**What is the best way to share an HIV diagnosis with an intimate partner? An experimental study of assertive disclosure communication**

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**Abstract**

Living with HIV presents challenges to wellbeing and managing one’s own and others’ health. Sharing an HIV positive diagnosis can increase social support and antiretroviral adherence and reduce onward HIV transmission. However, HIV disclosure anxiety is common with concerns about partner responses. There is limited research on whether *the way* HIV is shared affects partners’ responses. We assessed whether communication style influences hypothetical partner responses in intimate relationships. Two hundred and four participants (83% female; median age 20, IQR 19-23) were shown four vignettes (high assertion regular partner, low assertion regular partner, high assertion casual partner, low assertion casual partner). Participants responded as the intimate partner to questions addressing affective and cognitive reactions to HIV diagnosis sharing. Assertive compared to non-assertive communication led to intimate partner responses with lower negative affect, warmer feelings toward the character and greater intentions to provide support and to continue a sexual relationship. Participants responded with more global negative affect and shock, and greater intention to provide support and to continue a sexual relationship if the character was a regular compared to a causal partner. Future work could explore whether people with HIV should be assisted to share their diagnosis assertively for greater benefits.

**Key words: HIV; disclosure; assertion; partner; relationship**

**Introduction**

Disclosing one’s HIV status to a sexual partner, even in the era of U=U (undetectable = untransmittable) and PrEP, can prevent HIV transmission, for example, through facilitating condom use. This is because not all people with HIV will be virally suppressed and HIV-negative partners may not be using PrEP or be PrEP-adherent. Sharing one’s HIV status may also elicit support and enhance medication adherence (e.g., Denison et al., 2015). Many people living with HIV (PLHIV) struggle with sharing their status, however, fearing social rejection, relationship dissolution and HIV stigma (Evangeli & Wroe, 2017).

There may be a lack of confidence with knowing *how* to share one’s status (Chenneville, Lynn, Peacock & Marhefka, 2015). It is unclear whether this applies when there are non-verbal methods of HIV disclosure, as available with some ‘hook-up’ apps. Further, the perceived *need* to disclose to partners may influence sharing. This may differ by type of relationship, with PLHIV more likely to share with regular partners (e.g., Obermeyer, Baijal & Pergurri, 2011). There is research focusing on the sometimes positive relationship outcomes of HIV disclosure (Smith, Cook and Rohleder (2017a; 2017b). These studies have not examined whether *how* the diagnosis is shared affects partner responses.

Assertive communication involves communicating in an honest, direct manner, whilst respecting that the views of others may differ. Assertive communication interventions have been used to promote condom use (e.g., Schmid, Leonard, Ritchie & Gwardz, 2015). We assessed whether communication style influenced hypothetical partner responses to HIV sharing in causal and regular relationships. We hypothesised that:

1. Assertive HIV disclosure would lead to more positive partner responses than non-assertive HIV disclosure communication.
2. Partner responses would be more positive in regular than casual relationships.

**Method**

**Design and Participants**

The study used an experimental within-participants design. 204 18-73 year-olds (median age 20; IQR 19-23) were recruited from university psychology credit and paid participant pools, and via Facebook, between February and April 2018. Background information is in Table 1. Participants received course credits or were entered into a £30 Amazon voucher prize draw.

**Table 1 here**

**Consultation**

We consulted a Social Worker from an HIV support organisation, a Clinical Psychologist with HIV research experience and three postgraduate psychology students. As a result, anger and shock were added as dependent variables, a definition of support was provided, and minor changes to vignettes were made.

**Ethics**

Approval was obtained from Royal Holloway University of London ethics committee (Ethics Code 754).

**Materials**

***Vignettes***

Four vignettes were used: Casual Assertive, Casual Non-Assertive, Regular Assertive, Regular Non-Assertive. Different versions used male and female straight and gay/lesbian characters, so participants could personally identify with characters with the same gender and sexuality.

The vignettes presented two characters, where one shared their HIV positive status with their partner. Descriptions of the HIV positive character’s personality and interests were provided. Casual and regular relationships were defined by the amount of times characters had had sex. Once was considered casual and numerous times, regular. Relationship type was defined further by whether characters were having sex with others (casual) or not (regular). These distinctions were based on the literature (e.g., Chamratrithirong & Kaiser, 2012). Assertive communication was described as making good eye contact and stating one’s own feelings clearly and respectfully, whilst allowing the partner opportunity to ask questions. Non-assertive communication was defined by lack of eye contact, with the HIV positive character pre-empting the partner’s response as negative and not communicating about HIV clearly, or giving their partner the opportunity to respond.

