic Update. Geneva, UNAIDS, 2007.
88. United Nations. 2007 World Drug Report: United Nations, Office on Drugs and Crime, 2007.
89. Van Blerk L. AIDS, mobility and commercial sex in Ethiopia: Implications for policy. AIDS Care 2007;19(1):79-86.
90. Wayessa AH. The causes and consequences of early marriage among the Selale Oromos: the case study of Hidabu and Kuyu woredas, North Shewa Zone and Oromia Regional State. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
91. Wereta TG. Assessment of factors associated with acquiring HIV among VCT- seeking married women of health institutions in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
92. Wobede AA. The prevalence of violence against children in schools: a case study in Gulele sub-City of Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
93. Wolday D, Meles H, Hailu E, et al. Temporal trends in the incidence of HIV infection in antenatal clinic attendees in Addis Ababa, Ethiopia, 1995-2003. J Internal Med 2007;261(2):132-137.
94. Wolde Kiros TS. Hepatitis B virus infection among attendants of voluntary counseling and testing center and anti-retroviral therapy clinic of Saint Paul's General Specialized Hospital. MSc thesis, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, 2007.
95. Woldeyohanis KN. Survival strategies of street children and high risk behaviors towards HIV/AIDS in Adama town. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
96. Workneh AA. Correlates of sexual experiences among students of Debre Markos College of Teachers Education, Amhara Regional State: MA thesis, Institute of Development Research, Addis Ababa University, 2007.
97. Wouhabe M. Sexual behaviour, knowledge and awareness of related reproductive health issues among single youth in Ethiopia. Afr J Reprod Health 2007;11(1):14-21.
98. Yadeta GM. Possible interactions of intestinal helminth and HIV infections: the situation in Fitche, Northern Oromia. MSc thesis, Department of Biology, Addis Ababa University, 2007.
99. Yusuf AM. Violence against women and girls: the case of Fentale (Oromia) and Mille (Afar) Districts. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
100. Zeleke NA. Socio-cultural practices and vulnerability of rural households to 1IV/AIDS: an assessment of knowledge, attitudes and practices in Kallu Woreda, South Wollo. MA thesis, Department of Social Anthropology, Addis Ababa University, 2007.

Section 4. Clinical Research

This section includes studies on the characteristics and clinical course of HIV infection and opportunities infections, and other clinical issues affecting HIV?AIDS patients.

1. Aderaye G, Bruchfeld J, Aseffa G, et al. *Pneumocystis jiroveci* pneumonia and other pulmonary infections in TB smear-negative HIV-positive patients with atypical chest X-ray in Ethiopia. Scand J Infect Dis 2007;39(11):1045-53.
2. Afework K, Getahun M, Belete A, et al. Coinfection and clinical manifestations of tuberculosis in human immunodeficiency virus-infected and -uninfected adults at a teaching hospital, northwest Ethiopia. J Microbiol, Immunology Infect 2007;40(2):116-122.
3. Clifford DB, Mitike MT, Mekonnen T, et al. Neurological evaluation of untreated human immunodeficiency virus infected adults in Ethiopia. J Neurovirol 2007;13(1):67-72.
4. Diriba L, Worku F, Girma T. Drug use evaluation on Cotrimoxazole preventive threapy for people living with HIV/AIDS in Jimma Universit Specialized Hospital, southwest Ethiopia. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October, 2007, Abstract no.33.
5. Feleke Y, Mengistu Y, Enquselassie F. Diabetic infections: clinical and bacteriological study at Tikur Anbessa Specialized University Hospital, Addis Ababa, Ethiopia. Ethiop Med J 2007;45(2):171-9.
6. Ghezehegn KH. Immune reconstitution inflammatory syndrome (IRIS) among HIV/AIDS patients during highly active antiretroviral therapy (HAART) in Addis Ababa. MSc thesis, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, 2007.
7. Girma A, Hailemariam D. Quality assessment of directly observed treatment short-course of tuberculosis in Afar National Regiona State. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Abstract no. 73.
8. Hoff ST, Abebe M, Ravn P, et al. Evaluation of *Mycobacterium tuberculosis*-specific antibody responses in populations with different levels of

exposure from Tanzania, Ethiopia, Brazil, and Denmark. Clin Infect Dis 2007;45:575-582.
9. Huruy K, Mulu A, Mengisu G, Shewa-Amare A, Akalu A. Immune reconstitution inflammatory syndrome (IRIS) among HIV/AIDS patients during highly active antiretroviral therapy (HAART) in Addis Ababa, Ethiopia. 18th Annual conference of the Ethiopian Public Health Association, Addis Ababa, October 9-11, 207, Abstract no. 85.
10. Kassu A, Mengistu G, Ayele B, Diro E, Mekonnen F. Coinfection and clinical manifestations of tuberculosis in human immunodeficiency virus-infected and -uninfected adults at a teaching hospital, northwest Ethiopia. J Microbiol Immunol Infect 2007;40(2):116-22.
11. Kassu A, Nguyen Van N, Nakamori M, et al. Deficient serum retinol levels in HIV-infected and uninfected patients with tuberculosis in Gondar, Ethiopia. Nutr Res 2007;27(2):86-91.
12. Kitilla T. Relationships of testicular volume and fine-needle aspiration cytology pattern in infertile azoospermic men (FGAE CenteralCentral Clinic, 2003-4). Ethiop Med J 2007;45(1):19-28.
13. Lattuada E, Lanzafame M, Concia E, Vento S. Intracranial mass lesions in HIV/AIDS patients from developing countries endemic for neurocysticercosis. Internat J STD & AIDS 2007;18:144-145.
14. Lemma T, Diro E, Aderaye G, Chaka T. Musculoskeletal sarcoidosis in an Ethiopian. Ethiop Med J 2007;45(1):85-90.
15. Mamo Y, Seid E, Adams S, Gardiner A, Parry E. A primary healthcare approach to the management of chronic disease in Ethiopia: an example for other countries. Clin Med 2007;7(3):228-31.
16. Meshesha MK. Dynamics of T cells, plasma HIV RNA level and immune activation in tuberculosis patients co-infected with HIV before and during Highly Active Anti-retroviral Therapy in urban settings in Ethiopia. MSc thesis, Department of Biology, Addis Ababa University, 2007.
17. Miller LC, Tseng B, Tirella LG, Chan W, Feig E. Health of children adopted from Ethiopia. Matern Child Health J doi: 10,1007/s100995-007-0274-4, 2007.
18. Sacktor N, Nakasujja N, Robertson K, Clifford DB. HIV-associated cognitive impairment in sub-Saharan Africa--the potential effect of clade diversity. Nat Clin Pract Neurol 2007;3(8):436-43.
19. 19. Tsegaye A, Ran L, Wolday D, et al. Stable pattern of HIV-1 subtype C Gag-specific T-cell responses coincides with slow rate of CD4 T-cell decline in HIV-infected Ethiopians. AIDS 2007;21(3):369-372.

