Title: Authenticity and diversity: enhancing Australian hepatitis C prevention messages.

Rebecca Winter\textsuperscript{1,2,3}, Suzanne Fraser\textsuperscript{1,2}, Norman Booker\textsuperscript{4}, Carla Treloar\textsuperscript{2}

\textsuperscript{1}Monash University, Melbourne, Australia
\textsuperscript{2}National Centre in HIV Social Research, The University of New South Wales, Sydney, Australia
\textsuperscript{3}Centre for Population Health, Burnet Institute, Melbourne, Australia
\textsuperscript{4}ntbconsulting, Sydney, Australia

Corresponding author

Rebecca Winter

rwinter@burnet.edu.au

Ph: +613 8506 2328

c/o Centre for Population Health
Burnet Institute
GPO Box 2284
Melbourne
Victoria, 3001

Co-authors

A/Prof Suzanne Fraser

suzanne.fraser@monash.edu

Mr Norman Booker

ntb@mac.com

Prof Carla Treloar
Manuscript submitted as ‘Original Research’.

**Funding**

This work was supported by the New South Wales Department of Health and the Australian Research Council [grant number DP0877944]. Rebecca Winter is supported by a National Health and Medical Research Council (NHMRC) PhD scholarship [grant number 603756] and the NHMRC Centre for Research Excellence on Injecting Drug Use [grant number 1001144]. The National Centre in HIV Social Research is supported by a grant from the Australian Government Department of Health and Ageing.

**Conflicts of Interest**

The authors have no conflicts of interest to declare.

**Acknowledgements**

The authors acknowledge the members of the project Advisory Group (Nicky Bath, Paul Harvey, Jo Holden and Christine Maidment) for their feedback and insights into resource production. Emily Lenton, Philip Tayler and Robyn Dwyer worked on various aspects of the collection and cataloguing of resources and their work is gratefully acknowledged.

**Word count:** Abstract – 126 words; Manuscript – 6,055 words; References – 981 words;
Abstract

Despite two decades of prevention activities and education, rates of hepatitis C infection remain high among people who inject drugs. In this paper we draw on the findings of an extensive review of the content of print hepatitis C prevention materials circulating in Australia, examining these data in light of Petraglia’s (2009) theory of ‘authenticity’ in social marketing. We identify three main areas in which resources could be redesigned: closer attention to language and terminology, a critical engagement with common concepts of the individual, and more acknowledgement of the role of social and structural factors in shaping injecting practice. To achieve a stronger sense of authenticity, and in turn become more equitable and efficient, future resources could address these issues using insights from social marketing literature.

Keywords: hepatitis C virus, prevention education, health communication, authenticity
Introduction

The hepatitis C virus affects approximately 220,000 Australians (The Kirby Institute, 2012) and to date there is no vaccine available to prevent transmission. While improvements in treatment have been achieved over the last decade, prevention remains a primary focus of Australian hepatitis C policy, in the context of around 10,000 new infections each year (Razali et al., 2007). In Australia, hepatitis C disproportionately affects people who inject drugs; almost 90% of all new infections are attributed to unsafe injecting (National Centre in HIV Epidemiology and Clinical Research, 2006; Razali et al., 2007). Prevention interventions are therefore primarily targeted at people who inject drugs. Along with the distribution of sterile injecting equipment, the provision of information aiming to increase knowledge about, and prevent transmission has been the cornerstone of the preventive hepatitis C response in Australia.

Given the incidence of hepatitis C infection continues at an unacceptable rate, the success of previous hepatitis C health promotion campaigns has been modest. In light of this, these campaigns require careful review. In this paper we draw on data collected for a large social research project on hepatitis C in Australia, health promotion and social marketing theories of ‘authenticity’ and the small body of critical work currently available in the field. We identify three main areas in which resources could be redesigned: closer attention to language and terminology, a critical engagement with common concepts of the individual, and more acknowledgement of the role of social and structural factors in shaping injecting practice. In addressing these issues, resources could, following the social marketing literature we explore, achieve a stronger sense of authenticity for readers, and in turn become more effective.
Background

Over the last half century, health promotion approaches have relied on motivating individuals to change their behaviour through education and health communication (Glanz, Rimer & Viswanth, 2008; National Cancer Institute, 2005; Nutbeam & Harris, 2004). These health communication strategies assume their targets to be a rational decision-maker able to follow a linear path from awareness to attitude to action (Airhihenbuwa & Obregon, 2000). Information provision, or health communication, is conducted on the basis that people will change their conduct when armed with certain kinds of information. Such strategies have been criticized on many counts: their reliance on the construct of the rational decision-maker; their emphasis on the individual; their failure to recognize the role of structural forces, including material deprivation and stigma, in shaping conduct; and their blindness to the role of emotion in choices and needs (Airhihenbuwa & Obregon, 2000; Dodds, 2002; Fraser, 2004; Grace, 1991). Further, it has been argued that information provision approaches are ‘limited…by the paradigm of the ‘expert’ professional making decisions about what information is presented’ (Perfrement, 2003, p21). Although the adult learning principles incorporated into the field during the 1980s increased consumer involvement, they often failed to account for the complexities shaping individual agency and access to the resources necessary to enact recommended behaviour change (Perfrement, 2003).

