

Faculty Attitudes About Caring for People Living With HIV/AIDS: A Comparative Study

Juan M. Leyva-Moral, PhD, MSc, RN; Karen A. Dominguez-Cancino, MPH, BSN, RN; Genesis M. Guevara-Vasquez, MSc, Lic(Est); Joan E. Edwards, PhD, RN, CNS, FAAN; and Patrick A. Palmieri, DHSc, EdS, MBA, MSN, RN, FAAN

ABSTRACT

Background: People living with HIV/AIDS (PLHIV) experience stigma and discrimination. Negative attitudes of nursing faculty about caring for PLHIV can adversely affect student perceptions and their nursing care. The study purpose was to describe nursing faculty attitudes and beliefs about caring for PLHIV. **Method:** The HPASS (Healthcare Provider HIV/AIDS Stigma Scale), Spanish version, was delivered to nursing faculty in Colombia and Peru. **Results:** The HPASS was completed by 98 nursing faculty. The overall mean score was 2.41 ($SD = 0.69$), with subscale scores: stereotypes, 2.55 ($SD = 0.84$); discrimination, 2.28 ($SD = 0.74$); and prejudices, 2.41 ($SD = 0.63$). Peruvian faculty had the highest scores, statistically correlated with the importance of religion, whereas Colombia had the lowest. **Conclusion:** Nursing faculty attitudes toward PLHIV were slightly positive in Colombia to slightly negative in Peru; however, both countries had negative stereotypes. Knowledge deficiencies about HIV persist and attitudes appear to be influenced by culture and religion. [*J Nurs Educ.* 2019;58(12):712-717.]

(Munro et al., 2017; Wagner, Girard, McShane, Margolese, & Hart, 2017). Discriminatory behaviors and fears about contracting the virus persist in nursing (Stringer et al., 2016; Vorasane et al., 2017; Waluyo, Culbert, Levy, & Norr, 2015) with positive correlations between negative attitudes toward caring for PLHIV and advanced age, homophobia, having children, race, and religion (Peate, Suominen, Välimäki, Lohrmann, & Muinonen, 2002; Stringer et al., 2016). With more caring nursing attitudes and increased understanding about the virus and the disease, PLHIV can be respected, nurtured, and understood (Watson, 2002).

Nursing faculty attitudes and beliefs are important to understand as they can become part of the informal, or occult, curriculum (Sirota, 2013; Tanner, 1992, 2004)—that is, there can be implicit learning impregnated with values (Chuang et al., 2010; Thompson, Emrich, & Moore, 2003). Since the earliest study examining student and faculty attitudes about caring for PLHIV (Mueller, Cerny, Amundson, & Waldron, 1992), there have been fewer than 20 additional studies reported in the literature (PubMed® and SciELO searches). However, the results of the few studies often report only students in small local samples using a validated, although outdated, instrument (Bektas & Kulakaç, 2007; Earl, 2010; Li, Scott, & Li, 2008; Lohrmann et al., 2000; Röndahl, Innala, & Carlsson, 2003; Suominen, Laakkonen, & Lioznov, 2015).

In the context of PLHIV in South America, Colombia (Red Colombiana de Personas que Viven con VIH, 2015) and Peru

Despite advancements in scientific knowledge and clinical management strategies since the first reported case of AIDS (Centers for Disease Control and Prevention, 1982), people living with HIV/AIDS (PLHIV) continue to experience stigmatization and discrimination throughout the world

Dr. Leyva-Moral is Senior Lecturer, Department of Nursing, Universitat Autònoma de Barcelona, Barcelona, Spain; Dr. Edwards is Professor and Director, Center for Global Nursing, Texas Woman's University, Houston, Texas; Ms. Dominguez-Cancino is Research Fellow, Center for Health Sciences Research, Universidad María Auxiliadora, Lima, Ms. Guevara-Vasquez is Biomedical Statistician, Research Department, Hospital Regional Lambayeque, Chiclayo, Lambayeque, and Dr. Palmieri is Vice Chancellor for Research, Universidad Norbert Wiener, Lima, Peru.

© 2019 Leyva-Moral, Dominguez-Cancino, Guevara-Vasquez, et al.; licensee SLACK Incorporated. This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International (<https://creativecommons.org/licenses/by/4.0>). This license allows users to copy and distribute, to remix, transform, and build upon the article, for any purpose, even commercially, provided the author is attributed and is not represented as endorsing the use made of the work.

This project was partially funded by a research dissemination grant from the Vicerrectorado de Investigación at the Universidad Norbert Wiener (Lima, Peru). The authors thank colleagues Dr. Sandra K. Cesario, Prof. Doris B. Gonzales-Carhuajulca, Dr. M.I. Lalinde, Ms. Nataly, Membrillo-Pillpe, Prof. P. Piscocoya-Angeles, and Dr. G. A. Sandoval-Peña for their assistance with the study design or data collection.