**Vignette Questions**

Ten questions were asked after each vignette to reflect anticipated/actual partner responses noted in the literature (e.g., Obermeyer et al., 2011). Participants were asked to respond as though they were the character in the vignette to whom the HIV diagnosis has been shared. Each question was adapted with the name of characters matching the scenario (e.g., “If you were Rebecca in this situation….”).

***Affect***

*Global negative affect* used the negative affect subscale of the International Positive and Negative Affect Scale Short Form (IPANAS-SF) (Thompson, 2007), adapted to assess momentary feelings. Participants were asked how likely they would be to feel upset, hostile, ashamed, nervous and afraid, from *1 (not very likely)* to *5 (very likely)*. A total score was calculated (α.= 0.83 to 0.85 across vignettes). *Anger*and *shock* were assessed in the same way.

*Affect toward partner* used one item (Herek, Capitanio and Widaman, 2003), adapted to measure momentary feelings (e.g., “If you were Natalie rate how you would feel towards Jonah from *1 (negative feelings, e.g., cold, anger)* to *10 (positive feelings e.g., warm, caring)*?”).

***Cognition***

One item addressed *intent to provide support*. For example, “If you were Natalie in this situation, how likely is it that you would offer support to Jonah in the future? *(for example, provide practical support, be someone to talk to),*” from *1 (not very likely)* to *5 (very likely)*.

*Intention to continue a sexual relationship* used one item, for example, “If you were Natalie in this situation, how likely would you be to continue a sexual relationship with Jonah?” from 1 (*not very likely*) to 5 (*very likely*).

**Procedure**

After informed consent, demographic questions directed participants to appropriate gender and sexuality-matched vignettes (with bisexual participants randomised to the vignette presentation of either male or female partners). The vignettes were presented in a randomised order followed by the dependent variable questions. Information was presented online via Qualtrics.

**Data Analyses**

Main analyses used repeated measures ANOVAs, with alpha at 0.05. Hypotheses addressing communication style were measured using one-tailed tests. All other analyses used two-tailed tests.

**Results**

Descriptive data is in Table 2.

**Table 2 here**

***Global Negative Affect***

There was a main effect of communication style, *F* (1,189) = 80.81, *p*<.001 ηp2=.30, reflecting higher negative affect with non-assertive vignettes (*M*=16.66 vs 14.81). There was a main effect of relationship type, *F* (1,189) = 6.92, *p*=.01, ηp2=.03, with higher negative affect with regular relationship vignettes (*M*=15.96 vs 15.51). There was no interaction between communication style and relationship type.

***Anger***

There was a main effect of communication style, *F* (1,194) = 76.31, *p*<.001 ηp2=.28, reflecting higher anger with non-assertive vignettes (*M*=3.40 v 2.75). The effect of relationship type (*p*=.09) and the interaction between relationship type and communication style (*p*=.09) were not significant.

***Shock***

There was a main effect of communication style, *F* (1,193) = 25.14, *p*<.001 ηp2=.12, reflecting more shock with non-assertive vignettes (*M*=4.32 vs 4.05). There was a main effect of relationship type, *F* (1,193) = 19.86, *p*<.001, ηp2=.09, regular relationships vignettes resulting in more shock (*M*=4.29 vs 4.08). A significant interaction was not found.

***Affect Toward Partner***

There was a main effect of communication style, *F*(1,194)=84.76, *p*<.001, ηp2=.30. Participants were more positive towards the partner in assertive vignettes (*M*=5.28 vs 4.20). There was not a main effect of relationship type or a significant interaction.

***Intention to Provide Support***

There were main effects of communication style, *F* (1,193) = 68.00, *p*<.001 ηp2=.26 and relationship type, *F*(1,193)=16.37, *p*<.001, ηp2=.08. Assertive vignettes reflected higher intention to support (*M*=3.73 v 3.15). Intention to provide support was higher with regular relationships (*M*=3.57 vs 3.31) A significant interaction between communication style and relationship type was found, *F* (1,193) = 3.99, *p*=.047, ηp2=.02. Intention to provide support was greatest for regular relationships with assertive communication.

***Sexual Relationship Intention***

There was a main effect of relationship type, *F* (1,194) = 27.87, *p*<.001, ηp2=.13, with higher sexual relationship intentions with regular relationships (*M*=2.29 vs 1.99). There was a main effect of communication style, *F* (1,194) = 79.15, *p*<.001 ηp2=.29. Intentions to continue a sexual relationship were greater with assertive communication (*M*=2.36 vs 1.92). The interaction was not significant.

