

**COUNTRY CONTEXT**

Senegal’s epidemic is currently characterized as ‘stable’ and ‘concentrated’. The prevalence rate in the general population is low (0.9%, (UNAIDS 2010)), but it much higher in high-risk groups, such as sex workers and their partners, mobile and cross-border populations, or men who have sex with men (who are said to count for 20% of new HIV infections, Ndiaye et al 2008).

Several factors have been suggested as contributing to Senegal’s success in maintaining a lower prevalence rate, including wide spread circumcision ( a majority of its population is Muslim) and changed policies and practices relating to safe blood supply and sex worker registration. However, the most important factor seems to have been the timely national response. When HIV/AIDS first emerged in the mid-1980s, the government established *Programme National de Lutte contre le SIDA*, later restructured as the *Conseil National de Lutte contre le SIDA* (CNLS) which has facilitated a coordinated response.

Information, education and communication interventions aimed at the general population have helped to raise awareness (DHS 2005 indicates a nearly universal knowledge about HIV/AIDS). However, there is some question as to how far these efforts have resulted in behavioral change, with infrequent condom use and lingering stigmatization of people livings with HIV/AIDS (Diouf 2007). Senegal has demonstrated leadership on treatment, as the first sub-Saharan African country to establish an antiretroviral treatment program in 1998 (*Initiative Senegalaise d’Acces aux ARV*), and ART is now free. However, there is a strong geographic disparity, with access to treatment and patient support (by both public and nongovernmental providers) mainly limited to urban centers.

The country progress report for 2010 also mention stigma and discrimination towards sex workers and sexual minorities as barriers to their accessing health services, HIV testing, and HIV treatment (Diouf 2007, UNAIDS 2010). The current *National Strategic Plan 2007–2011* prioritizes delivery of HIV/AIDS services to high risk groups.

Building on a tradition of social mobilization, the government quickly adopted a multisectoral approach, with several interventions taken to increase participation and representation. Civil society organizations (CSOs) have become increasingly involved in care and support activities. There are now more than 3,000 AIDS-engaged CSOs in Senegal (Diouf 2007), ranging from local community-based organizations (CBOs) to larger national NGOs (mainly in Dakar). In response to difficulties faced in channeling support to local CSOs, the Global Fund established a parallel CSO funding mechanism in 2006 (*Alliance Nationale Contre le SIDA*) which is now a primary recipient.

**SENEGAL AT A GLANCE**

Region	West Africa
Capital	Dakar
Population (millions)	12.53
Poverty (% population headcount ratio at national poverty line)	50.8 (in 2005)
GDP (US\$ billions)	12.8
Life expectancy at birth (total years)	55.9
Primary completion rate (total %relevant age group)	57
Number of people living with HIV	59,000 [50,000-69,000]
Adult prevalence rate (age 15-49)	0.9% [0.7%-1%]
Adults living with HIV (aged 15 and up)	54,000 [46,000-63,000]
Women living with HIV (age 15 and up)	32,000 [27,000-38,000]
Children living with HIV (age 0-14)	5,200 [2,800-7,800]
Deaths due to AIDS	2,600 [1,900-3,500]
Orphans due to AIDS (age 0-17)	19,000 [15,000-25,000]

Current National Policy: *2007–2011 National Strategic Plan*

National Coordinating Body: *Conseil National de Lutte Contre le SIDA*

Source: UNAIDS 2010 & World Bank 2011

**COMMUNITY RESPONSE EVALUATION**

**‘Communities’**

can be described as *cultural identity* (members belong to a group that shares common characteristics or interests), or as a *geographic sense of place* (a group in a location or an administrative entity)

**‘Community response’**

The combination of actions and steps taken by communities, including the provision of goods and services, to prevent and/or address a problem to bring about social change

**Typologies of Community Response**

*Community responses can be characterized in six main ways:*

1. types of implementing organizations and structures
2. types of implemented activities or services and beneficiaries
3. actors involved in and driving responses
4. contextual factors influencing responses
5. extent of community involvement in the response
6. extent of involvement of wider partnerships/collaboration

Source: Rodriguez-Garcia et al 2011

**STUDY FOCUS**

With a long tradition of social mobilization, communities and CSOs quickly became involved in HIV/AIDS response, providing a strong institutional mechanism to support and increase access to services. From 2002, there has been an increased focus on voluntary HIV Counseling and Testing (HCT or VCT). Funding by the World Bank provided an additional impetus to strengthen the institutional structure of communities and their activities (since 2003 - 1,040 CBO-linked sensitization campaigns were funded).

