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Decision Readiness to Disclose HIV-Positive Status to Family Members

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Abstract

Background: People living with HIV (PLWH) are faced with the often difficult decision of whether, when, and how to disclose their seropositive status. This study draws on the transtheoretical model of change to examine men and women's decision readiness to disclose their HIV-positive status to family members and to assess predictors (decisional balance and decision self-efficacy) of their decision readiness.

Methods: Cross-sectional data were collected from 346 PLWH – 191 males and 155 females. Participants self-reported on their disclosure decision readiness, decisional balance, and decision self-efficacy. Data were analyzed using chi-square tests, general linear models, and multinomial logistic regression models.

Results: Two-thirds of PLWH were in the three lower stages of decision readiness, with the majority starting to think about disclosure. One-third of PLWH were in the three higher stages of decision readiness (close to deciding or have made the decision to disclose). Decisional balance and decision self-efficacy predicted decision readiness. Overall, few gender differences emerged.

Conclusions: These findings can help researchers, clinicians, and health care providers to better understand and support PLWH as they move through the decision-making process.

Brief Summary

This study found that the majority of people living with HIV started to think about disclosing to family members. Decisional balance and decision self-efficacy predicted disclosure decision readiness.

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Keywords

disclosure; decision readiness; stages of change; living with HIV

INTRODUCTION

In 2015, more than 1.1 million people were living with HIV and 39,782 individuals were newly diagnosed with HIV in the United States ¹. People living with HIV (PLWH), and particularly those with a recent diagnosis, are faced with the often difficult decision of whether, when, and how to disclose their HIV-positive status to others ^{2,3}. Disclosure processes are further tied to relationships ^{2,3}. Disclosure to sex partners, for instance, might occur due to concerns for others in terms of HIV transmission risk. In contrast, disclosure to family, the focus of the current study, might be more focused on the self because of the potential for generating support from family, increased feelings of security, greater engagement in care, and greater adherence to medications that can extend the length and quality of life as well as greatly reduce the risk of HIV transmission ^{2,4,5}. However, research examining the disclosure decision-making process that can inform disclosure behavior is lacking.

Thus, the current study draws on the transtheoretical model (TTM) of change to examine PLWH's progression through six stages of decision readiness to disclose their HIV-positive status to family members ⁶. For the purpose of the current study, the six stages are operationalized as follows: In the lowest stage, *precontemplation*, PLWH have not yet thought about disclosing. PLWH in the *contemplation* stage have not thought about disclosing but are interested in thinking about it. In the *preparation* stage, they are considering thinking about disclosing. In the *action* stage, PLWH are close to deciding about disclosing. In the *maintenance* stage, they are ready to decide but are still leaving all options open. In the *termination* stage, PLWH have decided to disclose and are not likely to change their minds.

Two main factors may predict the stages of decision readiness—decisional balance and self-efficacy ⁶. Decisional balance is a comparison of costs and rewards associated with behavior change ⁷⁻⁹. PLWH are more likely to decide to disclose to family members when the rewards outweigh the costs of disclosure ^{9,10}. Decision self-efficacy refers to individuals' level of confidence that they can change and maintain that change. It is tied to perceptions of personal beliefs about abilities and skills ¹¹. For example, individuals may feel certain that they have or can find resources or information to help them make disclosure decisions and feel comfortable sticking with their decisions.

The main purpose of this study was to examine men and women's decision readiness to disclose their HIV-positive status to family members. Drawing on research on disclosure behavior ^{2,3,12,13}, it was hypothesized that more women than men will be in the higher stages of decision readiness (*action* to *termination*) (H1). Additionally, and based on the TTM, it was hypothesized that decision readiness to disclose will be predicted by decisional balance (H2) and decision self-efficacy (H3). Finally, this study tested the research questions

(RQs) whether there are gender differences in decisional balance (RQ1) and decision self-efficacy (RQ2).

