Intervening in global markets to improve access to HIV/AIDS treatment: an analysis of international policies and the dynamics of global antiretroviral medicines markets.

Waning B, Kyle M, Diedrichsen E, Soucy L, Hochstadt J, Barnighausen T, Moon S.

Abstract

ABSTRACT: BACKGROUND: Universal access to antiretroviral therapy (ART) in low- and middle-income countries faces numerous challenges: increasing numbers of people needing ART, new guidelines recommending more expensive antiretroviral (ARV) medicines, limited financing, and few fixed-dose combination (FDC) products. Global initiatives aim to promote efficient global ARV markets, yet little is known about market dynamics and the impact of global policy interventions. METHODS: We utilize several data sources, including 12,958 donor-funded, adult first-line ARV purchase transactions, to describe the market from 2002-2008. We examine relationships between market trends and: World Health Organization (WHO) HIV/AIDS treatment guidelines; WHO Prequalification Programme (WHO Prequal) and United States (US) Food and Drug Administration (FDA) approvals; and procurement policies of the Global Fund to Fight AIDS, Tuberculosis, and Malaria (GFATM), US President's Emergency Plan for AIDS Relief (PEPFAR) and UNITAID. RESULTS: WHO recommended 7, 4, 24, and 6 first-line regimens in 2002, 2003, 2006 and 2009 guidelines, respectively. 2009 guidelines replaced a stavudine-based regimen ($88/person/year) with more expensive zidovudine- ($154-260/person/year) or tenofovir-based ($244-2465/person/year) regimens. Purchase volumes for ARVs newly-recommended in 2006 (emtricitabine, tenofovir) increased >15-fold from 2006 to 2008. Twenty-four generic FDCs were quality-approved for older regimens but only four for newer regimens. Generic FDCs were available to GFATM recipients in 2004 but to PEPFAR recipients only after FDA approval in 2006. Price trends for single-component generic medicines mirrored generic FDC prices. Two large-scale purchasers, PEPFAR and UNITAID, together accounted for 53%, 84%, and 77% of market volume for abacavir, emtricitabine, and tenofovir, respectively, in 2008. PEPFAR and UNITAID purchases were often split across two manufacturers. CONCLUSIONS: Global initiatives facilitated the creation of fairly efficient markets for older ARVs, but markets for newer ARVs are less competitive and slower to evolve. WHO guidelines shape demand, and their complexity may help or hinder achievement of economies of scale in pharmaceutical manufacturing. Certification programs assure ARV quality but can delay uptake of new formulations. Large-scale procurement policies may decrease the numbers of buyers and sellers, rendering the market less competitive in the longer-term. Global policies must be developed with consideration for their short- and long-term impact on market dynamics.

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**Early treatment outcomes and HIV status of patients with extensively drug-resistant tuberculosis in South Africa: a retrospective cohort study.**


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Comment in:


**Abstract**

BACKGROUND: Data from Kwazulu Natal, South Africa, suggest that almost all patients with extensively drug-resistant (XDR) tuberculosis are HIV-positive, with a fatal outcome. Since, there are few data for the treatment-related outcomes of XDR tuberculosis in settings with a high HIV prevalence, we investigated the associations of these diseases in such settings to formulate recommendations for control programmes. METHODS: In a retrospective cohort study, we analysed the case records of patients (>16 years old) with XDR tuberculosis (culture-proven at diagnosis) between August, 2002, and February, 2008, at four designated provincial treatment facilities in South Africa. We used Cox proportional hazards regression models to assess risk factors associated with the outcomes-mortality and culture conversion. FINDINGS: 195 of 227 patients were analysed. 21 died before initiation of any treatment, and 174 patients (82 with HIV infection) were treated. 62 (36%) of these patients died during follow-up. The number of deaths was not significantly different in patients with or without HIV infection: 34 (41%) of 82 versus 28 (30%) of 92 (p=0.13). Treatment with moxifloxacin (hazard ratio 0.11, 95% CI 0.01-0.82; p=0.03), previous culture-proven multidrug-resistant tuberculosis (5.21, 1.93-14.1; p=0.001), and number of drugs used in a regimen (0.59, 0.45-0.78, p<0.0001) were independent predictors of death. Fewer deaths occurred in patients with HIV infection given highly active antiretroviral therapy than in those who were not (0.38, 0.18-0.80; p=0.01). 33 (19%) of 174 patients showed culture conversion, of which 23 (70%)
converted within 6 months of initiation of treatment. INTERPRETATION: In South Africa, patients with XDR tuberculosis, a substantial proportion of whom are not infected with HIV, have poor management outcomes. Nevertheless, survival in patients with HIV infection is better than previously reported. The priorities for the country are still prevention of XDR tuberculosis, and early detection and management of multidrug-resistant and XDR tuberculosis through strengthened programmes and laboratory capacity. FUNDING: South African Medical Research Council, European Union Framework 7 program, and European Developing Countries Clinical Trials Partnership. Copyright 2010 Elsevier Ltd. All rights reserved.


