

Understanding of HIV and AIDS-Related Messages Among the Key Populations

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Abstract

For effective communication, it is important to find out how the target populations interpret and understand the messages. A descriptive phenomenological study was carried out in Banke district of Nepal to explore the understanding of HIV and AIDS-related messages among the key populations. In-depth interviews were carried out with nine participants selected through purposive and snowball sampling from sexual minority people, and female sex workers. Four emergent themes and eight clusters of themes were identified during data analysis. The participants had a better understanding of safer sex, and the use of PrEP and ARV. On the other hand, some words, symbols, and pictures presented in the messages were still confusing to the participants. This study suggests that clear, precise, explanatory, and illustrative messages in the local language of the target population would be more comprehensible.

Keywords: HIV and AIDS, key populations, communication, understanding, message

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Introduction

The knowledge, attitude, and behaviors of the target population regarding HIV and AIDS and related care are influenced by how they interpret and understand the messages provided by the different means of communication. On the other hand, the success of the communication interventions can be achieved when the target audience correctly interprets the sent messages (Scannell, 2007). From the expert's point of view, no matter how effective means of communication are used, if the audiences have felt difficulty in understanding and interpreting the information and messages, it may create confusion and misunderstanding among them and the desired results may not be achieved. The success and effectiveness of communication involve not only the correct use of languages such as words, pictures, and symbols but also how these are interpreted (Haupt et al., 2005). Understanding a message is about interpretation and it depends on an individual's perceptual filter and linguistic category system, and the message may be misunderstood or distorted, or completely changed when the audiences assign the meaning to it (Lundsteen, 1971, as cited in Chiwara, 2017).

Some of the health messages and materials available in the community and organizations providing HIV and AIDS-related care in Nepal are found to have problems in terms of accuracy, uniformity, completeness, and reliability (Ministry of Health and Population, 2013). "Most of the health messages or information and program are disseminated and published preparing in the Nepali language, although Nepal is a country with multi caste, ethnicity and several languages" (ibid., p. 7). It indicates the presence of a similar problem in Nepal as the finding of Nunyenge (2013) that less attention has been given to the meaning people make in their messages during HIV campaigns and awareness creation. It demands that the designers of the means of communication need to study how the audience can differently understand the message disseminated through the different means of communication (Okaron, 2015). For communication to be effective, it is also important to find out how the audiences interpret and understand the messages. The audience's understanding of the information received can have a significant impact on the effectiveness of HIV and AIDS-related communication programs which have not yet been studied adequately, especially in the local context.

In Nepal, nearly 60% of HIV infections is occurring in key populations, such as people who inject drugs, female sex workers, clients of sex workers, labor migrants, men who have sex with men, and transgender people (Deuba et al., 2020). Some reasons behind this problem are little knowledge about HIV and available care, low uptake of HIV testing and counseling, and high risk-behaviors among them (Shrestha et al., 2017; Kakchapati et al., 2018; NCASC, 2018; Deuba et al., 2020; Wilson et al., 2021). Banke district, specially Nepalgunj Sub-metropolitan City is a vulnerable location for the spread of HIV (International Organization for Migration, 2019). In this district, 12 organizations have been conducting HIV and AIDS-related communication campaigns for decades targeting those key populations, but the trend of the concentrated epidemic has not declined as expected (Shrestha, 2018). One of the major causes

of this situation may be the target populations' misinterpretations or inability to understand the available HIV and AIDS-related messages, which are not explored adequately. In this context, this descriptive phenomenological study was carried out in Banke district of Nepal to explore the answer to the research question, "How do the key populations understand the HIV and AIDS-related messages provided through the prevalent means of communication?" Exploring the answer to this research question can provide insightful guidance for designing and disseminating more comprehensible messages for those key populations in the study area and other similar contexts.

