

# **EFFECT OF INNOVATIVE INTERVENTION IN ELIMINATING STIGMA AND DISCRIMINATION AMONG PEOPLE LIVING WITH AIDS IN KHARTOUM STATE, SUDAN 2013**

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## **Abstract**

Since the outbreak of the epidemic, almost 78 million people have been infected with the HIV virus and about 39 million people have died of HIV. Globally, 35.0 million people were recorded to be living with HIV at the end of 2013. Sub-Saharan Africa remains the most severely affected region, and accounts for almost 71% of the people living with HIV worldwide<sup>12</sup>. HIV/AIDS cases in Sudan increases gradually from one case in 1986 to 10444 cases in 2009, to about 0.67%<sup>13</sup>. People living with the disease are the main source through which HIV is spreading. They suffer social stigma and community discrimination. Information, Education, and Communication (IEC) are public health approach aim in changing or reinforcing health-related behaviors to a target audience through communication methods and principles<sup>1</sup>. A quasi-experimental study was conducted in Khartoum State, which aim to study the effect of information, education, and communication in reducing stigmatization and discrimination among people living with AIDS/HIV (PLWAIDS/HIV). 25 participants of the total registered members of PLWAIDS/HIV in the society have been selected by systematic random sampling. An intensive intervention using IEC was conducted for six months. Data which were collected before and after the intervention were compared and analyzed using Chi-square test through a computer using SPSS Program. Furthermore, this was presented in tables and graphs. The study revealed that there was a significant elimination of social stigma and a slight decrease in the feeling of community discrimination. The IEC strategy has been proven to be effective in a

significant elimination of social stigma and has slightly decreased the feeling of community discrimination.

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**Keywords:** Stigma, discrimination, AIDS, HIV, Sudan

## **Introduction**

**Background and Problem Statement:** Since the outbreak of the epidemic, almost 78 million people have been infected with the HIV virus and about 39 million people have died of HIV. Globally, 35.0 million [33.2–37.2 million] people were recorded to be living with HIV at the end of 2013. An estimated 0.8% of adults aged 15–49 years worldwide are living with HIV, although the burden of the epidemic continues to vary considerably between countries and regions. Sub-Saharan Africa remains the most severely affected region, as 1 out of every 20 adults are living with HIV, and accounting for nearly 71% of the people living with HIV worldwide<sup>12</sup>. The overall HIV prevalence in Sudan is estimated at 0.67% after the referendum 2011<sup>12</sup>. Apart from persistent fear, denial, and stigma, there is still a lack of clarity on biological, social and development relationships, and HIV. However, what *is* known may be poorly implemented in Sudan<sup>9</sup>.

**Addressing HIV Stigma and Discrimination:** The Sudan Household Survey (2006) found a high level of HIV related stigma among the general population. There is a high HIV stigma among health personnel in health settings. Stigma is a key factor hindering people from utilizing the available HIV services. This strategy integrates stigma reduction interventions among all services provided at all settings of the health system<sup>9</sup>.

**IEC and HIV/AIDS Control:** IEC is one of the most essential components of an AIDS prevention programme. IEC in health programme aims to increase awareness, change attitudes, and bring about changes in specific behaviors. IEC means sharing information and ideas in a way that is culturally sensitive and acceptable to the community, using appropriate channels, messages, and methods. It is therefore broader than developing health education materials, because it includes the process of communication and building social networks for communicating<sup>8</sup>. Approaches may range from the use of mass media to inform or establish positive norms among the general population to the use of targeted interpersonal communication to help those at particular risk to evaluate their own behavior and develop new personal skills<sup>4</sup>.

**Justification:** This Research provides a review and interpretations of the link between IEC and HIV/AIDS, by identifying the important areas of research, and addressing the following question: What is the efficiency of the

existing IEC methods in the elimination of both social stigma and community discrimination?

**General Objective:** To study the effectiveness of IEC in eliminating social stigma and community discrimination among PLWIDS/ HIV/ in Khartoum State.

