http://heanoti.com/index.php/hn

LITERATURE REVIEW ARTICLE
URL of this article: http://heanoti.com/index.php/hn/article/view/hn20801

Interventions of Stigma and Discrimination Towards HIV/AIDS Patients: An Integrative Literature Review

Wiwin Martiningsih[1(CA)], Josephine Lorica[2]
[1(CA)]Nursing Faculty, Saint Paul University, Philippines / Department of Nursing, *Poltekkes Kemenkes Malang* (Health Polytechnic of Malang), Indonesia; wiwin_martiningsih@yahoo.co.id (Corresponding Author)
[2]Nursing Faculty, Saint Paul University, Philippines; jlorica@spup.edu.ph

ABSTRACT

HIV / AIDS is a chronic disease that has gained stigma and discrimination. Various attempts had been made by the government to reduce this stigma and discrimination. This paper identified the critical components of interventions with the aim to decrease stigma and discrimination of PLWHA. This integrative literature review was conducted in the databases PubMed and Cumulative Index of Nursing and Allied Health Literature (CINAHL), from January 1, 2007, to December 31, 2017. Finally, 6 studies were found in CINAHL and 2 studies from PubMed. Results revealed that the most interventions were creating a program with a specific designation that aimed to change behavior. Interventions were developed base on diffusion and innovation theory, social cognitive theory, socioeconomic and community theory. Sample articles provided information the positive results, such as 1) decreasing of stigma toward PLWHA from community member, community leader, health worker, community to the family with PLWHA, also from family to PLWHA, 2) improving PLWHA self-esteem, 3) decreasing uncertainty about HIV treatment among PLWHA, 4) increasing institutional support in the hospital, and 5) increasing of HIV knowledge. For further needed programs involving multiple levels of respondents/participants (PLWHA, community, government, organization, health worker, social worker) in one moment and implemented at least 1 year, by combining behavior change techniques through education, social marketing, and community/group organizational development.

Keywords: Interventions of stigma, Discrimination, HIV/AIDS

INTRODUCTION

Background

On 1 January 2016, the world officially began implementation of the 2030 Agenda for Sustainable Development—the transformative plan of action based on 17 Sustainable Development Goals—to address urgent global challenges over the next 15 years. Part of the Goal of 3 aims to ensure health and well-being for all at all ages by ending the epidemics of major communicable diseases. One of the major communicable diseases is HIV disease. In 2015, 2.1 million people became newly infected with HIV. World leaders committed to support research and development, increase health financing, and strengthen the capacity of all countries to reduce and manage health risks. In 2015, the number of new HIV infections globally was 0.3 per 1,000 uninfected people, and an estimated 2.1 million people became newly infected that year. Between 2011 and 2015, World AIDS Days are held under the theme of “Getting to Zero: Zero New HIV Infections, Zero Discrimination, and Zero AIDS-Related Deaths. In this context, a global vision was developed for all countries; working together toward zeros, but a big question is how we can approach these ambitious targets. They are fantastic and attractive phrases that motivate all stakeholders to contribute and work together more effectively, and the world deserves no less than such a future; however, they are not easily reachable, in reality.[(5)]

People Living with HIV and AIDS (PLWHA) are often believed to deserve their HIV-positive status as a result of having done something “wrong”. The shame associated with AIDS is a manifestation of stigma, that has been described by some writers as internalized stigma may also prevent PLWHA from seeking treatment, care and support and exercising other rights, such as working, attending school etc. Stigma associated with AIDS is underpinned by many factors, including lack of understanding of the illness, misconceptions about how HIV is transmitted, lack of access to treatment, irresponsible media reporting on the epidemic, the incurability of AIDS, and prejudice and fears relating to a number of socially sensitive issues including sexuality, disease and death,