The criticisms levelled at health promotion generally are also found in the social research literature on injecting drug use and hepatitis C risk. Research has shown that the ability to adopt safer injecting practices is mediated by structural, social and environmental, as well as personal and emotional, factors. All these, it has been argued, need to be borne in mind in framing effective hepatitis C prevention messages (Bryant, Brener, Hull & Treloar, 2010; Dodds, 2002; Dwyer, Fraser & Treloar, 2011; Ellard, 2007; Fraser, 2004; Rhodes, 2009; Rhodes, Singer, Bourgois, Friedman & Strathdee, 2005; Rhodes & Treloar, 2008; Small, Rhodes, Wood & Kerr, 2007; Tempalski & McQuie, 2009). In their review of educational interventions to prevent hepatitis C, Griesbach and Taylor drew attention to a tendency among health professionals to make incorrect assumptions about the target group. The
review also identified a number of other challenges in producing effective educational interventions. These included the heterogeneity of people who inject, difficulties in reaching people before injecting behaviours are established, and differing levels of literacy within the target group (Griesbach & Taylor, 2009).

Beyond the few studies cited above, little research has been conducted into the content of prevention education literature for hepatitis C. This gap in knowledge is a significant obstacle to improving prevention education resources and their outcomes and responding effectively to message ‘fatigue’ (Treloar, Valentine & Fraser, 2011). In this article we address this gap by conducting a detailed analysis of the types of hepatitis C prevention messages included in existing print resources circulating in Australia, and identifying factors contributing to the shaping of these messages. We conclude by considering the implications of the patterns we identify for the effectiveness and equity of current prevention education resources. A new generation of educational materials is required that better represents and addresses the multiple and multi-layered influences on injecting practice.

**Approach and methods**

In this article we consider the criticisms levelled at prevention education in general, and hepatitis C prevention materials in particular, in light of Petraglia’s claim that in order for health communication to be well received by the target group it must be considered ‘authentic’. According to Petraglia, authenticity is:

‘...not just perceived relevance but a felt relevance that pulls information out of the background and to the fore. Authenticity enables individuals to understand, emotionally as well as cognitively, how information can relate to their everyday existence.’ (Petraglia, 2009, p176)

Authenticity, Petraglia argues, is achieved when narrative, dialogue and persuasion intersect. A narrative approach to health communication contextualizes information in the form of stories, anecdotes and cases. In its most simple conceptualisation, dialogue may be thought of as the exchange
of information between individuals or the process of deliberation an individual engages in to guide
decision-making. Petraglia reasons that the persuasion of individuals of the relevance of messages to
change their health behaviours is a process that unfurls when messages are ‘embedded in narratives
that simultaneously tap the cognitive, affective, social and cultural dimensions of behavior’ (Petraglia,
2009). Dialogue is critical in the final negotiation of persuasion: target audiences of health
communication need to be able to engage in a process of reasoning; refuting or accepting the ‘facts’ as
they are presented in order to be persuaded of their personal relevance. Without authenticity,
messages about disease and exhortations to change risky behaviour can simply become ‘white noise’
(Petraglia, 2009).

We reviewed hepatitis C prevention education materials circulating in Australia’s hepatitis C sector in
order to assess whether their components meet Petraglia’s conditions for authenticity. While the
nature of the study means that we are unable to assess subjective relevance (that is, how the materials
have been received by the target audience), or any dialogic function and use of materials, we appraise
their objective relevance and potential for authenticity by evaluating factors such as the nature,
content and shaping of the prevention messages.

The study on which this article is based aimed to collect as comprehensive a corpus of Australian
hepatitis C prevention education resources as possible. It focused on print resources collected from
Australian organisations working with people affected by, or at risk of, hepatitis C infection. This
included national and state-based hepatitis organisations, national and state-based drug-user advocacy
groups (‘drug user organisations’) and other community-based and government-funded health
services and advocacy bodies. The initial collection of resources occurred between November 2008
and October 2009, and a follow-up collection – limited to New South Wales-based and national
organisations only – was conducted during August 2010.
The collection process began with a written request sent to all identified organisations, asking for copies of all materials on hepatitis C the organisations had ever produced. Materials were also collected from online sources and by visiting organisations in person wherever possible. The follow-up collection involved contacting national and New South Wales-based organisations via telephone to request copies of any more recently produced (October 2009 – August 2010) materials.

