


Evaluation of an online injecting drug use stigma intervention targeted at health providers in New South Wales, Australia

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Abstract

People who inject drugs are highly stigmatised. Discriminatory experiences are commonly reported, particularly in health care settings. This article evaluates an online stigma reduction training module targeting health providers working with people who inject drugs. A total of 139 participants completed a pre- and post-survey including attitude items and items depicting hypothetical scenarios and concerns around client behaviours. Participants' attitudes towards people who inject drugs were more positive and they showed less concerns about client behaviours after completing the online training module. Findings highlight the benefits of online training in reducing discriminatory attitudes towards people who inject drugs and improving confidence in working with this client group.

Keywords

drugs, education, health care, health care systems, stigma

Introduction

It is estimated that up to 200,000 people currently inject drugs in Australia (Mathers et al., 2008). As a group, people who inject drugs (PWIDs) experience a range of health and social disparities and unique health outcomes comparative to the general population (Galea and Vlahov, 2002). PWIDs have an elevated risk of mortality compared to the general population, with drug overdose being a primary cause of death (Mathers et al., 2013). Additionally, PWIDs are at greater risk of acquiring blood-borne viruses, such as HIV and hepatitis C, via unsafe practices for injecting drugs, which is a significant global burden of disease (Degenhardt and Hall, 2012). PWIDs may also experience a number of injecting related harms, such vein damage, abscesses, infected ulcers, cellulitis and overdose, which present a substantial burden in costs to health care (Del Giudice, 2004; Hope et al., 2008).

Injecting drug use remains a highly stigmatised practice, largely due to its illegality and the perception of PWID as being violent, dangerous and engaging in a criminal activity (Ahern et al., 2007). Stigma is a complex construct; it refers to the social process of exclusion of people for possessing a characteristic that is viewed negatively by a broader social group (Goffman, 1963; Scambler, 2009).

This process must be understood, as Parker and Aggleton (2003) note, in terms of 'producing and reproducing relations of power and control' (p. 16), whereby one group is discredited in order for another to feel superior. Stigma is enacted via discriminatory behaviours and practices (Treloar et al., 2013), such as differential or negative treatment by interpersonal relations and health providers. Stigma can also be enacted via structural systems, which create and reinforce discrimination, including legislation and policies that serve to marginalise PWID (e.g. criminalisation of drug use) (Australian Injecting and Illicit Drug Users League (AIVL), 2010; Count the Costs, 2015; Lancaster et al., 2015). Stigma may also be perceived; for example, PWID may exclude themselves from social and other situations on the basis of expecting to experience discrimination (Pachankis, 2007). Finally, stigma can also impact on self-perception among PWID; increasingly,

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research has concentrated on the internalisation or acceptance of stigma by this group, including self-blame (Fraser and Treloar, 2006; Luoma et al., 2007). All of these experiences of stigma negatively impact on health and social outcomes of PWID, including resulting in poorer physical and mental health (Ahern et al., 2007), social alienation (Ahern et al., 2007) and participation in risky injecting and sexual behaviour (Latkin et al., 2010; Preston et al., 2007; Wilson et al., 2014).

PWIDs most commonly report health care as the key context of negative attitudes and discriminatory treatment (AIVL, 2015; Habib et al., 2003; Hopwood et al., 2006). Findings from a survey of discrimination among PWID in Australia found that 80 per cent had experienced discrimination within health care settings (AIVL, 2012). This discrimination can take the form of judgemental or hostile interactions, excessive use of hygiene and infection control, extended waiting times for PWID to receive care and the refusal of health service provision to PWID, including removal from drug treatment programmes and refusal to treat patients with hepatitis C who are currently injecting drugs (AIVL, 2015; Day et al., 2003; Hopwood et al., 2006; McLaughlin et al., 2000; Neale et al., 2008). Negative attitudes towards people who use drugs by health professionals appear to be widespread (van Boekel et al., 2013) and may differ by sector (van Boekel et al., 2014). Health professionals who have less contact with people who use substances tend to have greater negative attitudes, with a reported lack of empathy and motivation to work with this group (van Boekel et al., 2013). These attitudes tend to be more negative towards people who currently use substances compared to those who are abstaining from use (van Boekel et al., 2013). These discriminatory experiences in health care can act as a barrier to future health-seeking intentions and behaviours of PWID, such as utilisation of health services, uptake and completion of substance use treatment (Brenner et al., 2010; Luoma et al., 2007; Radcliffe and Stevens, 2008).