**Discussion**

The consistent strong, positive effects of assertive disclosure communication are consistent with findings on assertive sexual communication (e.g., Schmid, Leonard, Ritchie & Gwadz, 2015). There were both positive and negative outcomes for regular versus causal partners. Negative affect and shock were higher in regular relationships (perhaps linked to HIV not having been shared previously), alongside greater intention to continue sexual relationships and to provide support. The latter was facilitated by assertive communication. Positive outcomes may be enhanced by feelings of trust, and a greater investment in regular relationships (Smith et al., 2017c).

Most participants were UK students, heterosexual and female. Research could be conducted with populations at higher risk of HIV, and assessing whether HIV knowledge and HIV stigma are moderators. Research could also investigate whether assertive disclosure communication (a) is associated with more disclosure satisfaction and increases the likelihood of future sharing (b) mediates the relationship between relationship quality and relationship outcomes after sharing.

The effects of assertive disclosure communication suggest that PLHIV could be supported to share their diagnosis assertively. Guidance on *how* to communicate an HIV diagnosis assertively could be developed and provided to individuals with HIV to enhance skills in this area. This may enhance disclosure self-efficacy, and reduce fear of negative outcomes, both significant barriers to sharing (e.g., Chenneville et al., 2015). The results may also help elaborate existing HIV disclosure theory (e.g., Chaudoir, Fisher & Simoni, 2011).

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**Declaration of interest statement**

The authors have no conflicts of interest to declare.

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**Table 1. Demographic Characteristics and HIV Background Information**

|  |  |  |
| --- | --- | --- |
|  | ***Frequency*** | ***%*** |
| **Age, years** |  |  |
| 18-25 | 164 | 80.4 |
| 26-45 | 21 | 10.3 |
| 46-73 | 19 | 9.3 |
| **Gender** |  |  |
| Male | 34 | 16.7 |
| Female | 170 | 83.3 |
| **Ethnicity** |  |  |
| White | 158 | 77.5 |
| Mixed | 11 | 5.4 |
| Black | 4 | 2 |
| Asian | 28 | 13.7 |
| Other | 3 | 1.5 |
| **Highest Level of Education** |  |  |
| Secondary school (no GCSEs) | 5 | 2.5 |
| GCSEs or equivalent | 150 | 73.5 |
| Undergraduate degree | 42 | 20.6 |
| Postgraduate degree | 7 | 3.4 |
| **Occupation** |  |  |
| Unemployed | 14 | 6.9 |
| Full-time Student | 135 | 66.2 |
| Part-time Student | 9 | 4.4 |
| Employed Part-time | 34 | 16.7 |
| Employed Full-time | 39 | 19.1 |
| **Relationship Status** |  |  |
| In a relationship | 103 | 50.5 |
| Single | 101 | 49.5 |
| **Sexuality** |  |  |
| Straight | 171 | 83.8 |
| Gay/Lesbian | 13 | 6.4 |
| Bisexual | 20 | 9.8 |
| **Knowledge of anyone with HIV** |  |  |
| Yes | 14 | 6.9 |
| No | 190 | 93.1 |
| **Tested for HIV** |  |  |
| Yes | 52 | 25.5 |
| No | 140 | 68.6 |
| Don’t know | 12 | 5.9 |

**Note: N=204. The total n for Occupation is larger than the sample**

**size as multiple responses were valid.**

**Table 2. Mean Scores for Dependent Variables**

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Dependent Variables** | | | | | | | | | | | | |
|  | Negative affect | | Anger | | Shock | | Affect toward partner | | Intention to provide support | | Sexual relationship intention | |
| *N* | 190 | | 195 | | 194 | | 195 | | 194 | | 195 | |
|  | *M* | (*SD*) | *M* | (*SD*) | *M* | (*SD*) | *M* | (*SD*) | *M* | (*SD*) | *M* | (*SD*) |
| Casual Assertive | 14.70 | 4.91 | 2.74 | 1.36 | 3.95 | 1.12 | 5.22 | 2.35 | 3.56 | 1.16 | 2.18 | 1.13 |
| Casual Non-assertive | 16.32 | 4.81 | 3.30 | 1.33 | 4.18 | 1.05 | 4.20 | 2.19 | 3.07 | 1.29 | 1.81 | 1.04 |
| Regular Assertive | 14.93 | 4.87 | 2.75 | 1.34 | 4.14 | 1.00 | 5.35 | 2.37 | 3.90 | 1.11 | 2.53 | 1.20 |
| Regular Non-assertive | 16.99 | 4.63 | 3.50 | 1.29 | 4.43 | 0.82 | 4.19 | 2.29 | 3.24 | 1.29 | 3.25 | 1.11 |