A total of 218 materials were collected in the first round of data collection, and a further 11 in the second round. Of the 229 resources collected, a total of 159 were catalogued and analysed for this study. In keeping with the aims of this study, materials which did not cover hepatitis C transmission education or advice relating to injecting drug use were excluded (n=70). Excluded materials ranged from those addressing health, social and lifestyle aspects of living with hepatitis C to treatment options and managing disclosure and discrimination. Materials aimed at healthcare professionals were also excluded.

Materials were catalogued and subjected to a content and thematic analysis, paying particular attention to the shaping and targeting of key prevention messages. A list of thematic areas was devised by the research team, and this was then used to guide the analysis. The analysis framework was developed during an initial one-day workshop, and then reviewed and redrafted by the four members of the research team. Existing social and epidemiological research and health education concepts were drawn upon to guide the analysis framework. The analytical process involved cataloguing key features of the resources such as presentation, language, message content and mode of address, any assumptions and absences, inclusions or exclusions of specific groups and the targeting of specific groups. This included, for example, noting features such as specific hepatitis C prevention messages and how they are framed by elements such as language (directive/inclusive/passive, addressing individuals or groups), and imagery (depictions of people and faces, disembodiment of injecting practices, depictions of injecting environments), whether assumptions about readers’ knowledge and access to resources were implicit and whether the intended audience was apparent through any combination of these factors.
The reviewed materials were produced between 1991 and 2010, with the majority (78%) produced after 2000. Twelve resources are not able to be dated. Most (68%) are in pamphlet or booklet form, and most (67%) exclusively address hepatitis C and no other blood-borne viruses. Forty per cent are written for people who inject as a primary audience, and 35% are focussed on hepatitis C prevention specifically among people who inject (Table 1).

| Insert Table 1 here |

The materials can be divided into two loose categories; (1) generic hepatitis C information resources that cover – in brief, or in detail – basic hepatitis C information including epidemiology, transmission, symptoms, living with hepatitis C, symptoms and illness trajectories, prevention advice, testing, and treatments, and (2) targeted information addressing a specific aspect of hepatitis C such as transmission risks and prevention. The former materials are more likely to be aimed at the general community, and the prevention advice they give on injecting is limited. The latter are more commonly targeted at people who inject and specific risk sub-groups (e.g. prisoners, Aboriginal people who inject). This targeting is apparent through language use (e.g. slang or colloquialisms), imagery (e.g. graphical representations of drug preparation or the target population), and the extent of emphasis on drug use and injecting. Often the title of the resource makes the target audience clear (e.g. Women and Hep C) as does the attribution of the resource (e.g. to a drug user organisation). The data set shows that as knowledge about the hepatitis C virus, natural history, epidemiology, risk environments and treatment options developed over time, messages became more targeted and detailed. The evolution of hepatitis C knowledge over time can be traced throughout the dataset.
Results and discussion

Three key issues for improvement identified in these materials are: language use – the presence of vague or insufficiently clearly defined terms, and too much reliance on jargon; an overemphasis on individual agency in prevention advice; and insufficient attention to the social nature of injecting and to structural forces shaping injecting practice. These are elaborated on below, and we consider how they may impact on the perceived relevance of the preventive messages.

1. Language and terminology

‘Blood-to-blood contact’

Across the materials hepatitis C transmission is commonly described as occurring as a result of blood-to-blood contact. This phrase starts to appear in resources produced during the late 1990s and features increasingly over time. A definition of the expression ‘blood-to-blood contact’ appeared in one early (1994) resource, but such definitions did not become common until 2000. For example, The Little Book of Hep C explains that blood-to-blood contact is ‘...when blood from somebody with the virus enters the bloodstream of someone else’ (Northern Sydney Health Hepatitis C Service Network, 2002). Versions of this explanation have been reproduced repeatedly over time. In a few materials, the explanation of transmission mechanics lack clarity. For example, the Disposing of Fits Factsheet states ‘People who inject drugs should not let their blood come into contact with anyone else’s, not let anyone else’s blood come into contact with theirs’ (Hepatitis C Council NSW, 2000). This description fails to identify the need for (infected) blood to enter another person’s bloodstream.