Implementation of co-trimoxazole prophylaxis and isoniazid preventive therapy for people living with HIV.

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Abstract

OBJECTIVE: To measure progress in implementing co-trimoxazole prophylaxis (CTXp) (trimethoprim plus sulfamethoxazole) and isoniazid preventive therapy (IPT) policy recommendations, identify barriers to the development of national policies and pinpoint challenges to implementation. METHODS: In 2007 we conducted by e-mail a cross-sectional survey of World Health Organization (WHO) HIV/AIDS programme officers in 69 selected countries having a high burden of infection with HIV or HIV-associated tuberculosis (TB). The specially-designed, self-administered questionnaire contained items covering national policies for CTXp and IPT in people living with HIV, current level of implementation and barriers to developing or implementing these policies. FINDINGS: The 41 (59%) respondent countries, representing all WHO regions, comprised 85% of the global burden of HIV-associated TB and 82% of the global burden of HIV infection. Thirty-eight countries (93%) had an established national policy for CTXp, but only 66% of them (25/38) had achieved nationwide implementation. For IPT, 21 of 41 countries (51%) had a national policy but only 28% of them (6/21) had achieved nationwide implementation. Despite significant progress in the development of CTXp policy, the limited availability of co-trimoxazole for this indication and inadequate systems to manage drug supply impeded nationwide implementation. Inadequate intensified tuberculosis case-finding and concerns regarding isoniazid resistance were challenges to the development and implementation of national IPT policies. CONCLUSION: Despite progress in implementing WHO-recommended CTXp and IPT policies, these interventions remain underused. Urgent steps are required to facilitate the development and implementation of these policies.

Supplemental Content

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Tuberculosis outcomes and drug susceptibility in individuals exposed to isoniazid preventive therapy in a high HIV prevalence setting.

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Abstract

OBJECTIVE: Despite World Health Organization recommendations, concerns about promoting resistance have impeded implementation of isoniazid preventive therapy (IPT) for tuberculosis (TB). We describe characteristics of TB in individuals previously exposed to IPT as part of 'Thibela TB', a cluster-randomized trial of community-wide IPT in gold miners in South Africa. DESIGN: Case series including participants who were dispensed IPT, attended at least one follow-up visit and were subsequently treated for TB. METHODS: TB episodes were detected through surveillance and through follow-up if IPT was stopped early. Drug susceptibility data were compared with TB episodes detected through surveillance in control clusters (where IPT use was minimal) and a laboratory substudy of mycobacterial sputum culture from TB suspects in control clusters. RESULTS: Among 126 eligible individuals (125 men, median age 43 years), median time from starting IPT to TB treatment was 316 days (interquartile range 174-491). Ninety-four of the 126 (75%) were first episodes. Eighty-nine of 103 (86%) tested HIV-infected, with the median CD4 cell count of 196 cells/microl (n = 51). Sixty-four of 108 (59%) with known treatment outcomes were cured or completed treatment. Among 71 isolates with drug susceptibility results available, 12.1% [95% confidence interval (CI) 5.0-23.3] and 7.7% (95% CI 0.2-36.0) from first and retreatment episodes, respectively, had isoniazid resistance, compared with 6.0% (95% CI 3.1-10.2) and 18.7% (95% CI 10.6-29.3) in control clusters and 11.8% (95% CI 8.2-16.3) among first TB episodes in the laboratory substudy. CONCLUSION: TB after recent IPT has prevalence of drug resistance similar to background and treatment outcomes typical of this setting. These data support wider implementation of IPT.