MATERIALS AND METHODS

Design and Procedure

Data for this study were obtained from the baseline assessment of a larger intervention study designed to help men and women in their decision-making process to disclose their HIV-positive status to family members. Baseline data were collected between 2014 and 2017 from 346 PLWH in a large US Southeast metropolitan area (see Table 1 for demographic characteristics). Participants had to be at least 18 years of age, living with HIV, speak English, and plan to live in the area in the next year. Additionally, participants had to indicate an interest in learning more about disclosure to family members, express a desire to make a disclosure decision, and have at least one family member who did not yet know about their HIV-positive status. Because one aspect of the overall study investigated disclosure to sexual partners and sexual behavior, participants also had to be sexually active in the 90 days prior to enrollment.

Participants were recruited using a variety of strategies including advertisements with local AIDS service organizations, local newspapers, and at HIV-related venues. Data were collected using audio computer-assisted self-interviewing (ACASI) software and took about 50 minutes at baseline. All procedures were approved by the University of South Florida Institutional Review Board. Informed consent was obtained prior to data collection.

Measures

Decision readiness to disclose to family.—Participants were asked a single question with six response options to assess their disclosure decision readiness stage, which is similar to a sizeable body of previous studies that used the TTM to guide the examination of change¹⁴. The question was, “When you think of the members of your family that don’t know your HIV status, would you say that you (1) haven’t really thought much about whether or not you want to disclose to them (*precontemplation*); (2) haven’t really thought much about disclosing to them, but are interested in thinking about it now (*contemplation*); (3) are considering right now whether or not you want to disclose to one or more of your family members (*preparation*); (4) are close to deciding whether or not to disclose (*action*); (5) have already made your decision, but are still willing to reconsider your options (*maintenance*); or (6) have already decided and are not likely to change your mind (*termination*).”

Decisional balance.—The Decisional Conflict Scale was used to ask participants about their perceived rewards and costs of disclosing to family members¹⁵. Items were modified to specifically ask about disclosure decisions rather than global decision making. The scale included 5 decisional subscales: (1) *informed* (knowing benefits and risks; 3 items); (2) *values clarity* (being clear about benefits and risks; 3 items); (3) *support* (having adequate support; 3 items); (4) *certainty* (being clear and sure what decision to make; 3 items); and (5) *effective* (making informed choice; 4 items). Responses were recorded on a Likert-type scale ranging from 1 = *strongly disagree* to 4 = *strongly agree*. Each subscale was created by

summing the corresponding number of items, with higher scores indicating greater decisional balance. Cronbach alphas in the current study ranged from .65 to .80 across the subscales.

Decision self-efficacy.—The Decision Self-Efficacy Scale was utilized to ask participants to rate 13 items regarding their confidence in making a disclosure decision¹⁶. Responses were recorded on a Likert-type scale ranging from 0 = *not at all confident* to 4 = *very confident*. Items were summed to create the self-efficacy scale, with higher scores indicating greater self-efficacy. Cronbach alpha in the current study was .92.

Control variables.

Based on previous studies and gender differences in demographic characteristics of participants in the current study, five control variables were added in the multinomial logistic regression analysis. Racial minority was coded 1 = *racial minority*, 0 = *White*. Non-Hispanic ethnicity was coded 1 = *not Hispanic* and 0 = *Hispanic*. Sexual orientation included 1 = *gay*, 2 = *bisexual/other*, and 3 = *straight*. Level of education was treated as a continuous variable and ranged from 1 = *8th grade or less* to 7 = *post-graduate degree*. Monthly income was also coded as a continuous variable and ranged from 1 = *\$0 to \$500* to 5 = *over \$2,000*.

Data Analysis

Descriptive statistics were used to check the data for normality and describe participants' demographic characteristics. Comparisons between males and females were carried out using chi-square tests for categorical variables and general linear models for continuous variables (Table 1 and Table 3). Z-scores were calculated to test for gender differences on each stage of disclosure decision readiness (H1; Table 2). Z-scores are used to compare whether two group proportions differ on a single categorical variable with multiple levels (i.e., six stages of disclosure decision readiness).

Multinomial logistic regression, with the addition of gender and the control variables, was conducted to test the two predictors of decision readiness to disclose stages (H2, H3; Table 4). Multinomial logistic regression allows for the analysis of unordered categorical outcomes with more than two values. Resulting standardized coefficients provide relative risk ratios (RRR) that are interpreted as the odds of belonging in any of the lower stages compared to the highest stage (*termination* as reference category). Data were analyzed in SAS software version 9.4.