Sharing injecting equipment

Where materials are aimed directly at people who inject drugs, key prevention messages centre on instructing them not to share injecting equipment and to avoid blood contact, or blood transference from one person to another. Typical examples include:
‘Never share injecting equipment! Use a new fit for every hit!’ (What is Hep C?, Streetwize Communications, 2004).


In early publications, instructions to avoid sharing of injecting equipment specify only needles/syringes or ‘fits’. Later materials also identify other objects involved in the injecting process, including spoons, swabs, filters, water and tourniquets. In these materials, however, the expression ‘sharing’ is rarely explained. At times it is conflated with re-using equipment, creating a potential for confusion. For example, in Impact: Hepatitis C Information readers are told:

‘To reduce the risk of transmission, it is (therefore) important that people who inject drugs do not share or reuse needles… even when no blood is visible’ (Hepatitis C Council Vic, 2003).

Blood awareness

As with the expression ‘sharing’, another common expression, ‘blood awareness,’ is not consistently defined in the materials. The concept of being blood aware first appeared in 1998, subsequently becoming heavily utilized in materials aimed specifically at people who inject. However ‘blood awareness’ is not always well explained. For example, Hepatitis C: Basic Information features the directive ‘Be blood aware – avoid blood-to-blood contact’ (Hepatitis C Council QLD, 2000). The only explanation included with this exhortation is another to avoid sharing injecting equipment, wash hands and to be aware of safer injecting practices. A few resources do give an explanation of blood awareness and/or identify specific steps in the injecting process during which people should be alert to the potential for blood presence or transference. As Hep C not 4 me: a guide 2 staying safe explains:

‘Always be blood aware!!! Being blood aware means being alert to what is happening before, during & after you inject. If you think blood, yours or someone else's, has contaminated the injecting space or equipment you should replace any sterile equipment, re-clean any other
things that may have been contaminated, and re-wash your hands before proceeding.’

(Australian Injecting & Illicit Drug Users League (AIVL), undated, p6)

Formality of language

In early materials the language is formal and often employs clinical jargon, but over time slang and colloquialisms are introduced. For example, the term ‘needles/syringes’ is later substituted with the term ‘fits’, ‘mixing up’ for drug preparation, ‘hit’ or ‘shot’ for injection of a drug. Similarly, materials aimed at specific sub-sets of the injecting community, such as Aboriginal people or prisoners, use language and imagery familiar to these communities. This progression reflects a trend towards the tailoring resources of and messages to the target group/s, a common strategy in health communication (Petraglia, 2009).

2. Individual responsibility and agency

Framing individual responsibility for prevention

Responsibility for prevention of hepatitis C transmission is almost always framed individually. This is achieved through directives that specifically address the intended reader (people who inject, people with hepatitis C). The booklet Hepatitis C contains a typical example:

‘If you are infected with hepatitis C your blood is infectious. Thus you must be extremely careful not to let other people come into contact with your blood.’ (Australian Gastroenterology Institute, 1991).

Readers are sometimes held responsible for protecting others as well as themselves. For instance, Contact: Hepatitis C Diagnosis advises that:

‘To avoid infecting others take steps to reduce opportunities where other people come in contact with your blood, and you should avoid contacting the blood of others’ (Hepatitis C Council QLD, 1998).
In these examples, individuals are encouraged to consider the welfare of their injecting networks, invoking a moral obligation to protect others from themselves. In a couple of resources responsibility is also placed on the individual to make sure they do not pass on ‘bad habits’ to new/young injectors and thus to protect them from infection risk (see Fraser, 2004, for a detailed critique of responsibilizing discourse in hepatitis C literature).

Acknowledging individual agency

While other prevention messages also appear in some materials, these are much less common than those described above. Usually related to drug preparation and injecting practices, they go into greater detail about specific preventive steps and considerations. People who inject are sometimes implored to prepare in advance, making sure clean equipment is always on hand, as in *Safer Using on the Street*:

‘Plan ahead: have your own injecting kit so you'll never have to share; get to know locations and opening times of NSP and pharmacies; have a back-up supply; have everything you need before you mix up’ (Inner South Community Health Centre, 2000).

Self-preparation of drugs to guarantee the use of clean equipment is also emphasized. *Hepatitis C: What You Need to Know* includes the advice ‘…don’t inject hits prepared by other people at some other time’ (Hepatitis C Council NSW, 2001). Advice on safely disposing of used injecting equipment, either to deter use by others or to avoid exposure to the general community, also appears occasionally. This advice is sometimes framed as a moral obligation, that is, that the individual avoid contributing to negative community perceptions of drug users.

3. Environmental, social and structural considerations

Injecting contexts

While some materials implicitly acknowledge the often social nature of drug consumption, they rarely advise on managing prevention in social contexts. Instead of engaging directly with the social
complexity of injecting, they tend to reiterate strategies that separate the individual from the group.

