ABSTRACT

The study examined whether the relationships between HIV stigma and depression and anxiety would be mediated by metacognitive beliefs and thought control strategies among men who have sex with men who are living with HIV. Participants completed an online survey that measured 30-item Metacognitions Questionnaire, thought control strategies (Thought Control Questionnaire), and symptoms of depression (Patient Health Questionnaire-9) and anxiety (Generalized Anxiety Disorder-7). The relationships between internalised and anticipated HIV stigma with depressive symptoms were mediated by negative metacognitive beliefs and the use of worry and social thought control strategies. Negative Metacognitive beliefs mediated the association between internalised HIV stigma and anxiety symptoms.

INTRODUCTION

Previous Research
- The implementation of highly active antiretroviral therapy (HAART) has meant that HIV is viewed as a chronic illness (Bing, 2007; Vetter & Donnelly, 2006).
- Despite significant improvements in the physical health of people living with HIV (PLWH), there continues to be a higher prevalence of anxiety and depression in this population (Bing et al., 2001; Grierson et al., 2009; Nacher et al., 2010).
- HIV Stigma continues to be a major stressor for PLWH and is associated with more psychological distress (Earnshaw & Chaudoir, 2009; Hatzenbuehler et al., 2011; Logie & Gadalla, 2009).

- Thought to occur through at least three processes (Earnshaw & Chaudoir, 2009):
  a. Enacted Stigma (also called Experienced Stigma) referring to perceptions of overt or actual HIV stigma (Phillips et al., 2011; Scambler & Paoli, 2008);
  b. Anticipated Stigma (also called Felt or Perceived Stigma) is the expectation of negative societal attitudes and discrimination from others (Earnshaw & Chaudoir, 2009; Herk et al., 2013; Phillips et al., 2011) and;
  c. Internalised Stigma (also called Self-Stigma) is the incorporation of these negative prejudicial attitudes into one's self-concept (Corrigan & Watson, 2002; Phillips et al., 2011).

Methods
- Metacognitions Defined as beliefs dictating the meaning and importance placed on one's cognitions believed to trigger ineffective thought control strategies aimed at suppressing or removing distressing thoughts (Wells & Carter, 2009).

- Purpose of Study To examine the role of metacognitions in explaining differences in depression and anxiety symptoms in response to perceptions of HIV stigma in MSM living with HIV.

- Predictions Unhelpful metacognitions and ineffective thought control strategies are predicted to mediate HIV stigma with symptoms of depression and anxiety among MSM living with HIV.

- The relationship between greater enacted, internalised, and anticipated HIV stigma and more depressive symptoms will be mediated by greater Negative Metacognitive Beliefs, Need to Control Thoughts, and lack of Cognitive Confidence and more use of Worry as a thought control strategy.

- The relationship between greater enacted, internalised and anticipated HIV stigma and more anxiety symptoms will be mediated by greater Negative Metacognitive Beliefs and Need to Control Thoughts and more use of Worry and Punishment as thought control strategies.

METHOD

Participants
- 106 gay, bisexual & other MSM
- Average age 45 years (range: 24 - 74)
- 83% identified as gay/homosexual
- 58% single, 40% in a long-term relationship
- 40% employed full-time; 19% part-time
- 74% born in Australia, 87% currently living in Australia
- Average year of HIV diagnosis in 1999
- 80% currently on antiretroviral therapy, 65% reporting no current health problems or side effects, 74% reporting undetectable viral load

Procedure
- HIV Stigma: Bunn et al.’s (2007) 32-item HIV Stigma Scale which refers to stigma in relation to living with HIV
- Metacognitive Beliefs: MCQ-30 (Wells & Cartwright-Hatton, 2004) Five subscales measuring positive metacognitive beliefs, negative metacognitive beliefs about worry being uncontrollable & dangerous, cognitive confidence, need to control thoughts & cognitive self-consciousness
- Thought Control Strategies: Participants completed Wells & Davies (1994) 30-item TCQ
- Depression: Assessed using Patient Health Questionnaire (PHQ-9)
- Measures depressive symptoms experienced in the last 2 weeks
- Anxiety: Measured using Generalized Anxiety Disorder Questionnaire (GAD-7; Spitzer et al., 2006)
- Assesses how much an individual has been “bothered by” anxiety symptoms in the last 2 weeks

Ethics Considerations
- Ethics approval was granted by Queensland University of Technology
- Participation was voluntary & anonymous, & participants provided informed consent

RESULTS

- Found significant unique associations between (a) internalised (Negative Self-Image) & anticipated (Public Attitudes) HIV stigma & depression & (b) between two MCQ-30 factors (Negative Metacognitive Beliefs & Need to Control Thoughts) & two TCQ factors (Worry & Social) & depression.

- Metacognitive beliefs based on the Need to Control Thoughts (NCT) showed significant positive associations with internalised (Negative Self-Image) & anticipated (Public Attitudes) HIV stigma; however, NCT was not significantly associated with depression.

- Negative Metacognitive Beliefs & use of Worry as a thought control strategy significantly mediated the relationship between internalised (Negative Self-Image) HIV stigma & depression (see bold pathways in Figure 1). Thus, more anticipation of HIV stigma from the public was related to more depressive symptoms, both directly & indirectly, through greater Negative Metacognitive Beliefs, more use of Worry & less use of peers (Social thought control) to control distressing thoughts.

- Negative Metacognitive Beliefs significantly mediated the relationship between internalised (Negative Self-Image) HIV stigma & anxiety symptoms (see bold pathways in Figure 2). The use of Worry as a Thought Control strategy was just below statistical significance. Thus, greater internalisation of HIV stigma as being a valid part of one’s identity was indirectly related to more anxiety symptoms, though more Negative Metacognitive Beliefs.

CONCLUSIONS

- Relevance to support workers/clinicians:
  - HIV stigma involving internalised negative perceptions and anticipating stigma from others are associated with the experience of depressive symptoms MSM who have HIV.
  - Association was mediated by Negative Metacognitive Belief, as well as using Worry and Social thought control strategies.
  - Anxiety symptoms among MSM, who have HIV associated only with internalised HIV stigma, appears to be strongly mediated by negative metacognition.

- This study provides preliminary evidence for the mediating role of metacognitions linking HIV stigma with the experience of depressive and anxious symptom among MSM.

- This study provides new insight into new directions for future research and interventions (such as interventions targeting negative metacognitions to reduce symptom of depression and anxiety).

Recommendations:
- Large longitudinal study is needed to confirm hypothesised casual pathways (as this study was cross-sectional and causation could not be determined).

REFERENCES

- Bunn et al. (2007) 32-item HIV Stigma Scale which refers to stigma in relation to living with HIV
- Metacognitive Beliefs: MCQ-30 (Wells & Cartwright-Hatton, 2004) Five subscales measuring positive metacognitive beliefs, negative metacognitive beliefs about worry being uncontrollable & dangerous, cognitive confidence, need to control thoughts & cognitive self-consciousness

- Correspondence can be sent to: amy.mullens@usq.edu.au

This study was previously published