

Practical Challenges in Implementing a Simplified Leaflet for HIV Patients in Resource Poor Settings: The Practice towards Public Health

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Abstract

A simple and readable patient information leaflet has been developed to access the socio-demographic, biological features, clinical profiles as well as biochemical parameters of HIV patients. The main objectives are to provide dual visual/textual information on HIV testing that will be helpful to improve the patient's knowledge. This patient information leaflet secures the HIV test in leaflet format rather than verbal counseling. This patient information leaflet will be helpful in describing the patient's characteristics by written information and the final document would be prepared for analysis of biological and clinical features in a target population study. To identify, recommend and implement of this patient information leaflet is the best practices of this type of patient information design. Acquired immuno-deficiency syndrome is a highly chronic disease caused by human immunodeficiency virus. The patient follow-up antiretroviral therapy treatment during acquiring the AIDS leads to treatment failure is the cause of the emergence of drug resistance. The human immuno-deficiency virus-infected person management requires the depth collection history, physical examination, laboratory testing etc. Such kind of information is required to develop a patient information leaflet to follow up the clinical features of HIV patients during each visit. This patient information leaflet is divided into four parts. In part-1 contains the social features, risk factors opportunistic infections, various signs and symptoms of HIV infection. In part-2 contains the CD4 counts, part-3 contains patient follow-up visits during ART, part-4 contains the biochemical features of the HIV-infected patients. The patient information leaflet is required based on knowledge, attitudes and practices on data collection during focus on human immuno-deficiency virus study.

Keywords: Human immunodeficiency virus (HIV); Acquired immuno-deficiency syndrome (AIDS); Anti-retroviral therapy (ART); Patient information leaflet (PIL); Public Health

Introduction

The main cause of spreading of HIV/AIDS disease in general population is due to lack of knowledge and practice. Sexual practices like homosexuality and anal intercourse are the cause of increased risk of HIV transmission. The main focus of HIV prevention is the proper diagnosis in a fixed population level. Delays in diagnosis may reflect changes in HIV incidence in a population [1]. Cultural practices are also associated with the risk of HIV transmission especially through female "circumcision and infibulations". Besides sexual and cultural practices, other practices like medicinal bloodletting, possibly blood lettings, rituals and medicinal enemas injection of medicines, genital tattooing, body hair shaving, contact with primates, ritual scarification etc. [2]. Mother to child transmission is the main cause of HIV infection in a human population. Poor economic background, the literary level of the parents are the main understanding in HIV transmission. Socio-cultural factors are influencing transmission of HIV from mother to child. So far the behavioral changes, voluntary counseling and testing services, identification of uninfected women, antiretroviral therapy during pregnancy, delivery and postpartum, combination therapy, modification of infant feeding practices, micronutrient supplementation, evidence of an effect on transmission of risk, immune therapies are required for the mother to child transmission [3].

A detail of socio-demographic description of mother to child transmission is required during a population based HIV research. Age is directly correlated with HIV infection. Thymus function gradually changes with age during the treatment of HIV infection [4]. Age distribution of deaths among HIV patient is common. The latent period of HIV infections at certain age may overcome following

treatment. The age gap provides the increased risk of HIV transmission among male-female partners [5]. HIV also transmitted through oral sex. Sex differences influence on HIV diseases progression followed by highly active antiretroviral therapy. Women responded better to highly active antiretroviral therapy than men. Therefore, the CD4 count and RNA level in women are better than men [6]. In a case of men and women exchange sex or partnership is a cause of HIV transmission. Exchange sex in commercial market or informed trading partnership is a cause of high-risk behavior in HIV transmission. Therefore exchange partnership may directly or indirectly influence the HIV transmission [7]. As HIV is the sexually transmitted disease, the major spread of HIV transmission is through sexual intercourse. HIV is mainly transmitted through blood, sexual contact, vaginal secretions, mother to child transmission, heterosexual, injecting drug users etc, [8]. Marital status is a risk factor and main cause of AIDS mortality. The relationship of marital status and HIV is very complex due to various demographic factors. Education plays a major role to combat HIV infection. Education acts like a social vaccine against HIV [9].

Socioeconomic status of an HIV patient is directly related to

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employment or unemployment. A person with psychological symptoms acquired by HIV is the cause of unemployment. The physical symptoms of HIV acquired patients symptoms have no role on working capacity of HIV-infected persons. Employment is very essential to maintain a better life and live up to more longevity period. Employment provides the income status of the HIV- infected persons that he can socially rebuild his family. Cigarette smoking is the cause of morbidity and mortality in HIV-infected population. Cigarette smoking is the main risk of acquiring HIV and rapid CD4 count decline. Cigarette smoking is the major cause of increase the risk of Pneumocystis pneumonia and Tuberculosis in HIV-infected population [10]. In case of persons with a history of excessive of alcohol use, smoking or drug use is the major cause of mortality and morbidity in HIV-infected patients. However, the ART follow- up is continuing, still the mortality is increasing in the HIV-infected population. Tobacco use is extremely common among HIV-infected population. Tobacco use and Nicotine dependence is directly associated with active drug injection of HIV-infected patients [11].