Methods

This study was carried out by adopting the descriptive phenomenological approach to explore the common experiences of the participants who were targeted and exposed to HIV and AIDS-related information in the study area. The participants were selected through snowball sampling from adult key populations of sexual minority people, and female sex workers who were exposed to HIV and AIDS-related means of communication, and aged between 20 and 40 years residing in Banke district in Nepal. In this district, there are an estimated 824 female sex workers, 1709 men who have sex with men and male sex workers, and 639 transgender people (National Centre for AIDS and STD Control (2017)). A total of nine participants including five sexual minority people and four female sex workers were selected for this study. According to Starks and Trinidad (2007), typical sample sizes for phenomenological studies vary from one to ten people; hence this number of participants was sufficient to reach the saturation point.

In-depth group interviews were conducted using a semi-structured interview guide in drop-in-centers of Nepal STD and AIDS Research Centre (NSARC) and Western Star Nepal in Nepalgunj, and in participants' residences with help of the selected trained assistants familiar with the respective groups of participants. The interview guide consisted of 10 major open-ended questions which were modified as per the need of each interview context. Interviews were carried out in three phases as recommended by Cresswell (2014): initial screening interview, main interview, and follow-up interview. Screening the participants, rapport building, informing them about the study, and obtaining informed consent were completed in the first phase. The main interviews were conducted by demonstrating some of the most widely used communication materials related to HIV and AIDS in the study area and trying to find out what the participants understood about the messages. HIV and AIDS-related eight posters, one pamphlet, and one leaflet were presented during interviews to capture the lived understandings of the participants to fulfill the research purpose of the present study. Each main interview was digitally audio-recorded and was completed approximately within one hour to two hours. The audio record was transcribed immediately after each interview and sent to the participants to review accuracy. I employed Colaizzi's seven-step method of descriptive phenomenological data analysis (as cited in Morrow et al., 2015): transcribe and familiarize, extract significant statements, formulate meanings, cluster themes, create exhaustive descriptions, produce fundamental structure, and validate findings.

As explained by Lincoln et al. (2018) and Meyers (2019), I utilized methods such as pilot testing of the interview guide, bracketing my preoccupied assumptions and experiences, thick description, following transcription protocol, and member checking to reduce my bias and increase the credibility of data collected. Ethical consideration was strictly maintained in this study. I provided a detailed information sheet about my study to each participant and took written informed consent before starting the interview. Anonymity and confidentiality were strictly maintained and participation was voluntary. Participants' pseudonyms are used to represent their identities in this article.

Result

Four emergent themes were identified from the analysis of participants' descriptions: safer sex for health and safety, PrEP reduces the risk of HIV infection, ARV reduces the viral load of HIV and confusion regarding messages. Participants' understandings of the messages are presented as their representative verbatim descriptions under succeeding eight clusters of themes related to these emergent themes.

Safer Sex for Health and Safety

After exposure to the posters and a leaflet related to HIV and AIDS, most of the participants understood that safer sex promotes their health and safety. They described their understanding that condoms and lube would maintain safer sex, and unsafe sex meant sex without a condom.

Condom and Lube Maintain Safer Sex

Prema (pseudonym), a transgender, aged 39 shared her understanding of the message of a poster she read, “Wearing a condom and applying lube strengthens a bit sexual health, of the anus because there is no fear of tearing.” She added, “Condom should be used for safe sex and protect oneself from pregnancy.” Similarly, Chadani (pseudonym), another transgender, aged 28 stated, “Condom means it works for both satisfaction and safety.” After reading the leaflet on HIV and AIDS Sonia (pseudonym), a transgender, aged 26 described, “The lube is the slippery substance like oil used while sexual contact.” Most of the participants understood that condoms and lube provide satisfaction and safety, and maintain safer sex. They understood that lube works as a lubricant and prevents tearing while anal sex.