Section 5. Impacts Research

This section covers studies on the social, psychological, economic, and demographic impacts of HIV/AIDS on individuals, families, communities, institutions, or the nation. In addition, studies that explore relevant social issues associated with the spread of HIV/AIDS are also included

1. Afework GH. The psychological challenges of people living with HIV/AIDS: a case of Hawassa and Dilla towns. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
2. Alemayehu BA. Attitudes of HIV/AIDS orphans towards teachers, classmates and the community: the case of three government children's homes in Addis Ababa. MA thesis, Department of Special Needs Education, Addis Ababa University, 2007.
3. Asamnew TY. A comparative study of the psychological and behavioral problems of institutionalized HIV/AIDS and non-HIV/AIDS orphans, MA thesis, Department of Special Needs Education, Addis Ababa University, 2007.
4. Ayele MK. Psychosocial situation of people living with HIV/AIDS: the case of Assosa Town. MA thesis, Department of Special Needs Education, Addis Ababa University, 2007.
5. Beyene NM. Being a woman and living with HIV/AIDS: socio cultural and economic problems affecting women living with HIV/AIDS in Addis Ababa. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
6. Desalegn A, Tadele G, Chernet H. Impact of HIV/AIDS in teacher training institutions: analyzing the response in Ethiopia. Regional Workshop on Analyzing the Responses of Teacher Training Institutions to HIV and AIDS, Nairobi, 2007.
7. Getahun AA. The socio-economic condition of women living with HIV/AIDS: the case of Entoto holy water site. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
8. Kassu NM. The psycho-social developmental needs and challenges of children orphaned by AIDS. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
9. Meshesha AY. The impact of HIV/AIDS on livelihoods: consequences and barriers of household case studies. MA thesis, Department of Social Work, Addis Ababa University, 2007.
10. Mulualem YG. The relationship between HIV-related social discrimination and psychosocial adjustment of people living with HIV/AIDS: the case of some selected sub-cities in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
11. Yusuf AA. The effect of HIV/AIDS on children: the case of AA. MA thesis, Department of Social Anthropology, Addis Ababa University, 2007.
12. Zerihun MZ. Psycho-social problems of AIDS orphans: the case of Welfare for the Mothers and Children organization. MA thesis, Department of Social Work, Addis Ababa University, 2007.

Section 6. Intervention Research

This section reports on research and programmatic activities that are aimed at treatment, care, and support of people

This section reports on research and programmatic activities that are aimed at infected and affected by HIV, including voluntary counseling and testing. This section also includes reports on prevention efforts and public policy measures targeted against HIV/AIDS.