Developing strategies to reduce discriminatory attitudes are critical in the context of health care delivery, given that health professionals often lack the education, training and available support structures to meaningfully engage with this group (van Boekel et al., 2013). However, there is limited empirical evidence for strategies to reduce stigma and discrimination directed towards PWID, particularly among health professionals. A recent systematic review of substance use-related stigma interventions yielded just 13 eligible studies for inclusion (Livingston et al., 2012). Findings indicate that there are some benefits of interventions in producing short-term positive changes in attitudes towards people who use substances. Many of these studies were conducted among members of the community or medical students, with only one study targeting certified alcohol and drug counsellors. There is currently no available literature on stigma interventions

among practicing health providers to reduce discriminatory attitudes towards PWID. The aim of this study is to fill this gap by evaluating an online training module targeted at substance use-related stigma among health providers in New South Wales (NSW), Australia. Specifically, this study evaluated the impact of the online training module on changing attitudes and concerns of health providers around working with PWIDs.

Methods

'Stigma, discrimination and injecting drug use' eLearning module

The 'Stigma, Discrimination and Injecting Drug Use' eLearning module was developed for the workforce in publicly funded health services in NSW. The module takes approximately 40 minutes to complete. It was developed with substantial input from the national peak organisation representing drug users in Australia, the Australian Illicit & Injecting Drug Users League (AIVL) who was a partner on this project. The module was adapted by the Health Education and Training Institute (HETI), an organisation that supports education and training across the NSW health sector. The module uses stories and personal encounters which were drawn from real-life experiences of PWID developed by AIVL and is interactive in nature, providing insights and discussion around attitudes and behaviours towards PWID. Ultimately, the module aims to reduce discriminatory attitudes towards PWID, leading to improvements in health service encounters by strengthening relationships between PWID and health providers.

Procedure

The module was launched on World AIDS Day 2015 and was also promoted during other local events on harm reduction and blood-borne viruses. Chief Executives of Local Health Districts (LHDs) were notified of the release of the module and sent promotional packages and encouraged senior leaders to promote the module to their staff. Additional relevant stakeholders in drug and alcohol, blood-borne viruses and sexual health also promoted the module. Services frequented by PWID were targeted, such as emergency departments and opioid substitution clinics. All those who initiated the online training were invited to participate in the evaluation via a notice on the front page of the module. This included notification of a prize draw (5 × US\$100) for those participants completing both pre- and post-module surveys. After completing the pre-survey, participants were directed to the HETI module, and at the completion of the module, participants were asked to respond to a second short survey containing similar items to the pre-survey in order to assess any changes in participant responses as a result of the training. Participants were

then asked to provide their email address for entry into the prize draw. Ethical approval was obtained from the South Eastern Sydney LHD, and site-specific approval was obtained from each LHD.

Measures

Attitudes towards PWID. Participants responded to 12 statements regarding their attitudes towards PWID (e.g. ‘I won’t associate with people who inject drugs if I can help it’ and ‘I think people who inject drugs are disgusting’) based on an existing measure (Brener and Von Hippel, 2008). Items were scored on a 5-point scale from strongly disagree (1) to strongly agree (5) with higher numbers indicative of more negative attitudes. These 12 items were summed to develop an Attitude towards PWID scale.

Hypothetical scenarios. Participants were asked to respond to four individual hypothetical scenarios on a 10-point scale from most unlikely (1) to most likely (10) (see supplementary material). Each item addressed a potential issue that health workers may face when working with PWID. For example, participants were asked whether they would support a health worker who turns away a PWID from their service because he has ongoing health issues but refuses to stop using drugs. For each item, higher scores on these items indicated that participants were more likely to support negative actions of others when working with PWID.

Concerns about client behaviours. Participants were presented with a brief scenario about a hypothetical PWID attending their service and then asked to respond to six statements assessing some concerns which may arise for them when learning about the injecting history of their client (e.g. ‘he/she may become violent’ and ‘you fear for your personal safety’ (see supplementary material). These items were scored on a 10-point scale from ‘not a concern’ (1) to ‘a major concern’ (10) with higher numbers indicative of greater concern. The items were then summed together to make a scale of concerns about client behaviours.