For instance, *Safer Injecting* advises:

> ‘No matter how well it has been cleaned, never let your used equipment or anyone else's come into contact with a group mix. Unless new sterile fits are used to mix and divide up, each person must have all their own equipment’ (AIVL, 2003)

The materials rarely consider the influence of factors beyond the individual. Instead, most assume that the target audience has sufficient access to the resources (e.g. sterile needles and syringes, a private space to prepare and inject drugs) and independence required to adopt the safer injecting practices advised. Exceptions to this include materials specifically targeted at prisoners, where the restricted environment is the focus, and materials which present a hierarchy of options to consider in the face of limited resources. For instance, the booklet *Safer Injecting* includes the following suggestion: ‘If no sterile water, use cooled boiled water in a clean glass’ (AIVL, 2003). Such materials were commonly developed by (or with acknowledged input from) drug user organisations who have most likely influenced message development to be more practical and realistic in the face of adverse environmental and structural conditions. The individual’s place within, and relationship to, group dynamics and customary drug purchasing and consumption procedure, and the effect these may have on individual and group injecting practices are not addressed in the vast majority of materials. Two of the reviewed resources did however raise the issue of gender roles in heterosexual relationships in the context of women being initiated into injecting by a male partner and subsequently relying on his drug purchasing and consumption practices. The Australian Hepatitis Council’s booklet *Women and Hepatitis C* (2004) implores women to ‘Take control of your drug use’.

Differing local contexts also impact on individual ability to undertake safer injecting practices. Most materials appear to be written with a city-based, resourceful and knowledgeable subject in mind, without regard for the limited needle and syringe access points and resources available in regional or rural areas, or influences such as stigma and discrimination in accessing services. However, these
materials may have been specifically developed, targeted and distributed at city locations; the intention is unknown.

The three aspects of language, individual responsibility and agency, and social and structural considerations discussed in sections one to three above are reflected in common approaches to tailored health communication. Petraglia notes that tailoring of health communication frequently draws from varying combinations of four methods (described by Kreuter and McClure (2004)):

“peripheral (designing elements to fit the audience demographic), evidential (enhancing the relevance of the information by using group-specific evidence), linguistic (adapting messages to the language and register of the target audience), and sociocultural (presenting messages in the context of social and/or cultural characteristics of the intended audience)” (Petraglia, 2009, p182)

These tailoring strategies are present – to varying degrees - in many of the reviewed materials produced in the latter decade (2000 onwards) but, Petraglia argues, these approaches may assist in increasing perceived relevance, but in order to persuade, messages need to employ narrative and dialogue. In section four below, we discuss potential for improvement in the peripheral, evidential and sociocultural aspects of tailoring of hepatitis C resources. We also consider the use of narrative, and outline ways in which dialogue can and does operate in the hepatitis C prevention field.

4. Increasing relevance: the quest to achieve authenticity

Drawing on the critique of health promotion outlined earlier, several pressing opportunities to reframe messages for hepatitis C prevention emerge from the three areas analysed above. According to Petraglia, authenticity is an important ingredient in the emotional and cognitive engagement of target groups with health promotion messages (Petraglia, 2009). We suggest a number of ways in which hepatitis C prevention messages might be enhanced to achieve greater relevance, on the path to authenticity.

Balancing individual and shared responsibility for prevention
The materials we analysed typically place responsibility for prevention on the individual and fail to represent drug use within social and structural contexts that have been shown to profoundly shape injecting practice. People who inject drugs are well aware of the obstacles they face in following health advice and may find messages that ignore these obstacles unconvincing. Consideration should therefore be given to balancing individual and shared responsibility for prevention and acknowledging individual’s place in broader social contexts (Dodds, 2002). By doing so, the materials may better chime with the experiences of readers, achieving a greater sense of authenticity. HCV prevention messages that ascribe responsibility to the individual injector can also generate blame for transmission and further reinscribe stereotypes of people who inject as irresponsible. As we have noted elsewhere (Fraser, 2004) individual responsibility for prevention needs to be contextualized against the wider responsibilities of organisations, governments and society. This could be done by, for example, outlining the measures governments are taking to address HCV prevention, and by framing people who inject as partners in the wider response. The link between responsibility and wider legal, police, economic, social and cultural environments (Rhodes, 2009) should also figure by acknowledging that the resources needed to follow prevention advice may not be available in the local environment. More broadly, prevention advice contained in health promotion messages should be realistically achievable by the target group. For example, local factors, such as the availability of needles and syringes or sterile water directly shape individual ability to undertake the safer injecting practices promoted (Small et al., 2007). Suggesting practices that are unachievable because of local issues can reduce the credibility and usefulness – the relevance – of the health promotion resource or activity. Again, by presenting a fuller picture of the field of concern over hepatitis C, and acknowledging the real conditions under which people who inject must operate, resources may present as more in tune with readers’ experiences and their messages more authentic.