### Specific Objectives

- To improve the participants' attitudes towards the disease.
- To modify the participants thought towards the community members.
- To improve the participants' social relationship with others.

### I.

**Materials and methods:** A quasi experimental study was conducted in Khartoum State targeting people living with AIDS (PLWAIDS) with the aim of eliminating the social stigma and community discrimination.

**Study Area:** Khartoum locality is one of the seven localities of Khartoum State situated in the center of Khartoum State. Also it lies between longitudes 37-520 and along latitude 1900; thus, it has a total area of nineteen thousand square kilometers.

**Study Population:** There are 15 societies for people living with the disease in the country (one per state). However, the Khartoum State Society is located in an Alamarat area with a total of 250 registered infected people.

**Sample Size:** 25 members were selected as the sample size from people living with HIV

**Intervention:** Intervention includes interpersonal communication, focus group discussions, lectures, video shows, distribution of pamphlets, AIDS education, home visits, movie, and combination of all the three methods with the concentration on stigma and discrimination. This is in addition to different sessions by specialists. However, the intervention continued for six months.

**Follow Up and Evaluation:** The follow-up continued throughout the intervention to ensure that the intervention was going on as planned through checklist and observation of practices. Data that were collected after the intervention and the baseline data, were compared and tested statistically using Chi-square test using Statistical Package for Social Sciences (SPSS).

**Results:** The result revealed the following demographic characteristics; sex (56 male 44 female). Most of the age of the infected persons (72%) was less than 40 years old. Most of the participant's (88%) monthly income was less than 800 SDG. Approximately, one-third of the infected persons are illiterates and more than half (60%) of them had a secondary school education. However, only 28% of the participants were

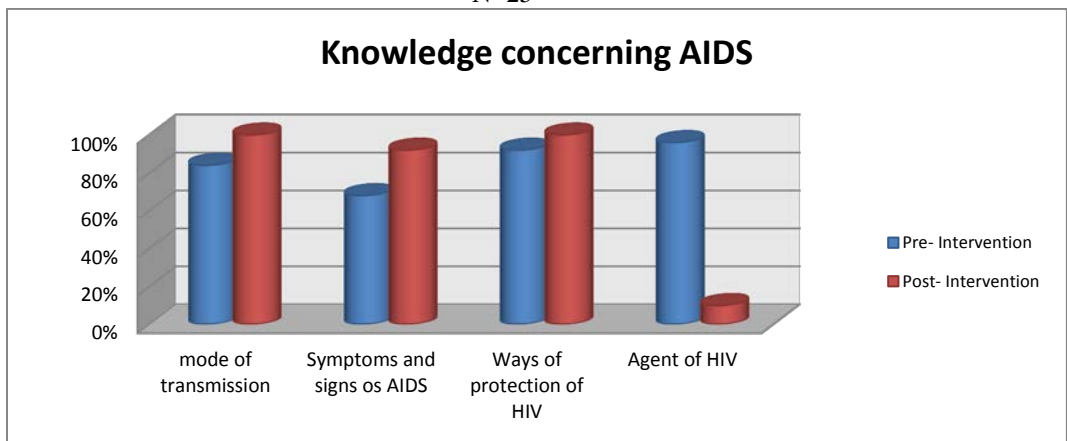
single, 52% were married, 8% divorced, and 12% were widowed. Furthermore, the majority (92%) of the participants have no private homes

**Knowledge:** Participants’ knowledge concerning the mode of transmission, signs and symptoms, and ways of protection of AIDS had increased significantly after the intervention. Also, the knowledge concerning the agents of HIV infection increased insignificantly after the intervention (see figure 1).

**Attitudes:** There is a significant modification in the thought of the participants about AIDS as a health problem (see figure 2). This they do by informing the health workers about their HIV status when attending health centers (see figure 7). The feeling of stigma (see figure 5) and the experience of the participants regarding discrimination by the community after the intervention, were improved positively (see figure 4).

**Practices:** There is an insignificant modification in the participants’ relation with uninfected people (see figure 3) and in donating blood to others after the intervention (see figure 6).