The authors have disclosed no potential conflicts of interest, financial or otherwise.

Address correspondence to Patrick A. Palmieri, DHSc, EdS, MBA, MSN, RN, FAAN, Vice Chancellor for Research, Universidad Norbert Wiener, Av. Arequipa 444, Lima, 15046, Peru; e-mail: patrick.palmieri@globalnursing.org.

Received: December 26, 2018; Accepted: September 4, 2019

doi:10.3928/01484834-20191120-06

(Consorcio de Organizaciones de Personas con VIH en el Peru, 2018) report higher than average stigma indexes, which results in widespread discrimination. Furthermore, the health system contributes to the stigmatization of PLHIV in Colombia (Djel-louli & Quevedo-Gómez, 2015; Ritterbusch, Correa-Salazar, & Correa, 2018) and Peru (Perez-Brumer et al., 2017; Valenzuela et al., 2015) through discriminatory and prejudicial conduct of health care professionals (Avert, 2019; Cianelli, Ferrer, & McElmurry, 2008), which negatively influences their quality of care (Piñeirúa et al., 2015). Despite being recognized, the stigma and discrimination within the health systems have largely been ignored (Cáceres & Mendoza, 2009) as an institutionalized reality (Valencia-García, Rao, Strick, & Simoni, 2017). As potential change agents within the context of health systems, the objective of this study was to understand Colombian and Peruvian nursing faculty attitudes and beliefs about caring for PLHIV.

METHOD

Study Design and Population

This pilot study represents the South America data from an ongoing multicenter observational study with nonrandomized electronic sampling. Data were collected from four schools of nursing in Colombia and Peru using an online version of the Healthcare Provider HIV/AIDS Stigma Scale, or HPASS (Wagner, Hart, McShane, Margolese, & Girard, 2014), from January to July 2017. The HPASS was sent to university faculty e-mails on record (estimated response rate = 52%). The inclusion criteria were all nursing faculty with an e-mail on record, whereas all others were excluded. The study was approved by the university institutional review board.

Instruments and Measures

The validated 30-item HPASS (Wagner et al., 2014) measures stigma with three dimensions: discrimination (six items), prejudice (13 items), and stereotype (11 items). The internal consistency and test-retest reliability for the scale (Cronbach's alpha between .88 and .94) and the three individual subscales (Cronbach's alpha between .80 and .93) are excellent (Wagner et al., 2014; Xie et al., 2019). The 6-point Likert scale, ranging from *complete disagreement* (1) to *complete agreement* (6), in response to statements about PLHIV-eliminated ambiguous midline responses to provide an "accurate picture of the attitudes and beliefs" held by participants (Wagner et al., 2014, p. 2405). The scale midpoint score is 105, ranging between 30 and 180. Similarly, the subscale midpoints are 21 for discrimination (range = 6 to 36), 45.5 for prejudice (range = 13 to 78), and 39 for stereotype (range = 11 to 66). Higher scale scores from the midpoint are associated with more stigma (similar for subscales) and lower scores with less stigma.

HPASS-ESP

A Spanish version of the scale (HPASS-ESP), for cross-cultural research in South America, was produced through a rigorous process including forward and reverse translations, expert item evaluations, subscale analysis, and adaptation for equivalence in content, context, and culture (Guillemin, Bom-

bardier, & Beaton, 1993; Sousa & Rojjanasrirat, 2011). The experts included 12 bilingual nursing faculty from Chile, Colombia, and Peru.

Data Analysis

Descriptive statistics were performed for all variables in the two-country sample, as well as for each individual country. Bivariate inferential statistics were performed to compare the total scale score, each subscale, and the sociodemographic variables by country. As a pilot study, the threshold for significance was set at 0.09 (Conn, Algase, Rawl, Zerwic, & Wyman, 2010; Hertzog, 2008). An analysis was also performed to examine the correlation between sociodemographic variables and the HPASS-ESP scores (scale and subscales). Parametric and non-parametric statistics were used (McCullagh & Nelder, 1989; Polit & Beck, 2017; Siegel & Castellan, 1988) with a correlation analysis to measure the direction and strength of potential associations across the three considered subscales (Altman, 1991). The data were organized in an Excel[®] spreadsheet and analyzed with Stata[®] 14.0. The study is reported according to the STROBE (Strengthening The Reporting of OBservational Studies in Epidemiology), following the minimum reporting requirements for cross-sectional studies (von Elm et al., 2014).

RESULTS

The total of 98 nursing faculty from Peru ($N = 57$) and Colombia ($N = 41$) responded to the HPASS-ESP. The participant median age was 44 years (interquartile range [IQR] = 37 to 53), the majority identified as female ($n = 80$, 81.6%), with a median teaching experience of 9.5 years (IQR = 5.0 to 15), and 93.9% completed postgraduate studies. Participants primarily taught in an undergraduate program ($n = 85$, 86.7%), most self-identified as Catholic ($n = 87$, 88.8%), and most indicated religion as important to very important in their lives ($n = 79$, 80.6%).