RESULTS

Sample Description

Table 1 displays the demographic characteristics of the overall sample ($N = 346$) as well as statistical comparisons between males ($N = 191$) and females ($N = 155$). The majority of participants identified as racial minorities (63.34%), non-Hispanic (88.08%), and straight (51.74%). Roughly one quarter of participants had earned a high school degree or GED (28.65%) or had some college experience (28.65%). Monthly income levels reported most often were between \$0-\$500 (31.98%) and \$501-\$1,000 (39.53%). Participants' mean age

was 45.46 years and time since HIV diagnosis was 12.80 years. Significant gender differences existed for a number of characteristics. More females compared to males identified as racial minorities, non-Hispanic, and straight; and fewer females than males reported college degrees and high incomes.

Decision Readiness to Disclose

Table 2 shows PLWH's stage of decision readiness to disclose their HIV-positive status to family members overall and statistical comparisons between males and females. Two-thirds of participants were in the lower three stages of decision readiness—16.57% of PLWH were in the *precontemplation* stage, 18.31% in the *contemplation* stage, and 31.40% in the *preparation* stage. The three higher stages of decision readiness were less frequently reported—9.88% reported being in the *action*, 9.30% in the *maintenance*, and 14.53% in the *termination* stage. Regarding gender differences (H1), more females than males were in the *action* stage; no other gender differences were found.

Decisional Balance, Decision Self-Efficacy, and Decision Readiness to Disclose

As indicated in Table 3, decisional balance ranged from an overall mean of 8.57 for *certainty* (range from 3–12) to 12.32 for *effective* (range from 4–16). The overall mean for decision self-efficacy was 36.54 (range from 0–52). There were no significant differences between males and females in decisional balance (RQ1) or decision self-efficacy (RQ2).

Regarding the relationship between decision readiness to disclose and decisional balance and decision self-efficacy, two important findings emerged, as shown in Table 4. PLWH who expressed greater certainty/clarity about disclosure decisional balance were less likely to be in the bottom three stages of decision readiness (*precontemplation*, *contemplation*, *preparation*) than in the highest stage of decision readiness (*termination*). Additionally, PLWH who had greater disclosure decision self-efficacy were more likely to be in the third (*preparation*) and fourth (*action*) stage than in the *termination* stage. Thus, H2 and H3 were partially supported. Gender was not a significant predictor of stage of decision readiness. Also, no significant relationships were found between the control variables and the readiness stages (not shown).

DISCUSSION

This study examined PLWH's decision readiness to disclose their HIV-positive status to family members and predictors of their decision readiness. Findings indicated that two-thirds of PLWH are in the three lower stages of disclosure decision readiness (*precontemplation*, *contemplation*, *preparation*), with almost one-third in the *preparation* stage. This suggests that many PLWH have started to think about the benefits and costs of disclosing to family members^{6–10}. This finding may be a result of the larger study design that required participants to express an interest in learning more about disclosure to family members and in making disclosure decisions. Further research using different designs is warranted to better understand this potential association.

Considering that at the lower stages of decision readiness PLWH are still perceiving greater disclosure costs than benefits, a focus should be on helping them make more informed

decisions in the early stages. For example, prior research has shown both benefits and risks of disclosure among PLWH. Risks can include lack of readiness to disclose or fears of questions surrounding how HIV was acquired, discrimination once others know that they are seropositive, rejection, and having to live with HIV-related stigma ^{7–10}. Addressing these and other fears can help PLWH make sound, thoughtful, and rational rather than fear-induced disclosure decisions.

Findings further indicated that one-third of PLWH reported being in the three higher stages of decision readiness to disclose to family members. That means that they are either actively contemplating disclosing or have already decided whether or not to disclose their HIV-positive status to family ⁶. In the higher readiness stages, PLWH are perceiving greater benefits than risks of disclosing. Clinicians working with PLWH should focus on skill development to support the ongoing decision-making process and, for those who decide to disclose, ensure safe and successful disclosure. Additionally, although not addressed in the current study, clinicians need to be aware of potential differences in disclosure processes depending on family targets or relationships. For instance, disclosure to mothers and sisters is more likely than to fathers and brothers; and disclosure is more likely to occur to adolescent children than younger children ^{2,3}.