Figure (1) **Distribution of the Participants according to their Knowledge regarding AIDS/ HIV**  
N=25



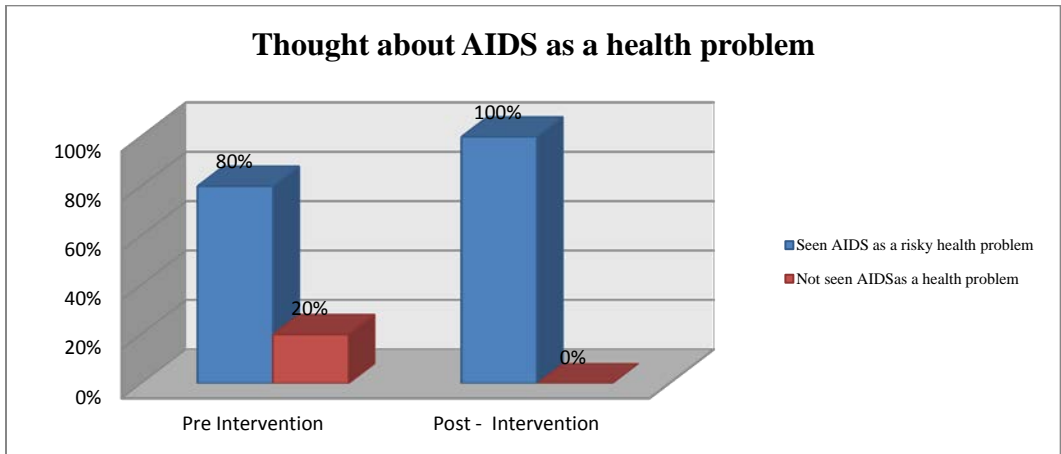
Participants’ knowledge concerning the mode of transmission of HIV/AIDS was increased significantly after intervention from 84% to 100%;  $X^2 = 4.348$ ,  $df = 1$ ,  $P. value = 0.037$

Participants’ knowledge concerning symptoms and signs of AIDS was increased significantly after the intervention from 68% to 92%;  $X^2 = 4.500$ ,  $df = 1$ ,  $P. value = 0.034$ .

Participants’ knowledge concerning ways of protection of AIDS is increased insignificantly after the intervention from 92% to 100%;  $X^2 = 2.083$ ,  $df = 1$ ,  $P. value = 0.149$

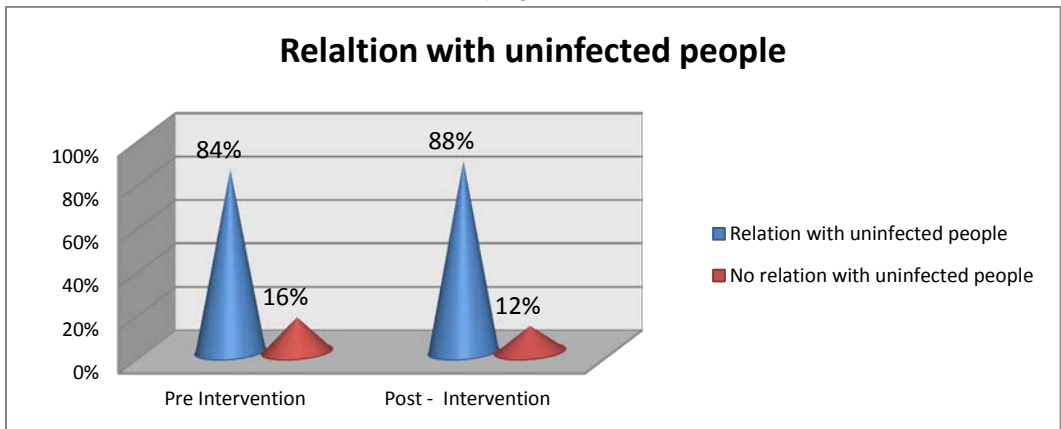
Participants’ knowledge concerning agent of HIV infection increased significantly after the intervention;  $X^2 = 6.818$ ,  $P. value = 0.032$ ,  $df = 2$ .