Unsafe Sex as the Sex Without Condom

After seeing the posters and reading a leaflet, Junu (pseudonym), a female sex worker, aged 34 expressed her understanding of unsafe sex, “Doing [sexual intercourse] indiscriminately, not paying for [sex], and doing without a condom are unsafe sexual behaviors.” Reshma (pseudonym), another female sex worker, aged 25 expressed a similar understanding, “It [unsafe sex] is sex without wearing a condom, and other is oral sex.” These verbatim descriptions represent most of the participant's understanding of the message that unsafe sex was indiscriminate sexual contact without using a condom.

PrEP Reduces the Risk of HIV Infection

The organizations conducting HIV and AIDS-related care in the study area were providing medicine to the people involved in HIV risk behaviors as pre-exposure prophylaxis (PrEP). Most of the participants interpreted the messages presented on a poster and a pamphlet related to the PrEP as that PrEP protects people with risk behaviors from HIV if taken before unsafe sex.

PrEP Protects From HIV if Taken Before Unsafe Sex

Geeta (pseudonym), a female sex worker, aged 35 described her understanding of PrEP, “It [poster] says that if two people have unsafe sex, they should take medicine before. Then it prevents HIV transmission.” Similarly, Reshma, another female sex worker, aged 25 stated, “One should take PrEP before sexual contact between two persons.” These representative descriptions revealed participants' understanding of the message that PrEP is a medicine that protects people from HIV if it is taken before involving in unsafe sexual activities.

PrEP Should be Taken by the People With HIV Risk Behaviours

Junu, a female sex worker, aged 34 described her understanding of the message, of who should take PrEP, “Those who inject drugs, you know, who have sexually transmitted diseases, who do not use a condom, and who have sex with HIV positive, and the persons who have sex in exchange with goods should take PrEP.” Likewise, Pyari (pseudonym), a transgender, aged 28 explained in more detail that PrEP should be taken by persons who have been involved in risky behaviors like sex work. She said:

Suppose, I have a lot of risky behaviors, some are involved in sex work. Such persons should take PrEP because they have a lot of risky behaviors. Now, somewhere, they may have sex with an HIV- infected person. Now you can get infected by having such relationships with many people. Now you don't know (the HIV status of) the person you are having relation (sex) with just by looking at them, it is known only after a blood test. So it is very good and necessary for people to take PrEP who take such risky behaviors.

These descriptions represent most of the participant's understanding of the message that PrEP should be taken by injecting drug users, persons with STDs, non-users of condoms, a person having sex with HIV positive, and sex workers. Participants understood that these people were at risk of HIV infection due to their risky behavior and that the intake of PrEP would protect them from HIV.

ARV Reduces the Viral Load of HIV

The antiretroviral drug (ARV) is provided to people living with HIV (PLHIV) which reduces the number of viruses (viral load) in their bodies. Participants' representative verbatim descriptions related to their understandings of the messages about ARV and viral load on the three posters they were exposed to are analyzed under the following subthemes.

ARV Prolongs Normal Life of PLHIV

Pyari, a transgender, aged 28 shared her understanding of ARV, “The medicine to be taken after being infected with HIV is called ARV.” She added, “You can live like a normal person if you take ARV regularly as recommended.” Similarly, Ramesh (pseudonym), a man who has sex with men expressed his understanding, “Like our life is a hundred years, if we continuously take it [ARV] now, we can live hundred years. If left now, we can die in 10-15 years.” Most of the participants understood the message that ARV is a medicine to be taken by PLHIV which prolongs their life and they can live like normal people.

ARV Reduces Viral Load and Transmission

Pyari, a transgender, aged 28 shared her understanding of ARV, "Suppose I am infected, I am HIV positive. Now if I take medicine continuously and carefully without missing, you know, and after taking medicine, even if I have sex with anyone, there is no chance of HIV transmission." She further stated, “Suppose, I am initially infected with the virus, the number of viruses in my body decreases as I continue to take ARV.” In addition, Ramesh, a man who has sex with men clarified, “If you take medicine [ARV], the number of viruses in the body decreases, and if you have sex with others, it does not transmit." Similarly, Reetu (pseudonym), a female sex worker, aged 27 shared her understanding, "The amount of virus is higher at the beginning. If you keep taking the medicine, the virus will go down. It will be less when testing in six months and testing in the next successive 6 months is less even." The majority of the participants of this study understood the message that regular intake of ARV gradually decreases the viral load in PLHIV and reduces the chances of transmission to others. They also understood that the viral load can be detected by blood testing for HIV every six months intervals.