VCT sites are now widely available in Senegal, in urban health facilities as well as rural health posts. However, VCT remains extremely low, with only 1.1 percent of the population having been tested in 2007. This raises questions as to whether a peer mentoring approach might be more effective than traditional social mobilization techniques.

To answer this, an impact evaluation of peer mentoring took place in 2009-2010, with the objective of comparing three types of program delivered by CBOS:

1. Traditional information campaigns on sexual behaviors and HIV
2. Standard social sensitization activities involving education about HIV and information about VCT, targeting a group of about 450 individuals drawn from the local communities
3. Peer mentoring with peer education

The evaluation was aimed at assessing whether CBO programs are an effective way of increasing voluntary testing rates and/or changing the behavior of individuals who test positive and whether the manner in which sensitization programs are delivered affect outcomes.

**STUDY METHODS**

This evaluation undertook a randomized approach that took advantage of the phased-in of the peer mentoring approach. Measured outcomes included the number of persons who were: tested, had received pre-test counseling, had picked up test results, had tested positive, had tested positive whose partner was also tested, and had tested positive who came back for post-test counseling.

These outcomes were measured by the data routinely collected at the administrative health district level. Participating CBOs were randomly allocated to one of three groups:

**Group 1: control group:** CBOs which received no funding and provided sensitization techniques (operating in 24 of 52 health districts)

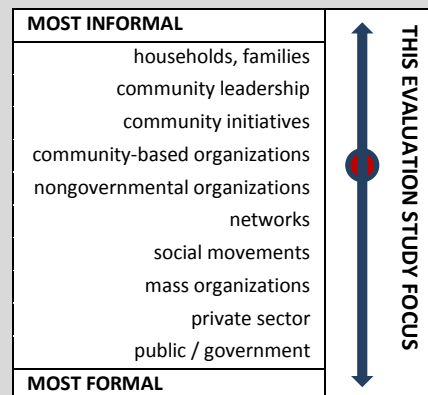
**Group 2: first treatment group:** CBOs which received funding and applied sensitization techniques (found in 9 health districts)

**Group 3: second treatment group:** CBOs which received funding and followed a peer mentoring approach (in 19 health districts)

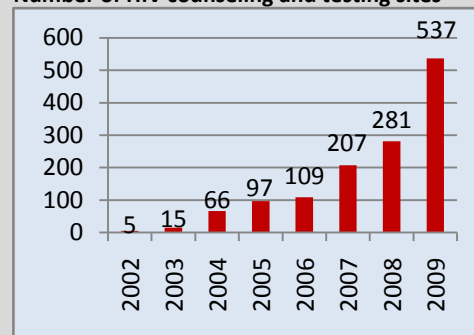
In total 156,178 tests were given, with significantly more women tested than men, and a relatively high proportion of individuals came back for their test results. In this data set, the average HIV prevalence rate was 4.7%. A Poisson regression model was used to test differences in outcome variable measured at the district level.

**Civil society organization (CSO):** is a generic term, inclusive of all community-based initiatives and organizations (e.g. CBOs, NGOs, FBOs, networks, as well as local initiatives).

