

THE MODELLING OF INJECTING BEHAVIOUR AND INITIATION INTO INJECTING

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The modelling of injecting by injecting drug users (IDUs) around non-injecting drug users (NIDUs) is examined as a precursor to NIDUs initiation into injecting. Structured self-report interviews were conducted with 86 IDUs. 86% of the sample had been initiated into injecting by an IDU: 78% of their initiators being either a friend, partner, or sibling. Only 7% of respondents reported being pressured into injecting. 70% of respondents assessed that modelled injecting had been an important influence on their decision to inject by making them curious about injecting. In turn 98% of the respondents had modelled injecting around NIDUs, but 59% reported being unsure, or thought it unlikely, that they had made someone want to try injecting. Of these respondents 90% had talked to an NIDU about injecting, and 77% had injected around an NIDU. The findings suggest the need for interventions that raise awareness about the socially transmitted nature of injecting drug use.

Keywords: Social Learning Theory; Modelling; Injecting Drug Users (IDUs); Non injecting Drug Users (NIDUs); Harm reduction interventions

INTRODUCTION

Injecting drug users (IDUs) frequently report that they held a strong aversion to injecting earlier in their drug using careers (Hunt et al 1998). However, rather than needing to be pressured into injecting, many IDUs report that they requested their first injection from an existing IDU (Stenbacka, 1989). It appears that for many non-injecting drug users (NIDUs) a process operates to diminish the aversion to injecting. Social learning theory

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(SLT) posits that the verbal or visual modelling of a feared behaviour can make that behaviour more attractive by desensitising an observer to the possible risks and increasing their sense of self-efficacy in relation to the behaviour (Bandura, 1977; Bandura, 1986).

This exploratory research sought to examine the perceived influence of NIDUs observing and discussing injecting with IDUs in relation to their initiation into injecting. The purpose of the research was to identify what potential exists for interventions that lessen the inadvertent promotion of injecting to NIDUs by IDUs. Using self-reported data from IDUs, three issues were investigated: a) the influence that watching and talking about injecting has on a drug user's original decision to try injecting, b) the extent to which IDUs inject in front of NIDUs or discuss injecting with NIDUs, c) the awareness IDUs have of their possible influence on NIDUs by modelling injecting in this way.

METHODS

The research was undertaken from May 1996 to October 1996 as part of a project to develop and evaluate an intervention designed to lessen the likelihood that NIDUs will start to inject (Hunt *et al* 1998). The data were collected from structured interviews with current IDUs using a previously piloted schedule. The interviews were tape recorded and took about an hour to complete. Responses to "open" questions asked prior to related "forced choice" questions were transcribed. The data collection covered respondents' current social circumstances, past and present drug use, severity of dependence (Gossop, Griffiths & Strang, 1992), their own initiation into injecting, initiation of others, and their behaviour related to injecting when in contact with NIDUs.

The interviews were conducted by two of the authors at seven drug agencies in South East England and at the homes of the respondents or their friends. The criteria for inclusion in the research were that respondents had injected in the past 30 days and that they spoke English. The sample was recruited from drug services and through leaflets dispensed with syringe exchange packs at pharmacies. Respondents provided written, informed consent and were paid £10 per interview. Ethical approval was obtained from the local NHS research ethics committees in each area.

RESULTS

Sample recruited

Eighty six IDUs were interviewed, 67 (78%) were male. The respondents were predominantly white/British (80/93%). Their mean age was 30 years (SD 6.6). Sixty-one (71%) of the respondents were in contact with a treatment centre or needle exchange unit. Most (71/83%) had finished full time education by age 16, and 76 (88%) were unemployed and receiving state benefits. The main drug injected by the sample was heroin 55 (64%) followed by amphetamine 23 (27%). Respondents had injected on an average of 18 days in the past month (SD 9.3). The mean number of daily injections was 3 (SD 1.6).

Injecting history of the sample

Mean length of time using illicit drugs before first injection for the sample population was 5.3 years (SD 4 years). Slightly more respondents had injected heroin (38/44%) as their first drug than amphetamine (36/42%). The length of time was significantly shorter from initial use of heroin to that drug being the first drug injected (1 year) than for amphetamine to that drug being the first drug injected (2.5 years) ($F = 9.0757$; $df 1$; 72, $p = .0036$). The mean length of time since first injection for the sample was 9 years (SD 7 years). When asked whether they would still choose to begin injecting, 39 (45%) respondents said they would definitely not choose to do so, 16 (19%) probably not, 18 (21%) probably would and 13 (15%) definitely would.