**Contextualizing targeted information**

The materials reviewed also did little to contextualize technical information about blood, hepatitis C and injecting drug use in broader social and everyday experiences of people who inject drugs. It is
well accepted that tailoring strategies to address distinct segments of a target group can increase effectiveness (Kreuter, Strecher & Glassman, 1999; Noar, Benac & Harris, 2007). This is also a component of communication authenticity. However, social marketing research has drawn a distinction between the approach to segmentation used by public health and that used by social marketers. Public health approaches have been characterized as relying on demographics or epidemiologically-identified risk factors (such as injecting in public, having unstable housing) as a means to define groups. Social marketing approaches emphasize distinguishing distinct segments of the target population on the basis of a broader range of factors such as current behaviour (e.g., heavy versus light smoking), future intentions, readiness to change, product loyalty, and/or psychographics (e.g., lifestyle, values, personality characteristics) (Grier & Bryant, 2005). Further, public health approaches that target groups of people as ‘communities’ (such as the epidemiologically-defined risk groups suggested above) have the potential to homogenize, obscuring the everyday differences that give rise to choices and behaviour (Petraglia, 2009). Messages should instead be tailored to the diversity of people who inject, taking into account that many may not identify as part of a community of injectors or drug takers and that a myriad of elements comprise their identities. Individuals align to multiple, overlapping and mobile networks. Accounting for this may require regularly repackaging and contextualizing information based on the variety of interests and individualities of the specific target group.

**Innovative packaging and delivery of messages**

Taking into consideration heterogeneity and diversity of experiences and interests may provide fresh ways to conceive and deliver hepatitis C messages (Ellard, 2007). Didactic messages can be perceived as patronizing, and traditional prevention advice and methods as sermonizing and irrelevant by target groups. If packaged with new useful information and other resources, prevention advice can have fresh impact, striking the stronger note of relevance and credibility recommended by Petraglia. The principle is to avoid foregrounding potentially bland or unappealing messages by contextualizing hepatitis C prevention within people’s lives more generally. Going beyond traditional print-only
educational resources and campaigning to create innovative ways of distributing information could aid in attracting renewed interest from people who inject. The appeal and relevance of standard prevention messages can be increased by including other useful materials or messages. For example, one resource (not included in this review of print materials) consisted of a toiletries bag containing common personal care items which also included hepatitis C prevention information. Campaigns like this may also interest new injectors who do not relate to traditional methods of education.

Other interests and everyday needs and practices may also be incorporated to enhance the relevance and impact of safer injecting messages, including those relating to health and social issues beyond hepatitis C itself. For instance, social research has identified that some people who inject drugs consider visible injecting scars and the stigma they can attract, a more significant issue than hepatitis C (Harris, Treloar & Maher, 2012). Likewise, some readers may be more concerned about building and maintaining healthy and workable social relationships whilst managing drug use, or managing the financial aspects of drug use to avoid withdrawal symptoms (Mateu-Gelabert et al., 2007). Others again may be most interested in promoting hygienic practice in injecting (to prevent ‘dirty hits’ and to maintain general health) (Treloar et al., 2008). Digital communication mechanisms may also offer novel ways of accessing new and young injectors and provide new possibilities for the tailoring, packaging and delivering of information. Again, by recognizing the many priorities readers juggle, prevention education may be able to achieve a greater sense of relevance.

Recognising pleasure and emotional engagement

Also missing in the materials was an appreciation of the emotional component of drug use and drug use practices (Airhihenbuwa & Obregon, 2000; Petraglia, 2009; Treloar et al., 2008), particularly the pleasurable aspects of use (Dwyer, 2008; Moore, 2008; O’Malley & Valverde, 2004). This absence may be related to the reliance of resource producers on government funding (either through community-based organisations or health departments). Resources are produced within a particular social, legal, political and financial context which can place considerable constraints on their development and content including imagery, messages and language. To some extent producers of
materials are limited by what may be acceptable to an audience wider than that intended (the target group), especially given the illegality of injecting drug use. Government funders may be well-intentioned in seeking to protect prevention efforts that are vulnerable to adverse community or political attention (Korner & Treloar, 2003). Where resources have come to the attention of readers other than the intended audience, media criticism of the content (its graphic nature and apparent condoning of injecting drug use) has sometimes emerged. Further, producers may be restricted by the perceived moral implications of providing detail on the (safest) ways to prepare and consume illicit drugs. These constraints notwithstanding, acknowledging pleasure may produce more innovative and authentic messages. Indeed, the relative timidity of health messages targeting people who inject drugs compared with the sex-positive messages for HIV prevention targeting men who have sex with men has already been noted (Treloar et al., 2011).