1. Abdurahman ZA. Assessment of factors influencing contraceptive utilization in Somali Region, Jijiga District. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
2. Abebe T, Aase A. Children, AIDS and the politics of orphan care in Ethiopia: The extended family revisited. Social Sci Med 2007;64(10):2058-2069.
3. Abrha A. Assessment of quality of antiretroviral therapy services in government hospital in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
4. Adane HA. Assessment of factors associated with HIV/AIDS among women seeking post abortion care in public hospitals of Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
5. Aberra RA. The role of emergency contraception in women's reproductive health: awareness, demand and accessibility issues in Addis Ababa. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
6. Addis T, Ayele A, Enbakom S, et al. Challenges of community volunteers in HIV/AIDS home-based care. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Poster Abstract no. 67.
7. Addisu C. Determinants of voluntary counseling and HIV testing among pregnant women in Adama Town. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDC004.
8. Adem EY. Assessment of the reproductive health behavior and need of street youth in Dessie Town, South Wollo Zone of Amhara Region. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
9. Aferu SY. HIV/AIDS knowledge and risk reduction behavior among Dejach Wondirad High School students: sex, age, and grade level performance. MA thesis, Department of Development Psychology, Addis Ababa University, 2007.
10. AIDS Resource Center, Johns Hopkins University, Etharc. Ethiopia, National ART Strategic Communication Framework. Addis Ababa: Federal HIV/AIDS Prevention and Control Program, 2005.
11. Ali AM. Youth reproductive health problems and service preferences: Lalibela Town, North Wello Administrative Zone. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
12. Ali HM. The impact of some pre-test counseling session factors on the chance of HIV/AIDS status: the case of OSSA Mobile VCT Center in urban Addis Ababa. MA thesis, Department of Statistics, Addis Ababa University, 2007.
13. Altaye DE. A study linking family planning services with VCT services from clients and providers perspectives in Dessie Town, northeastern Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
14. Amae I, Melkamu Y. The roles of traditional institutions in HIV prevention, RH promotion and fertility regulation: the case of Borana pastoralists, southern Ethiopia. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDC143.
15. Amberbir A, W/Michael K, Getachew S, Girma B, Deribe K. Adherence and quality of life in HIV-infected individuals receiving antiretroviral therapy in southwest Ethiopia. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October, 2007, Abstract no. 47.
16. Amberbir A, W/Michael K, Getachew S, Girma B, Deribe K. The influence of health beliefs on medication adherence among HIV-infected persons: a behavioral model perspective in southwest Ethiopia. 18th Annual Conference of the Ethiopian public Health Association, Addis Ababa, 19-21 October, 2007, Abstract no. 50.
17. Amera T. The role of voluntary youth in HIV/AIDS prevention, care and support in Addis Ababa. MOH thesis, Department of Community Health, Addis Ababa University, 2007.
18. Aragaw FM. The role of dentists in the crusade against HIV/AIDS in Ethiopia. Horn Africa Bull 2007;4:13-14.
19. Asefa M, Tessema F. Ethiopian National Health Survey Report. Jimma, Jimma University and World Health Organization, 2006.
20. Asfaw DS. A comparitive study of caring environment for institutionalized and non-institutionalized HIV/AIDS orphans and its impact on their psychosocial problems: the case of Awassa. MA thesis, Department of Developmental Psychology, Addis Ababa University, 2007.
21. Asfaw ZG. Knowledge, attitude and practice of voluntary HIV counseling and testing (VCT): a case study in Debre Berhan Teachers Training College. MA thesis, Department of Statistics, Addis Ababa University, 2007.
22. Assefa Y, Kloos H. The public health approach to ART service scale up in Ethiopia. Ethiop Med J 2007, in press.
23. Bekele Y. Women's reasons for not participating in prevention of mother to child transmission of HIV (PMTCT) follow up counseling and institutional

delivery before starting short course of antiretroviral prophylaxis in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
24. Belachew T, Jira C. Awareness about feeding options for infants born to HIV positive mothers and mother to child transmission of HIV Gurage Zone, south Ethiopia. Ethiop J Health Dev 2007;21:40.
25. Belay TW. Reasons for low uptake and the preferred modes of PMTCT services among urban and rural communities in Amhara Region. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
26. Berhane Y, Tsui A. Key messages of the Conference. Proceedings to the International Conference on Linking Reproductive Health, Family Planning and HIV/AIDS Programs in Africa. Ethiop J Health Dev 2007; 21:92-107.
27. Berhe ED. Assessment of the barriers of emergency contraception use among antenatal care clients of Addis Ababa health centers. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
28. Beshir IN. Assessment of acceptability of provider-initiated HIV counseling and testing among tuberculosis patients in Addis Ababa. Interventions. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
29. Bitew TY. Challenges to antiretroviral therapy adherence: a case study in three government health facilities of the Addis Ketema Sub-city, Addis Ababa. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
30. Bleiker R, Kay A. Representing HIV/AIDS in Africa: pluralist photography and local empowerment. Internat Stud Q 2007;51(1):139-163.
31. Bogale HB. Surveillance for HIV drug resistance among untreated HIV-1 infected patients requiring antiretroviral treatment in Addis Ababa, Ethiopia. MSc thesis, Department of Biology, Addis Ababa University, 2007.
32. Bradley H, Bedada A, Tsui A, Brahmbhatt H, Gillespie D, Kidanu A. HIV and family planning service integration and voluntary counseling and testing composition in Ethiopia. Paper presented at the Population Association of America 2007 Annual Meeting. New York, March 29-31, 2007. Available at: http://paa2007.princeton.edu/download.aspx?submissionId=71732.
33. Buchanan S, Ayele A, Tadesse S, Alemu J, Pose B. Improved community governance after building competence in different sectors can improve girls' and women's status and health: Case studies collected in CARE Ethiopia. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 151512.
34. Buchanan S, Tadesse S, Ahmed A, Ababus Y, Eshetu F, Pose B. Highly effective combination of behavior change communication (BCC) approaches to increase use of family planning (FP) and reduce risk and vulnerability to HIV – a Best Practice Model from CARE Ethiopia. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 152761.
35. Cambanis A, Ramsay A, Yassin MA, Cuevas LE. Duration and associated factors of patient delay during tuberculosis screening in rural Cameroon. Trop Med Internat Health 2007;12:1309-1314.
36. Dasa KD. Sexual and reproductive health needs and preferences of people living with HIV/AIDS in SNNRP. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
37. Demissie T. Assessment of trends in voluntary HIV test and sero-prevalence among randomly selected pregnant mothers who have attended care services in government health centers in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007
38. Dessie MM. Assessment of VCT utilization and willingness to accept provider-initiated HIV counseling and testing among tuberculosis patients in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
39. Desta GA. The situation of perceived parent sexual communication and its relationship with adolescent sexual behavior. MA thesis, Department of Developmental Psychology, Addis Ababa University, 2007.
40. Desta HG. Assessment of opportunities and challenges of networking among organizations working on HIV/AIDS care and support services: the case study of Arada Sub-City in Addis Ababa. MA thesis, Department of Social Work, Addis Ababa University, 2007.
41. Dilnessa E. Assessment of couples voluntary counseling and testing service utilization at Addis Ababa government hospital VCT sites. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
42. Duguma BB. Behavioral change responses to HIV/AIDS messages in some selected private college students of AA. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
43. Dula TG. Role of spousal communication and women's status on contraceptive use in SNNPR. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
44. Editorial. Patriarch and U.S. Ambassador discusses modern versus traditional methods in treating HIV/AIDS. Addis Ababa, ETHARC 2007.
45. Endalamaw LA. Assessment of family planning method mix and effects of contraceptive shortage.