Interestingly and contrary to expectations, women and men living with HIV were in similar stages of disclosure decision readiness. Prior studies have found gender differences in actual disclosure, with women being more likely to disclose to family members than men ^{2, 3}. Similarities may be explained by the fact that in the current sample the average participant had known about their HIV positive status for over a decade. They may have had ample time to reflect on their status and weigh the pros and cons of disclosing to various family members. It may also be that thinking about and being ready to disclose is qualitatively different from actual disclosure behavior. More research is needed to better understand gender differences and similarities at the stages of disclosure decision readiness compared to actual disclosure behavior.

Although the findings suggest similarities between women and men living with HIV, it may be worth considering integrating gender-specific topics when working with individuals who are contemplating disclosure. For instance, studies have shown that women living with HIV experience greater stigma and discrimination from family, friends, and others than men ³. Additionally, women perceive greater risks of disclosure to family than men, including fears of being rejected and negative reactions from children ³. Addressing commonly known factors that may affect women's decision-making process and perceptions of the risks and benefits of disclosing to family members appear beneficial.

As expected, both decisional balance and decision self-efficacy are related to stages of disclosure decision readiness ⁶. Disclosure is more likely to be considered by PLWH when they perceive the benefits to outweigh the costs ^{9, 10}. That is, they perceive a decisional balance. However, in the current study, only one aspect of decisional balance stood out. PLWH with greater certainty, which refers to clarity regarding the pros and cons of disclosing as well as perceiving that rewards outweigh costs, were more likely to be in the highest decision readiness stage (*termination*) than in the lower three decision readiness

stages. This finding suggests that particular attention should be paid to the perceived pros and cons of disclosure to help PLWH make clear, positive, and effective decisions.

Regarding decision self-efficacy, PLWH with higher self-efficacy are more likely to be in the preparation and action stage than in the termination stage. This is somewhat contradictory to expectations¹¹. Self-efficacy is the reflection on one's skills and abilities to successfully disclose. When PLWH are in the middle stages and weighing the pros and cons of and taking the first steps in the disclosure decision-making process, they may be more aware of or reflecting on their abilities and skills to disclose. Thus, self-efficacy may be a more important conscious part of the early decision-making process than once the decision to disclose has become habitual and confirmed (*termination* stage).

Limitations and Conclusions

Limitations of this study need to be considered when interpreting the findings beyond the current sample. PLWH in this study were not randomly or nationally sampled. Thus, findings may be unique to the current sample and not be generalizable to other PLWH. Participants in this study also knew that the purpose of the intervention that followed the baseline assessment was to help PLWH already interested in making decisions about disclosure to family members. As such, they may have tried to guess what researchers were looking for and tailored their answers accordingly (e.g., prepare for readiness). A further limitation was the global measure used to assess decision readiness to disclose to family members in general, rather than pertaining to a specific family member, based on the TTM. Prior research has shown that disclosure decision making processes can differ depending on the relationship (e.g., mother, father, sister, brother)^{2,3}. Thus, the TTM may perform differently for different familial relationships. Finally, all of the measures were self-reported and may reflect social desirability bias (i.e., over- or under-reporting of behaviors).

This study makes unique contributions to the HIV disclosure field regarding decision readiness to disclose to family members and predictors of readiness in men and women living with HIV. Findings are important for helping PLWH navigate the complexities of the decision-making process. Additionally, researchers, clinicians, and health care providers can use the findings to improve their understanding of the decision-making process to better support PLWH in deciding whether, when, and how they want to start the decision-making process of disclosing their HIV-positive status to family members.