Inaccurate diagnosis of HIV-1 group M and O is a key challenge for ongoing universal access to antiretroviral treatment and HIV prevention in Cameroon.

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Abstract

BACKGROUND: Increased access to HIV testing is essential in working towards universal access to HIV prevention and treatment in resource-limited countries. We here evaluated currently used HIV diagnostic tests and algorithms in Cameroon for their ability to correctly identify HIV infections. METHODS: We estimated sensitivity, specificity, and positive and negative predictive values of 5 rapid/simple tests, of which 3 were used by the national program, and 2 fourth generation ELISAs. The reference panel included 500 locally collected samples; 187 HIV-1 M, 10 HIV-1 O, 259 HIV negative and 44 HIV indeterminate plasmas. RESULTS: None of the 5 rapid assays and only 1 ELISA reached the current WHO/UNAIDS recommendations on performance of HIV tests of at least 99% sensitivity and 98% specificity. Overall, sensitivities ranged between 94.1% and 100%, while specificities were 88.0% to 98.8%. The combination of all assays generated up to 9% of samples with indeterminate HIV status, because they reacted discordantly with at least one of the different tests. Including HIV indeterminate samples in test efficiency calculations significantly decreased specificities to a range from 77.9% to 98.0%. Finally, two rapid assays failed to detect all HIV-1 group O variants tested, with one rapid test detecting only 2 out of 10 group O specimens. CONCLUSION: In the era of ART scaling-up in Africa, significant proportions of false positive but also false negative results are still observed with HIV screening tests commonly used in Africa, resulting in inadequate treatment and prevention strategies. Depending on tests or algorithms used, up to 6% of HIV-1 M and 80% of HIV-1 O infected patients in Cameroon do not receive ART and adequate counseling to prevent further transmission due to low sensitivities. Also, the use of tests with low specificities could imply inclusion of up to 12% HIV negative people in ART programs and increase budgets in addition to inconveniences caused to patients.

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Supplemental Content

Guidelines for the Prevention and Treatment of Opportunistic Infections among HIV-exposed and HIV-infected children: recommendations from CDC, the National Institutes of Health, the HIV Medicine Association of the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the American Academy of Pediatrics.


Collaborators (30)