and drug use.[1] Stigma has been described as a dynamic process of devaluation that 'significantly discredits' an individual in the eyes of others. HIV-related stigma is multi-layered, tending to build upon and reinforce negative connotation through the association HIV/AIDS with already-marginalized behaviors, such as sex work, drug use, and homosexual and transgender sexual practice. Stigmatization involves cognitive (e.g., believe or attitudes towards the disease and those affected), emotional (fear, pity), and behavioral (behaving in unfair or discriminatory ways) responses.[10] When stigma is acted upon, the result is discrimination. Discrimination consists of actions or omissions that are derived from stigma and directed towards those individuals who are stigmatized. The stigma and discrimination associated with HIV and AIDS also mean that PLWHA is much less likely to receive care and support. The less optimal implementation of the program has affected the successful management of HIV / AIDS. Stigma and discrimination not only done by the community but also by a health worker, family member of PLWHA. Healing may need to occur on many levels for the patient, that is Physical self, mental self, emotional self and spiritual self.[11] Giving negative stigma and discrimination will affect four levels above, not only mental and emotional. There were many interventions that have been done by the government, even the whole world tried to apply any form of intervention. In other words, a lot of intervention or research is done but its utilization is still not optimal, especially in research results that can actually reduce stigma and discrimination. So that the achievement still did not meet the desired goals. This Integrative Literature Review will explore the interventions that have been done in various countries, all of which are aimed at preventing HIV / AIDS and in order to achieve 3 zero targets.

Purpose

This review aims to identify the critical components of interventions that have been implemented by nurses or provider health worker with the aim of decreasing stigma and discrimination of HIV/AIDS Patients. Finally, the researcher intends to further refine propositions for research and apply it in the community. So, the research question is what is the main attributes of nursing interventions that have been described to decrease stigma and discriminations of HIV/AIDS patients?

METHODS

The steps for the integrative review used in this study were problem identification (question formulation), literature search, data evaluation, data analysis and reporting.

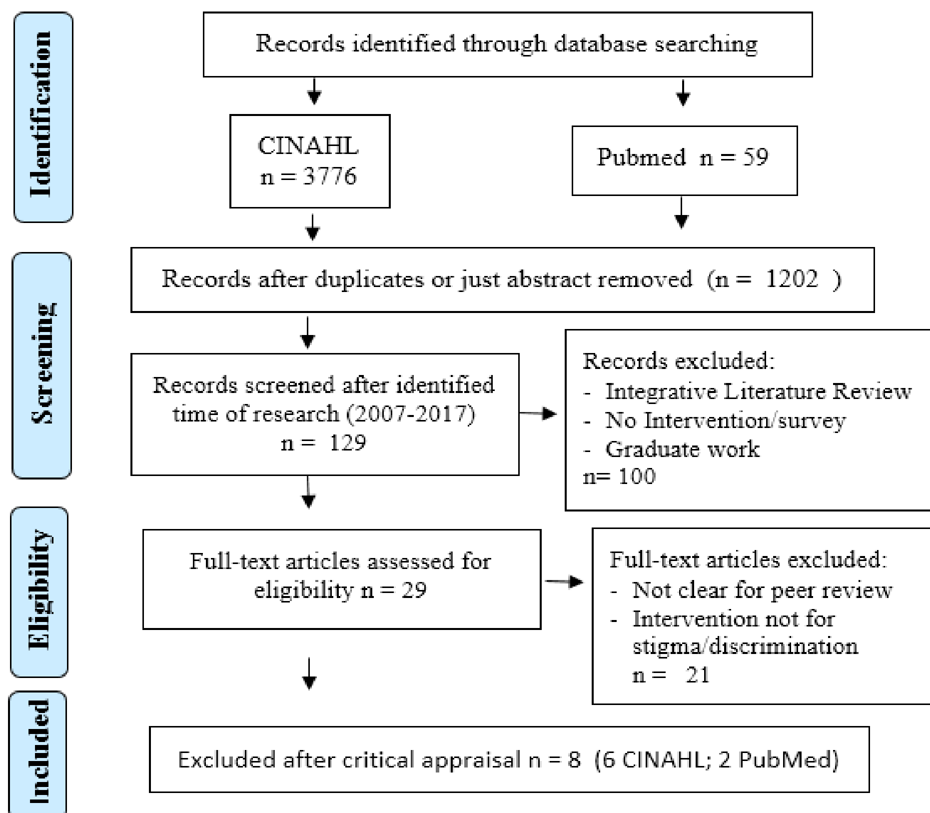

Figure 1. Flowchart of Literature Search Performed

The central question of this integrative review is; " what are the main attributes of nursing interventions that have been described to decrease stigma and discriminations of HIV/AIDS patients ?". The second step,

literature search: an extensive electronic search of the literature was conducted in the databases PubMed and Cumulative Index of Nursing and Allied Health Literature (CINAHL), from January 1, 2007 to December 31, 2017. Studies include the following criteria: full peer-reviewed papers, describing quantitative or qualitative research that should necessarily present a clear proposition or implementation of a nursing intervention aimed at decreasing stigma and discrimination of HIV/Patients. Papers were written in English. Reviews and dissertations or unpublished papers were not included. And studies that contained the words Intervention, stigma, discrimination, HIV/AIDS patient. Whereas, the intervention was not addressed issues related to decreasing stigma and discrimination patients HIV/AIDS were excluded. The third step, data evaluation: 3776 studies were found in CINAHL and 59 studies from PubMed, then 1202 studies that full papers were taken. Only 129 studies that related to with ILR topic with the time of research (2007-2017). Full-text articles assessed for eligibility (n=29). Finally, 6 studies were found in CINAHL and only 2 studies from PubMed. For details, see the flowchart (figure 1).