Of course, we are not the first to note the tendency for health professionals to determine the content of health promotion messages and the incorrect assumptions about the target group this can sometimes entail (Griesbach & Taylor, 2009; Perfrement, 2003). Involving the target group in all stages of message development, including the prioritizing of key health concerns, is essential to message credibility and authenticity, but also to foster genuine partnerships in the response to hepatitis C. Sufficient information was not available in the materials reviewed to ascertain the extent of involvement of people who inject drugs (beyond those materials that were produced by drug user organisations or acknowledged their involvement). We suggest that input from a number of sources is required to balance the best available information and insights from the target group with knowledge drawn from social research in hepatitis C prevention and the broader health communication literature. This balance will limit the risk of reproducing stereotypes about people who inject drugs and their practices, and enhance effectiveness. We further suggest that, where possible, contributors be listed on resources.

Lastly, given the fast-evolving knowledge on hepatitis C infection epidemiology, natural history and treatment options we recommend that all materials be clearly marked with a date for review to enable
the reader to assess the currency of its information. Resources which have been superseded or become out-of-date should be removed from circulation. A number of the out-of-date materials reviewed in this study were still available in community services and therefore, presumably, to the target audience.

Use of narrative

While a handful of resources employ narrative techniques as a vehicle for the hepatitis C prevention messages, as suggested by Petraglia, this strategy is not common. Occasionally, narrative-style case studies feature alongside traditional didactic messages which help to contextualise the formal information being delivered and make it relatable to the reader. A handful of materials, such as *Transmission Magazine* (Hepatitis C Council of New South Wales, 2009) employ a comic style format in which prevention messages are exchanged between characters. In these instances again, more detailed didactic hepatitis C information often features alongside the narrative. Narrative can also serve as a method to introduce social and structural restrictions. For example, in *The Little Book of Hep C* (Northern Sydney Health Hepatitis C Service Network) ‘Rebecca’s’ narrative centres around injecting in the days before needle and syringe programs were implemented. Such approaches are considered by Petraglia as important to achieving ‘felt relevance’ in the target audience.

The comic resource series *Via Us* (VivAIDS, 2001) is a good example of a narrative resource which avoids at least some of the common pitfalls described above. The three-episode ‘drama’ follows two housemates (‘Shep’ and ‘Trey’), and ‘Minh’ who is starting a romantic relationship with Shep. The fact that they inject drugs is just one part of their identity. For example, ‘Minh’ is a professional wrestler who wins a championship. Hepatitis C prevention messages are exchanged between characters in the context of their lives, while concurrent storylines are also explored. Topics such as sex, pregnancy, overdose, conflict with parents, physical disability, disclosure and discrimination, and treatment considerations all feature. The pleasurable aspects of drug use features through the characters making comments such as ‘YES! I can get my drugs soon!’ when pictured leaving work for the day. And, more explicitly with the inclusion of an image of a needle/syringe with the words ‘insert pure uncut pleasure here’ written across the barrel of the syringe.
Dialogue

This review was unable to collect information on how the materials are used with and by the target group, nor how they are received. As such we were unable to assess whether dialogue with or between people who inject drugs features as part of their distribution. However, one of the resources we reviewed was a comic which was produced as a result of a peer-led education initiative. Acting Up, which ran over 2006-2007 involved the peer working with drug users around Melbourne to write and produce a stage play for other drug users. Health and safety messages were embedded within the narrative in the broader context of the character’s lives. In this project, dialogue with the target audience was integral to all stages of implementation, including the development of the messages themselves, and post-production in discussion with audiences. The comic resource that followed documented the resultant script.

The hepatitis C field has a strong history of peer education activities and this is just one such example. It demonstrates how authenticity can be achieved in hepatitis C education, employing the key features of persuasion that Petraglia identifies: relevance, narrative and dialogue.

Summary

In summary, drawing on these considerations of improving ‘relevance’, hepatitis C educational materials could in future be developed with the following in mind:

1. Avoid the use of jargon, clinical terminology and overly formal language.
2. Balance individual responsibility for prevention by framing communities and government as partners in the wider response.
3. Consider the access to the resources required to follow prevention advice.
4. Consider the social and structural influences on drug consumption and injecting decisions and behaviours.
5. Acknowledge heterogeneity and shifting identities by tailoring materials to interests, rather than solely demographics or epidemiologically-defined risk behaviours.
6. Repackage prevention messages with other useful information and/or resources and consider innovative delivery techniques.