Overall, the mean scale score was 80.0 ($SD = 22.9$); the subscale mean scores were 12 (IQR = 9.0 to 16) for discrimination, 31 (IQR = 21 to 40) for prejudices, and 35.2 ($SD = 10.3$) for stereotypes. The mean scale score was 68.6 ($SD = 20.6$) for Colombia and 88.2 ($SD = 21.1$) for Peru. The country subscale scores included the following: discrimination of 11 (IQR = 8 to 15) for Colombia and 14 (IQR = 10 to 18) for Peru; prejudices of 24 (IQR = 19 to 35) for Colombia and 36 (IQR = 28 to 41) for Peru; and stereotypes of 29.9 ($SD = 9.7$) for Colombia and 39.1 ($SD = 9.0$) for Peru. When comparing the countries, the scores were statistically significant for the stigma scale ($p < .001$) and each of the three subscales, discrimination ($p = .030$), prejudices ($p = .006$), and stereotypes ($p < .001$).

In the analysis of the sociodemographic variables, total scale score, and subscale scores, statistically significant associations were found between the level of education and the scale ($p = .037$) and the discrimination subscale ($p = .019$). For education level and the scale score, participants with undergraduate education (80.5, $SD = 22.6$) scored higher than those with postgraduate education (56.3, $SD = 16.8$). In the case of the discrimination subscale, participants with undergraduate education (12, IQR = 9.0 to 16) also scored higher than participants with postgraduate education (6.5, IQR = 6.0 to 9.5). In the analyses by

country, the significance remained for the discrimination subscale for Peruvian participants ($p = .0316$), and the scores for participants with undergraduate education (2, IQR = 1.5 to 2.7) were higher than those with postgraduate education (1, IQR = 1.1 to 1.6).

As the years of teaching experience had different distributions (normal for Colombia and not normal for Peru), the analysis was performed separately. A significant statistical difference was found with years of experience in the case of Peru for total scale score (Spearman's $\rho = 0.32$; $p = .014$), and the prejudice (Spearman's $\rho = 0.39$; $p = .003$), stereotype (Spearman's $\rho = 0.24$; $p = .07$), and discrimination subscales (Spearman's $\rho = 0.23$; $p = .09$). However, none of these associations were significant for Colombia. In the analysis of religious importance for the two countries, a significant difference was found in the scale score and stereotype subscale (Peru = 2.91, $SD = 0.10$; Colombia = 2.25, $SD = 0.11$; $p < .0001$); no relationship was found with the other subscales.

There were also significant correlations between the total scale score and each of the three subscales (discrimination: $r = .73$, $< .001$; prejudice: $r = .91$, $< .001$; and stereotype: $r = .83$, $p < .001$). Additionally, there were correlations observed between all the subscales (stereotype and prejudice: $r = .57$, $p < .001$; stereotype and discrimination: $r = .38$, $p < .001$; and discrimination and prejudice: $r = .68$, $p < .001$). Finally, in terms of stereotypes and false beliefs, four item responses scored greater than 4 of 5, indicating participants from both countries generally believe "if people act responsibly, they will not contract HIV" and HIV positive patients "have engaged in risky activities despite knowing these risks" and "should accept responsibility for acquiring the virus." They were also "worried about contracting HIV from HIV+ patients."

DISCUSSION

The findings from this study indicate nursing faculty attitudes about caring for PLHIV are neutral to slightly positive; however, there are notable differences between Colombia and Peru, as well as some common areas for improvement. The item analysis indicates a persistent presence of false myths and lack of knowledge about HIV/AIDS, also reported in other studies (Leyva et al., 2017). The analysis indicates both countries demonstrate stereotypical attitudes and beliefs that can adversely impact patient care. However, despite concerns about contracting the virus, the participants were not hesitant to "come into physical contact with HIV+ patients" and believe there is no "right to refuse to treat HIV+ patients to protect" themselves.

Overall, the faculty results observed in the two countries are slightly higher than the scores from other countries (e.g., Spain and Germany) in terms of the overall stigma score and stereotype score. This finding might be attributed to the high HIV-related stigma reported in Latin America (Johnson et al., 2015), including overt discrimination experienced by lesbian, gay, transgender, and bisexual people (i.e., the LGBTQ community) (Barrientos, 2016). In Latin America, there is a close relationship between machismo and the meanings associated with sexuality (Marín, 2003), and therefore attributed to sexually transmitted infections such as HIV (Cianelli et al.,

2008; Quevedo-Gómez, Krumeich, Abadía-Barrero, Pastrana-Salcedo, & van den Borne, 2012). In the Latino community, ideas about machismo seem to contribute to discrimination against women and gay men, resulting in enhanced homophobia and increased sexual coercion (Marín, 2003).

