Article

HEJ

Health Education Journal
2015, Vol. 74(1) 120–127
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DOI: 10.1177/0017896914530582
hej.sagepub.com
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Development of an educational video to improve HIV-related knowledge, attitudes and prevention among company workers in Ecuador

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Abstract

Objective: To develop and assess an innovative educational video package for improving HIV knowledge, attitudes and practices among company workers in Ecuador.

Methods: The design and development of the HIV prevention educational video was based on the results of a large-scale survey conducted in 115 companies (commerce, manufacturing and real estate) and among 1,732 workers in the three most populous provinces of Ecuador (Pichincha, Guayas and Azuay). Two focus groups (workers of different job categories and HIV experts from various domains) evaluated the video by means of an 11-item questionnaire scoring the concept, script, technical aspects, potential impact, content and quality of the digital production.

Results: The video produced was 16-minutes long. The two focus groups indicated their overall satisfaction with the initial version of the video and their scores were high. They felt the video kept their interest, was easy to understand, and evidenced the good use of graphics, voice audio and narrative to impact on the audience. The experts were, however, slightly more critical than workers and made some minor suggestions about the content and the need to test the video's cultural appropriateness and degree of comprehension, both of which improved the video prior to its final release.

Conclusion: Video-based HIV intervention programmes targeting company workers may have value in improving knowledge and reducing the risk of HIV transmission in Ecuador.

Keywords

Ecuador, educational video, HIV education, prevention, transmission

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Background

HIV is a major epidemic worldwide, despite considerable advance in the areas of diagnosis, treatment and prevention over the last 20 years. At the end of 2011, more than 34 million people were reportedly living with HIV, of which 2.5 million were reported new cases. Moreover, 1.7 million AIDS-related deaths occurred that year (United Nations Programme on HIV/AIDS [UNAIDS], 2012). The delivery of effective behaviour change strategies is central to reversing the global HIV epidemic. According to the Global HIV Prevention Working Group (2008), the availability of effective biomedical HIV prevention modalities, such as vaccines and microbicides, is still many years away. Even when such tools become available, human behaviour will remain a critical component of HIV prevention (Global HIV Prevention Working Group, 2008). HIV prevention programmes should be comprehensive, not only educating but also building skills and providing information about access to essential commodities such as condoms or sterile injecting equipment according to the target population. Such programmes should also be properly evaluated (National Prevention Information Network, 2013).

Videos and DVDs can serve as a support tool in HIV-related education programmes (Card et al., 2011). Indeed, they offer the opportunity to provide real-life testimonials, easy-to-understand animated graphics illustrating prevention procedures, as well as information regarding protective measures and risk factors. Viewing videos or DVDs can help to alleviate misconceptions, concerns and inhibitions. However, despite the current growth of video usage in patient education, there are relatively few assessments of this medium against more traditional methods of education (Gagliano, 1988). A recent report describes African-American male teenagers attending a sexually transmitted infections (STI) clinic who received either a 14-minute video or a one-on-one session with a health educator, or standard care. The study failed to find any significant differences in terms of the behavioural effects of the three treatment modes. Notably, condom use increased among all three groups over the six-month time period (Douglas and ETR Associates, 2002). Another study, implemented in Uganda to measure the most effective channel for a HIV education intervention, reported that over 85% of the community had seen at least one drama or video show. The conclusion of the study was that the use of a multichannel approach such as educational videos using drama is appropriate when community educators and leaflets were included (Mitchell et al., 2000).

Context

Ecuador is a middle-income Latin American country with major health issues relating to poverty, low levels of education, gender inequality, racism and religious restrictions on condom use. The first case of AIDS in Ecuador was reported by the Ministry of Public Health of Ecuador (MPHE) in 1984. In 2010, the National AIDS Programme in Ecuador reported that the number of HIV cases had been increasing steadily for the past 25 years and workers were among the groups most affected by HIV infection (UNAIDS, 2008). It was also known that 99% of reported infections were due to sexual contact (CARE International, 2008), emphasising the presence of sexual risk behaviour associated with lack of condom use and sexual activity with multiple partners. In Ecuador, there is a need for HIV prevention and education programmes in occupational settings related to the social and cultural reality of that country, in which the Catholic religion plays an important role with topics such as sexuality and condom use.