The fourth step, data analysis: a research instrument was developed for data extraction and analysis from the included studies. The instrument comprised the following items: author, purpose/result, interventions, study design, sample size and statistical methods, and conclusion/recommendation/nursing implication.

RESULTS

Among the eight included studies, the purpose was reducing of the stigma and discrimination of PLWHA, beside that there several variations of goals such as increasing self-esteem, coping self-efficacy of HIV/AIDS patients, tolerance to reduce stigma, disclosure concern and also decreasing of internalized stigma. Base on the result of this integrative literature review, 4 the studies used quantitative research with a pre-post test with control and without control, Randomized Control Trial, post-test only experimental design, and 4 remaining using qualitative and quantitative design, such as action research, mixed methods as well. Data collection techniques through FGD and in-depth interview for qualitative research, while the quantitative research using checklist/survey. Type of scale to measure stigma used IHSS, Burger scale, and another scale that is used by researcher such as the scale of behavior to seek HIV test, knowledge of HIV, self-stigma, coping self-esteem scale, stigma by community toward PLWHA or family of PLWHA, also the stigma of the family to PLWHA. The study was carried out in Chicago, New York, Puerto Rico, China, Africa, Thailand and Caribia and the data gathering were conducted in the hospital and the community. The participants were caregivers/health worker, community member, community leader, PLWHA (adolescent, youth-adult, adult woman), and the family of PLWHA. There were 5 studies involved the PLWHA as participants, and only 3 studies involving simultaneously participants from different level/profession in one activity/study/program so that it could be evaluated comprehensively the interrelationship between participants. The sampling was used for systematic, cluster and stratified sampling for quantitative methods.

Interventions were conducted in this literature review in form stands for the program to make remembering easier: ACCEPT (Adolescents Coping, Connecting, Empowering and Protecting Together) Project, Public Service Announcements (PSAs) Project, White Coat, Warm Heart (WW) Project, The Finding Respect and Ending Stigma around HIV (FRESH) Workshop, Community Champions HIV/AIDS Advocates Mobilization Project (CHAMP), Acceptance Commitment Therapy Training (ACT), Social Justice Capacity Building (SJCB), home-based counseling and testing (HBCT). Various activities were done in the intervention 1) Information-based approaches (Make message for individual to get an HIV test, watching the video, sharing information, role-playing, playing the game), 2) Facilitating the acquisition of coping skills 3) Empowerment of the Community, 4) Financial contribution, 5) Make relationship with PLWHA or their group.

Researchers made interventions were based on theory Behavioral Change, such as diffusion and innovation theory, social cognitive theory, integrated behavior and structural level component, whole community approach, socioeconomic and community approach. The shortest duration of intervention was 1 month and at most 12 months, the average intervention was done for 5 months. Analysis of the research in this ILR was WSRT, Regression, ACASI, Wilcoxon sign rank test, Fisher test, ANOVA, MANOVA, Paired t-test, reliability test, those were for quantitative research, and content analysis using Nvivo software for qualitative research. The summary of Literature Reviewed can be seen in table 1.

Table 1. List of sources included in review and description of the study

Author	**Gary W. Harper, Diana Lemos & Sybil G. Hosek [6]**
Purpose & Results	**Purpose:** To describes the influence of a group-based behavioral intervention for adolescents and young adults newly diagnosed with HIV in four dimensions. **Results**: Reducing of stigma of male PLWHA (personalized stigma, disclosure concerns, negative self image, concerns with public attitudes about people with HIV/AIDS), reducing of stigma of female PLWHA (personalized stigma), increasing of stigma of female PLWHA