Demographics. Participants were asked a range of demographic questions in the initial pre-module survey completed before engaging in the training module. This included age, sex, level of education, number of years they had worked in the alcohol and other drugs (AOD) sector and their professional role.

Analysis

Descriptive statistics were used to characterise the sample. Paired samples *t* tests assessed changes in mean scores from pre- to post-intervention on attitudes towards

Table 1. Participant characteristics.

	n (%)
Age, M (SD)	46.68 (11.52)
Sex	
Female	112 (81)
Male	27 (19)
Education	
Year 10 or below	8 (6)
Year 12	12 (9)
Certificate/diploma	20 (14)
Undergraduate degree	34 (25)
Postgraduate degree	65 (47)
Years worked in the AOD sector	
Less than 1 year	12 (9)
1–2 years	9 (7)
3–5 years	24 (17)
6–10 years	23 (17)
11 years or more	71 (51)
Professional role	
Medical	2 (1)
Nursing	86 (62)
Allied health	17 (12)
Other	34 (25)
Works directly with clients	
Yes	105 (76)
No	34 (25)

AOD: alcohol and other drugs; SD: standard deviation.

PWID, hypothetical scenarios and concerns about behaviour of clients who inject drugs.

Results

Participants

A total of 139 participants completed both the pre- and post-e-learning module survey including all attitude items, hypothetical scenario items and concerns around client behaviours. The mean age of the sample was 47 years; the majority of the sample was female (81%) and most participants had either an undergraduate degree (25%) or postgraduate degree (47%). Table 1 presents the additional demographic data.

Attitudes towards PWID

Reliability for the attitude items pre-completion ($\alpha = .89$) and post-completion ($\alpha = .85$) of the online module was good. The mean scores for the administration pre-module ($M = 31.44$, standard deviation (SD) = 8.10) and post-module ($M = 29.83$, SD = 7.58) indicate that attitudes overall lie in the mid-range of the scale. There was a significant change in participants’ responses to the attitude items, $t_{(138)} = 4.46$, $p < 0.001$, with mean scores indicating that health

Table 2. Comparison of pre- and post-mean scores for hypothetical scenarios.

	Pre-mean (SD)	Post-mean (SD)	$t_{(df)}$
Scenario A	3.99 (2.19)	3.03 (1.91)	6.54 ₍₁₃₇₎ ***
Scenario B	2.63 (2.03)	2.42 (1.89)	1.95 ₍₁₃₇₎
Scenario C	4.58 (2.76)	3.61 (2.38)	5.96 ₍₁₃₆₎ ***
Scenario D	2.59 (2.09)	2.25 (1.80)	2.60 ₍₁₃₈₎ *

SD: standard deviation.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

professionals had less negative attitudes towards PWID after completing the online module.

Hypothetical scenarios

Participants did not endorse the negative behaviours depicted in the hypothetical scenarios before completing the online module. The mean score for each scenario is presented in Table 2. A significant shift in a positive direction occurred on three of the four scenarios from pre- to post-administration of the e-learning module. This suggests that after completing the online training module, participants were less likely to support actions depicted in the scenarios that were negative or discriminatory towards PWID. The fourth scenario showed no change from pre- to post-administration of the e-learning module.

Concerns about client behaviours

Reliability for the concern items pre-completion ($\alpha = .90$) and post-completion ($\alpha = .89$) of the online module was high. The mean score for the scaled concern items prior to completing the module was 30.11 (SD = 14.23), lying midway along the scale, and after completing the module was 24.83 (SD = 13.06) slightly closer to the 'not a concern' end of the scale. Responses to the concern items pre and post the e-learning module were significantly different, $t_{(130)} = 6.47$, $p < 0.001$, suggesting that participants had less concern around client behaviours after they had completed the module.

Discussion

This study assessed whether an online stigma reduction training module delivered to health care workers reduced negative attitudes and concerns around working with PWID. Findings from this study are positive and indicate that health worker attitudes towards PWID changed after completing the online training module, and that significant differences on items related to concerns about client behaviour (hypothetical scenarios and client concern items) were found between the pre-module administration and post-module administration. These results have some similarities with research among medical students that has

shown that educational interventions which address beliefs held about people who use illicit substances impact on the level of comfort in working with this group (Bland et al., 2001; Cadiz et al., 2012; Crapanzano et al., 2014; Ramirez-Cacho et al., 2007). However, significantly in this study, participants show attitudinal shifts in their attitudes towards PWID and this was not evident in the above cited studies.