7. Consider the use of narrative as a vehicle for message delivery and dialogue.

8. Acknowledge the pleasurable aspects of drug use and how emotion may influence drug use practices and decision-making.

9. Contributors to the development of resources should include the target population and draw from knowledge gained from social research and health communication literature.

10. Resources should be marked with a date for review and old issues removed from circulation.

**Conclusion**

It is important to recognize that this review covers material produced over two decades and that evolving knowledge about hepatitis C and injecting drug use means the materials have changed in many ways over time. Yet as we have demonstrated, some themes appear consistently. These resources are a core method by which the Australian hepatitis C prevention response is delivered and information about hepatitis C is communicated to people who inject drugs, so their limitations and shortcomings cannot be ignored. Characterizing these materials is the persistent rehearsal of individualizing messages based on an assumed rational actor devoid of social and structural influences and limits or an emotional engagement with injecting drugs. This rational actor must grapple with complex, often incompletely defined, terms and concepts. Key concepts such as ‘blood-to-blood contact’ are not always explained, pleasure is erased, and readers are routinely addressed as a homogenous group. By tailoring information to different sectors of the target audience, diversifying information to better fit the life experiences and interests of target groups, redefining target groups, ensuring that materials include messages about shared responsibility for prevention, and acknowledging more directly the role of pleasure in injecting, resources are likely to register with readers as more authentic and credible. This will produce more equitable messages and strategies and, in turn, increase impact.
References


10.1016/j.socscimed.2004.12.024


10.1016/j.drugpo.2007.01.005


In this paper we re-analyse the data presented in the online report, *Technical Review of Hepatitis C Health Promotion Resources* (Winter, Fraser, Booker & Treloar, 2011), making a new argument based on Petraglia’s ‘authenticity’ theoretical approach.
Table 1: Summary of reviewed hepatitis C prevention education materials.

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total materials reviewed</td>
<td>159</td>
<td>100</td>
</tr>
<tr>
<td>People who inject and hepatitis C prevention specific</td>
<td>56</td>
<td>35</td>
</tr>
<tr>
<td>Producer organisation type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis organisation</td>
<td>69</td>
<td>43</td>
</tr>
<tr>
<td>Drug user group</td>
<td>35</td>
<td>22</td>
</tr>
<tr>
<td>Alcohol and other drug service / needle and syringe program</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Government department</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Other health/community advocacy organisation</td>
<td>16</td>
<td>10</td>
</tr>
<tr>
<td>Aboriginal health service</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Community/Area Health Service</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Format</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Booklet</td>
<td>57</td>
<td>36</td>
</tr>
<tr>
<td>Pamphlet</td>
<td>51</td>
<td>32</td>
</tr>
<tr>
<td>Postcard</td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td>Factsheet</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Poster</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Fold-out wallet card</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Wallet card</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Year of production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1991 - 1995</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>1996 - 2000</td>
<td>29</td>
<td>18</td>
</tr>
<tr>
<td>2001 - 2005</td>
<td>53</td>
<td>34</td>
</tr>
<tr>
<td>2006 - 2010</td>
<td>59</td>
<td>37</td>
</tr>
<tr>
<td>Unknown</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Focus:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis C only</td>
<td>107</td>
<td>67</td>
</tr>
<tr>
<td>Blood-borne viruses generally</td>
<td>29</td>
<td>18</td>
</tr>
<tr>
<td>Hepatitis viruses</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Other (e.g. no blood-borne virus mentioned but safer injecting advice included)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Target groups*:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>People who inject (general)</td>
<td>64</td>
<td>40</td>
</tr>
<tr>
<td>Steroid users</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Amphetamine users</td>
<td>1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Indigenous</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>Young people</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Prisoners</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Women</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>People with hepatitis C</td>
<td>32</td>
<td>20</td>
</tr>
<tr>
<td>Low literacy</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Culturally/linguistically diverse (English language only)</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Other drug use harms addressed (in materials aimed at people who inject, n=64)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overdose</td>
<td>8</td>
<td>13</td>
</tr>
<tr>
<td>Non-viral (bacterial) infections, dirty hits, septicaemia, abscesses etc</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>Drugs and their effects</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Social, financial, legal topics</td>
<td>23</td>
<td>36</td>
</tr>
</tbody>
</table>

Note: Percentages are rounded. * Does not include those aimed at general community or health professionals. Materials may appear in more than one group (e.g. prisoners and low literacy and people who inject).