Confusion Regarding Messages

Most of the participants were confused about some words and symbols used in the posters of PrEP and ARV and a leaflet on HIV and AIDS. They either misinterpreted the messages or were unable to understand them.

Misunderstanding

Pyari, a transgender, aged 28 misinterpreted the word *Naganya* [uncountable] in a poster of ARV as, “not having sex with many people or making few partners.” Similarly, Junu, a female sex worker, aged 34 misinterpreted the word *Sankramit Ragat* [infected blood] mentioned in the leaflet, “It is healthy blood, without HIV and sexually transmitted diseases.” She further misinterpreted the words *Yoni Maithun* [vaginal sex] and *Guda Maithun* [anal sex] as: "Yoni Maithun means you know, someone sucks Yoni, by gents, it is that. Someone sucks that of gents, you know, that is called Guda Maithun." Those verbatim descriptions represent most of the participants' misunderstandings about the messages. They misinterpreted the words *Naganya*, *Sankramit Ragat*, *Yoni Maithun*, and *Guda Maithun*.

Feelings of Inability to Understand

Junu, a female sex worker, aged 34 expressed her inability to understand the picture on the poster of PrEP, “For now no one understands the symbol of the key. The explanation must be written. The picture of the heart there is not suitable. It [HIV] doesn’t infect directly in the heart.” On the poster of ARV, Pyari, a transgender, aged 28 realized her confusion with the word *Nagnya*, “I don’t even understand this word. This word confused me.” Similarly, Reetu, a female sex worker, aged 27 shared her confusion about the symbol $U = U$ displayed on another poster of ARV, “That U is equal to U is not clear to us.” Geeta, another female sex worker, aged 35 also stated, “we are confused about the words *Undetectable = Untransmittable* in these posters.” Participants were confused about the *Linkages Nepal Project* mentioned in the leaflet with a logo of green leaf and a label with *Vishwas* [faith]. Chadani, a transgender, aged 28 expressed, “For the first time, I just heard about linkages.” Reshma and Junu, sex workers, also said, “we could not understand what the Linkages Nepal Project and the green leaf are about”. Most of the participants realized their confusion and inability to understand the picture on the poster of PrEP, the words *Nagnya*, *Undetectable = Untransmittable*, and the symbol $U = U$ on the posters of ARV, and the word *Linkages Nepal Project* with the symbol of green leaf in the leaflet of HIV and AIDS.

Discussion

This study explored the essence of participants' understanding of the messages to which they were exposed through different communication materials. It revealed that participants understood safer sex was for health and safety, PrEP for reducing the risk of HIV infection, and ARV for reducing the viral load of HIV. These understandings were similar to the messages printed in the communication materials. This finding indicates that the messages related to the meaning of safer sex and the benefits of PrEP and ARV were easy for the participants to understand. Such understandings might have contributed to increasing the key populations' awareness about safer sex as explored by some previous studies (Kakchapati et al., 2018; NCASC, 2018, Storm et al., 2020). The increasing rate of acceptance and completion of the course of PrEP (93% and 64% respectively), as revealed by FHI 360 and Linkages Nepal (2020), might have also been due to the key populations' accurate understanding of PrEP.