In a human subject of research, to keep up regulations and guidelines for HIV research, the informed consent is necessary. The patient needs the proper reading of the subject of research that will help the patient to gain the knowledge on AIDS research and concerned the subject theme. After reading the subject matter in front of the researcher, the patient thoroughly gained some knowledge on what has been written by the researcher on the HIV research, and then the patient thoroughly puts the signature to complete the informed consent. The proper counseling and HIV testing are very essential for high-risk individuals that may reduce the rate of transmission among high-risk population groups. Therefore, the enhancement of HIV testing can curb the HIV epidemic [12].

Therefore, this patient information leaflet is mainly used in testing and counseling, to study on opportunistic infections, initiation of antiretroviral therapy, CD4 count, during treatment of regimens in HIV-infected patients.

Materials and Methods

This patient information leaflet has been used to collect n=221 numbers of patients those are taking first-line antiretroviral therapy in the ART center of Sarojini Naidu Medical College, Agra. During the whole blood collection from each patient for HIV drug resistance test, the social, biological, clinical, and biochemical profiles are recorded by questioners as well as by observing test data. The informed consent of each patient was taken during whole blood collection.

Results

Our aim is to implement this leaflet in the entire clinical, laboratory, research organizations where the HIV testing, counseling and ART follow up is a daily practice. We have validated and recorded the data of 221 patients in the ART center of Sarojini Naidu Medical College, Agra during our HIV drug resistance test. Among 221 patients, 20 patients are not well accompanied with the query during fill up of this patient information leaflet because of some patients are not well feeling as their deportation of the health status, rescheduled for transport, fairness to say verbally, leave for an emergency job etc.

Key Considerations

- This patient information leaflet contains the information at risk individuals and the new HIV- infected patients.

- This patient information leaflet helps the researchers and counselors in a combined way during the cohort study.
- This patient information leaflet is generally used by a counselor in the ART center to access the information of HIV-infected patients. Many counselors and researchers are logically and verbally input their mind during the collection of information of HIV-infected patients. Most of them are not putting the information in a record form provided by WHO or NACO or self-developed form. Even they have skills and strategies to inquiry the information form details are required to gain more knowledge on patient status.
- This type of patient information leaflet mainly uses as an electronic format to improve quality and efficiency in HIV testing and very easy to write the data of HIV patients.
- This patient information leaflet replaces the verbal discussion with HIV patients and ensures a track record to maintain the data in several clinics, laboratory and ART centers.
- By use of this patient information leaflets, the clear documentation offered and accepted of HIV testing would be recorded for future references.
- This protest the verbal pretest counseling and to improve the sexual health strategy by auditing the collected documents in each year.
- This patient information leaflet mainly used to reduce high-risk HIV-infected individuals such as adolescents, substance users, gay and bisexual population by proper counseling in written formats.
- This patient information leaflet helpful to aggregate the social and behavioural dimension of HIV- infected patients and implement in HIV testing program.
- This patient information leaflet enhances the confidentiality and utilization of HIV testing.
- This patient information leaflet identifying the social context of counseling and testing that is able to identify best practices and malfunctions in each HIV-infected patient's information creating suitable account in the planning of services in several laboratories, clinics, ART centers etc.
- This patient information leaflet describing in a series like a format includes the opportunistic infections, biochemical tests, socio-demographic and clinical profiles, CD4 counts etc. that will help the HIV patients to keep all types of record in a single leaflet.
- This patient information leaflet (PIL) mainly used in multilingual societies during counseling, testing, ART follow up of HIV-infected patients.
- The use of this patient information leaflet increase the rate of diagnosis test of newly HIV- infected patients in a population study and follow up ART from the date of HIV infection.
- This patient information will be helpful to create awareness of serostatus among HIV-infected individuals in a fixed population by keeping track records and work as a primary preventive measure from the source of HIV testing.
- This kind of information leaflet will be helpful in a public health with high-quality wide approach.

Practice Implications

This patient information leaflet design is valuable in culture and literacy skills. This leaflet enhances the learning theory and design principles by enhancing the appeal and improve understanding by end users. Verbal counseling is accompanied with written information.

Conclusion

This patient information leaflet provided an evidence-based information on data collection in each clinic, ART center, Laboratory etc. that can keep the information in a record. As this leaflet creates the immediate effects of knowledge, intentions and attitudes for the primary health care providers for HIV-infected patients, So the CD4 counts and ART follow up date is recall by keeping this leaflet with the patients. This information leaflet will be helpful to promote the HIV screening program.

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