This is the first known study to successfully show changes in health care workers attitudes towards PWID and to address stereotypes that may exist in relation to working with PWID using an online stigma reduction training module. The findings from this study are positive and indicate the success of this e-learning intervention in changing attitudes towards PWID and concerns with working with this group. This suggests that undertaking online training can influence the way health workers understand and think about client behaviours, especially clients who may have complex histories and who engage in an activity which is highly stigmatised (Ahern et al., 2007). The materials presented in the module may result in participants' reflecting on the way they think about and behave towards PWID. This is particularly significant in relation to the concerns around client behaviour (clients may lie about their drug use, steal, become violent) as these are based on stereotypical notions of the ways in which drug using clients may behave (Brener et al., 2010; McLaughlin et al., 2000). It appears that the module content may provide the impetus to alter stereotypical ways of thinking about these clients.

One important factor that may have contributed to the success of this intervention is that the module was designed based on existing training developed by AIVL with substantial input from peers. Given AIVL's expertise in working with PWID and with the community organisations representing PWID, it is evident that the involvement of a national peak drug user organisation is integral to the success of this module as reflected in the evaluation data. Peer involvement in such campaigns, especially the sharing of personal stories, has been noted to be important in ensuring that concerns of the target group are adequately conceptualised and in 'humanising' the issues that stigmatised groups face (Brener et al., 2013; Cama et al., 2015). Hence, the peer-led development of this intervention may have both increased the credibility of the information presented and made the concerns more real to participants. Interventions that include a combination of education and personal contact with the stigmatised group appear to be more effective in producing attitudinal change (Livingston et al., 2012). Thus, it could be that the combination of education and real personal stories from PWID in this online module contributed to its success in decreasing negative attitudes and increasing comfort levels of working with this group.

While this research had positive implications, some limitations of this study must be noted. Undertaking this stigma reduction module was voluntary, and hence, it is

likely that those who participated held more positive attitudes towards working with PWID to begin with. Such shifts in attitudes and concerns may be less likely to occur among a group of health workers who feel more negatively about these clients. Additionally, while it is very positive that shifts are reported in attitudes and potential behaviours after completing the module, it cannot be concluded that actual behaviours towards PWID will change. It would be interesting to establish whether these attitudinal changes translate into positive behavioural changes over time. The lack of follow-up data on attitudes towards PWID among this group is also a limitation, as it is unclear whether these shifts in attitudes will be sustained over time. Very few studies have examined the impact of stigma interventions beyond the immediate post-intervention period, with those that have finding that the effect diminishes with time (Livingston et al., 2012). This research also relied on an explicit measure of attitudes towards PWID and therefore was not able to capture implicit or subconscious bias towards PWID. Strategies need to address implicit biases that health professionals hold towards PWID. Research in the mental health field has suggested that implicit and explicit stigmas are independent constructs which may predict different behavioural outcomes (Stier and Hinshaw, 2007). Future research should include both an implicit measure of attitudes and a longitudinal assessment of attitudinal change.

Despite these limitations, this research is significant and clearly illustrates that a well-designed online stigma reduction intervention can impact the way respondents think about their clients who inject drugs. The findings of this research highlight the potential benefits of online training in reducing discriminatory attitudes towards PWID and improving confidence in working with this client group. This type of intervention is of low cost and easy to administer and hence can reach a large number of people working in the health sector, an area identified as a major source of stigma and discrimination. As PWID face particular and serious health concerns (Degenhardt and Hall, 2012; Del Giudice, 2004; Galea and Vlahov, 2002; Hope et al., 2008; Mathers et al., 2013), it is important to provide non-judgemental health services to this group. Stigma and discrimination are known to be major barrier to health-seeking behaviour among PWID (Brener and Von Hippel, 2008; Buchanan and Young, 2000; Livingston et al., 2012; Radcliffe and Stevens, 2008), and therefore, by decreasing stigmatising attitudes among health workers and reducing their concerns about working with PWID, it is hoped that this will ultimately translate into increased engagement with health services among this marginalised group.

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