Self initiation into injecting

Twelve of the 86 respondents (14%) had given themselves their first injection. Five of these 12 had a IDU friend or acquaintance present when they injected. Of the rest four were alone and three had non IDU friends or acquaintances present. Seven of the respondents who initiated themselves had been given information on how to inject from IDU friends or acquaintances and the five respondents who had not been given information about injecting had all observed an IDU inject before giving themselves their

first injection. There was no evidence of spontaneous, self-initiation without exposure to verbal or visual modelling of injecting.

Initiation by an injecting drug user

The remaining 74 respondents (86%) had been given their first injection by an IDU. Most (43/57%) had been initiated by a friend, 14 (19%) were initiated by an acquaintance, 6 (8%) by a male partner, 6 (8%) by a sibling, 4 (5%) by a female partner and 2 (3%) by a stranger. The respondents had known their initiator for an average of 3.7 years (SD 5.7), with 54 (72%) knowing the person for one year or more. Over four fifths (64/85%) of the respondents had been seeing the person at least once a week at the time of their initiation with 31 (42%) seeing the person every day.

In response to Likert-scaled questions, 47 (64%) of the 74 respondents said that they felt close to their initiator at the time of their initiation. Fifty five (73%) felt sure that the person would inject them safely and the majority (65/88%) thought their initiator was knowledgeable about injecting. "Knowing someone with enough expertise to inject me" was important in the decision to try injecting for 56 (76%) respondents. Almost half (36/49%) of the respondents were obtaining their drugs from or via their initiator.

Observing and talking about injecting

The respondents were asked how important an influence observing IDUs inject, and/or talking with IDUs about injecting had been on their decision to try injecting. A majority of the respondents (51/59%) reported that watching friends inject had been important in raising their curiosity about the effects of injecting and making them want to inject, and 13 (15%) respondents said seeing a partner inject had been important to a similar degree in making them curious enough to try injecting. However, 41 (48%) of the respondents reported that seeing acquaintances and strangers inject had also been an important factor in raising their curiosity and their resulting decision to inject. Overall, two thirds (58/67%) of the sample reported that they thought seeing someone inject prior to their first injection was an important influence on their decision to start injecting.

In aggregate, 52 (61%) of the study population thought that talking about injecting with an IDU had been an important determinant in them becoming sufficiently curious to want to try injecting. Half (43/50%) of

the respondents thought talking to IDU friends about injecting had made them curious and want to inject, 33 (38%) stated that talking to other IDU acquaintances or strangers about injecting had been important in raising their curiosity about the effects of injecting, and 10 (12%) reported talking to an IDU partner about injecting was important in making them curious enough to inject. In total, 60 (70%) of the sample reported that the curiosity resulting from either observing and/or talking with a IDU had been an important influence on their decision to start injecting.

Other influences on NIDUs decision to inject

Respondents were asked about other influences on their decision to begin injecting. Three areas were considered: rush/immediate effect, economies from injecting, and perceived safety, some of these have been identified elsewhere (Crofts et al, 1996). Responses were scaled between "very important" and "unimportant".

The majority of the respondents (74/86%) reported that wanting to experience the "rush" from injecting was an important influence on their decision to inject. Fifty one (59%) respondents stated that they had come to see injecting as a really good experience. Nearly two thirds, (54/63%) reported that the fact that they had come to see injecting as safe enough to try was important in their decision to inject, while over half (54/63%) reported that perceiving injecting as being more economical was an important influence in making them move to injecting.

The qualitative data extracted from the interview recordings indicates that it may be useful to distinguish between the sensation of the rush and avoidance of the delayed onset of drug effects. Sometimes the specific experience of the rush was sought and some people resented the delay in onset of the drug effects that arose through using other routes, especially when they were using with IDUs. The perceived economies of injecting were not significantly related to the drug taken at first injection.

Some respondents reported wanting to be like a friend (36/42%) or their partner (9/10%) who injected. Just over a third (31/36 %) said they looked up to injectors at the time and nearly a quarter (22/26%) had considered that injecting would them more status. Only 6 (7%) of people interviewed felt that pressure from IDU partners, friends or others (i.e. acquaintances/strangers) had been an important influence on their decision to try injecting drug use.