In general, most company-based educational intervention programmes on HIV and AIDS involve oral presentations, information sessions, folders including flyers, leaflets and other documents and condoms given out by the company doctor or another facilitator (International Labour Organization [ILO], 2008; UNAIDS, 2002). Furthermore, HIV prevention programmes developed

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by international organisations such as UNAIDS and CARE International in other countries are sometimes implemented without the necessary cultural adaptation that would improve their positive impact. Moreover, their impact has rarely been evaluated, in particular with respect to limited time available, the use of technical vocabulary and the tendency to miss salient information. Usually, for low-income workers with poor literacy, such interventions should provide a basic vocabulary and clear messages that are easy to understand. In this context, we explored the idea of developing an innovative educational video informed by the results of a large-scale survey that we conducted in Ecuador on HIV knowledge, attitudes and practices among company workers. Specifically, the video broadcast's purpose was to focus on educating people about HIV, modes of transmission and prevention measures, condom use practice and non-discrimination towards HIV-positive workers in occupational settings.

Methods

The development of the educational video was based on the results of an earlier cross-sectional study about knowledge, attitudes and practices towards HIV and AIDS epidemics conducted in 115 Ecuadorian companies stratified by province (Pichincha, Guayas and Azuay) and working sector (commerce, manufacturing and real estate). A total of 1,732 workers participated (Cabezas et al., 2013). The study used the Behavioral Surveillance Survey–Adult questionnaire developed by Family Health International (FHI). HIV transmission knowledge was evaluated using questions concerning the most common local misconceptions about HIV transmission. HIV prevention measures knowledge was evaluated by means of questions about consistent condom use and mutual monogamy (FHI, 2000).

The survey study revealed major gaps in HIV transmission knowledge (prevalence = 49.1%; 95% confidence interval [CI] = 46.6–51.6) and prevention measure knowledge (prevalence = 32.9%; 95% CI = 30.6–35.2) despite previous exposure to HIV intervention programmes through company programmes (67.9%). It also demonstrated a high rate of unprotected sexual intercourse (80%) among individuals who did not use condoms during sexual intercourse with regular, occasional and commercial sexual partners. Finally, it identified salient risk factors and subject characteristics associated with knowledge and sexual behaviour (e.g. younger age, lower education level, commercial sexual partners and living with spouse or with another sexual partner).

The production team from the Universidad San Francisco de Quito – which consisted of a sociologist, epidemiologist, communication and public health staff – met to analyse these findings, discuss the main issues and establish the principal objectives and strategy for video development. The production team also utilised other sources of reference, including international and national HIV prevention videos as well as bibliographic information. The project experts decided to include information on appropriate techniques for using a condom, and the stigma and discrimination faced by HIV-positive workers in occupational settings. Finally, they suggested that the video should not be too long (around 15 minutes) to avoid problems with the production schedule in companies at the time of implementation and to keep the attention of viewers.

After the feedback meeting, the production department developed a detailed plan to produce the video. The plan included script development and several technical aspects, as described in the next section.

Script development

The script included a brief story similar to a short soap opera in order to keep the attention of the audience. For decades, Latin American soap operas have captivated audiences with exciting stories

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experts, the staging was appropriate to generate impact and they gave a score of 5. For the last question ('What did you not like about the video?'), the comments of the 5 experts suggested making minor changes related to the subtitles, the qualifications and degrees of the interviewed experts and one change in a motion image related to HIV prevention. Finally, the 5 experts suggested using the word 'HIV-positive' rather than 'HIV-reactive' to avoid misconceptions in interpretation. The principal messages reported were condom use, prevention, fidelity and non-discrimination, which coincided with the responses on the workers' focus group. The average satisfaction was high (4.86).

Final video release version

Some of the suggestions made by the focus group members about the HIV video could have been foreseen. For the most part, their suggestions were positive comments. However, the expert focus groups identified three important suggestions for change. At the conclusion of the focus groups, the production company was contacted and several meetings took place to determine the best strategies to adopt to implement these. Prior to the final edit and release, the following three changes were made: (1) in the interview with the priest, subtitles in Spanish were included to ensure clear understanding of the speech; (2) some changes were also made to the subtitles (mostly names and degrees of the interviewed experts) and to some images; (3) the final version used the term HIV-positive instead of HIV-reactive.

Discussion

This study is part of a larger three-phase project to improve awareness about HIV transmission and prevention in occupational settings in Ecuador. Several national reports have consistently indicated that the work setting has been a major factor in the spread of the disease in the country (CARE International, 2008; Ministerio de Salud Pública del Ecuador, 2010; UNAIDS, 2008). In the first phase of the project, a large-scale survey based on the original questionnaire developed by FHI for the evaluation of HIV knowledge and risk behaviour was conducted among Ecuadorian companies in three distinct provinces and working sectors. This paper reports on the second phase of the project, namely the development of an educational video specifically designed for companies based on the findings and outcomes of the first-phase cross-sectional study. A third phase of work will assess the impact of the video on knowledge, attitudes and practices surrounding HIV prevention in the same companies.

