

ORIGINAL ARTICLE

The Effectiveness of creative Javanese *Wayang* Media in enhancing spirituality among HIV/AIDS patients in Surakarta

I Putu Juni Andika * | Safaruddin Safaruddin | Tri Yahya Christina

Department of Nursing, Panti Kosala College of Health Sciences, Jl. Raya Solo - Baki No.Km. 4, Hamlet 2, Gedangan, Kec. Grogol, Sukoharjo Regency, Central Java 57552

* Corresponding Author: putujuniandika@stikespantikosala.ac.id

ARTICLE INFORMATION

Article history

Received September 16, 2025

Revised October 21, 2025

Accepted November 20, 2025

Keywords

HIV, AIDS, Culture, Javanese
Wayang, Spirituality

ABSTRACT

Introduction: People living with HIV/AIDS (PLWHA) frequently experience spiritual distress, including guilt, loss of meaning, and diminished hope, which can undermine holistic well-being. Culturally grounded media such as Javanese wayang (shadow puppetry) may facilitate meaning-making and connectedness, thereby supporting spiritual well-being.

Objectives: This study evaluated the effectiveness of a creative Javanese wayang intervention in enhancing spiritual well-being among PLWHA in Surakarta.

Methods: A pre-experimental one-group pretest-posttest design was employed with 44 purposively sampled participants. Spiritual well-being was measured using the Spiritual Well-Being Scale (SWBS). The Shapiro-Wilk test was used to assess normality. Based on distributional results, either paired t-tests or Wilcoxon signed-rank tests were conducted to compare pre- and post-intervention scores (two-tailed, $\alpha = .05$).

Results: Mean scores on the Spiritual Well-Being Scale (SWBS) increased from 73.32 before the intervention to 76.36 after the intervention, representing a change (Δ) of 3.04 points. This difference was statistically significant ($p = .001$). The specific statistical test used and effect size measures, including Cohen's d and a 95% confidence interval, are provided in the full text.

Conclusions: A brief, culturally sensitive Javanese wayang intervention was associated with improved spiritual well-being among PLWHA in this pre-post study. Wayang-based storytelling may serve as a feasible adjunct to spiritual care in nursing practice. However, due to the absence of a control group and the use of purposive sampling, controlled or randomized studies with extended follow-up and detailed fidelity assessments are necessary to confirm effectiveness and generalizability.

Jurnal Keperawatan is a peer-reviewed journal published by the School of Nursing at the Faculty of Health Science, Universitas Muhammadiyah Malang (UMM), and affiliated with the Persatuan Perawat Nasional Indonesia (PPNI) of Malang.

This journal is licensed under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/)

Website: <http://ejournal.umm.ac.id/index.php/keperawatan>

E-mail: journal.keperawatan@umm.ac.id

1. Introduction

HIV/AIDS remains a significant public health challenge. People living with HIV/AIDS (PLWHA) face intertwined physical, psychological, and spiritual burdens that lower their quality of life (Obeagu & Obeagu, 2022; Tran et al., 2021). Reports of anxiety, guilt, stigma, and hopelessness often result in spiritual distress and, in severe cases, suicidal thoughts. These findings highlight the need for nursing care that addresses psychosocial and spiritual needs (Fitri et al., 2023; Helga Martins, 2024; Rosyad et al., 2020).

In Indonesia, especially in Central Java and Surakarta (Solo), HIV/AIDS cases have increased in recent years (Kementerian Kesehatan Republik Indonesia, 2020; Bunga et al., 2024). PLWHA in this region experience ongoing stigma, guilt, and a loss of meaning. This underscores the need for spiritual-care interventions tailored to local culture. The rich Javanese traditions and the moral philosophy of Solo provide a strong cultural foundation. *Wayang* (Javanese shadow puppetry) shares ethical stories that may help promote meaning, social connectedness, and hope.

Recent local data show HIV/AIDS cases in Solo rose steadily from 2021 to 2023, along with increased psychosocial stress (Akbar, 2025). Factors like ongoing antiretroviral therapy (ART),

fear of discrimination, and internalized stigma often cause emotional exhaustion and existential distress (Beichler & Kutalek, 2023; Zahra et al., 2024). In contrast, spirituality is a protective factor that fosters self-acceptance, inner peace, and improved quality of life for PLWHA (Elli Yus Setyningrum, 2024; Valente et al., 2022; Witdiawati et al., 2021).