TABLE I Benefit and risk influences on initiation into injecting

Statement	Very important		Important		Inbetween		Not very important		Unimportant	
	n	%	n	%	n	%	n	%	n	%
1. I wanted to experience the benefits of injecting i.e. the rush and immediate effect	37	(43)	37	(43)	2	(2)	3	(4)	7	(8)
2. It was a more economic way of using drugs	20	(23)	22	(26)	7	(8)	7	(8)	30	(35)
3. I had come to see injecting as something safe enough to try	7	(8)	47	(55)	22	(26)	2	(2)	8	(9)
4. I had come to see injecting as something that could be a really good experience	14	(16)	37	(43)	12	(14)	6	(7)	17	(20)

The frequency of IDUs modelling injecting behaviour

The majority (72/84%) of the respondents reported that they had injected in front of a NIDU at some time since their initiation, and 44 (51%) had done so in the three months before the interview. Of those respondents who had injected in front of a NIDU 59 (69%) stated that it led to conversations about injecting. The main explanations of why the respondents had injected in front of a NIDU were that the observer was not bothered by seeing them inject, that they were in their own home so it was up to the NIDU if they wanted to stay, and the need to inject overriding any other considerations. There was a negative correlation for the sample between the number of NIDUs injected in front of in the three months before interview and length of time injecting ($N = 71$ Spearman's $Rho = -.3472$, $p = .003$). This finding suggests that IDUs are more likely to inject in front of NIDUs earlier in their injecting careers than later.

Seventy five (87%) respondent's had talked about injecting with a NIDU at some time since their own initiation, and 50 (58%) of the study population had done so in the three months before interview. Of the respondents who had talked about injecting with an NIDU 39 (45%) reported that the NIDUs usually started the conversation, 9 (11%) of the respondents said they usually started the conversation and 38 (44%) reported that it "just seemed to happen". Sixteen (19%) respondent's reported talking mainly about the good aspects of injecting, 60 (70%) mainly the bad aspects and 9 (11%) good and bad aspects equally.

The respondents' awareness of the potential effects of their behaviour around NIDUs

Only 10 (12%) respondents said they had ever encouraged a NIDU to inject whereas 64 (74%) said they had tried to discourage a NIDU from injecting. The respondents were asked at the start of the interview how likely it was that they had done something that would have made someone want to try injecting; 35 (41%) thought it likely, 38 (44%) thought it unlikely, and 13 (15%) respondents were unsure.

Of the 51 (59%) respondents who were not sure, or thought it unlikely, that they had done something that would have made an NIDU want to try injecting drug use 46 (90%) had talked to an NIDU about injecting, and 39 (77%) had also injected in front of a NIDU. When asked later in the inter-

view, 22 (47%) of these respondents stated they thought a NIDU would be made more interested in injecting by seeing an IDU inject. Thirty one (60%) of the 51 respondents reported that they thought a NIDU would be made more interested in injecting even if they did not see the IDU inject directly but just knew what was happening and were able to observe the subsequent effects.

DISCUSSION

This study examines some particular social interactions between IDUs and NIDUs hypothesised to influence non-injectors' propensity to inject : in particular seeing someone inject and talking about injecting drug use. The research found that the majority of NIDUs are initiated by an IDU who they know well. Very few respondents reported being pressured into injecting, but most thought that the modelling of injecting by IDUs had made them curious about injecting and that this was an important influence on their decision to inject. Nearly all the respondents had themselves, in turn, modelled injecting before a NIDU; but only a small proportion thought that they might have influenced an NIDU to want to try injecting drug use.

Limitations of the methodology

Given that much of the focus of interest is interactional data which is generally hidden and, that it relates to an activity which is commonly disapproved of, some broad influences on the validity of the data can be suggested. These arise in regard to recall and social desirability responding. Respondents sometimes found it difficult to respond accurately about actions around NIDUs during the past three months. They could not always identify definitively whether people in whose presence they had injected were NIDUs, IDUs, or non users. The respondents were asked to only report NIDUs being present when they were certain that the people they were referring to were NIDUs. Consequently, reported rates of discussing injecting and injecting in front of NIDUs are almost certainly minima.

Asking the respondents to reflect on whether they had conversations with NIDUs or had injected drugs around them revealed that it was not necessarily something to which IDUs had previously attended and had little salience for many of them. In itself, this is indicative of potential opportunities to increase IDUs' awareness of their influence on NIDUs.