In addition, the higher scale score in Peru might be associated with the machismo prevailing in the Peruvian health sector (Palmieri, 2017) and therefore the discrimination experienced by the collective LGBTQ community. Other investigations have found correlations associated with stigma and discrimination with religion (Kinyanda et al., 2012; Leyva-Moral et al., 2017; Stringer et al., 2016), noted to be a significant difference between Peru and Colombia in this study. In particular, the higher scores in Peru might be explained by conservative Catholic traditions. However, these differences could also result from the sampling strategy and variability of sociocultural contexts in which participants share cultural meanings associated with sexuality and HIV but not with religious affiliation.

Positive attitudes are related to increased caring behaviors (Dyson, 1996; Watson, 2008). Nursing education has long played an important role in the development of caring attitudes (Eron, 1955), the acquisition of knowledge (Benner, 1982), and the advancement of caring behaviors (Bevis & Watson, 1989). For nurses, caring is "the moral ideal of nursing whereby the end is protection, enhancement, and preservation of human dignity" (Watson, 1985, p. 29). However, negative faculty attitudes and incorrect beliefs about caring for PLHIV can adversely influence the attitudes of students and the care they provide. This can be partly explained in relationship to their comfort teaching specialized content about populations. For example, Sirota (2013) described "a long skew toward negative attitudes" (p. 222) for more than half of the nursing faculty ($n = 733$) in a study regarding homosexuality. As less than 30% of faculty were prepared to teach students about homosexuality, almost 90% indicated a "sense of ignorance about what content to teach and how to teach it" (p. 225). The implication is that faculty are not comfortable teaching what they do not understand.

Faculty caring behaviors can positively influence the caring behaviors of their students (Labrague, McEnroe-Petite, Papathanasiou, Edet, & Arulappan, 2015). As such, developing faculty education about caring for PLHIV is a viable strategy to advance positive caring attitudes in students. In general, university faculty need to develop critical and constructive approaches to teaching students about HIV/AIDS (Camillo, Maiorino, & Chaves, 2013), including sharing personal experiences from PLHIV in the classroom. In this regard, expert patient illness narratives have been reported to be an effective teaching method for nursing students (Feijoo-Cid, Moriña, Gómez-Ibáñez, & Leyva-Moral, 2017) to develop cultural sensitivity, respect, and trust in others (Davidson, 2005). Similarly, when PLHIV are included as simulated patients, HIV-related stigma decreases and comfort in providing care increases (Jaworsky et al., 2017). More favorable attitudes about caring for HIV-infected pregnant women among certified nurse practitioners compared with RNs (Farley et al., 2014). Finally, positive empathetic attitudes ($r = .36$, $p < .001$) were negatively correlated with avoidant attitudes ($r = -.34$, $p < .001$) in nurses working in HIV clinics compared with those working in general clinics (Hamama et al.,

2014). Education and daily interactions between the providers and PLHIV result in more positive caring attitudes.

LIMITATIONS

This study has three important limitations. First, this study used a self-administered instrument. According to Parahoo (1997), participants might have tried to present what they believe is a desirable image resulting in more favorable scores. Second, the nonrepresentative convenience samples in metropolitan areas of each country might not be representative of the entire country. Third, the small sample size resulting from the intentional sampling strategy could have similarly influenced the results. Even so, this study is the largest sample size reported in the literature for Latin America and the only study comparing the context of different countries.

CONCLUSION

In general, nursing faculty attitudes toward caring for PLHIV were slightly negative in Peru to slightly positive in Colombia, with the stereotype subscale requiring improvement in both countries. Myths and lack of knowledge about HIV/AIDS remain problematic and attitudes appear to be influenced by nationality, education, and religion. Nursing faculty need to take a critical and constructive approach to improving HIV/AIDS education, including the incorporation of real-world experiences of PLHIV in the classroom.

Importantly, previous research has not established the correlation between the three dimensions (discrimination, prejudices, and stereotypes) among nursing faculty. In addition, this study found a correlation between the three subscales and the overall scale. This finding is important to justify continued research with the HPASS with the goal of developing interventions to decrease stigma. As all the factors are related, an educational activity designed to improve attitudes will impact the three dimensions.

Additional research is necessary for three reasons. First, the inclusion of more participants from additional universities in the represented countries can improve the fidelity of the findings. Also, participants from similar countries in the Andean Region of South America (e.g., Argentina, Bolivia, Chile, and Ecuador) can provide more information about the effects of nationality, as well as culture, on the HPASS scores. Second, qualitative research is necessary to explain the HPASS subscale scores. For example, a qualitative study can directly explore the influence of faculty attitudes on the behavior of students and, more importantly, their behaviors in providing care. Finally, theory-derived and evidence-informed interventions need to be developed to advance the knowledge and attitudes of nursing faculty about caring for PLHIV.