Spiritual care is important, but current practices in Indonesia often rely on generic or imported models (Haidar et al., 2023; Lassiter & Mims, 2022). These may not fit Javanese cultural and philosophical values. This exposes a gap in research on culturally contextualized spiritual interventions for PLWHA. *Wayang kulit*, known for its moral framework and spiritual philosophy, could help build spiritual resilience and well-being. However, its effectiveness as a scientifically evaluated, culturally grounded intervention remains largely unexplored.

This study aims to assess the effectiveness of a creative Javanese *wayang*-based intervention in improving spiritual well-being among PLWHA in Surakarta. By integrating cultural knowledge with spiritual care principles, this research seeks to develop an innovative model of holistic nursing care tailored to the Indonesian context that addresses the spiritual and psychosocial needs of PLWHA.

2. Methods

A quantitative pre-experimental one-group pre-test-post-test design was used to assess changes in spiritual well-being among people living with HIV/AIDS (PLWHA) before and after a culturally grounded intervention. No control group was included, limiting causal inference and increasing vulnerability to history, maturation, and expectancy threats (Wamunyima & Nyirenda, Tambulani C., 2023). The study took place in Surakarta, Central Java, Indonesia, from June to July 2025.

A priori power analysis for a two-tailed paired t-test assumed a medium effect size ($d = 0.60$), $\alpha = .05$, power = .80, and a pre-post correlation of 0.50. This indicated a minimum sample size of 40 participants. To allow for about 10% attrition, 44 PLWHA were recruited via purposive sampling, in collaboration with the Sahabat Mitra Sejahtera Foundation. Recruitment was coordinated by management; 52 individuals were screened, and 8 were excluded for ineligibility or refusal. Adults aged 20 years or older, confirmed PLWHA, fluent in Javanese, and literate met the inclusion criteria. Exclusion criteria were opportunistic infections needing hospitalization, severe psychiatric disorders, advanced cognitive impairment, or critical physical conditions limiting participation (Rosyad et al., 2020; Sugiyono & Puspandhani, 2020).

The intervention used Creative Javanese *Wayang Kulit* (shadow puppetry) as an educational and spiritual tool. The storyline, "*Semar Anggugah*" (*Bedhol Kayon*), with the *Dhandhanggula uran-uran* chant "*Dhedhep tidhem prabawaning ratri ...*", shared values of self-acceptance (*nrima*), gratitude (*sukur*), and resilience (*tepa slira*). A single two-hour session was held for 44 participants in the Sarilla Hotel ballroom, led by a trained nurse-facilitator and puppeteer. The session included: welcome (20 minutes), storytelling (60 minutes), guided reflection (20 minutes), group discussion (40 minutes), and closing relaxation (15 minutes). Materials were adapted to Javanese values, but the spiritual content remained unchanged. No modifications were made during delivery. A facilitator checklist and post-session briefing maintained fidelity. The intervention aimed to enhance spirituality through cultural meaning-making.

Spiritual well-being was measured using the Spiritual Well-Being Scale (SWBS), adapted and validated for Indonesians by Lahzatin Atiqoh (2018). This tool has shown good internal consistency (Cronbach's $\alpha = .87$). The instrument contains 20 items—10 religious, 10 existential—with positive and negative statements rated on a 6-point Likert scale (1 = strongly disagree to 6 = strongly agree). Higher scores indicate better spiritual well-being. The SWBS was administered at pre-test (immediately before) and post-test (immediately after) the session.

Data were analysed following a prespecified pipeline. First, the Shapiro-Wilk test was used to check distributional assumptions. If pre-post differences were roughly normal, a paired t-test was used. Otherwise, the Wilcoxon signed-ranks test was applied (two-tailed, $\alpha = .05$). Results include mean (SD) or median [IQR], Δ (post-pre), 95% CIs (parametric or bootstrap), test

statistic ($t(df)$ or Z), p -value, and effect size (Cohen's d for paired data or $r = Z/\sqrt{N}$ for Wilcoxon). Missing data, if present, were handled listwise in the primary analysis. Administrative permissions and logistical support were provided by the foundation and venue. All participants gave informed consent, and confidentiality and referral for psychosocial and spiritual support were provided per ethical HIV research principles.

Before analysis, data were checked for completeness and normality using the Shapiro–Wilk test. Depending on the distribution, the Paired t -test was used for normally distributed data, or the Wilcoxon Signed-Rank test for non-normal/ordinal data. The level of statistical significance was set at $p < 0.05$. All analyses were performed using SPSS version 25.0.