**Figure: 2 Thought about HIV and AIDS as a Major Health Problem**  
N=25



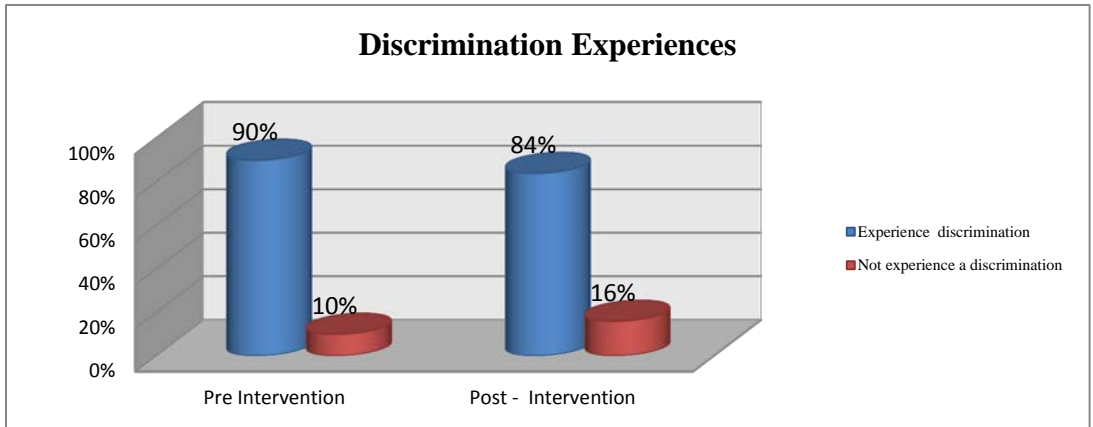
There is a significant modification in the thought of the participants after the intervention from 80% to 100%;  $X^2 = 5.556$ ,  $df = 1$ ,  $P. Value = 0.018$

**Figure (3) Relations with Uninfected people**  
N=25



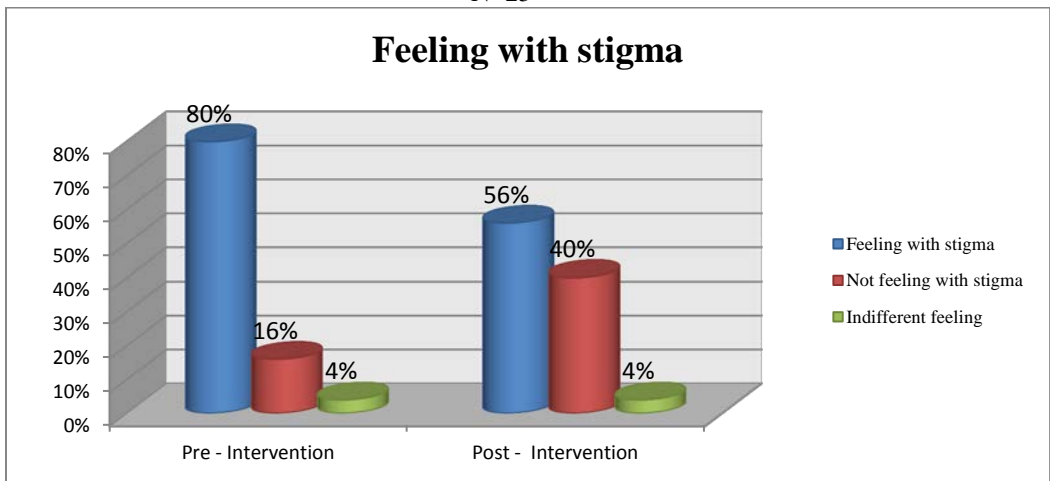
There is an insignificant increase in the participants' relation with uninfected people after the intervention from 84% to 88%;  $X^2 = 0.166$ ,  $df = 1$ ,  $P. value = 0.684$ .