MPH thesis, Department of Community Health, Addis Ababa University, 2007.
46. Enis AY. Factors affecting reproductive health: assessment of determinants of HIV VCT in Gondar Town. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
47. Eshete F. **A**ssessment of actors influencing willingness of voluntary HIV counseling and testing among members of Central Command Military in Tigray Regional State, northwest Ethiopia. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Poster Abstract no. 75.
48. Faris MY. Exploring the role of community organizations especially idirs in mitigating the spread of HIV/AIDS in Adama Town. MA thesis, Department of Social Work, Addis Ababa University, 2007.
49. Federal Democratic Republic of Ethiopia. Report on progress towards implementation of the Declaration and Commitment on HIV/AIDS: reporting period: January 2003-December 2005. Addis Ababa: HAPCO, 2006.
50. Federal Ministry of Health. Prevention of Mother to Child Transmission of HIV. Addis Ababa: Disease Prevention and Control Department, 2007.
51. Gebeyehu GT. The role of EOTC in preventing and controlling the spread of HIV and AIDS through care and support provision: the case of Adama. Institute of Regional and Local Development Studies, Addis Ababa University, 2007.
52. Gebre Egziabher SB. Assessment of voluntary HIV counseling and testing (VCT) service utilization among 15-49 year old group in Mersa Town of Habru District, North Wollo Zone, Amhara Region, Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
53. Gelaye ST. Total demand for family planning and its correlates in Benishangul Gumuz Region. Institute of Development Research, Addis Ababa University, 2007.
54. Getahun FA. Determinants of outcome of counseling HIV-positive people in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
55. Gidey YT. Assessment of the major problems to undertake voluntary counseling and testing among Mekele University students. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
56. Gilks CF, Crowley S, Ekpini R, et al. The WHO public-health approach to antiretroviral treatment against HIV in resource-limited settings. Lancet 2006;368(9534):505-510.
57. Gisselquist D, Poterat JJ, Salerno L. Injured and insulted: women in Africa suffer from incomplete messages about HIV/AIDS risks. Horn Africa J AIDS 2007;4:15-18.
58. Hadera HG, Boer H, Kuiper WAJM. Using the theory of planned behaviour to understand the motivation to learn about HIV/AIDS prevention among adolescents in Tigray, Ethiopia. AIDS Care 2007;19(7):895-900.
59. Haile Mariam D, Tekola F, Ali A, et al. Ethiopia National Health Facility Survey 2005. Addis Ababa: Federal Ministry of Health and Addis Ababa University, January 2007.
60. Haile Mariam HB. HIV counselors' understanding of the development of their adult clients: the case of VCT counselors in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
61. Hailu MW. To assess the magnitude of VCT utilization for HIV/AIDS among government employees and identify factors and barriers that affect VCT utilization in Butajira, SNNPR. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
62. Hanmid AS. The knowledge, attitude and expected role of Muslim students towards HIV/AIDS: the case of four general secondary schools and one informal education center in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
63. Husman MH. Knowledge, attitude and practice of voluntary HIV counseling and testing (VCT) among people with hearing disabilities: a case of Soddo Town High school adolescents, Woleita Zone, SNNPR. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
64. Hussein MM. Women's role in family planning decision making: the case of one woreda in Jimma Town. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
65. Hussen JJ. The nature, impact and problems of counseling services provided to sexually abused children: a case of some selected organizations in Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
66. IRIN. Ethiopia: Church endorses 'holy water' and ARVs as people flock to miracle mountain. Plus News, United Nations Office for the Coordination of Humanitarian Affairs, 25 May, 2007.
67. Jerene D, Endale A, Lindtjorn B. Acceptability of HIV counseling and testing among tuberculosis patients in south Ethiopia. BMC Internat Health Human Rights 2007;**7** doi:10.1186/1472-698X-7-4.
68. Jerene Dare D. HIV antiretroviral therapy in Ethiopia: overcoming implementation challenges. PhD dissertation, Center for International health, University of Bergen, Bergen, Norway, 2007.
69. Kassa SC. The role and challenges of community participation on HIV/AIDS prevention, care and support activities in Dangla Town. MA thesis, Department of Social Anthropology, Addis Ababa University, 2007.