REFERENCES

Altman, D. G. (1991). *Practical statistics for medical research*. London, United Kingdom: Chapman and Hall.
Avert. (2019). *HIV and AIDS in Latin America and the Caribbean regional overview*. Retrieved from <https://www.avert.org/professionals/hiv-around-world/latin-america/overview>

Barrientos, J. (2016). Situación social y legal de gays, lesbianas y personas transgénero y la discriminación contra estas poblaciones en América Latina [The social and legal status of gay men, lesbians and transgender persons, and discrimination against these populations in Latin America]. *Sexualidad. Salud y Sociedad*, 22, 331–354. <https://doi.org/10.1590/1984-6487.sess.2016.22.15.a>
Bektas, H. A., & Kulakaç, O. (2007). Knowledge and attitudes of nursing students toward patients living with HIV/AIDS (PLHIV): A Turkish perspective. *AIDS Care*, 19(7), 888–894. <https://doi.org/10.1080/09540120701203352> PMID:17712692
Benner, P. (1982). From novice to expert. *The American Journal of Nursing*, 82(3), 402–407. PMID:6917683
Bevis, E. O., & Watson, J. (1989). *Toward a caring curriculum: A new pedagogy for nursing*. New York, NY: National League for Nurses.
Cáceres, C. F., & Mendoza, W. (2009). The national response to the HIV/AIDS epidemic in Peru: Accomplishments and gaps—A review. *Journal of Acquired Immune Deficiency Syndromes*, 51(Suppl 1), S60–S66. <https://doi.org/10.1097/QAI.0b013e3181a66208> PMID:19384104
Camillo, S. O., Maiorino, F. T., & Chaves, L. C. (2013). O ensino de enfermagem sobre HIV/AIDS sob a ótica da cidadania. [Nursing teaching on HIV/AIDS in the perspective of citizenship]. *Revista Gaúcha de Enfermagem*, 34(3), 117–123. <https://doi.org/10.1590/S1983-14472013000300015> PMID:24344593
Centers for Disease Control and Prevention. (1982). Update on Acquired Immune Deficiency Syndrome (AIDS)—United States. *MMWR Weekly*, 31(37), 507–514. Retrieved from <https://www.cdc.gov/mmwr/preview/mmwrhtml/00001163.htm>
Chuang, A. W., Nuthalapaty, F. S., Casey, P. M., Kaczmarczyk, J. M., Culimore, A. J., Dalrymple, J. L., . . . Undergraduate Medical Education Committee, Association of Professors of Gynecology and Obstetrics. (2010). To the point: Reviews in medical education-taking control of the hidden curriculum. *American Journal of Obstetrics and Gynecology*, 203(4), 316.e1–316.e6. <https://doi.org/10.1016/j.ajog.2010.04.035> PMID:20541735
Cianelli, R., Ferrer, L., & McElmurry, B. J. (2008). HIV prevention and low-income Chilean women: Machismo, marianismo and HIV misconceptions. *Culture, Health & Sexuality*, 10(3), 297–306. Retrieved from <https://doi.org/https://doi.org/10.1080/13691050701861439> <https://doi.org/10.1080/13691050701861439> PMID:18432428
Conn, V. S., Algase, D. L., Rawl, S. M., Zerwic, J. J., & Wyman, J. F. (2010). Publishing pilot intervention work. *Western Journal of Nursing Research*, 32(8), 994–1010. <https://doi.org/10.1177/0193945910367229> PMID:20702685
Consortio de Organizaciones de Personas con VIH en el Peru. (2018). *Índice de estigma y discriminación informe final: Hacia las personas con VIH en Peru* [Index of stigma and discrimination final report: Towards people with HIV in Peru]. Retrieved from <https://plataformalac.org/wp-content/uploads/2019/03/MFOSC89SPa.pdf>
Davidson, L. (2005). Recovery, self-management and the expert patient—Changing the culture of mental health from a UK perspective. *Journal of Mental Health (Abingdon, England)*, 14(1), 25–35. <https://doi.org/10.1080/09638230500047968>
Djellouli, N., & Quevedo-Gómez, M. C. (2015). Challenges to successful implementation of HIV and AIDS-related health policies in Cartagena, Colombia. *Social Science & Medicine*, 133, 36–44. <https://doi.org/10.1016/j.socscimed.2015.03.048> PMID:25840048
Dyson, J. (1996). Nurses' conceptualizations of caring attitudes and behaviours. *Journal of Advanced Nursing*, 23(6), 1263–1269. <https://doi.org/10.1046/j.1365-2648.1996.13326.x> PMID:8796477
Earl, C. E. (2010). Thai nursing students' knowledge and health beliefs about AIDS and use of universal precautions: A cross-sectional descriptive research study. *AAOHN Journal*, 58(8), 331–334. <https://doi.org/10.1177/216507991005800904> PMID:20669861
Eron, L. D. (1955). The effect of nursing education on attitudes. *Nursing Research*, 4(1), 24–27. <https://doi.org/10.1097/00006199-195506000-00003> PMID:14384085
Farley, J. E., Hayat, M. J., Murphy, J., Sheridan-Malone, E., Anderson, J., & Mark, H. (2014). Knowledge, attitudes, and practices of OB/GYN nurses and auxiliary staff in the care of pregnant women living with HIV. *The Journal of the Association of Nurses in AIDS Care: JANAC*, 25(2), 158–167. <https://doi.org/10.1016/j.jana.2013.04.004> PMID:23876818

