

## The Effectiveness of Religion as Therapy for People Living with HIV (PLHIV) in Malang Indonesia

Sri Sunaringsih Ika Wardoyo and Rakhmad Rosadi  
Faculty of Health Science, University of Muhammadiyah Malang, Malang, Indonesia

**Abstract:** This study aimed to identify the effectiveness of religion as therapy for People Living with HIV (PLHIV) in Malang, Indonesia. It was quasi experimental study which comprises two groups namely experimental and control groups. The experimental group received intensive religion program for 6 month while control group didn't receive any intervention. The population of this study were 7.650 male and female adults (18-40 year old) who diagnosed with HIV during 2012-2014 and registered in Health Department of Malang. The sample were 100 respondents and it's divided into 50 respondents on the experimental groups and 50 respondents on the control groups. Simple random sampling technique were used in this study. Instrument used were PSS-10, a validated questionnaire developed by Cohen to assess psychological condition (state anxiety, trait anxiety and HIV-related symptomatology) of the respondents between these groups. While, descriptive statistic and Independent t-test were used to analyse the data. As a result, there were significance difference between the outcome of these two groups ( $p < \alpha$ ). It shown that state anxiety, trait anxiety and HIV-related symptomatology in the experimental groups have been minimized greater than the control groups, after religion intervention program were given. In other words, religion has been effectively used as a therapy for PLHIV in Malang, Indonesia.

**Key words:** Religion, therapy, People Living with HIV (PLHIV), experimental, comprises

---

### INTRODUCTION

HIV is becoming worldwide epidemic, since WHO report that in 2010, there are about 34 mln. of People Living With HIV (PLHIV) in the world which increasing from 33 mln. in 2009. HIV is an important public health issue in Indonesia. National AIDS Commission on Ministry of Health, states HIV in Indonesia becomes one of Asia's fastest growing epidemics. Moreover, UNAIDS reports that during the last 5 year, there are at about 750.000 PLHIV in Indonesia and it keeps increasing every year. However, as reported by Health Department in 2013, the prevalence of HIV in Malang increase for 11% in each year due to its migration level. It makes Malang becomes the most rapid growth of HIV prevalence in East Java Province (Chesney *et al.*, 2000).

On the other hand, the Government of Indonesia has designed a program to overcome this problem, by giving ARV (Anti-Retroviral) drugs treatment. Yet, there are only 45% of PLHIV in Malang, being diagnosed and cured with this treatment due to unequal distribution of this drug. Furthermore, most of the PLHIV in this city felt depression and anxiety, caused by high stigmatization from their societies. Obviously, ARV drug treatment is not holistic treatment for PLHIV, since it only focusing on

physiological aspect. Depression and anxiety are the two most common psychological symptoms present in the HIV-infected population and are associated with increased symptom frequency and accelerated progression to AIDS. Studies have demonstrated that the symptoms of depression in HIV-infected subjects can be reduced using techniques for stress reduction (Antoni *et al.*, 1991; Lutgendorf *et al.*, 1997). Social support is a primary mediator of perceived stress and can lessen feelings of emotional distress and enhance health outcomes in those infected with HIV (Solano *et al.*, 2002).

At the same time, religion can be seen as an alternative and holistic treatment for PLHIV and also reflects as the social support for them. Tsevat (2006) states religion involvement positively affects PLHIV on psychological, behavior and biologic aspects. Religion affects PLHIV since it provides better health outcomes, such as greater longevity, better coping skills on stigmatization, health-related quality of life (even during terminal illness) less anxiety, less depression, better cognitive and social functioning and fewer HIV symptom (Tsevat, 2006; Cotton *et al.*, 2006; Ramer *et al.*, 2006; Yi *et al.*, 2006).

Religion is an important part of Indonesia and it influences on daily life of Indonesian people (Hosen, 2005). Hosen (2005) said that religion as the biggest social norms in Indonesia, can play a potential role in addressing social support for PLHIV. Unfortunately, based on the investigation, it is not effectively used as a therapy for PLHIV in Indonesia, especially in Malang, since based on the report from Ministry of Health this city has the highest number of HIV prevalence and highest stigmatization rate for the PLHIV, among other cities in Indonesia. Therefore, lots of PLHIV in Malang were less treated and have worst depression rate. Thus, research will conduct to examine the effect of religion as therapy for PLHIV in Malang Indonesia.