	(disclosure concerns, negative self image, concerns with public attitudes about people with HIV/AIDS).
Intervention	Project ACCEPT/ Adolescents Coping, Connecting, Empowering and Protecting Together) • The Project ACCEPT intervention is based on the Disability-Stress-Coping model and incorporates skills-building activities guided by Social Cognitive Theory. • Intervention over a 12-week period, stigma was addressed in a holistic manner during the i**ntervention of** 3 activities.
Study Design	• **Qualitative:** Focus groups and individual interviews with youth living with HIV. **Quantitative:** a randomized controlled trial, utilizing a One group pretest-posttest design study. The Berger HIV Stigma Scale.
Sample size & Statistical Methods	• Fifty youth (28 male, 22 female; newly diagnosed with HIV • Audio-Computer-Assisted Self Interviewing (ACASI).
Conclusion/Recommendation/Nursing Implication	Needed gender specific outcomes and a different type of intervention to reduce stigma for young women
Author	**Prawit Thainiyom & Katherine Elder** (7)
Purpose & Results	**Purpose:** To determine whether HIV/AIDS Public Service Announcements (PSAs) that use emotional appeals have unintended effects of creating stigmatizing attitudes in their viewers **Results: 1)** Men exposed to the " hope condition had significantly higher stigmatizing attitudes towards PLWHS than men in the other 2 conditions, 2) There were no significant differences in stigmatizing attitudes and discrimination intent across the 3 conditions.
Intervention	• Public Service Announcements (PSAs) Program • There was 3 group, each group was asked to watch a 30-second HIV/AIDS PSA that concluded with a message for individuals to get an HIV test, using a fear, hope, or informative approach.
Study Design	• **Quantitative:** a post-test only experimental design, • Scale: 1) HIV/AIDS Stigma scale, 2) HIV/AIDS-related Stigma and Discrimination Scale, and 3) Likert scale to measure behavioral intention to seek HIV testing
Sample size & Statistical Methods	• 240 respondents (labor market) and lived in the US. 77 were exposed to "the fear condition", 91 to the "hope condition", and 72 to the "informative condition". • MANOVA analyses and Pearson correlations
Conclusion/Recommendation/Nursing Implication	**Recommendation:** that further research needs to be conducted with a more robust sample size and to account for any moderating influences that might explain why a "hopeful message" that communicates togetherness would have a negative attitudinal impact on male viewers.
Author	**Li Li, Zunyou Wu, Li-Jung Liang, Chunqing Lin, Jihui Guan, Manhong Jia, Keming Rou, and Zhihua Yan** (9)
Purpose & Results	**Purpose:** To reduce service providers' stigmatizing attitudes and behaviors toward PLWHA. **Results:** researcher observed significant improvements for the intervention group in reducing prejudicial attitudes ($P < .001$), reducing avoidance intent towards people living with HIV ($P < .001$), and increasing institutional support in the hospitals ($P = .003$)
Intervention	• The intervention" White Coat, Warm Heart (WW), integrated behavioral- and structural-level components. The behavioral-level components were built on the diffusion of innovation theory. • Conducted for 12 months.
Study Design	**Quantitative:** The randomized controlled trial, a systematic sampling approach and using the 12-item priority stigma indicator defined in the HIV/AIDS-Related Stigma and discrimination
Sample size & Statistical Methods	• 44 service providers were randomly selected from each hospital was conducted in 40 county-level hospitals in 2 provinces of China between October 2008 and February 2010. • t-tests, Wilcoxon signed-rank test
Conclusion/Recommendation/Nursing Implication	Recommendation: Model for stigma reduction programs can be applied to the other countries.
Author	**C. Apinundecha, W. Laohasiriwong, M. P. Cameron & S. Lim** (2)
Purpose & Results	**Purpose:** To investigate whether an integrated socioeconomic and community participation intervention could be used to reduce HIV/AIDS stigma. **Result:** The intervention had a significant effect on HIV/AIDS knowledge score ($p < 0.01$) and HIV/AIDS stigma score ($p < 0.01$)
Intervention	• There are 8 stages of interventions