This evaluation study is focused on: AIDS-engaged community-based organizations (CBOs) in Senegal

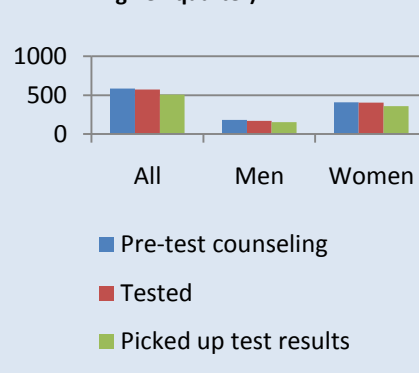


Number of HIV counseling and testing sites



Source: Senegal UNGASS Report March 2010

Numbers counseled, tested and knowing test results (Average numbers per health district in a given quarter)



**STUDY FINDINGS**

**Funding peer mentoring by community based organizations increases the number of individuals who get tested compared to the control group (unfunded sensitization activities), while funded sensitization does not.**

Compared to standard unfunded social sensitization activities, funded peer mentoring increases the number of individuals who attend pre-test counseling, get tested and pick up their test results (figure 1). These effects are mainly due to the increased number of women being tested. This indicates that peer mentoring performs better than unfunded sensitization activities by mainly reaching women.

Peer mentoring is effective compared to sensitization activities that receive funding: The number of individuals who access pre-test counseling, get tested and pick up their test results increases by 100 percent, 70 percent and 80 percent respectively (figure 2).

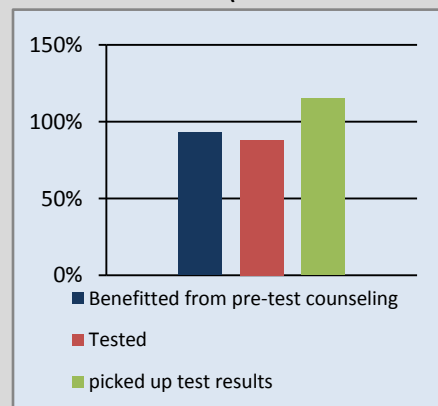
**The effect of sensitization activities is different for HIV positive individuals:** Both peer mentoring and funded traditional sensitization activities do not affect the number of individuals who test positive and pick up their tests compared to the control group.

**However, both types of activities significantly increase the number of individuals who test positive and receive post-test counseling (figure 3),** with no statistically significant differences between peer mentoring and funded sensitization activities. These activities also increase the number of HIV-positive individuals whose partners have been tested.

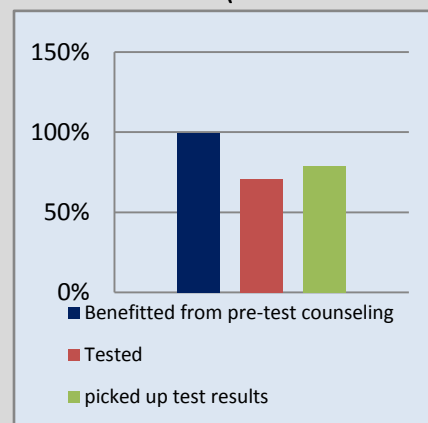
**Sensitization activities affect the partners of individuals who test positive:** Compared to unfunded sensitization activities, both peer mentoring and funded sensitization activities increase the number of HIV-positive individuals whose partners are tested and more than double the number of HIV positive individuals who follow post-test counseling (although there are no statistical differences between peer mentoring and sensitization) (figure 3).

**The effects of sensitization activities on HIV positive individuals differ by gender:** While both peer mentoring and funded sensitization activities are effective, funded sensitization techniques are particularly effective in terms of ensuring that infected women follow post-test counseling and peer mentoring activities are particularly effective at encouraging HIV positive men to follow post-test counseling.

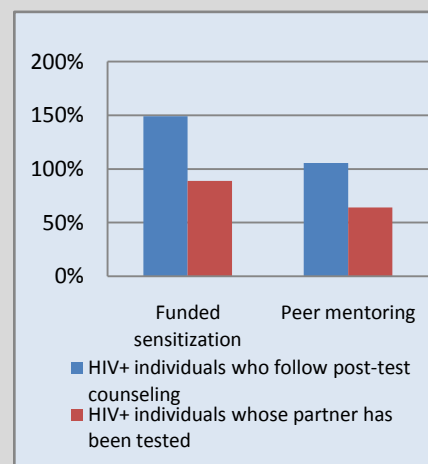
**Figure 1: Peer mentoring compared to unfunded sensitization activities (% increase in numbers)**