- Feijoo-Cid, M., Moriña, D., Gómez-Ibáñez, R., & Leyva-Moral, J. M. (2017). Expert patient illness narratives as a teaching methodology: A mixed method study of student nurses satisfaction. *Nurse Education Today*, *50*, 1–7. <https://doi.org/10.1016/j.nedt.2016.11.029> PMID:27998806
- Guillemin, F., Bombardier, C., & Beaton, D. (1993). Cross-cultural adaptation of health-related quality of life measures: Literature review and proposed guidelines. *Journal of Clinical Epidemiology*, *46*(12), 1417–1432. [https://doi.org/10.1016/0895-4356\(93\)90142-N](https://doi.org/10.1016/0895-4356(93)90142-N) PMID:8263569
- Hamama, L., Tartakovsky, E., Eroshina, K., Patrakov, E., Golubkova, A., Bogushevich, J., & Shardina, L. (2014). Nurses' job satisfaction and attitudes towards people living with HIV/AIDS in Russia. *International Nursing Review*, *61*(1), 131–139. <https://doi.org/10.1111/inr.12074> PMID:24308493
- Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, *31*(2), 180–191. <https://doi.org/10.1002/nur.20247> PMID:18183564
- Jaworsky, D., Gardner, S., Thorne, J. G., Sharma, M., McNaughton, N., Paddock, S., . . . CHIME Research Group. (2017). The role of people living with HIV as patient instructors—Reducing stigma and improving interest around HIV care among medical students. *AIDS Care*, *29*(4), 524–531. <https://doi.org/10.1080/09540121.2016.1224314> PMID:27577683
- Johnson, M., Samarina, A., Xi, H., Valdez Ramalho Madruga, J., Hocqueloux, L., Loutfy, M., . . . Martinez, M. (2015). Barriers to access to care reported by women living with HIV across 27 countries. *AIDS Care*, *27*(10), 1220–1230. <https://doi.org/10.1080/09540121.2015.1046416> PMID:26168817
- Kinyanda, E., Weiss, H. A., Mungherera, M., Onyango-Mangen, P., Ngabirano, E., Kajungu, R., . . . Patel, V. (2012). Psychiatric disorders and psychosocial correlates of high HIV risk sexual behaviour in war-affected Eastern Uganda. *AIDS Care*, *24*(11), 1323–1332. <https://doi.org/10.1080/09540121.2011.647676> PMID:22272693
- Labrague, L. J., McEnroe-Petitte, D. M., Papathanasiou, I. V., Edet, O. B., & Arulappan, J. (2015). Impact of instructors' caring on students' perceptions of their own caring behaviors. *Journal of Nursing Scholarship*, *47*(4), 338–346. <https://doi.org/10.1111/jnu.12139> PMID:25959595
- Leyva-Moral, J. M., Terradas-Robledo, R., Feijoo-Cid, M., Dios-Sánchez, R., Mestres-Camps, L., Lluva-Castaño, A., & Comas-Serrano, M. (2017). Attitudes to HIV and AIDS among students and faculty in a school of nursing in Barcelona (Spain): A cross-sectional survey. *Collegian (Royal College of Nursing, Australia)*, *24*(6), 593–601. <https://doi.org/10.1016/j.colegn.2016.10.006>
- Li, Y., Scott, C. S., & Li, L. (2008). Chinese nursing students' HIV/AIDS knowledge, attitudes, and practice intentions. *Applied Nursing Research*, *21*(3), 147–152. <https://doi.org/10.1016/j.apnr.2006.10.004> PMID:18684408
- Lohrmann, C., Välimäki, M., Suominen, T., Muinonen, U., Dassen, T., & Peate, I. (2000). German nursing students' knowledge of and attitudes to HIV and AIDS: Two decades after the first AIDS cases. *Journal of Advanced Nursing*, *31*(3), 696–703. <https://doi.org/10.1046/j.1365-2648.2000.01326.x> PMID:10718890
- Marín, B. V. (2003). HIV prevention in the Hispanic community: Sex, culture, and empowerment. *Journal of Transcultural Nursing*, *14*(3), 186–192. <https://doi.org/10.1177/1043659603014003005> PMID:12861921
- McCullagh, P., & Nelder, J. A. (1989). *Generalized linear models*. London, United Kingdom: Chapman and Hall. <https://doi.org/10.1007/978-1-4899-3242-6>
- Mueller, C. W., Cerny, J. E., Amundson, M. J., & Waldron, J. A. (1992). Nursing faculty and students' attitudes regarding HIV. *The Journal of Nursing Education*, *31*(6), 273–279. <https://doi.org/10.3928/0148-4834-19920601-09> PMID:1320109
- Munro, L., Marshall, Z., Bauer, G., Hammond, R., Nault, C., & Travers, R. (2017). (Dis)integrated care: Barriers to health care utilization for trans women living with HIV. *The Journal of the Association of Nurses in AIDS Care: JANAC*, *28*(5), 708–722. <https://doi.org/10.1016/j.jana.2017.06.001> PMID:28838570
- Palmieri, P. A. (2017). The co-emergence of Caritas nursing and professional nursing practice in Peru. In S. Lee, P. A. Palmieri, & J. Watson (Eds.), *Global advances in human caring literacy* (pp. 71–88). Sudbury, MA: Springer.