70. Kassa TT. Clients' perception toward voluntary counseling and testing services: the case of Addis Ababa. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
71. Kebede Y. Quality of family planning service in Dembia District, North West Ethiopia. Ethiop Med J 2007;45(1):29-38.
72. Kejela AT. Assessment of male partner influence towards voluntary HIV testing, care and support on PMTCT. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
73. Kloos H, Yibeltal A, Adugna A, Mulatu MS, Mariam DH. Utilization of antiretroviral treatment in Ethiopia between February and December 2006: spatial, temporal, and demographic patterns. Internat J Health Geogr 2007;25 doi:10.1186/1476-072X-6-45.
74. Lamu FT. General practitioners' beliefs of providing HIV risk assessment and prevention counseling. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
75. Macro International. Trends in Demographic and Reproductive Health Indicators in Ethiopia: Further Analysis of the 2000 and 2005 Demographic and Health Surveys Data. Calverton, Maryland, 2007.
76. Mammo KC. Role of civil society organizations in nurturing the social psychological makeup of AIDS orphans: the case of 22 selected CSOs in Asella, Adama and Awassa towns. MA thesis, Department of Social Psychology, Addis Ababa University, 2007.
77. Mamo E. Assessment of knowledge, attitude and practice with regard to AIDS hotline service among preparatory school students in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
78. Markos E. Adherence to antiretroviral therapy in people living with HIV at Yirgalem Hospital, SNNPR, Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
79. Maru M, Ali A. Up take HIV testing and willingness for provider-initiated counseling and testing among tuberculosis patients in Addis Ababa. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, October 9-11, 2007, Abstract no. 16.
80. Mebratu B, Asfawesen G, Selamawit E, et al. Two year accomplishments of an HIV/AIDS treatment, care, and support program for 10,000 in the Democratic Republic of Ethiopia. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDB278
81. Mekuria LA. Assessment of factors favouring willingness to HIV counseling and testing among patients presenting with the conventional transmitted infections (STI) in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
82. Mengesha AB. Assessment of effectiveness of the different IEC interventions in improving awareness and reducing stigma related to HIV/AIDS among high school adolescents in Awassa, southern Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007
83. Mengesha MT. Assessment of the level of adherence to highly active antiretroviral therapy among HIV/AIDS patients at Adama Hospital, East Shoa Zone, central Ethiopia. MSc thesis, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, 2007.
84. Mengist MD. Knowledge and attitude towards HIV/VCT among the military personnel: the case of cadets at MG Haytom Military Academy. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
85. Mengistu AT. Assessment of the prevalence of adverse reaction among HIV-infected adults on antiretroviral therapy and factors associated with it at Zewditu Memorial Hospital. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
86. Merid L. A regional perspective towards managing HIV/AIDS in Northeast Africa. J Health Popul Dev Countries 2003, 30 December. Availability at http://www.popline.org/docs/1594/190195.htm
87. Mesfin HD. A study of family planning communication in rural parts of Ethiopia: a case study of Basona Woreda and implications it has on creating awareness about HIV/AIDS. Department of Journalism and Communication, Addis Ababa University, 2007.
88. Mesgena AS. Fertility decision and need for family planning among people on antiretroviral treatment and follow up care in Adama Town. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
89. Meshesha AT. Determinants of non-adherence to ARV treatment in Shashemene General Hospital: a multivariate approach. MA thesis, Department of Statistics, Addis Ababa University, 2007.
90. Ministry of Agriculture and Rural Development, FAO. Nutritional care and support for people living with HIV/AIDS: a training course for use in Ethiopia. Participants guide. Addis Ababa: Ministry of Agriculture and Rural Development and Food and Agriculture Organization, no date given.
91. Ministry of Health. Phase 1 review and Phase 2 planning document. Addis Ababa: Federal HIV/AIDS Prevention and Control Office (HAPCO), 2007.
92. Ministry of Health. MAC-E Phase III monthly status report: Meskerem 1-Hidar 30, 2000 E.C. (September 11-November 11, 2007). Addis Ababa: Federal

HIV/AIDS Prevention and Control Office (HAPCO), 2007.
93. Ministry of Health. Multisectoral Plan of Action for Universal Access to HIV Prevention, Treatment, Care and Support in Ethiopia. Addis Ababa: HIV/AIDS Prevention and Control Office (HAPCO), 2007.
94. Ministry of Health. Guidelines for Paediatric HIV/AIDS Care and Treatment in Ethiopia. Addis Ababa: Federal HIV/AIDS Prevention and Control Office, Ministry of Health (FHAPCO), 2007.
95. Ministry of Health. Guidelines for Management of Opportunistic Infections and Anti Retroviral Treatment in Adolescents and Adults in Ethiopia. Addis Ababa: Federal HIV/AIDS Prevention and Control Office (FHAPCO), 2007.
96. Ministry of Health. Guidelines for HIV Counseling and Testing in Ethiopia. Addis Ababa: Federal HIV/AIDS Prevention and Control Office (FHAPCO), 2007.
97. Ministry of Health. Millennium AIDS Campaign Ethiopia (MAC-E). Addis Ababa: Federal HIV/AIDS Prevention and Control Office (FHAPCO), 2007.
98. Ministry of Health. Monthly HIV Care and ART Update: Update for the end of Meskerem 30, 2000 (October 10, 2007). Addis Ababa: Federal HIV/AIDS Prevention and Control Office (FHAPCO), 2007.
99. Ministry of Health. Guidelines for Implementation of the Antiretroviral Therapy Programme in Ethiopia. Addis Ababa: Federal HIV/AIDS Prevention and Control Office (FHAPCO), 2007.
100. Mohammed NI. Factors that affect the chance of survival/death (survival status) among HIV positive people under the antiretroviral treatment program: the case of Addis Ababa. MA thesis, Department of Statistics, Addis Ababa University, 2007.
101. Molla M, Ãstrom A, Berhane Y. Applicability of the theory of planned behavior to intended and self-reported condom use in a rural Ethiopian population. AIDS Care 2007;19(3):425-431.
102. Molla M, Berhane Y, Emmelin M, Lindtjørn B. Young adults in rural Ethiopia do not seek health services for STIs: practices and perceptions of young people and perspectives of health professionals in Butajira. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDC017
103. Monnickendam M, Monnickendam SM, Katz C, Katan J. Health care for the poor--An exploration of primary-care physicians' perceptions of poor patients and of their helping behaviors. Social Sci Med 2007;64(7):1463-1474.
104. Motuma TK. Does distributing pamphlets make a difference in knowledge and attitudes towards VCT among high school students? MPH thesis, Department of Community Health, Addis Ababa University, 2007.
105. Mulu HS. Assessment level of adherence to highly active antiretroviral treatment in people living with HIV/AIDS, Mekele area, Tigray Region, North Ethiopia. MSc thesis, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, 2007.
106. Muluneh D, Shimelis D, Benti D. Analysis of admissions to the pediatric emergency ward of Tikur Anbessa Hospital in Addis Ababa, Ethiopia. Ethiop J Health Dev 2007;21(1):48-52.
107. Nane S, Tefera K, Kassa M, Teshome W. Client satisfaction in Awassa Referral Hospital Chronic Care Clinic. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Poster Abstract no. 40.
108. National Network of Positive Women Ethiopians (NNPWE). Strategic Plan (2007-2009): Working for Positive Change. Addis Ababa, 2007.
109. Østebø MT. Respected women: a study and its implications for women's sexual rights among the Arsi Oromo of Ethiopia. HIV Research Net Conference, Center for International Health, University of Bergen, Scandic Bergen City, October 11-12, 2007.
110. Poku NK, Sandkjaer B. Meeting the challenges to scaling up HIV/AIDS treatment in Africa. Dev in Practice 2007;17(2):279-290.
111. Pose B, Abdullah MA, Buchanan S, Tadesse S, Ahmed A. Rethinking the role of Traditional Birth Attendants (TBAs) in rural communities – outcomes from a study in Ethiopia. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 152751.
112. Pose B, Ayele A, Buchanan S, Kidanewold A. Strategic Impact Inquiry to Evaluate Empowerment of Women in relation to FGC (Female Genital Cutting) in Afar/Ethiopia. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 153620.
113. Reta ATB. Assessment of factors influencing willingness and utilization of VCT among pregnant women in Dessie Town. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
114. Rosen S, Feeley F, Connelly P, Simon J. The private sector and HIV/AIDS in Africa: taking stock of 6 years of applied research. AIDS 2007;21 (Suppl):S41-S51.
115. Sahilu TA. The role of voluntary youth in HIV/AIDS prevention, care and support in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
116. Seifu A. Impact of household and nutrition security on adherence to antiretroviral therapy and treatment outcomes among PLWHA in Dire Dawa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.