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Abstract

This report updates and combines into one document earlier versions of guidelines for preventing and treating opportunistic infections (OIs) among HIV-exposed and HIV-infected children, last published in 2002 and 2004, respectively. These guidelines are intended for use by clinicians and other health-care workers providing medical care for HIV-exposed and HIV-infected children in the United States. The guidelines discuss opportunistic pathogens that occur in the United States and one that might be acquired during international travel (i.e., malaria). Topic areas covered for each OI include a brief description of the epidemiology, clinical presentation, and diagnosis of the OI in children; prevention of exposure; prevention of disease by chemoprophylaxis and/or vaccination; discontinuation of primary prophylaxis after immune reconstitution; treatment of disease; monitoring for adverse effects during treatment; management of treatment failure; prevention of disease recurrence; and discontinuation of secondary prophylaxis after immune reconstitution. A separate document about preventing and treating of OIs among HIV-infected adults and postpubertal adolescents (Guidelines for the Prevention and Treatment of Opportunistic Infections in HIV-Infected Adults and Adolescents) was prepared by a working group of adult HIV and infectious disease specialists. The guidelines were developed by a panel of specialists in pediatric HIV infection and infectious diseases (the Pediatric Opportunistic Infections Working Group) from...
the U.S. government and academic institutions. For each OI, a pediatric specialist with content-matter expertise reviewed the literature for new information since the last guidelines were published; they then proposed revised recommendations at a meeting at the National Institutes of Health (NIH) in June 2007. After these presentations and discussions, the guidelines underwent further revision, with review and approval by the Working Group, and final endorsement by NIH, CDC, the HIV Medicine Association (HIVMA) of the Infectious Diseases Society of America (IDSA), the Pediatric Infectious Disease Society (PIDS), and the American Academy of Pediatrics (AAP). The recommendations are rated by a letter that indicates the strength of the recommendation and a Roman numeral that indicates the quality of the evidence supporting the recommendation so readers can ascertain how best to apply the recommendations in their practice environments. An important mode of acquisition of OIs, as well as HIV infection among children, is from their infected mother; HIV-infected women coinfected with opportunistic pathogens might be more likely than women without HIV infection to transmit these infections to their infants. In addition, HIV-infected women or HIV-infected family members coinfected with certain opportunistic pathogens might be more likely to transmit these infections horizontally to their children, resulting in increased likelihood of primary acquisition of such infections in the young child. Therefore, infections with opportunistic pathogens might affect not just HIV-infected infants but also HIV-exposed but uninfected infants who become infected by the pathogen because of transmission from HIV-infected mothers or family members with coinfections. These guidelines for treating OIs in children therefore consider treatment of infections among all children, both HIV-infected and uninfected, born to HIV-infected women. Additionally, HIV infection is increasingly seen among adolescents with perinatal infection now surviving into their teens and among youth with behaviorally acquired HIV infection. Although guidelines for postpubertal adolescents can be found in the adult OI guidelines, drug pharmacokinetics and response to treatment may differ for younger prepubertal or pubertal adolescents. Therefore, these guidelines also apply to treatment of HIV-infected youth who have not yet completed pubertal development. Major changes in the guidelines include 1) greater emphasis on the importance of antiretroviral therapy for preventing and treating OIs, especially those OIs for which no specific therapy exists; 2) information about the diagnosis and management of immune reconstitution inflammatory syndromes; 3) information about managing antiretroviral therapy in children with OIs, including potential drug--drug interactions; 4) new guidance on diagnosing of HIV infection and presumptively excluding HIV infection in infants that affect the need for initiation of prophylaxis to prevent Pneumocystis jirovecii pneumonia (PCP) in neonates; 5) updated immunization recommendations for HIV-exposed and HIV-infected children, including hepatitis A, human papillomavirus, meningococcal, and rotavirus vaccines; 6) addition of sections on aspergillosis; bartonella; human herpes virus-6, -7, and -8; malaria; and progressive multifocal leukodystrophy (PML); and 7) new recommendations on discontinuation of OI prophylaxis after immune reconstitution in children. The report includes six tables pertinent to preventing and treating OIs in children and two figures describing immunization recommendations for children aged 0--6 years and 7--18 years. Because treatment of OIs is an evolving science, and availability of new agents or clinical data on existing agents might change therapeutic options and preferences, these recommendations will be periodically updated and will be available at http://AIDSInfo.nih.gov.

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Supplemental Content
Impact of HIV infection on severity of imported malaria is restricted to patients with CD4 cell counts < 350 cells/microl.


Collaborators (157)