- Parahoo, K. (1997). *Nursing research. Principles, process and issues*. Houndmills, United Kingdom: Palgrave MacMillan.
- Peate, I., Suominen, T., Välimäki, M., Lohrmann, C., & Muinonen, U. (2002). HIV/AIDS and its impact on student nurses. *Nurse Education Today*, *22*(6), 492–501. <https://doi.org/10.1054/medt.2002.0747> PMID:12387763
- Perez-Brumer, A. G., Reisner, S. L., McLean, S. A., Silva-Santisteban, A., Huerta, L., Mayer, K. H., . . . Lama, J. R. (2017). Leveraging social capital: Multilevel stigma, associated HIV vulnerabilities, and social resilience strategies among transgender women in Lima, Peru. *Journal of the International AIDS Society*, *20*(1), 21462. <https://doi.org/10.7448/IAS.20.1.21462> PMID:28362064
- Piñeirúa, A., Sierra-Madero, J., Cahn, P., Guevara Palmero, R. N., Martínez Buitrago, E., Young, B., & Del Rio, C. (2015). The HIV care continuum in Latin America: Challenges and opportunities. *The Lancet. Infectious Diseases*, *15*(7), 833–839. [https://doi.org/10.1016/S1473-3099\(15\)00108-5](https://doi.org/10.1016/S1473-3099(15)00108-5) PMID:26122456
- Polit, D. F., & Beck, C. T. (2017). *Nursing research: generating and assessing evidence for nursing practice* (10th ed.). Philadelphia, PA: Wolters Kluwer Health.
- Quevedo-Gómez, M. C., Krumeich, A., Abadía-Barrero, C. E., Pastrana-Salcedo, E., & van den Borne, H. (2012). Machismo, public health and sexuality-related stigma in Cartagena. *Culture, Health & Sexuality*, *14*(2), 223–235. <https://doi.org/10.1080/13691058.2011.629682> PMID:22085396
- Red Colombiana de Personas que Viven con VIH. (2015). *Voces positivas: Resultados del índice de estigma en personas que viven con VIH en Colombia [Positive voices: Stigma index results for people living with HIV in Colombia]*. Retrieved from <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/INEC/INTOR/informe-voces-positivas.pdf>
- Ritterbusch, A. E., Correa Salazar, C., & Correa, A. (2018). Stigma-related access barriers and violence against trans women in the Colombian healthcare system. *Global Public Health: An International Journal for Research, Policy and Practice*, *13*(12), 1831–1845. <https://doi.org/10.1080/17441692.2018.1455887> PMID:29583079
- Röndahl, G., Innala, S., & Carlsson, M. (2003). Nursing staff and nursing students' attitudes towards HIV-infected and homosexual HIV-infected patients in Sweden and the wish to refrain from nursing. *Journal of Advanced Nursing*, *41*(5), 454–461. <https://doi.org/10.1046/j.1365-2648.2003.02553.x> PMID:12603570
- Siegel, S., & Castellan, N. J. (1988). *Nonparametric statistics for the behavioral sciences* (2nd ed.). New York, NY: McGraw-Hill.
- Sirota, T. (2013). Attitudes among nurse educators toward homosexuality. *Journal of Nursing Education*, *52*(4), 219–227. <https://doi.org/10.3928/01484834-20130320-01> PMID:23506172
- Sousa, V. D., & Rojjanasrirat, W. (2011). Translation, adaptation and validation of instruments or scales for use in cross-cultural health care research: A clear and user-friendly guideline. *Journal of Evaluation in Clinical Practice*, *17*(2), 268–274. <https://doi.org/10.1111/j.1365-2753.2010.01434.x> PMID:20874835
- Stringer, K. L., Turan, B., McCormick, L., Durojaiye, M., Nyblade, L., Kempf, M.-C., . . . Turan, J. M. (2016). HIV-related stigma among healthcare providers in the deep South. *AIDS and Behavior*, *20*(1), 115–125. <https://doi.org/10.1007/s10461-015-1256-y> PMID:26650383
- Suominen, T., Laakkonen, L., Lioznov, D., Polukova, M., Nikolaenko, S., Lipiäinen, L., . . . Kylmä, J. (2015). Willingness to take care of HIV positive people: Responses from Russian nursing students. *Nordic Journal of Nursing Research*, *35*(2), 1–6. <https://doi.org/10.1177/0107408314560323>
- Tanner, C. A. (1992). The teacher-proof curriculum. *Journal of Nursing Education*, *31*(6), 243–244. PMID:1320104
- Tanner, C. A. (2004). The meaning of curriculum: Content to be covered or stories to be heard? *Journal of Nursing Education*, *43*(1), 3–4. <https://doi.org/10.3928/01484834-20040101-04> PMID:14748528
- Thompson, T. L., Emrich, K., & Moore, G. (2003). The effect of curriculum on the attitudes of nursing students toward disability. *Rehabilitation Nursing*, *28*(1), 27–30. <https://doi.org/10.1002/j.2048-7940.2003.tb01718.x> PMID:12567819
- Valencia-García, D., Rao, D., Strick, L., & Simoni, J. M. (2017). Women's experiences with HIV-related stigma from health care providers in