Companies are structures employing a wide spectrum of workers in terms of demographic characteristics, professional experience, family and social relations. Thus, targeting company workers may be seen as an opportunity to reach a much wider population of subjects. The international non-governmental organisation, CARE International, has been running a programme in occupational settings in Ecuador to implement policies to reduce discrimination towards HIV-positive workers but has not been assessing knowledge about HIV transmission and prevention. The organisation has been working with 470 companies in the 17 most important cities of the country. As a result, in 2009, 54% of these companies implemented non-discrimination policies (CARE, 2009). In 2007, the ILO implemented a programme in Peruvian companies to enhance knowledge regarding HIV transmission but the results of the intervention are not yet available (Organización Internacional del Trabajo [OIT], 2007).

The development of audiovisual materials to educate and change attitudes towards HIV, sexually risky behaviours, and condom use must consider not only the technical elements but also psychological aspects of attitude formation and attitude change (Albarracin et al., 2005; Eagly and Chaiken, 1993; Wegener and Carlston, 2005). For educational purposes, it is important to note that attitudes change not only as the result of direct experiences but also by means of persuasive

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communication such as audiovisual materials. One advantage of using this type of technology is that it can be cost-effective, multimodal and uses sight, sound and movement that can attract the attention of the audience (Vogel, 2006).

Research in the area of attitude formation and attitude change (Eagly and Chaiken, 1993; Johnson et al., 2005) suggests a number of factors that can improve the persuasive effect of a message such as attractiveness, status and legitimacy of the role models. Regarding the message, this needs to be emotionally appealing, realistic, concrete, relevant, novel and cognitively stimulating, and the content needs to be close to the acceptance level of the audience. Also, the message is more persuasive when the role model presents the desired behaviour that is then reinforced. In addition, the order of presentation is important; it is better to start with material that the audience is already aware of and then continue to present new information. A good approach would be to present abstract information first and then more particular evidence. Finally, attitude change is more feasible when the audience is invited to argue about a position. Thus, it is important to stimulate the audience to discuss the audiovisual material after its presentation.

Many of these recommendations were taken into account in the development of the present HIV prevention video. Since people in general have little direct experience of HIV, one important persuasive message conveyed was that HIV is real and that it is possible to acquire HIV during sexual intercourse, particularly during risky sexual behaviour. The video also transmitted the message that the consequences of acquiring HIV are not seen immediately but in the long run, associated with an affective component (i.e. future pregnancy, future marriage). Also, the video presented alternative behaviours with positive consequences (i.e. what would have happened if a condom had been used).

This study has a number of limitations including the representativeness (or otherwise) of the two focus groups and the fact that only the experts made suggestions and expressed concerns about the video. Additionally, a number of factors were not evaluated in this study, such as the duration and overall technical quality of the video.

The suggestions of the focus groups yielded a final product that we believe to be of potential impact in occupational settings. Thus, the video will be implemented in the 115 companies that were involved in the first phase of the project, and its impact on HIV knowledge and risk behaviour will be assessed 1 month later. Videos of this kind are unique in that they offer a special opportunity to communicate a discrete message with thousands, perhaps even millions, of people, and thus, capture the attention of mainstream culture without large financial investments in development and distribution (Card et al., 2011; Herek et al., 1998; Rotheram-Borus et al., 2009). With this implementation, we can assure that the population will have the same intervention without human bias such as the motivations of the speaker or missing information. If this initiative has a positive impact in the initial companies, implementation can easily be extended to other companies.

There are many questions to be answered in future research studies. They include addressing issues such as the following: how to evaluate the efficacy of this video in different settings and populations; how many times must the video be shown to reach maximal efficacy; and what is the best combination of strategies to use with the video to reach maximal efficacy? The use of more heterogeneous focus groups may also enhance future HIV video production. Many of these questions can be answered in the third phase of the project, which will start with the implementation of the video across all participating project companies.

Video excerpts are available at the following link: http://www.youtube.com/watch?v=0KN3Ohs2uBg

Funding

This study was supported by a grant from the Belgian Development Agency (CTB-BTC).

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Source: 2016 Release of Journal Citation Reports, Source: 2015 Web of Science Data

Health Education Journal
hej.sagepub.com

Published online before print April 29, 2014, doi: 10.1177/0017896914530582
Health Education Journal **January 2015** vol. 74 no. 1 **120-127**

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Abstract

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Ecuador educational video HIV education prevention transmission