The present study also explored that participants were confused with some messages. They perceived the picture on the poster of PrEP, the words “Nagnya” and “Undetectable = Untransmittable” on the posters of ARV, and the symbol “ $U = U$ ” on those posters as confusing and incomprehensible. In contrast to the finding of the Nepal Health Research Council (2018) which found that participants perceived leaflets clear and easy to understand, my study uncovered participants' lack of comprehension and misinterpretations of the words “Sankramit,” “Yoni Maithun”, “Guda Maithun,” and “Linkages Nepal Project” in the leaflet of HIV and AIDS. These findings were also in agreement with previous studies which reported

that HIV and AIDS-related messages were not always clearly understood by viewers and they were unable to attach any meaning to such unfamiliar and complicated words to them (NCASC et al., 2004; USAID, 2013). These findings are also aligned with the study by Ojo (2009) which revealed that unfamiliar images and ambiguous language in posters caused the messages to be misunderstood. The present study indicates that the unfamiliar and complicated words and symbols used in the means of communication might have distorted participants' decoding and sense-making process and ultimately compromised their comprehension.

The findings of the present study also support Corner's (1995) explanation that audiences' decoding and sense-making process determine the comprehension and interpretation of the message they received and finally affect their understanding of the message. In the words of Rice and Atkin (2013), comprehensibility is one of the influential message qualities, which indicates a simple, explicit, and detailed presentation of content that is understandable to audiences. In this context, the suggestion of Ojo (2009) is very significant that realistic, appropriate, and message-relevant imagery and familiar language can improve the comprehension of HIV and AIDS messages.

Conclusion

Though the participants had a better understanding of safer sex, and the use of PrEP and ARV, some of the HIV and AIDS-related messages provided by the available means of communication in the study area do not seem to match the target audience's local language, level of consciousness, and ability to understand. This study has revealed the fact that some words, symbols, and pictures presented in the messages were still difficult for the participants to understand. Such ambiguity in communication materials and messages might have created confusion and misunderstanding among the targeted populations. This study indicates that clear, precise, explanatory, and illustrative messages in the local language of the target population would be more comprehensible. The complex and unfamiliar words, symbols, and pictures need to be replaced with simpler, clearer, and more familiar ones.

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References

- Chiwara, T. B. (2017). *Guidelines for improving HIV/AIDS communication for women in Zimbabwe* [Doctoral dissertation, University of South Africa]. <https://pdfs.semanticscholar.org/a9ee/0d598745182a91dedd17f0fd44979fa73b81.pdf>
- Corner, J. (1995). Television form and public address. Edward Arnold. <https://doi.org/10.1080/08821127.1996.10731823>
- Creswell, J.W. (2014). *Research design: Qualitative, quantitative and mixed methods approaches* (4th ed.). SAGE.
- Deuba, K., Sapkota, D., Shrestha, U., Shrestha, R., Rawal, B. B., Badal, K., Baird, K. & Ekström, A. M. (2020). Effectiveness of interventions for changing HIV related risk behaviours among key populations in low-income setting: A meta-analysis, 2001–2016. *Scientific Reports*, 10:2197. <https://doi.org/10.1038/s41598-020-58767-0>
- FHI 360, & Linkages Nepal. (2020). *Exploring feasibility and acceptability of HIV pre-exposure prophylaxis for female sex workers, men who have sex with men, male sex workers, and transgender women in a selected district of Nepal: Study report*. Haupt et al., 2005
- International Organization for Migration. (2019). *Research on the health vulnerabilities of cross border migrants from Nepal*. shorturl.at/BUY13
- Kakchapati, S., Gautam, N., KC, K. P., & Rawal, B. B. (2018). HIV awareness and safe sexual behaviors among female sex workers in Kathmandu valley of Nepal. *HIV/AIDS - Research and Palliative Care*, 10, 157–166. <https://www.dovepress.com/getfile.php?fileID=43793>
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2018). Paradigmatic controversies, contradictions, and emerging confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (5th ed., pp. 108–150). SAGE.
- Meyers, A. (2019). *A phenomenological study of the lived experiences of counseling students in a co-facilitated experiential group* (Doctoral dissertation, University of Arkansas). <https://scholarworks.uark.edu/cgi/viewcontent.cgi?article=4830&context=etd>
- Ministry of Health and Population (2013). *National health communication policy 2012*. https://drive.google.com/file/d/1n56XSeaKwkqn1hNJev1mJhinYr8R_8uH/view
- Morrow, R., Rodriguez, A., & King, N. (2015). Colaizzi's descriptive phenomenological method. *The Psychologist*, 28(8), 643-644.
- National Centre for AIDS and STD Control (NCASC, 2018). *Country progress report NEPAL*. https://www.unaids.org/sites/default/files/country/documents/NPL_2018_countryreport.pdf