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Abstract

OBJECTIVES: To study the relative impact of HIV-1 infection and associated immunodepression on the severity of Plasmodium falciparum malaria in adults returning from areas of endemic malaria. METHODS: We conducted a cross-sectional study, based on data from 104 HIV-infected patients from the French Hospital Database on HIV cohort (FHDH-ANRS CO4) and 161 HIV-negative patients from Bichat hospital, with a diagnosis of imported P. falciparum malaria between 2000 and 2003. The severity of falciparum malaria episode was graded with World Health Organization (WHO) criteria 2000 or on 2007 French
recommendations. RESULT: Depending on criteria used, 40% (WHO) and 28% (2007 French recommendations) of episodes of imported P. falciparum malaria in HIV-infected patients were classified as severe, compared with 21% (WHO) and 11% (2007 French recommendations) of episodes among HIV-negative patients. Among HIV-infected patients, the episodes were severe in between 22 (CD4 cell counts ≥350/microl) and 51% (CD4 cell counts <350/microl) of cases using WHO criteria, and between 12 (CD4 cell counts ≥350/microl) and 41% (CD4 cell counts <350/microl) of cases using 2007 French recommendations criteria. Relative to HIV-negative patients, after adjusting for confounding factors, HIV-infected patients with severe immunodepression (CD4 cell counts <350/microl) were at a significantly higher risk of severe malaria than HIV-negative patients (odds ratio 3.2-4.7, depending on the criteria) contrary to HIV-infected patients with CD4 cell counts more than 350/microl (odds ratio 0.7-0.9). CONCLUSION: The association between HIV infection and severity of imported P. falciparum malaria is only observed for HIV-infected patients with severe immunodepression (CD4 cell counts <350/microl).

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Supplemental Content


HIV testing, human rights, and global AIDS policy: exceptionalism and its discontents.

Bayer R, Edington C.

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Abstract

Two years ago, in May 2007, UNAIDS and WHO issued new guidelines on HIV testing. Prepared to meet the demands of the AIDS pandemic and the prospects of extending the benefits of antiretroviral therapy to regions where such treatment had been all but out of reach, the new guidance was the product of an extended period of sometimes acrimonious controversy both within the two UN agencies and globally. Those pressing for change had argued that a paradigm of testing that had emerged at a time when little could be done for those infected with HIV was inappropriate to the current moment. Those who viewed with skepticism, if not hostility, the claims that current practice and stringent ethical standards had become an impediment to effectively confronting the challenge of AIDS saw in the proposed changes a threat to the bedrock ethical principles of informed consent. In the end, of course, decisions about HIV testing will be taken by nation - states, with the recommendations of international organizations constituting but one element, however important, that will shape policy. Nevertheless, an examination of the history and the dynamics of the recent controversy and its outcome will provide a unique resource to those faced with policy choices; it will also provide a unique opportunity to lay bare the complex and politically charged relationships evolving between public health and human rights.
Prophylactic antiretroviral regimens for prevention of mother-to-child transmission of HIV in resource-limited settings.

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Abstract

PURPOSE OF REVIEW: With the large international mobilization against HIV/AIDS, more HIV-infected people in resource-limited settings have access to antiretroviral therapy, including pregnant women. The relevance of simplified prophylactic antiretroviral regimens for the prevention of mother-to-child transmission of HIV may become questionable due to their lower efficacy and their higher risk of inducing viral resistance than fully suppressive antiretroviral therapy. RECENT FINDINGS: Field implementation of current recommendations, impact of prophylactic regimens on subsequent antiretroviral therapy response and possible new indications of antiretroviral therapy in pregnant women will be reviewed in this paper. SUMMARY: Prophylactic antiretroviral prevention of mother-to-child transmission regimens reached only 10% of the HIV-infected pregnant women in 2006, who were usually offered single-dose nevirapine only. The operational links between antenatal care and antiretroviral therapy programmes can now be documented and demonstrate good results in terms of safety and efficacy. The negative impact of single-dose nevirapine exposure on subsequent first-line antiretroviral therapy appears worse for mothers with advanced HIV disease at the time of delivery and short interval before antiretroviral therapy initiation. Strengthening the links between antenatal care and antiretroviral therapy programmes is critical for antiretroviral therapy-eligible HIV-infected pregnant women in terms of prevention of mother-to-child transmission and subsequent antiretroviral therapy response. The breastfeeding period could be a new indication for antiretroviral therapy in this population.
Supplemental Content


Need to optimise infant feeding counselling: a cross-sectional survey among HIV-positive mothers in Eastern Uganda.