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REFERENCES

1. Centers for Disease Control & Prevention (CDC). HIV in the United States: At a glance. 2017 Available at, <https://www.cdc.gov/hiv/statistics/overview/ata glance.html>. Accessed March 28, 2018.
2. Kalichman SC, DiMarco M, Austin J, Luke W, DiFonzo K. (2003). Stress, social support, and HIV-status disclosure to family and friends among HIV-positive men and women. *J Behav Med.* 2003;26:315–32. [PubMed: 12921006]

3. Obermeyer CM, Baijal P, Pegurri E. Facilitating HIV disclosure across diverse settings: A review. *Am J Public Health*. 2011;101:1011–23. [PubMed: 21493947]
4. Lee S, Yamazaki M, Harris DR, Harper GW, Ellen J. Social support and human immunodeficiency virus-status disclosure to friends and family: Implications for human immunodeficiency virus-positive youth. *J Adolesc Health*. 2015; 57:73–80. [PubMed: 25940217]
5. Thoth CA, Tucker C, Leahy M, Stewart SM. Self-disclosure of serostatus by youth who are HIV-positive: A review. *J Behav Med*. 2014;37:276–88. [PubMed: 23277232]
6. Prochaska JO, Redding CA, Evers K. The Transtheoretical Model and Stages of Change In Glanz K, Rimer BK, Lewis FM, eds. *Health Behavior and Health Education: Theory, Research, and Practice*. 3rd ed. San Francisco, CA: Jossey-Bass, Inc; 2002.
7. Derlega VJ, Winstead BA, Greene K, Serovich J, Elwood WN. Perceived HIV-related stigma and HIV disclosure to relationship partners after finding out about the seropositive diagnosis. *J Health Psychol*. 2002;7:415–32. [PubMed: 22112752]
8. Derlega VJ, Winstead BA, Greene K, Serovich J, Elwood WN. Reasons for HIV disclosure/nondisclosure in close relationships: Testing a model of HIV disclosure decision making. *J Soc Clin Psychol*. 2004;23:747–767.
9. Serovich JM. A test of two HIV disclosure theories. *AIDS Educ Prev*. 2001;13:355–64. [PubMed: 11565594]
10. Serovich JM, Lim JY., Mason TL. A retest of two HIV disclosure theories. *Health Soc Work*. 2008;33:23–31. [PubMed: 18326447]
11. Bandura A. *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall; 1986.
12. Serovich JM, Craft SM, Yoon HJ. Women's HIV disclosure to immediate family. *AIDS Patient Care STDs*. 2007;21:970–80. [PubMed: 18154493]
13. Serovich JM, Esbensen AJ, Mason TL. HIV disclosure by men who have sex with men to immediate family over time. *AIDS Patient Care STDs*. 2005;19:506–17. [PubMed: 16124845]
14. Cook CL, Perri M 3rd. Single-item vs multiple-item measures of stage of change in compliance with prescribed medications. *Psychol Rep*. 2004;94:115–24. [PubMed: 15077755]
15. O'Connor AM. Validation of a decisional conflict scale. *Med Decis Making*. 1995;15:25–30. [PubMed: 7898294]
16. O'Connor AM. Decision self-efficacy scale. 1993 Available at www.ohri.ca/decisionaid. Accessed March 01, 2018.

Table 1.

Demographic Characteristics of Participants at Baseline: Overall and by Gender

	Overall(N = 346)	Males (N = 191)	Females (N = 155)	χ^2 or F
Racial Minority [n, (%)]	216 (63.34)	96 (51.61)	120 (77.42)	24.25 ***
Non-Hispanic [n, (%)]	303 (88.08)	160 (84.66)	143 (92.26)	4.69 *
Sexual Orientation [n, (%)]				109.52 ***
Gay	109 (31.69)	100 (52.91)	9 (5.81)	
Bisexual/other	57 (16.57)	37 (19.58)	20 (12.90)	
Straight	178 (51.74)	52 (27.51)	126 (81.29)	
Level of Education [n, (%)]				
No high school/GED	77 (22.51)	26 (13.76)	51 (33.33)	
High school degree/GED	98 (28.65)	49 (25.93)	49 (32.03)	
Some college experience	98 (28.65)	64 (33.86)	34 (22.22)	
College degree	69 (20.17)	50 (26.46)	19 (12.42)	
Monthly Income [n, (%)]				26.25 ***
up to \$500	110 (31.98)	52 (27.51)	58 (37.42)	
\$501-\$1,000	136 (39.53)	62 (32.80)	74 (47.74)	
\$1,001-\$1,500	49 (14.24)	36 (19.05)	13 (8.39)	
\$1,501 - \$2,000	30 (8.72)	24 (12.70)	6 (3.87)	
Over \$2,000	19 (5.52)	15 (7.94)	4 (2.58)	
Age [M, (SD)]	45.46 (11.32)	45.01 (12.17)	46.01 (10.21)	0.65
Years diagnosed [M, (SD)]	12.80 (8.64)	12.36 (9.53)	13.35 (7.36)	1.12

*
p < .05***
p < .001

Table 2.