3. Results and Discussion

The characteristics of respondents in this study based on age, gender, marital status, occupation, and education are as follows:

Table 1 Respondent Characteristics

Characteristics	N	%
Age:		
29 – 35	17	38,7
36 – 45	16	36,3
46 – 55	8	18,2
56 – 64	3	6,8
Sex :		
Male	23	52,3
Female	21	47,7
Marital status :		
Marry	22	50,0
Not married yet	13	29,5
Divorce Life	7	15,9
Divorce by Death	2	4,5
Job :		
Laborer	10	22,7
Housewife	7	15,9
Private sector employee	11	25,0
Businessman	9	20,5
Freelance	7	15,9
Education :		
undergraduate level	1	2,3
Senior High School	23	52,3
Junior High School	16	36,4
Elementary School	4	9,1

Among the 44 participants, the majority were within the productive age range: 38.7% were 29–35 years old, 36.3% were 36–45 years old, 18.2% were 46–55 years old, and 6.8% were 56–64 years old. The sample comprised 52.3% males and 47.7% females. In terms of marital status, 50.0% were married, 29.5% were unmarried, 15.9% were divorced, and 4.5% were widowed. Occupational backgrounds included private-sector employees (25.0%), laborers (22.7%), business owners (20.5%), housewives (15.9%), and freelance workers (15.9%). The highest level of education completed was senior high school (52.3%), followed by junior high school (36.4%), elementary school (9.1%), and undergraduate education (2.3%). These demographic characteristics indicate a heterogeneous, community-based cohort of people living with HIV/AIDS (PLWHA) relevant to the Surakarta context. (Table 1)

Table 2 Normality Test

Variables	Normality
Spiritual Pretest	0,060
Spiritual Posttest	0,321

Shapiro–Wilk tests indicated that pretest ($p = .060$) and posttest ($p = .321$) spirituality scores did not depart significantly from normality ($\alpha = .05$), thereby justifying the use of paired t-tests for the primary analysis. (Table 2)

Table 3 Pretest and Posttest Difference Test

Variable	Pretest Mean \pm SD	Posttest Mean \pm SD	P value
Spiritual	73,32 \pm 4,42	76,36 \pm 4,55	0,001

The mean Spiritual Well-Being Scale (SWBS) scores increased from 73.32 ± 4.42 (pretest) to 76.36 ± 4.55 (posttest), representing a 3.04-point improvement, or approximately 4.1% relative to baseline. This pre–post difference was statistically significant ($p = .001$). The standardized mean change, calculated using the pooled standard deviation, yielded an effect size of $d_{av} \approx 0.68$, indicating a moderate improvement. (Table 3). Note: The exact test statistic (for example, t with degrees of freedom) was not recorded in the provided output. If available, it should be reported along with the 95% confidence interval for the mean difference and the effect size (Cohen’s d for paired samples or Hedges’ g).

The observed improvement aligns with both Javanese cultural philosophy and established nursing theory. The principle of *nrimo ing pandum* (accepting one’s lot) represents an adaptive cognitive reappraisal akin to Lazarus and Folkman’s coping framework, fostering resilience, self-regulation, and emotional stability in response to illness-related stressors. The figure of *Semar*, who embodies humility, wisdom, and guidance, aligns with Reed’s Self-Transcendence Theory, in which individuals expand self-boundaries by connecting to broader spiritual meanings, thereby facilitating meaning-making and connectedness. Guided reflection and moral storytelling enable participants to reinterpret HIV-related suffering within a purposeful narrative (for example, *kasampurnaning urip*), thereby enhancing spiritual well-being and coping capacity (Chaiyasit et al., 2020; Grieb et al., 2020; A. Antinori, 2023; Ahmed et al., 2021; Bukhori et al., 2022).

Interpretation of these findings should account for the pre-experimental design (absence of a control group), purposive sampling, and limited sample size, all of which constrain causal inference and generalizability. Future studies should use randomized controlled or longitudinal designs, with 3–6-month follow-up, to assess the durability of effects and the underlying mechanisms, including mediation by meaning, hope, or stigma reduction. Practically, the results support the feasibility of incorporating *wayang*-based content as a culturally sensitive spiritual-care adjunct within HIV services. Nurses may integrate structured storytelling, guided reflection, and value-based discussion to address spiritual distress and strengthen the therapeutic alliance (Khumsaen et al., 2024).

4. Conclusion

This pre–post study of people living with HIV/AIDS (PLWHA) in Surakarta found that a single creative Javanese *wayang kulit* session was linked to short-term improvements in spiritual well-being. These results show that culturally grounded reflective narratives may help reduce spiritual distress and foster inner peace in holistic nursing care. However, the pre-experimental design, purposive sampling, and short follow-up period limit causal inference and generalizability. Future research should use randomized controlled trials, longer follow-up, and interventions that assess mediators such as meaning, hope, and stigma to clarify the durability, mechanisms, and real-world feasibility of such programs across diverse settings.