117. Seid EM. Prevalence and determinants of acceptance of HIV testing among pregnant mothers at antenatal care settings of selected health centers in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
118. Semu YA. Assessment of utilization and determinants of voluntary counseling and testing for HIV in the armed forces of Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
119. Shah NM, Wang W, Bishai DM. Creation of family planning service quality score using factor analysis. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract #161161.
120. Shargie EB, Lindtjørn B. Determinants of treatment adherence among smear-positive pulmonary tuberculosis patients in southern Ethiopia PLoS Med 2007;4(2). e37 doi:10.1371/journal.pmed.0040037.
121. Shetty P. Bogaletch Gebre: Ending female genital mutilation in Ethiopia. Lancet 2007;369(9579)**:**2071.
122. Shiferaw GB. Related factors to VCT practice in Ethiopia. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract #CDB085.
123. Smith RA, Downs E, Witte K. Drama theory and entertainment education: Exploring the effects of a radio drama on behavioral intentions to limit HIV transmission in Ethiopia. Communic Monogr 2007;74(2):133-153.
124. Sumoro AS. An assessment of knowledge and perceived barriers to undergo voluntary HIV counseling and testing. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
125. Tamire W, Enqueselassie F. Knowledge, attitude, and practice on emergency contraceptives among female university students in Addis Ababa, Ethiopia. Ethiop J Health Dev 2007;21(2):111-116.
126. Tarekegn SM. Assessment of the contraceptive needs and practices of women in the extended postpartum period in Bahir Dar, Ethiopia. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
127. Teferra N. A comprehensive plan for entertainment education in Ethiopia. 35th Annual International Conference on Global Health 2007, Los Angeles, CA: Abstract no. D5.
128. Tegegne AD. Emergency contraceptive: knowledge, attitude and practices among Bahir Dar University female students. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
129. Tekle Mariam MTG. Psychosocial problems encountered by ARV drug users: the case of Debreberhan Zonal Hospital, Amhara Region. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
130. Teklemichael TH. Assessment of attitudes and practices of community-based reproductive health agents towards sexual and reproductive health service provision to unmarried young people in North Wollo Zone, Amhara Region Addis Ababa University, 2007.
131. Teller CH, Hijazi M. Assessing linkages of global health programs with poverty, equity and vulnerability: Policy implications for improving health's contribution to development programs. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 163477.
132. Temesigen BD. An assessment of factors limiting access to and effective utilization of HIV/AIDS related information by female domestic laborers: the case of Bahir Dar Town, northwestern Ethiopia. MA thesis, Institute of Regional and Local Development Studies, Addis Ababa University, 2007.
133. Tesema YB. Gender mainstreaming in HIV counseling and testing interventions in Addis Ababa: assessing the technical and structural elements. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
134. Tesfaye H. Adherence to TB treatment in Ethiopia: why do patients default? *PLoS Med* 2007;4(4): e165 doi:10.137/journal.pubmed.0040165. Available at: http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371%2Fjournal.pmed.0040165&ct=1).
135. Teshome AT. Involving the other gender: men's insights into reproductive health and rights in Woliso Town. MA thesis, Institute of Gender Studies, Addis Ababa University, 2007.
136. Teshome ET. Responses to commercial sexual exploitation of children: the case of Children Aid Ethiopia and Forum on Street Children Ethiopia in Addis Ababa Ketema Sub-city: Addis Ababa University Press, 2007.
137. Tigabu AT. Assessment of counseling and post-test services rendered by Mekdim Ethiopia National Association towards promoting possible living. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
138. Tsadik DA. Gender responsiveness of HIV/AIDS awareness education program in Addis Ababa: the case of Arada Sub-City Administration. MA thesis, Department of Curriculum and Instruction, Addis Ababa University, 2007.
139. Vitiello M, Winters D, Daoust P. Basic HIV/ARV training course for Ethiopian nurses. Participant handbook. Seattle, Washington: University of Washington, International Training and Education Center on HIV [I-TECH], 2004: 285 pp.