### MATERIALS AND METHODS

**Study design:** This study were employed with quasi experimental design which consists of one experimental group receiving the intervention and the control group which did not receiving any intervention, then the results were assessed by comparing the outcome of these two groups

**Population and sample:** The target populations of this study were 7.650 male and female adults (18-40 year old) who diagnosed with HIV during 2012-2014 and registered in Health Department of Malang Municipality in 2014. While, only 100 people were administered as the sample of this study then it divided into 50 people on experimental groups and the other half into control groups. Simple random sampling technique has been used in this study.

**Materials:** Quantitative methodological approach with questionnaire method were used in this study. Perceived Stress Scale (PSS-10), a validated questionnaire developed by Cohen *et al.* (1983) were used to diagnose the psychological condition of People living with HIV (PLHIV). It consisted of ten close-ended Questions about state anxiety, trait anxiety, depression and HIV-related symptomatology.

**Procedure:** After signed informed consent, individuals were chosen into experimental group and control group. Experimental group were given intensive religion treatment program by the priest for six month while the control groups received none interventions. Before the intervention begin, both of these groups were given pre test using PSS-10 questionnaire to measure their stress scale and also after the intervention finished given post test from this instruments. Then, the outcomes from these two groups were measured.

**Data analysis:** During the data analysis, descriptive statistic were used to identify trait anxiety, social anxiety, depressive and HIV physical symptomatology between experimental and control groups. While independent t-test were used to analyse the effectivity of religion treatments as psychological therapy for PLHIV between those two groups.

**Ethical considerations:** This study has been obtained its ethic approval from National Health Research Ethic Committee in East Java province as the data collection site. While informed consent also applied to ask for consent from all of the participant to do the intervention.

### RESULTS AND DISCUSSION

**Sociodemographic characteristic:** All 100 participants had documented HIV seropositive. They were predominantly Javanese (57%), Madurese (20%) and others (23%). About 53% of the participants were women and (47%) were men. The majority of the participants were single (82%) with the remaining 18 participants (18%) reporting some type of partnership. While, their age ranged from 24-63 (Mean = 39.9, SD = 7.8).

**The effectivity of religion as psychological treatment for PLHIV:** As shown on Table 1, it describes the state anxiety, trait anxiety, depression and HIV symptomatology situations between two groups before and after the intervention. The average of those four factors in the experimental group, before and after the intervention were having higher decreasing point than the control groups, since in the experimental group there is decreasing point of anxiety and depression for 2.15 point. While in the control group the average of decreasing level were only 0.75 point.

Based on Table 2, it shown that there is significant differences between experimental and control groups

Table 1: Identification of anxiety, depression level and hiv-related symptomatology between experimental and control groups

Variables	Experimental group		Control group	
	Pre	Post	Pre	Post
State anxiety	11.80	8.60	11.6	11.0
Trait anxiety	7.80	5.80	7.6	6.8
Depression	11.60	9.50	11.6	10.8
HIV-related symptomatology	7.50	6.20	7.8	7.0
Means	2.15	0.75		

Table 2: The effectivity of religion treatment for PLHIV using independent t-test

Groups	Sig. (2-tailed)	$\alpha$
Experimental group	0.035	0.05
Control group	(p< $\alpha$ )	

regarding to the religion intervention programs, since its  $p = 0.035 < \alpha = 0.05$ . In the other words, it can be concluded that religion intervention program has been effective to reduce the depression and anxiety level among PLHIV.

As stated by Trevino *et al.* (2010) and Powell *et al.* (2003) that religious coping can be used as resources of pain reliever and struggle for HIV patients, therefore by having strong belief on God and social support from their religious community, it will increase their mental health status and decreasing their depression and anxiety. Moreover, religion also can be seen as a stress buffer or stress deterrent for HIV patients through several pathways, namely: providing an interpretive framework or cognitive schema, enhancing coping resources, then facilitating access to social support and promoting social integration (Siegel and Schrimshaw, 2002; Fabricatore *et al.*, 2009).

Based on researches by Latkin *et al.* (2002), Siegel and Schrimshaw (2002) argued that the more use of positive religious coping strategies by PLHIV such as spiritual support and benevolent religious appraisal of negative situations has been associated with greater well-being, namely improved mental health status, reduced rates of mortality and increasing their CD4 cell which prolong their life. While greater use of negative religious coping strategies by PLHIV such as attributions of situations to a punishing God of their disease correlate with more psychological distress, depression and anxiety in which it leads to poorer resolution of the negative life event and worsening their health status.