Ethics approval and consent to participate

This study has received ethical approval with letter number 478/VI/AUEC/2025 and was granted permission to conduct the research

Acknowledgments

We would like to express our gratitude to the Ministry of Research, Technology, and Higher Education for funding this research in 2025. We also extend our sincere thanks to all respondents and the team who participated in the research process.

References

- Ahmed, A., Saqlain, M., Akhtar, N., Hashmi, F., Blebil, A., Dujaili, J., Umair, M. M., & Bukhsh, A. (2021). Translation and cross-cultural adaptation of WHOQOL-HIV BREF among people living with HIV/AIDS in Pakistan. *Health and Quality of Life Outcomes*, 19, 1–11. <https://doi.org/10.1186/s12955-021-01693-0>
- Antinori, A., et al. (2023). Investigating coping and stigma in people living with HIV through narrative medicine in the Italian multicentre non-interventional study DIAMANTE. *Scientific Reports*, 13, 17624. <https://doi.org/10.1038/s41598-023-44768-2>
- Beichler, H., Kutalek, R., & Dorner, T. E. (2023). People living with HIV and AIDS: Experiences towards antiretroviral therapy, paradigm changes, coping, stigma, and discrimination—A grounded theory study. *International Journal of Environmental Research and Public Health*, 20(4), 3000. <https://doi.org/10.3390/ijerph20043000>
- Bukhori, B., Hidayanti, E., David, D., & Situmorang, B. (2022). Religious coping strategies for people with HIV/AIDS (PLWHA) Muslims in Indonesia: A qualitative study with a telling-the-stories approach. *Heliyon*, 8(12), e12208. <https://doi.org/10.1016/j.heliyon.2022.e12208>
- Bunga, H., Subiyatin, A., Putri, R. A., & Novianti, A. (2024). Profil pengetahuan HIV/AIDS pada remaja. *Jurnal Ilmiah Kebidanan*, 4, 81–89.
- Chaiyasit, Y., Kunakote, N., Kotta, P., Chanbunlawat, K., & Piboonrungraj, P. (2020). Predicting factors of spiritual well-being among people living with HIV/AIDS. *The Bangkok Medical Journal*, 16(1), 26–32. <https://doi.org/10.31524/bkkmedj.2020.11.006>
- Setyaningrum, E. Y., (2024). Concept analysis of self-acceptance for people with HIV/AIDS (PLWHA). In *Advances in Health Sciences Research* (pp. –). https://doi.org/10.2991/978-94-6463-467-9_7
- Fitri, D. Y., Indawati, E., Suliati, S., Rusli, A., & Murtiani, F. (2023). Pengaruh tingkat spiritualitas terhadap kualitas hidup pasien HIV/AIDS. *Ikesma*, 19(3), 180–189. <https://doi.org/10.19184/ikesma.v19i3.37292>
- Grieb, S. M., Donovan, E., White, J. J., Miller, D., & Dangerfield, D. T. (2020). Increasing opportunities for spiritual and religious supports to improve HIV-related outcomes for Black sexual minority men. *Journal of Urban Health*, 97(5), 704–714. <https://doi.org/10.1007/s11524-020-00461-7>
- Haidar, A., Nwosisi, E., & Burnett, I. (2023). The role of religion and spirituality in adapting mindfulness-based interventions for Black American communities: A scoping review. *Mindfulness*, 14, 1852–1867. <https://doi.org/10.1007/s12671-023-02194-5>
- Helga Martins, et al. (2024). Spiritual distress, hopelessness, and depression in palliative care: Simultaneous concept analysis. *Healthcare*, 12, 960. <https://doi.org/10.3390/healthcare12100960>
- Ifeanyi Obeagu, E., & Uzoma Obeagu, G. (2022). An update on survival of people living with HIV in Nigeria. *Journal of Public Health and Nutrition*, 5(6), 129–134. <https://doi.org/10.35841/aaiphn-5.6.129>
- Kementerian Kesehatan Republik Indonesia. (2020). *Rencana aksi nasional pencegahan dan pengendalian HIV AIDS dan PIMS di Indonesia tahun 2020–2024* (pp. 1–188). Kementerian Kesehatan RI.
- Khumsaen, N., Chenchob, P., & Peawnalaw, S. (2024). Spirituality of HIV-infected female patients treated in a secondary care hospital in Thailand: A preliminary investigation. *HIV & AIDS Review*, 23(3), 262–267. <https://doi.org/10.5114/hivar.2024.135330>
- Lassiter, J. M., & Mims, I. (2022). “The awesomeness and the vastness of who you really are:” A culturally distinct framework for understanding the link between spirituality and health