140. Waldman K, Was A, Cress S, O'Brien M. Incorporation of model-based quantitative estimation techniques into government policy making for HIV care and treatment. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 161168.
141. Walelu MD. An assessment of VCT services and counseling applications in selected VCT centers of Dire Dawa Town. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
142. Warga MA. Antiretroviral treatment adherence and its determinants among people living with HIV/AIDS on highly active antiretroviral therapy at two hospitals of Oromiya Regional State, Ethiopia, 2006. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
143. Warren H, Bruce D, Armstrong D, Alemayehu T, Phillips S. Integrated ART adherence support and community based care; outcomes in Addis Ababa, Ethiopia. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDB34.
144. Warren H, Bruce D, Armstrong D, Alemayehu T, Phillips S. The effect of ARV treatment, counseling and adherence support on CD4 counts in an HIV(+) pediatric population. 4th IAS Conference on Pathogenesis, Treatment and Prevention 2007, Sydney, Australia: Abstract no. CDB343.
145. WHO. The Global MDR-TB & XDR-TB Response Plan 2007-2008. Geneva: World Health Organization, 2007.
146. WHO. Task shifting to tackle health worker shortages. Geneva: World Health Organization, 2007.
147. Wilson DP, Blower S. How far will we need to go to reach HIV-infected people in rural South Africa? BMC Med 2007; **5**:16 doi:10.1186/1741-7015-16.
148. Woldemichael DM. Preferences for sex and number of children and contraceptive use in rural Ethiopia. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
149. Wolde Yohannes YM. Assessment of the contribution of peer counseling among youth for HIV infection risk reduction. MA thesis, Department of Counseling Psychology, Addis Ababa University, 2007.
150. Woldeyohannes EB. Anti-retroviral treatment: its social and religious challenges: the experiences of 32 members from two associations-Tesfa Setechign Mariam and Mekdim Ethiopia. MA thesis, Department of Social Work, Addis Ababa University, 2007.
151. Wondimu T, W/Michael K, Kassahun W, Getachew S. Delay in initiating tuberculosis treatment and factors associated among pulmonary tuberculosis patients in East Wollega, western Ethiopia. Ethiop J Health Dev 2007;21(2):148-156.
152. Workneh AG. An exploratory study of health-seeking behavior and its implication for adherence: the case of antiretroviral therapy users in Zewditu Hospital. MA thesis, Department of Social Work, Addis Ababa University, 2007.
153. Worku G, Enquselassie F. Factors determining acceptance of voluntary HIV counseling and testing among pregnant women attending antenatal clinic at army hospitals in Addis Ababa. Ethiop Med J 2007;45(1):1-8.
154. Yimer AM. Factors that affect pregnant women's decision to utilize HIV counseling and testing for PMTCT: the case of antenatal care attendees at a government health center in Addis Ababa. MA thesis, Department of Social Work, Addis Ababa University, 2007.
155. Yitbarek BT. Fertility preferences and contraceptive practices among women currently married in Jimma Raaree Woreda. MA thesis, Institute of Development Research, Addis Ababa University, 2007.
156. Zeleke HT. Treatment seeking behavior of patients for Herpes zoster among HIV/AIDS patients at the Anti Retroviral Therapy Clinic of Tikur Anbessa Hospital. MSc thesis, Aklilu Lemma Institute of Pathobiology, Addis Ababa University, 2007.
157. Zemichael ZF. Assessment of needs for antiretroviral therapy (ART) among consumers in Addis Ababa: the case of 20 ART consumers in ALERT Hospital. MA thesis, Department of Social Work, Addis Ababa University, 2007.
158. Zewdu EM. An investigation of audiences' interpretation of radio and television messages promoting antiretroviral therapy (ART). MA thesis, Department of Journalism and Communication, Addis Ababa University, 2007.

Section 7. **Monitoring and Evaluation Research**

This section covers studies that focus on HIV/AIDS related program or intervention monitoring and evaluation activities.

1. Ambaw F, Zewdie T. Determinants of outcome of counseling HIV positive people in Addis Ababa. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October, 2007, Poster Abstract no. 93.
2. Asefa W, Araya T, Davey G, Reniers G, Sanders EJ, Berhane Y. Validation of lay diagnosis to determine TB/AIDS related adult mortality in Addis Ababa, Ethiopia. 18th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Abstract no. 59.
3. Asfaw ZT. How friendly are the reproduction health services at model youth health centers in Addis Ababa?. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
4. Assefa MT. An assessment of antiretroviral (ART) monitoring system in Addis Ababa. MA thesis,