- NCASC, POLICY Project Nepal, & Sancharika Samuha. (2004). *Media review: Analysis of reporting on HIV/AIDS in Nepal*. http://www.policyproject.com/pubs/countryreports/nep_mediareview_hiv.pdf
- NCASC. (2017). Mapping and size estimation of most-at-risk-population in Nepal. Kathmandu: NCASC.
- Nepal Health Research Council. (2018). *Linkages across the continuum of HIV services for key populations affected by HIV (LINKAGES) project*. <https://www.fhi360.org/sites/default/files/media/documents/resource-nepal-hivst-report.pdf>
- Nunyenge, R. (2013). The meaning people make of HIV posters: A case study on health improvement at Jirapa District in the Upper West Region of Ghana. *Journal of Biology, Agriculture and Healthcare*, 3(7), 1-16. <https://core.ac.uk/download/pdf/234658877.pdf>
- Ojo, O. A. (2009). *The efficacy of graphic imagery in HIV/AIDS-prevention campaigns: A case study of loveLife outdoor material*. (Doctoral dissertation, Central University of Technology) <http://ir.cut.ac.za/bitstream/handle/11462/119/Ojo%20%20Olutunmise%20Adesola.pdf?sequence=1&isAllowed=y>
- Okaron, P. S. (2015). *An evaluation of HIV/AIDS campaign messages: A case study of Mpango Wa Kando campaign in Nairobi County* [Master's thesis, University Of Nairobi]. shorturl.at/bvR26
- Rice, R. E., & Atkin, C. K. (2013). *Public communication campaigns*. SAGE.
- Scannell, P. (2007). *Media and communication*. SAGE.
- Shrestha, M. (2018, June 4-5). *LINKAGES Nepal Project* [Paper presentation]. National Centre for AIDS and STD Control province-level review meeting, Butwal, Province-5.
- Shrestha, R., Philip, S., Shewade, H. D., Rawal, B., & Deuba, K. (2017). Why don't key populations access HIV testing and counselling centres in Nepal? Findings based on national surveillance survey. *British Medical Journal (BMJ) Open*, 7:e017408. DOI:10.1136/bmjopen-2017-017408
- Starks, H., & Trinidad, S. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research*, 17, 1372–1380. DOI:10.1177/1049732307307031
- Storm, M., Deuba, K., Damas, J., Shrestha, U., Rawal, B., Bhattarai, R. & Marrone, G. (2020). Prevalence of HIV, syphilis, and assessment of the social and structural determinants of sexual risk behaviour and health service utilization among MSM and transgender women in Terai highway districts of Nepal: Findings based on an integrated biological and behavioural surveillance survey using respondent driven sampling. *BMC Infectious*

Diseases, 20:402. <https://doi.org/10.1186/s12879-020-05122-3>

USAID. (2013). *Understandings and interpretations of communication campaign messages about concurrent partnerships, acute HIV infection and sexual networks in Botswana and Tanzania*. <https://www.jhsph.edu/research/centers-and-institutes/research-to-prevention/publications/bostswana-tanzania-report.pdf>

Wilson, E. C., Dhakal, M., Sharma, S., Rai, A., Lama, R., Chettri, S., Turner, C. M., Xie, H., Arayasirikul, S., Lin, J., & Banik, S. (2021). Population-based HIV prevalence, stigma and HIV risk among trans women in Nepal. *BMC Infectious Diseases*, 21:128. <https://doi.org/10.1186/s12879-021-05803-7>