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Abstract

BACKGROUND: The choice of infant feeding method is important for HIV-positive mothers in order to optimise the chance of survival of their infants and to minimise the risk of HIV transmission. The aim of this study was to investigate feeding practices, including breastfeeding, in the context of PMTCT for infants and children under two years of age born to HIV-positive mothers in Uganda. METHODS: In collaboration with The Aids Support Organisation Mbale, we conducted a cross-sectional survey involving 235 HIV-positive mothers in Uganda. Infant feeding practices, reasons for stopping breastfeeding, and breast health problems were studied. Breastfeeding duration was analysed using the Kaplan-Meier method based on retrospective recall. RESULTS: Breastfeeding was initiated by most of the mothers, but 20 of them (8.5%) opted exclusively for replacement feeding. Pre-lacteal feeding was given to 150 (64%) infants and 65 (28%) practised exclusive breastfeeding during the first three days. One-fifth of the infants less than 6 months old were exclusively breastfed, the majority being complementary fed including breast milk. The median duration of breastfeeding was 12 months (95% confidence interval [CI] 11.5 to 12.5). Adjusted Cox regression analysis indicated that a mother's education, socio-economic status, participation in the PMTCT-program and her positive attitude to breastfeeding exclusively, were all associated with a reduction in breastfeeding duration. Median duration was 3 months (95% CI 0-10.2) among the most educated mothers, and 18 months (95% CI 15.0-21.0) among uneducated mothers. Participation in the PMTCT program and being socio-economically better-off were also associated with earlier cessation of breastfeeding (9 months [95% CI 7.2-10.8] vs. 14 months [95% CI 10.8-17.2] and 8 months [95% CI 5.9-10.1] vs. 17 months [95% CI 15.2-18.8], respectively). The main reasons for stopping breastfeeding were reported as: advice from health workers, maternal illness, and the HIV-positive status of the mother. CONCLUSION: Exclusive breastfeeding was uncommon. Exclusive replacement feeding was practised by few HIV-positive mothers. Well-educated mothers, mothers who were socio-economically better-off and PMTCT-attendees had the shortest durations of breastfeeding. Further efforts are needed to optimise infant feeding counselling and to increase the feasibility of the recommendations.
Supplemental Content


Centers for Disease Control and Prevention (CDC).

Abstract

Early diagnosis of human immunodeficiency virus (HIV) infection enables infected persons to obtain medical care that can improve the quality and length of their lives and adopt behaviors to prevent further HIV transmission. However, at the end of 2003, approximately one fourth of the estimated 1 million persons living with HIV remained unaware of their infection. Among all persons with HIV infection diagnosed in 2005, 38% received a diagnosis of acquired immunodeficiency syndrome (AIDS) within 1 year of their first positive HIV test. To reduce the number of persons with undiagnosed HIV infection, CDC issued recommendations in September 2006 to implement HIV screening as part of routine medical care for all persons aged 13-64 years. To establish a baseline for evaluating the effects of these recommendations and other strategies to increase HIV testing, CDC analyzed data from the National Health Interview Survey (NHIS). This report summarizes the results of that analysis, which indicated that testing rates remained nearly flat during 2001-2006. In 2006, 40.4% (an estimated 71.5 million persons) of U.S. adults aged 18-64 years reported ever being tested for HIV infection. In addition, 10.4% (an estimated 17.8 million persons) reported being tested in the preceding 12 months, and 23% of persons who acknowledged having HIV risk factors reported being tested in the preceding 12 months. These findings indicate that many persons in the United States have never been tested for HIV infection. Health-care providers should routinely screen all patients aged 13-64 years for HIV in accordance with CDC recommendations. New strategies are warranted to increase HIV testing, particularly among persons who are disproportionately affected by HIV infection.

Immunity against HIV/AIDS, malaria, and tuberculosis during co-infections with neglected infectious diseases: recommendations for the European Union research priorities.