	• **First,** several pre-test surveys were conducted to explore HIV/AIDS stigma • **Second**, action research was undertaken to develop an intervention to reduce HIV/AIDS stigma in a rural community.
Study Design	**Quantitative:** a quasi-experimental 'non-equivalent pre-test-post-test control group design, and using stratified random sampling Scale: **Five** different measures of HIV stigma: (1) community stigma towards PLWHA; (2) family stigma towards PLWHA; (3) community stigma towards the family of PLWHA; (4) PLWHA stigma towards themselves (self-stigma); and (5) PLWHA perceptions of stigma by their community. **Qualitative:** focus group interviews, in-depth interview
Sample size & Statistical Methods	• 199 PLWHA, 31 caregivers, and 195 other community members • ANCOVA
Conclusion/Recommendation/Nursing Implication	**Conclusion:** These results suggest that community interventions which **empower the community**, combined with a **financial contribution** to reducing resource constraints, increasing interaction between people living with HIV/AIDS (PLWHA) and other community members, increasing tolerance and reducing HIV/AIDS stigma.
Author	**Julie Barroso, Michael V. Relf, Megan Scull Williams, Joyell Arscott, Elizabeth D. Moore, Courtney Caiola, and Susan G. Silva [(3)]**
Purpose & Results	Purpose: To compare outcomes (self-esteem, coping self-efficacy, and internalized stigma) across time in HIV-infected women **Results:** Results: 1) There was a treatment-by-time effect for improved self-esteem. 2) Decreases in internalized stigma. 3) Improved coping self-efficacy.
Intervention	Watching a 45-min video titled, ''**Maybe Someday**: Voices of HIV-Positive Women.'' Evaluated conducted at 30 and 90 days.
Study Design	**Quantitative**: A Randomized Controlled Trial Scale: 1) Rosenberg Self-Esteem Scale (RSES), 2) Coping Self-Efficacy Scale (CSES). and 3) Internalized HIV-related Stigma Scale (IHSS)
Sample size & Statistical Methods	**Sample size**: HIV-infected women living in the Deep South who received a stigma reduction intervention (n = 51) with those of a control group (n = 49) **Analysis:** Wilcoxon two-sample tests and Fisher's exact tests
Conclusion/Recommendation/Nursing Implication	**Conclusion:** The magnitude of the intervention effect, however, was large with regard to reducing overall stigma, improving social relationships, and decreasing stereotypes in both groups.
Author	**D. Scott Batey, Samantha Whitfield, Mazheruddin Mulla, Kristi L. Stringer, Modupeoluwa Durojaiye, Lisa McCormick, Bulent Turan, Laura Nyblade, Mirjam-Colette Kempf, and Janet M. Turan [(4)]**
Purpose & Results	**Purpose:** To assess the feasibility and acceptability of a healthcare setting stigma-reduction intervention **Results: increased** awareness of stigma in the health facility among HW (Health Worker) p = 0.047, **decreased** uncertainty about HIV treatment among PLWHA, p = 0.017.
Intervention	Program: The Finding Respect and Ending Stigma around HIV **(FRESH)** Workshop, in the United States. The intervention included three key elements: (1) Sharing of information, (2) increasing contact between HW and PLWHA, and (3) utilizing empowerment strategies to improve coping with HIV-related stigma
Study Design	**Quantitative:** pre-post test design, online survey • Measuring for PLWHA: empowerment, HIV treatment self-efficacy, self-esteem, dimensions of HIV-related stigma, coping. • Measuring for Health Worker: empathy, HIV knowledge, HIV related stigma and attitudes toward PLWHA, perceived risk of HIV and familiarity and social distance. **Qualitative:** Open-ended item post-workshop, using FGD of PLWHA
Sample size & Statistical Methods	**Participants:** 17 HW (healthcare workers) and 19 PLWH (people living with HIV) **Analytical** reliability, t-tests, and using Nvivo qualitative data analysis software program
Conclusion/Recommendation/Nursing Implication	• **The** FRESH intervention appears to be feasible and highly acceptable to HW and PLWH participants and shows great promise as a healthcare setting stigma-reduction intervention for US contexts. **Recommendation:** Application of knowledge gained from this study to influence key components of the HIV continuum of care (e.g., HIV testing, linkage to care, and, especially, retention and re-