**Figure 2: Peer mentoring compared to funded sensitization activities (% increase in numbers)**



**Figure 3: Impact of peer mentoring and funded sensitization activities on HIV-positive individuals compared to unfunded sensitization (% increase in numbers)**



## CONCLUSIONS

*Three questions motivated the study:* does funding sensitization activities run by CBOs can increase the use of HCT services; can these activities change the subsequent behavior of individuals who test positive; and does the manner in which sensitization programs are run matter? *The answer to these three questions is yes.*

If the objective is to increase access to HCT services, funding peer mentoring activities is effective whereas funding traditional sensitization techniques is not.

Changing the behavior of HIV positive individuals is more complex, and different approaches might be needed. Traditional sensitization activities that are funded are effective if the objective is to social ensure that the partners of infected men are tested and infected women follow post-test counseling. Peer mentoring is effective at encouraging infected men to follow post-test counseling.

Overall, while peer-monitoring seems to be the most effective mean to encourage individuals to get tested for HIV and pick up the test results, sensitization campaigns seem to play a substantial role in modifying the behavior of infected individuals and the effects vary by gender and type of activities.

This suggests that instead of focusing on one particular type of social mobilization technique, a combined approach is justified due to the complementarities of the different programs.

## REFERENCES

- Arcand J, PA Diallo, C Sakho and N Wagner (2010) *HIV/AIDS sensitization, social mobilization and peer-mentoring: Evidence from a randomized experiment in Senegal*, World Bank Evaluation Report
- CNLS (2005) Civil society and private sector unit, mapping of services, October 2005, Dakar, CNLS
- Diouf D (2007) *HIV/AIDS policy in Senegal: A civil society perspective*, New York: Public Health Watch, Open Society Institute
- Ndiaye HD et al (2009) Surprisingly high prevalence of subtype C and specific HIV-1 subtype/CRF distribution in men having sex with men in Senegal. *Journal of Acquired Immune Deficiency Syndromes* 52:249-252
- Rodriguez-Garcia R et al (2011) *Analyzing community responses to HIV and AIDS: Operational framework and typology*. Washington: World Bank: Policy Research WP 5532 (January)
- UNAIDS (2010) *UNAIDS report on the global AIDS epidemic 2010*, Geneva: Joint United Nations Programme on HIV/AIDS. <http://aidsinfo.unaids.org>; accessed 15 Aug 2011
- UNGASS (2010) Senegal UNGASS Report, March 2010
- World Bank (2011) World Development Report and Indicators 2011. Washington, DC: The World Bank

## EVALUATION OF THE COMMUNITY RESPONSE TO HIV AND AIDS

The World Bank in collaboration with DFID and the UK Consortium on AIDS and International Development launched an evaluation exercise in 2009 to assess the results achieved by community responses to HIV and AIDS. The primary objective of this effort is to build a more robust pool of evidence on the impact and added value of community-based activities and actions. This brief is part of a series summarizing the findings from studies conducted in Burkina Faso, India, Kenya, Lesotho, Nigeria, Senegal, South Africa and Zimbabwe.

*For further information, contact Rosalía Rodríguez-García, Evaluation Team Leader, HNP, Human Development Network:*  
[rrodriguezgarciaworldbank.org](mailto:rrodriguezgarciaworldbank.org)

## EVALUATION PARTNERS IN SENEGAL

This brief is based on a more detailed paper entitled "HIV/AIDS sensitization, social mobilization and peer mentoring: Evidence from randomized experiment in Senegal" prepared by Jean-Louis Arcand, Pape Alioune Diallo, Cheikho Sakho and Natasha Wagner.

The evaluation in Senegal is the result of a joint collaboration between the World Bank Africa Region, the World Bank's Development Impact Initiative (DIME) and the AIDS Team in the Human Development Network (HDN) with the Senegalese government and the Graduate Institute, Geneva. DIME facilitated and coordinated this joint effort, under the leadership of Arianna Legovini.