Abstract

Infectious diseases remain a major health and socioeconomic problem in many low-income countries, particularly in sub-Saharan Africa. For many years, the three most devastating diseases, HIV/AIDS, malaria, and tuberculosis (TB) have received most of the world's attention. However, in rural and impoverished urban areas, a number of infectious diseases remain neglected and cause massive suffering. It has been calculated that a group of 13 neglected infectious diseases affects over one billion people, corresponding to a sixth of the world's population. These diseases include infections with different types of worms and parasites, cholera, and sleeping sickness, and can cause significant mortality and severe disabilities in low-income countries. For most of these diseases, vaccines are either not available, poorly effective, or too expensive. Moreover, these neglected diseases often occur in individuals who are also affected by HIV/AIDS, malaria, or TB, making the problem even more serious and indicating that co-infections are the rule rather than the exception in many geographical areas. To address the importance of combating co-infections, scientists from 14 different countries in Africa and Europe met in Addis Ababa, Ethiopia, on September 9-11, 2007. The message coming from these scientists is that the only possibility for winning the fight against infections in low-income countries is by studying, in the most global way possible, the complex interaction between different infections and conditions of malnourishment. The new scientific and technical tools of the post-genomic era can allow us to reach this goal. However, a concomitant effort in improving education and social conditions will be needed to make the scientific findings effective.

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Supplemental Content
Scaling-up co-trimoxazole prophylaxis in HIV-exposed and HIV-infected children in high HIV-prevalence countries.

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Comment in:


Abstract

Co-trimoxazole (trimethoprim-sulfamethoxazole) is a widely available antibiotic that substantially reduces HIV-related morbidity and mortality in both adults and children. Prophylaxis with co-trimoxazole is a recommended intervention of proven benefit that could serve not only as an initial step towards improving paediatric care in young children with limited access to antiretroviral treatment, but also as an important complement to antiretroviral therapy in resource-limited settings. Despite co-trimoxazole's known clinical benefits, the potential operational benefits, and favourable recommendations by WHO, UNAIDS, and UNICEF, its routine use in developing countries--particularly sub-Saharan Africa--has remained limited. Out of an estimated 4 million children in need of co-trimoxazole prophylaxis (HIV-exposed and HIV-infected), only 4% are currently receiving this intervention. We discuss some of the major barriers preventing the scale-up of co-trimoxazole prophylaxis for children in countries with a high prevalence of HIV and propose specific actions required to tackle these challenges.

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Supplemental Content


The impact of food assistance on weight gain and disease progression among HIV-infected individuals accessing AIDS care and treatment services in Uganda.
Abstract

ABSTRACT: BACKGROUND: The evidence evaluating the benefits of programmatic nutrition interventions to HIV-infected individuals in developing countries, where there is a large overlap between HIV prevalence and malnutrition, is limited. This study evaluates the impact of food assistance (FA) on change in weight and disease progression as measured by WHO staging. METHODS: We utilize program data from The AIDS Support Organization (TASO) in Uganda to compare outcomes among FA recipients to a control group, using propensity score matching (PSM) methods among 14,481 HIV-infected TASO clients. RESULTS: FA resulted in a significant mean weight gain of 0.36 kg over one year period. This impact was conditional on anti-retroviral therapy (ART) receipt and disease stage at baseline. FA resulted in mean weight gain of 0.36 kg among individuals not receiving ART compared to their matched controls. HIV-infected individuals receiving FA with baseline WHO stage II and III had a significant weight gain (0.26 kg and 0.2 kg respectively) compared to their matched controls. Individuals with the most advanced disease at baseline (WHO stage IV) had the highest weight gain of 1.9 kg. The impact on disease progression was minimal. Individuals receiving FA were 2 percentage points less likely to progress by one or more WHO stage compared to their matched controls. There were no significant impacts on either outcome among individuals receiving ART. CONCLUSIONS: Given the widespread overlap of HIV and malnutrition in sub-Saharan Africa, FA programs have the potential to improve weight and delay disease progression, especially among HIV-infected individuals not yet on ART. Additional well designed prospective studies evaluating the impact of FA are urgently needed.

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AIDS defining illnesses and mortality

http://ummafrapp.de/skandal/haart/Annex%207.pdf