	engagement in care, ART receipt, and viral suppression) is an important next step in addressing stigma as a fundamental component of an AIDS-free future.
Author	**Alan Tai-Wai Li, Kenneth Po-Lun Fung, Eleanor Maticka-Tyndale & Josephine Pui-Hing Wong (13)**
Purpose & Results	**Purpose:** To assess the effectiveness of two group interventions, Acceptance and Commitment Therapy/Training (ACT) and Social Justice Capacity Building (SJCB), in reducing HIV stigma and mobilizing champions to address HIV stigma. **Result:** 1) PLHIV had significantly decreased internalized stigma, 2) Community Leaders had significantly the decreased stigma, and against HIV/AIDS**,** also The **s**peaking out against HIV/Stigma in social situations.
Intervention	1) Community Champions HIV/AIDS Advocates Mobilization Project (CHAMP), 2) Acceptance Commitment Therapy Training (ACT) and Social Justice Capacity Building (SJCB)
Study Design	**Quantitative:** Pre-and post-intervention surveys The scale: 1) AIDS-related Stigma scale and Internalized AIDS-Related Stigma Scale **Qualitative:** Focus Group Discussion, monthly activity logs
Sample size & Statistical Methods	• 66 PLHIV and Non-PLHIV community leaders from faith-based, media and social justice sectors • Reliability test, ANOVA, and regression techniques
Conclusion/Recommendation/Nursing Implication	**Conclusion:** Participants' activity logs over a period of 9 months after completing the training showed they had engaged in 1090 championship activities to advocate for HIV related health equity and social justice issues affecting racialized and newcomer PLHIV and communities. **Recommendation** The overall outcome of the study suggests that engaging and empowering both PLHIV and non-PLHIV community leaders can reduce HIV stigma and promote individual and collective resilience and action.
Author	**Corinne Low, Cristian Pop-Eleches, Winnie Rono, Evan Plous, Angeli Kirk, Markus Goldstein, and Harsha Thirumurthy (8)**
Purpose & Results	Purpose: To learn whether community-based HIV testing programs, which seek to increase people's awareness of their own HIV status, can be successfully implemented even in the presence of HIV/AIDS-related stigma and whether they can eventually reduce levels of stigma. Result: No negative relationship between reported stigma and levels of testing
Intervention	Community-based intervention is Door-to-door home-based counseling and testing (**HBCT**) services.
Study Design	**Quantitative:** 1) a cluster-randomized, 2) The data used: household surveys, community leader surveys, and administrative data, 3) 17 stigma questions
Sample size & Statistical Methods	**Sample size**: 313 community leader**,** 2700 household (200 villages in the intervention area and 200 villages in the control area). **Analysis**: t-tests, regression analysis
Conclusion/Recommendation/Nursing Implication	Conclusion: Higher levels of stigma in a community did not interfere with successful implementation. The home-based HIV testing intervention resulted in community leaders reporting lower levels of stigma.

DISCUSSION

The data showed the interventions had positive and negative results. The positive results were: 1) reduction of stigma by community members, community leader, health worker, the family with PLWHA, and the family to PLWHA. The interventions reduced stigma for males PLWHA across all four dimensions of stigma (personalized stigma, disclosure concerns, negative self-image, concerns with public attitudes about people with HIV/AIDS), 2) improved self-esteem of PLWHA, 3) decreasing of uncertainty about HIV treatment among PLWHA, 4) Increasing institutional support in the hospital, 5) improving attitudinal and behavior of health providers, 6) Increasing of HIV knowledge, 6) reducing avoidance intention towards HIV/AIDS patients. Instead, the negative results had been informed in the study, that the stigma of females PLWHA about disclosure concerns, negative self-image, concerns with public attitudes about people with HIV/AIDS not in line with expectations, only personalized stigma demonstrated a decrease. In this research explained that increasing of stigma on a female may be driven by resilience-focused supportive factors associated with the primary sociodemographic, which was sexual orientation—male participants predominately identified as gay or bisexual, while female participants predominantly identified as straight. Heterosexual young women living with HIV often have different life

experience than gay/bisexual young men living with HIV, the women experience various forms of stigmatization in their relationship, may also be associated with psychological distress.(6) Besides that one of the research also stressed that intervention in the message group "Hopefull" in Public Service Announcements (PSAs) Program, get a negative attitude impact on male viewers.(7) Researchers hope for further study was sought causes. PSAs have applied techniques to change behavior through education as a transformation in the labor market. Education relies on the existence of a body of knowledge which is not only transferred to the individual but is instrumental in transforming the individual. The individual has to actively receive the knowledge and know how to use it.(12) The labor market was as part of a community member, expected unintended creating a stigmatizing attitude in their views.

In the literature review, it was clear that stigma and discrimination not only arise from the general public, even community leaders, health workers as well. They must be involved in the programmes because they were role models to convey messages related to HIV/AIDS. These people who will play a major role in the dissemination of sustainability of HIV/AIDS management, so it is appropriate that the intervention program is not only applied for the general public but the whole level community. Similarly, families with HIV AIDS patients also need to be involved in the program, not only take care of the patients, because the family is the ultimate motivator for patients to survive.