Department of Regional and Local Development Studies, Addis Ababa University, 2007.
5. Berhane Y. Public health optimism in the New Millennium. Ethiop J Health Dev 2007;21(2):109-110.
6. Bolu O, Anand A, Swartzendruber A, et al. Utility of antenatal HIV surveillance data to evaluate prevention of mother-to-child HIV transmission programs in resource-poor settings. Am J Obstet Gynecol 2007;197(3 Suppl):S17-S25.
7. Creanga AA, Bradley HM, Kidanu A, Melkamu Y, Tsui A. Does the delivery of integrated family planning and HIV/AIDS services influence community-based workers' clients loads in Ethiopia? Health Policy Plan 2007;22(6):404-414.
8. De SR, Mwase T, Boulenger SM, Dmytraczenko T. Moving beyond donor disbursement as a measure of investment in health; the need to track expenditures. 135th Annual Convention of the American Public Health Association, Washington, DC, 2007, Abstract 161828.
9. Dereje MW. Validity study of integrated management of adult and adolescent illnesses of HIV/AIDS in Addis Ababa. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
10. Denboba W, Davey G, Melaku K, Berhane Y, Britton J. Determinants of outcome of counseling HIV-positive people in Addis Ababa. 19th Annual Conference of the Ethiopian Public Health Association, Addis Ababa, 19-21 October 2007, Poster Abstract no. 20.
11. Dionisio D, Gass R, McDermott P, et al. What strategies to boost production of affordable fixed-dose anti-retroviral drug combinations for children in the developing world? Curr HIV Res 2007;5(2):155-87.
12. Dmytraczenko T, De SR, Boulenger SM, Mwase T. Maternal and child health MDGs: The neglected priorities? 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 163333.
13. El-Sadr W, Elul B, Hawken M, et al. Variability in populations enrolled and their outcomes in HIV care and treatment programs across countries in sub-Saharan Africa. 14th Conference on Retroviruses and Opportunistic Infections 2007, Los Angeles, CA, Abstract no. 534.
14. Family Health International. Service delivery models for HIV counseling and testing. Family Health International, 2007.
15. Hilawe EH. Development of a scale for measuring attitudes of health professionals towards people living with HIV/AIDS. MPH thesis, Department of Community Health, Addis Ababa University, 2007.
16. Hotchkiss DR, Banteyerga H, Kidanu A, Stillman K. Effects of scaling up antiretroviral treatment on health care systems: Evidence from Ethiopia. 135th Annual Convention of the American Public Health Association. Washington, DC, 2007, Abstract no. 155580.
17. Johnson A. HIV/AIDS treatment adherence monitoring and promotion policies and practices in East Africa. 135th Annual Convention of the American Public Health Association 2007, Washington, DC: Abstract no. 160378.
18. Nyblade L. Measuring HIV stigma: existing knowledge and gaps. Psychol, Health Med 2006;11(3):335-345.
19. Tadele G. Existing situation and best practices in the area of Information Management related to children living in vulnerable circumstances in Ethiopia. Addis Ababa, Italian Cooperation Program in Support of Children and Adolescents Living in Vulnerable Circumstances, in collaboration with the Ethiopian Ministry of Women's Affairs, 2006.
20. Tadesse MA. HIV testing from an African human rights system perspective: an analysis of the legal and policy framework of Botswana, Ethiopia and Uganda. LLM dissertation, Faculty of Law, University of Pretoria, South Africa, 2007.

Section 8. HIV/AIDS Research on Ethiopians in the Diaspora

This section covers HIV/AIDS among Ethiopians and foreign residents of Ethiopian origin living outside of Ethiopia. It includes studies in all the above six major sections.

1. Cohen M, Arad S, Lorber M, Pollack S. Psychological distress, life stressors, and social support in new immigrants with HIV. Behav Med 2007;33(2):45-54.
2. Laskofski L, Giorgis T, Strack R, Anderson D. A conceptual model for engaging the professional Diaspora in Ethiopia's fights against HIV/AIDS. APHA 134th Annual Meeting and Exposition. Boston, MA, 2006, Poster Abstract no. 10.
3. Loemba H, Brenner B, Spira B, Ma'ayan S, Petrella M, Wainberg MA. Patterns of drug resistance in HIV-1 subtype originating from Ethiopia. Report available at: http://www.cahr-acrv.ca/english/resources/abstracts/abs/ abs136P.htm
4. Lubart E, Lidgi M, Leibovitz A, Rabinovitz C, Segal R. Mortality of patients hospitalized for active tuberculosis in Israel. Isr Med Assoc J 2007;9(12):870-3.
5. PlusNews.Global: Uncounted and unheard-HIVB-positive immigrants in the US. PlusNews, UN Office for the Coordination of Humanitarian Affairs, 2007.

Section 9. Selected Websites Featuring HIV/AIDS in Ethiopia

1. Addis Ababa HAPCO Website: http://www/aahapco/org/
2. AIDS Portal: http://www.aidsportal.org/overlay_details.

aspx?nex=20&gclid=CO6um6LqzJECFSF41godlzvs2g
3. Center for International Health of the University of Bergen, Norway (also access to the Ethiopian Journal of Health Development): http://www.cih.uib.no/journals/EJHD
4. Christian Relief and Development Association, Ethiopia: www/crdaethiopia.org
5. Ethiopian AIDS Resource Center: http://www/etharc/org
6. Family Health international: http://www.fhi.org/en/CountrProfiles/Ethiopia+main+page.htm
7. HIV In Site at the University of California San Francisco's Center for HIV information: http://hivinsite.ucsf.edu/global?page=cr09-35-00
8. Johans Hopkins University Center for Clinical Global Health Education: http://ccghe/jhmi/edu/CCG/ country/ethiop/
9. Network of Ethiopian Professionals in the Diaspora (NEPID): www.nepid.org/vacancies.htm
10. People to people Organization: http://peopletopeople.org/; its Horn of Africa Journal of AIDS is available at: http:// peopletopeople.org/index.php?P=47
11. Save the Children: http://www.savethechildren.net/ethiopia/key_issues/abuse.html
12. The International Training and Education Center on HIV (I-TECH): htt://www.go2itech.org/itech?page+co-03-00
13. United Nations Children's Fund (UNICEF): http://www.unicef.org/ethiopia/hiv_aids_464.html
14. United Nation Development Programme (UNDP): http://www.et.undp.org/hiv.htm
15. United Nation Educational Scientific and cultural Organization (UNESCO): http://hivaidsclearinghouse.unesco.org/ev_en.php?ID=2829+201&ID2=DO_TOPIC
16. United Nation Joint Program on AIDS (UNAIDS): htpp://www.unaids.org/en/Regions_Countries/Countries/ethiopia/asp
17. United Nations Centers for Disease Control and Prevention (CDC): http://www/cdc/gov/nchstp/odgap/countries/ethiopia/htm
18. WHO E-Library: http://www/who/int/hiv/topics/vct/elibrary/en/index.html