Stages of Decision Readiness to Disclose to Family Members: Overall and by Gender

	Overall <i>N</i> (%)	Males <i>N</i> (%)	Females <i>N</i> (%)	Z-Score
1. Precontemplation	57 (16.57)	33 (17.28)	24 (15.69)	0.39
2. Contemplation	63 (18.31)	38 (19.90)	25 (16.34)	0.85
3. Preparation	108 (31.40)	57 (29.84)	51 (33.33)	-0.69
4. Action	34 (9.88)	12 (6.28)	22 (14.38)	-2.50*
5. Maintenance	32 (9.30)	22 (11.52)	10 (6.54)	1.58
6. Termination	50 (14.53)	29 (15.18)	21 (13.73)	0.38

*
 $p < .05$.

Table 3.

Decisional Balance and Decision Self-Efficacy: Overall and by Gender

Variable	Overall <i>M</i> (<i>SD</i>)	Males <i>M</i> (<i>SD</i>)	Females <i>M</i> (<i>SD</i>)	<i>F</i>
Decisional Balance				
Informed ^a	9.65 (1.64)	9.66 (1.65)	9.64 (1.63)	0.02
Values ^a	9.48 (1.82)	9.42 (1.81)	9.55 (1.85)	0.43
Support ^a	9.07 (1.85)	9.04 (1.93)	9.10 (1.77)	0.09
Certainty ^a	8.57 (2.08)	8.62 (2.15)	8.50 (1.99)	0.32
Effective ^b	12.32 (2.14)	12.36 (2.25)	12.26 (1.99)	0.17
Decision Self-Efficacy ^c	36.58 (10.67)	37.01 (11.34)	36.05 (9.80)	0.69

Note.^a Range from 3–12.^b Range from 4–16.^c Range from 0–52.

Table 4.

Decisional Balance and Decision Self-Efficacy as Predictors of Stages of Decision Readiness to Disclose to Family Members

Variable	Stage 1 vs 6 RRR (95% CI)	Stage 2 vs 6 RRR (95% CI)	Stage 3 vs 6 RRR (95% CI)	Stage 4 vs 6 RRR (95% CI)	Stage 5 vs 6 RRR (95% CI)
Decisional Balance					
Informed	1.05 (0.7–1.5)	0.99 (0.7–1.4)	1.31 (0.9–1.8)	1.29 (0.9–1.9)	0.98 (0.7–1.4)
Values	0.80 (0.6–1.1)	0.89 (0.6–1.3)	0.80 (0.6–1.1)	0.98 (0.6–1.4)	1.08 (0.7–1.6)
Support	0.78 (0.5–1.1)	0.90 (0.6–1.3)	0.90 (0.6–1.3)	0.79 (0.5–1.2)	0.90 (0.6–1.3)
Certainty	0.63 (0.4–0.9)*	0.48 (0.3–0.7)***	0.44 (0.3–0.6)***	0.66 (0.4–1.0)	0.66 (0.4–1.0)
Effective	1.15 (0.8–1.6)	1.19 (0.9–1.6)	1.08 (0.8–1.4)	0.80 (0.6–1.1)	1.10 (0.7–1.6)
Decision Self-Efficacy	1.03 (1.0–1.1)	1.04 (1.0–1.1)	1.08 (1.0–1.1)**	1.08 (1.0–1.1)*	1.05 (1.0–1.1)
Gender (Male vs Female)	1.55 (0.5–4.4)	1.50 (0.5–4.2)	0.78 (0.3–2.1)	0.36 (0.1–1.2)	1.2 (0.3–4.2)

Note: Stage 1 = precontemplation; Stage 2 = contemplation; Stage 3 = preparation; Stage 4 = action; Stage 5 = maintenance; Stage 6 = termination. Controlling for race, ethnicity, sexual orientation, education, and income.

* $p < .05$

**

$p < .01$

$p < .001$