Interventions on HIV/AIDS patient targets are challenging for researchers, inasmuch as directly they faced PLWHA and this required collaboration from all parties regarding licensing. It was not easy to find the data on HIV / AIDS patients. In this ILR there were several studies targeting PLWHA, one of which was encapsulated in the ACCEPT Project, this project was based on the Disability-Stress-Coping model and incorporates skills-building activities guided by Social Cognitive Theory. In this theory, human functioning is viewed as the product of a dynamic interplay of personal, behavioral, and environmental influences. People are viewed as self-organizing, proactive, self-reflecting and self-regulating rather than as reactive organisms shaped and shepherded by environmental forces or driven by concealed inner impulses.(12) The theory was appropriately used in this project as it aimed to promote healthy psychosocial adjustment and improving engagement in medical care, reduced personalized stigma, increasing of disclosure consents, decreasing of the negative self-image, concerns with public attitudes about people with HIV/AIDS. Patients were given a health education followed by expressing their challenges and expectations.(6) The Disability Stress-Coping model proposes that risk and resistance factors interact to impact an adolescent’s adaptation to his/her chronic illness and/or disability, the impact of this program will improve the stigma of male PLWHA about personalized stigma, disclosure concerns, negative self-image, concerns with public attitudes about people with HIV/AIDS. (6)

Furthermore, the project that used 8 intervention stages simultaneously involving PLWHA, caregivers, and community leaders had implemented several techniques of changing-behavior: education as transformation, social marketing dan community/group organizational development, and finally, the evaluation of this program was empowerment of the community, combined with a financial contribution to reducing resource constraints, increasing interaction between people living with HIV/AIDS (PLWHA) and other community members, increasing tolerance and reducing HIV/AIDS stigma.(2) In this program, community/group organizational and development as part of behavior change technique had been applied, because one of the participants was a community, they had done training, discussing, disseminating news on HIV/AIDS. Community development is both process and product. It includes problem-solving, community building, and systems interaction. An integrated approach assesses the problem, goes on to build community capacity, and importantly, addresses the problem.(12) According to Mohr & Smith 1999 that social marketing is the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups, or society as a whole. In socializing stigma and discrimination, individual ability to apply the principle of marketing principle, especially at the time of dissemination, in this program, youth volunteers disseminated news in HIV/AIDS at the community library in the temple.(12) They shared something like the seller, with the purpose to increase community knowledge or another purpose. However, there were difficulties that emerged, ultimately for the sustainability of this program, but they still maintained several activities. For this problem, of course, the government have to support with various technic, the primary was funding because in this program the empowerment of community had done.

The next was the CHAMP program also involved many levels of participants such as PLHIV and Non-PLHIV community leaders from faith-based, media and social justice sectors, one of its aim was the speaking out against HIV/Stigma in social situations, activities were also directed to education and training.(13) Even after the program was implemented had engaged in 1090 championship activities to advocate for HIV related health equity and social justice issues affecting racialized and newcomer PLHIV and communities. This program also applied behavior change technique through education as transformation, social marketing, community/group organizational and development.

In the White Coat, Warm Heart (WW) program, diffusion, and innovation theory were applied to change the behavior the participants, they were service providers who got training “stigma reduction messages”. They must disseminate stigma reduction messages within their community, to address structural-level barriers with

PLWHA and increase their comfort level when working. And the results were reducing prejudicial attitudes, reducing avoidance intent towards people living with HIV and increasing institutional support in the hospitals. According to this theory, new behavior trends are most efficiently establish when a critical mass of popular opinion leaders have adopted and endorsed the new trend.[9] Willingness and ability to adopt an innovation depends on adopter awareness, interest, evaluation, trial, and adoption. People could fall into different categories for different innovations.

CONCLUSION

Review this literature to identify the effectiveness of a strategy to reduce the stigma related to PLWHA. Stigma reduction interventions can be classified into 1) Information-based approaches (make message for individual to get an HIV test, watching the video, sharing information, role-playing, playing the game), 2) facilitating the acquisition of coping skills 3) Empowerment of the Community, 4) Financial contribution, 5) make relationship with PLWHA or their group. Interventions have been implemented at various levels of the environment targeting 1) PLWHA or their group, 2) Community leader, 3) Community members, 4) Health Worker, and 5) Organizational. The theories that underpinned the program/intervention were diffusion and innovation theory, social cognitive theory, integrated behavior and structural level component, whole community approach, socioeconomic and community approach. There several a comprehensive programs that involved all levels of respondents/participants (PLWHA, caregivers, and community members), this interventions used techniques of changing behavior i.e. education as transformation, social marketing and community/group organizational development, and finally, the evaluation was empowerment of the community, combined with a financial contribution to reducing resource constraints, increasing interaction between people living with HIV/AIDS (PLWHA) and other community members, increasing tolerance and reducing HIV/AIDS stigma. There are difficulties that emerge ultimately for the sustainability of this program, but the participants still maintained several activities. For this problem, of course, the government have to support with various technic, the primary is funding because the empowerment of the community has been done, the government must still maintain public trust.