**Figure (4) Discrimination between Infected and Uninfected People from the Community**  
N=25



There is an insignificant decrease in the experience of the participants regarding discrimination by the community after the intervention from 90% to 84%;  $X^2 = 0.166$ ,  $df = 1$ ,  $P$ .Value = 0.084.

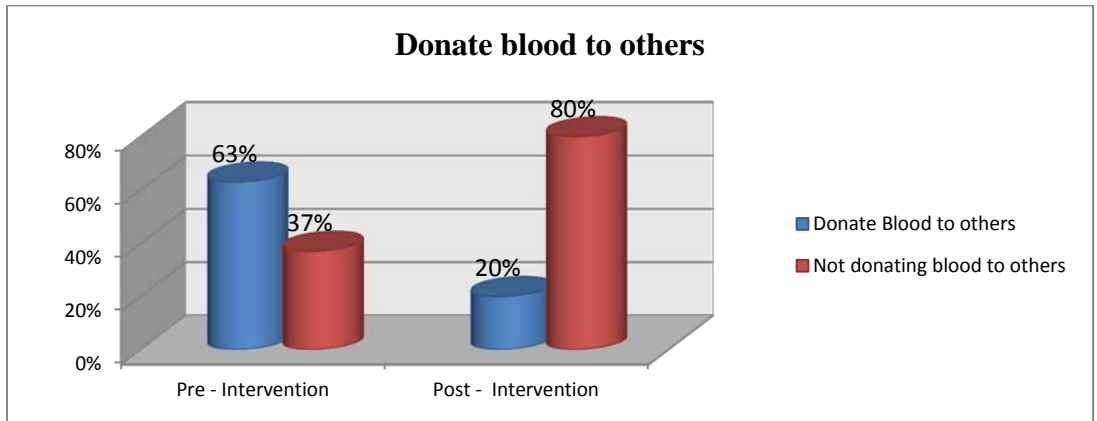
**Figure 5 Feeling of Stigma among the Participants**  
N=25



There is an insignificant decrease in the feeling of stigma among the participants after the intervention from 80% to 56%;  $X^2 = 0.266$ ,  $df = 2$ ,  $P$ .value = 0.784.

**Figure (6) Practice of Donating Blood or Other Blood Products to Others**

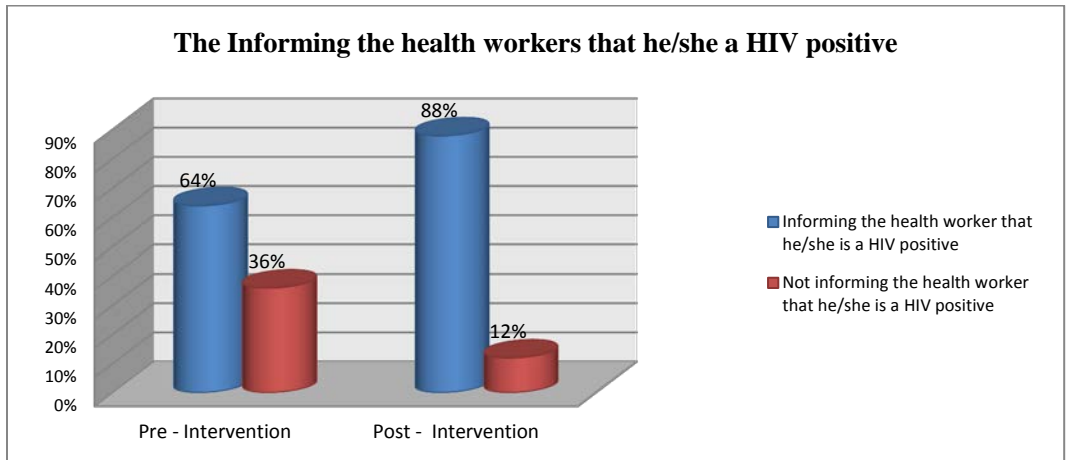
N=25



There is an insignificant decrease in the practice of donating blood from the participants to others after the intervention from 63% to 20%;  $X^2 = 5.807$ ,  $df = 1$ ,  $P. value = 0.055$ .