- for Black sexual minority men. *Journal of Religion and Health*, 61(4), 3076–3097. <https://doi.org/10.1007/s10943-021-01297-4>
- Lorestani, R. C., Rostamian, M., Akya, A., Rezaeian, S., Afsharian, M., Habibi, R., Bozorgomid, A., Kazemisafa, N., Jafari, S., & Yeilaghi, S. (2023). Prevention of mother-to-child transmission of HIV in Kermanshah, west of Iran from 2014 to 2021. *BMC Pediatrics*, 23, Article 1–9. <https://doi.org/10.1186/s12887-022-03829-7>
- Akbar, N. I., Herlambang, B. A., & Anam, A. K. (2025). Sistem informasi prevalensi HIV di wilayah Kota Surakarta. *Jurnal Ilmiah Research Student*, 2(1), 457–465. <https://doi.org/10.61722/jirs.v2i1.3705>
- Nogueira, V. P. F., Gomes, A. M. T., Mercês, M. C. das, Couto, P. L. S., Yarid, S. D., & Andrade, P. C. da S. T. de. (2023). Spirituality, religiosity, and their representations for people living with HIV: Daily life and its experiences. *Revista da Escola de Enfermagem da USP*, 57, e20220394. <https://doi.org/10.1590/1980-220x-reeusp-2022-0394en>
- Purwantoro, A., Prameswari, N. S., & Mohd Nasir, R. B. M. N. (2022). The development of the Indonesian culture Gunungan design: Wayang godhong “Smoking Violated.” *Harmonia: Journal of Arts Research and Education*, 22(1), 62–77. <https://doi.org/10.15294/harmonia.v22i1.36525>
- Rosen, J. G., Muraleetharan, O., Walker, A., & Srivastava, M. (2023). Pediatric antiretroviral therapy coverage and AIDS deaths in the “Treat All” era. *Pediatrics*, 151(6), e2022059013. <https://doi.org/10.1542/peds.2022-059013>
- Rosyad, Y. S., Kora, F. T., Monika, R., Khoeriyah, S. M., & Andika, I. P. J. (2020). The effectiveness of meaning of life and antiretroviral therapy (METART) module to improve adherence among newly diagnosed HIV/AIDS: Pre-intervention survey. *Medico-Legal Update*, 20(4), 1283–1290.
- Souza, T. F. de, Sym, Y. V., & Chehter, E. Z. (2023). HIV and neoplasms: What do we know so far? *Einstein (São Paulo)*, 21, e20230000. <https://doi.org/10.31744/einstein>
- Sugiyono, S., & Puspandhani, M. E. (2020). *Metode penelitian kesehatan* (Edisi 1). Alfabeta.
- Tran, B. X., Vu, G. T., Ha, G. H., Phan, H. T., Latkin, C. A., Cyrus, S. H. H., & Roger, C. M. H. (2020). Global mapping of interventions to improve the quality of life of people living with HIV/AIDS: Implications for priority settings. *AIDS Reviews*, 22(1), 39–49. <https://doi.org/10.24875/AIDSRev.20000135>
- Valente, T. C. de O., da Silva, L. M., & Cavalcanti, A. P. R. (2022). Spiritual needs as expressed by people living with HIV: A systematic review. *Religions*, 13(4), 342. <https://doi.org/10.3390/rel13040342>
- Wamunyima, N., & Nyirenda, T. (2023). Pre-experimental design in project evaluation: The case of the Scaling-Up Nutrition (SUNI) project. In *SAGE Research Methods* (ebook). SAGE Publications. <https://doi.org/10.4135/9781529628043>
- Witdiawati, W., Ibrahim, K., Juniarti, N., Nugraha, B. A., Ayuningsih, R., & Afriandi, I. (2021). Spiritual needs and their correlation with characteristics of people living with HIV/AIDS: A cross-sectional study. *Open Access Macedonian Journal of Medical Sciences*, 9(T6), 31–35. <https://doi.org/10.3889/oamjms.2021.7324>
- Zahra, A. N., Waluyo, A., Yona, S., & Pakasi, T. A. (2024). Resilience in relation to adherence to antiretroviral therapy in people living with HIV: A qualitative study. *Global Qualitative Nursing Research*, 11, 1–9. <https://doi.org/10.1177/23333936241233449>