For applying the education program, future directions messages through watching the video with more variety in “emotion”, “length” and “format”, not only watch video but also using all media social (posters, brochures, narrative stories, Twitter, WhatsApp etc), depend on the media social used in the country.

It needs activities involving multiple levels of respondents/participants (PLWHA, community leaders, community members, government, association, health worker) simultaneously in one moment, and implemented at least 1 year, by combining behavior change techniques in intervention, through education, social marketing, and community/group organizational development.

Needed support from the government especially funding, for the sustainability of the programs that have been assessed useful.

REFERENCES

1. Anggleton P, Wood K, and Malcolm A. HIV-Related Stigma, Discrimination, and Human Rights Violations: case studies of successful programmes. New York: UNAIDS; 2005.
2. Apinundecha C, Laohasiriwong W, Cameron MP, Lim S. A community participation intervention to reduce HIV/AIDS stigma, Nakhon Ratchasima province, northeast Thailand. AIDS Care. 2007;19(9): 1157-1165. DOI: 10.1080/09540120701335204
3. Barroso J, Relf MV, Williams MS, Arscott J, Moore ED., Caiola C et al. A Randomized Controlled Trial of the Efficacy of a Stigma Reduction Intervention for HIV-Infected Women in the Deep South. AIDS PATIENT CARE and STDs. 2014;28(9):489-498. DOI: 10.1089/apc.2014.0014
4. Batey DC, Whitfield S, Mulla M, Stringer KL, Durojaiye M., McCormick L et al. Adaptation and Implementation of an Intervention to Reduce HIV-Related Stigma Among Healthcare Workers in the United States: Piloting of the FRESH Workshop. AIDS PATIENT CARE and STDs. 2007; 30(11):519-527. DOI: 10.1089/apc.2016.0223
5. Haghdoost A, Karamouzian M. Zero New HIV Infections, Zero Discrimination, and Zero AIDS-Related Deaths: Feasible Goals or Ambitious Visions on the Occasion of the World AIDS Day?. IJPM. 2012;3 (12):819-823. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3530298/
6. Harper GW, Lemos D, Hosek SG. Stigma Reduction in Adolescents and Young Adults Newly Diagnosed with HIV: Findings from the Project ACCEPT Intervention. AIDS PATIENT CARE and STDs. 2014; 28(10): 543-554. doi: 10.1089/apc.2013.0331
7. Thainiyom P, Elder K. Emotional Appeals in HIV Prevention Campaigns: Unintended Stigma Effects. Am J Health Behavior. 2017;41(4):390-400. https://doi.org/10.5993/AJHB.41.4.3
8. Low C, Eleches CP, Rono W, Plous E, Kirk A, Goldstein M et al. The effects of home-based HIV counseling and testing on HIV/AIDS stigma among individuals and community leaders in western Kenya. AIDS Care. 2013; 25 (supplement 1):97-107. http://dx.doi.org/10.1080/09540121.2012.748879

9. Li Li, Wu Z, Liang LJ, Lin C, Guan J, Jia M et al. Reducing HIV-Related Stigma in Health Care Settings. American Journal of Public Health. 2013;103(2):286-292. doi:10.2105/AJPH.2012.300854
10. Restall, G., & Gonzalez, M. Strategies for addressing HIV-AIDS-related stigma. Departement of Occupational Therapy, School of Medical Rehabilitation, Faculty of Medicine, University of Manitoba. 2014.
11. Swanson B. ANAC's Core Curriculum for HIV/AIDS Nursing. 3rd ed. Canada: Jones and Barlett Publishers, LLC; 2010.
12. UW ERC. Behavior Change Theories and Techniques. Changing Public Behavior. 2009. https://fyi.uwex.edu/wateroutreach/files/2016/04/CPB-Behavior-Change-TheoriesTechniques8.pdf
13. Wai Li AT, Lun Fung KP, Tyndale EM, Hing Wong JP. Effects of HIV stigma reduction interventions in diasporic communities: insights from the CHAMP study. AIDS CARE. 2017; 1-7. DOI: 10.1080/09540121.2017.1391982