**Figure (7) When you go to the Hospital for Treatment, Do you Inform the Health Workers that you are HIV Positive?**

N=25



There is a significant increase in informing the health workers when attending health centers that he/she is HIV positive after the intervention from 64% to 88 %;  $X^2 = 3.947$ ,  $df = 1$ ,  $P. Value = 0.047$ .

## Discussion

### Demographic Characteristics of the Participants

More than half (54%) of the participants are females and most of the participants (72%) age are under 40 years old. This finding agrees with the results of the study of the current and future dimensions of HIV/AIDS

pandemic in women and children by [J. Chin, 2002](#), which concluded that the majority of the cases are within the age group of 20-40 years<sup>6</sup>. The economic situation of the participants is generally low, referring to the international standards of poverty. 68% of the participant's monthly income is less than 400SDG per month, which is less than 1 US\$ per day. Therefore, there is a relationship between poverty and the infection of the disease. Consequently, this finding agrees with the study that was carried out in India by Jason Williams and Hanoku Bathula, 2012. The study concluded that HIV infected people are usually poor people – lower end of the strata in the society, less educated, and were mostly daily workers<sup>5</sup>. Also, these findings disagree with the study that was conducted by R. K. Obi and C. Okangba (2007) in Nigeria. The study illustrated that HIV/AIDS is not associated directly to extreme poverty, but with multiple socioeconomic factors<sup>8</sup>.

**Knowledge:** Knowledge of the participants concerning agent of HIV, mode of transmission, symptoms and signs, and ways of protection of the disease have increased significantly after the intervention. All these increase in knowledge were as a result of the effective intervention. These finding agrees with the study of "Perceived Sufficiency and Usefulness of IEC materials and methods related to HIV/AIDS, among high school youth in Addis Ababa, Ethiopia," by (Cherie et al., 2005). The study concluded that life skills IEC was the most desired interventions by the students. Therefore, appropriate and mutually reinforcing IEC messages with emphasis on life skill training were recommended<sup>3</sup>.

**Thought and Attitudes:** There is a significant improvement in the feeling and practice of discrimination after intervention. There is an increase in the relations with the uninfected people after the intervention. These relations with the uninfected persons will help to overcome the stigma feelings among infected persons. Therefore, there is a decrease in the feeling of stigma among the participants after the intervention. However, this finding agrees with the study of "Effectiveness of IEC interventions in reducing HIV/AIDS related stigma among schools adolescents" in Southern Ethiopia (Hawasa), by Bekele and A. Ali (2007). The study concluded that a remarkable reduction in HIV related misconceptions, stigmatization, and discriminatory attitudes were observed<sup>1</sup>.

This findings also agrees with the study of "Addressing Stigma and Discrimination in HIV/AIDS Affected Orphans and Vulnerable Children in Vietnam" by Tran et al. (2013). Their findings concluded that HIV prevention education, particularly delivered through schools can be effective in fostering a supportive environment resulting in the reduction of stigma and discrimination against HIV/AIDS affected individuals<sup>13</sup>.

**Practice:** There is a significant increase in the practice of the participants concerning informing the health workers about the infection



after the intervention. The infected patients when they seek medical care for any other medical service should inform the health staff about their status. Thus, this will aid the medical staff to undertake infection control measures carefully to protect other patients and the health staff from the infections. This agrees with the study of Hogan T and Palmer C L (2005) who concluded that information seeking is an important activity for this sample of people living with HIV/AIDS<sup>14</sup>.

### **Conclusion**

The intensive IEC intervention which was carried out for six months has yield significant modifications and changes in both social stigma, discrimination, and a remarkable improvement in the practice and attitude concerning the disease.

**Recommendation:** The AIDS/HIV control program in the state need to intensify the use of IEC intervention to dispel some of the prevailing misconceptions, associated stigma, and discrimination against PLWHIV.

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