- Lima, Peru: "I would rather die than go back for care." *Health Care for Women International*, 38(2), 144–158. <https://doi.org/10.1080/07399332.2016.1217863> PMID:27485767
- Valenzuela, C., Ugarte-Gil, C., Paz, J., Echevarria, J., Gotuzzo, E., Vermund, S. H., & Kipp, A. M. (2015). HIV stigma as a barrier to retention in HIV care at a general hospital in Lima, Peru: A case-control study. *AIDS and Behavior*, 19(2), 235–245. <https://doi.org/10.1007/s10461-014-0908-7> PMID:25269871
- von Elm, E., Altman, D. G., Egger, M., Pocock, S. J., Gøtzsche, P. C., Vandenbroucke, J. P., & the STROBE Initiative. (2014). The Strengthening of Reporting of Observational Studies in Epidemiology (STROBE) statement: Guidelines for reporting observational studies. *International Journal of Surgery*, 12(12), 1495–1499. <https://doi.org/10.1016/j.ijssu.2014.07.013> PMID:25046131
- Vorasane, S., Jimba, M., Kikuchi, K., Yasuoka, J., Nanishi, K., Durham, J., & Sychareun, V. (2017). An investigation of stigmatizing attitudes towards people living with HIV/AIDS by doctors and nurses in Vientiane, Lao PDR. *BMC Health Services Research*, 17(1), 125. <https://doi.org/10.1186/s12913-017-2068-8> PMID:28183300
- Wagner, A. C., Hart, T. A., McShane, K. E., Margolese, S., & Girard, T. A. (2014). Health care provider attitudes and beliefs about people living with HIV: Initial validation of the Health Care Provider HIV/AIDS Stigma Scale (HPASS). *AIDS and Behavior*, 18(12), 2397–2408. <https://doi.org/10.1007/s10461-014-0834-8> PMID:24965675
- Wagner, A. C., Girard, T., McShane, K. E., Margolese, S., & Hart, T. A. (2017). HIV-related stigma and overlapping stigmas towards people living with HIV among health care trainees in Canada. *AIDS Education and Prevention*, 29(4), 364–376. <https://doi.org/10.1521/aeap.2017.29.4.364> PMID:28825863
- Waluyo, A., Culbert, G. J., Levy, J., & Norr, K. F. (2015). Understanding HIV-related stigma among Indonesian nurses. *The Journal of the Association of Nurses in AIDS Care*, 26(1), 69–80. <https://doi.org/10.1016/j.jana.2014.03.001> PMID:24759060
- Watson, J. (1985). *Nursing: Human science and human care, a theory of nursing*. Norwal, CT: Appleton-Century-Crofts.
- Watson, J. (2002). Intentionality and caring-healing consciousness: A practice of transpersonal nursing. *Holistic Nursing Practice*, 16(4), 12–19. <https://doi.org/10.1097/00004650-200207000-00005> PMID:12060941
- Watson, J. (2008). *Nursing: The philosophy and science of caring* (Rev. ed.). Boulder: University Press of Colorado.
- Xie, H., Yu, H., Watson, R., Wen, J., Xiao, L., Yan, M., & Chen, Y. (2019). Cross-cultural validation of the Health Care Provider HIV/AIDS Stigma Scale (HPASS) in China. *AIDS and Behavior*, 23(4), 1048–1056. <https://doi.org/10.1007/s10461-018-2312-1> PMID:30306438f