### CONCLUSION

To be concluded, religiousness and spirituality play an important role in the health and well-being of People Living with HIV (PLHIV). Therefore, it urged to design national health programs that addressed religion as a holistic treatment instead of pharmacologic treatment and it should be applied nationally to enhance their quality of life. This program will be an important issue and also helpful, especially for those who came from various religious tradition in Indonesia, about how religion coping resources can be addressed to tackle such psychological and physiological problems related to this disease.

### ACKNOWLEDGEMENTS

The researchers wish to express their sincere gratitude to University of Muhammadiyah Malang for financial support by Institutional Research Grant.

### REFERENCES

- Antoni, M.H., L. Baggett, G. Ironson, A. LaPerriere and S. August *et al.*, 1991. Cognitive-behavioral stress management intervention buffers distress responses and immunologic changes following notification of HIV-1 seropositivity. *J. Consulting Clin. Psychol.*, 59: 906-915.
- Chesney, M.A., J.R. Ickovics, D.B. Chambers, A.L. Gifford and J. Neidig *et al.*, 2000. Self-reported adherence to antiretroviral medications among participants in HIV clinical trials: The AACTG adherence instruments. *AIDS. Care*, 12: 255-266.
- Cohen, S., T. Kamarck and R. Mermelstein, 1983. A global measure of perceived stress. *J. Health Soc. Behav.*, 24: 385-396.
- Cotton, S., C.M. Puchalski, S.N. Sherman, J.M. Mrus and A.H. Peterman *et al.*, 2006. Spirituality and religion in patients with HIV/AIDS. *J. Gen. Internal Med.*, 21: S5-S13.
- Fabricatore, A.N., T.A. Wadden, A.J. Higginbotham, L.F. Faulconbridge and A.M. Nguyen *et al.*, 2011. Intentional weight loss and changes in symptoms of depression: A systematic review and meta-analysis. *Intl. J. Obesity*, 35: 1363-1376.
- Hosen, N., 2005. Religion and the Indonesian constitution: A recent debate. *J. Southeast Asian Stud.*, 36: 419-440.
- Latkin, C.A., K.E. Tobin and S.H. Gilbert, 2002. Shun or support: The role of religious behaviors and HIV-related health care among drug users in Baltimore, Maryland. *AIDS. Behav.*, 6: 321-329.
- Lutgendorf, S.K., M.H. Antoni, G. Ironson, N. Klimas and M. Kumar *et al.*, 1997. Cognitive-behavioral stress management decreases dysphoric mood and herpes simplex virus-Type 2 antibody titers in symptomatic HIV-seropositive gay men. *J. Consulting Clin. Psychol.*, 65: 31-43.
- Powell, L.H., L. Shahabi and C.E. Thoresen, 2003. Religion and spirituality: Linkages to physical health. *Am. Psychologist*, 58: 36-52.
- Ramer, L., D. Johnson, L. Chan and M.T. Barrett, 2006. The effect of HIV/AIDS disease progression on spirituality and self-transcendence in a multicultural population. *J. Transcultural Nurs.*, 17: 280-289.
- Siegel, K. and E.W. Schrimshaw, 2002. The perceived benefits of religious and spiritual coping among older adults living with HIV/AIDS. *J. Sci. Study Religion*, 41: 91-102.
- Solano, L., M. Costa, L. Temoshok, S. Salvati and R. Coda *et al.*, 2002. An emotionally inexpressive (Type C) coping style influences HIV disease progression at six and twelve month follow-ups. *Psychol. Health*, 17: 641-655.

- Trevino, K.M., K.I. Pargament, S. Cotton, A.C. Leonard and J. Hahn *et al.*, 2010. Religious coping and physiological, psychological, social and spiritual outcomes in patients with HIV/AIDS: Cross-sectional and longitudinal findings. *AIDS. Behav.*, 14: 379-389.
- Tsevat, J., 2006. Spirituality/religion and quality of life in patients with HIV/AIDS. *J. Gen. Internal Med.*, 21: S1-S2.
- Yi, M.S., J.M. Mrus, T.J. Wade, M.L. Ho and R.W. Hornung *et al.*, 2006. Religion, spirituality and depressive symptoms in patients with HIV/AIDS. *J. General Internal Med.*, 21: S21-S27.