Prevailing societal views towards injecting, including sub-cultural norms among IDUs, tend towards disapproval of initiating NIDUs. These seem likely to cause a bias towards over-reporting disapproval of initiation and under-reporting activities such as encouraging NIDUs to inject. Conducting much of the research within drug services may have added to this effect.

NIDUs initiation into injecting

The research found that most respondents were initiated by an IDU, usually a friend or acquaintance who they had known for some time before initiation, were seeing frequently, and to whom they were close. The majority of those respondents who gave themselves their first injection relied upon IDUs for guidance and support. These findings are consistent with other research into the transition to injecting drug use (Stenbacka, 1989; Stenbacka Alleback & Romelsjo, 1993; Des Jarlais et al, 1992; Crofts et al, 1996).

The proportion of respondents who were initiated by a partner (10/13%) was similar to that found in other studies of initiation into injecting drug use (van Ameijden et al, 1994; Crofts et al, 1996). A number of respondents who had initiated a partner commented on how difficult it was to avoid injecting around a cohabitee or to refuse a partner's request to be injected. This context may warrant special consideration in any intervention to reduce initiation into injecting.

Almost half (36/49%) of the respondents were obtaining their drugs from or via their initiator and 50 (58%) of the people the respondents initiated were obtaining their drugs from them. As has been found in other studies (Crofts et al, 1996) only a few of these cases involved the stereotypical avaricious drug dealer inducing dupes into more serious drug use: for the most part the respondents described "social dealing" transactions where little or no profit was derived by the person providing the drugs.

Influences on the decision to start injecting

Contrary to what may be supposed, very few (6/7%) of the respondents felt they had been pressured into injecting. The findings support the view that, for the most part, moving towards injecting results from a process of "voluntary association" (Coggans & McKeller. 1994) with IDUs.

The majority (60/70%) of the respondents regarded seeing IDUs injecting and/or talking to IDUs about injecting as an important influence on their decision to try injecting by engendering a curiosity about the effects of injecting. Even when the person is not a significant other the modelled behaviour appears still to have an effect. Only 16 (22%) of the respondents had been directly initiated by an IDU who was an acquaintance or stranger, but almost half 41 (48%) of the study population said seeing these inject was an important influence on their own decision to inject; 33 (38%) thought talking to an acquaintance or stranger had been an important influence in making them curious enough about the effects to want to try injecting.

Over half (49/57%) of the respondents stated that they were not worried about injecting at the time of their first injection, and for 54 (63%) of the sample believing injecting to be safe enough to try was an important influence on their decision to try injecting. The majority of the respondents 74 (86%) reported that wanting to experience the "rush" from injecting was an important influence on their decision to inject. These findings suggest that NIDUs come to see injecting as attractive and safe. A change that may well be as a consequence of their experience of observing and being contact with IDUs.

Nearly half 36 (42%) of the respondents stated that wanting to be like IDU friend influenced their decision to inject. Just over a third 31 (36%) of the study population said they looked up to injectors at the time of their first injection, and 22 (26%) saw starting to inject as giving them more status. These findings suggest that there may be a benefit from any mechanism that reduces the extent to which IDUs are identifiable to NIDUs.

IDUs awareness of their potential to influence NIDUs decision to inject

Over four fifths 75 (87%) of the sample reported having talked to NIDU about injecting; 50 (58%) in the last three months. Similarly, 72 (84%) of

the sample had injected in front of an NIDU and 44 (51%) had done so in the last three months. In aggregate 84 (98%) of the respondents had modelled injecting to NIDUs.

Only 10 (12%) of respondents said they had ever encouraged a NIDU to inject. Over half of the sample 51 (59%) stated that they were either unsure, or thought it unlikely, that they had made someone want to try injecting. Of these respondents 39 (77)% had injected in front of a NIDU and 46 (90%) had talked to an NIDU about injecting. There appears to be obvious scope for raising the awareness amongst some IDUs of how the modelling of injecting behaviour can unintentionally influence the decision of NIDUs to inject.

In particular there would appear to be some added benefit in focusing on new injectors who are more likely to inject in front of NIDUs. A negative correlation was found for the sample between length of time injecting and number of NIDUs injected in front of in the three months prior to interview. This finding confirmed comments made by many of the respondents with longer injecting histories during the interviews that they preferred not to inject in front of other people for reasons such as embarrassment and the need for privacy to concentrate on finding a vein. In addition to this effect, respondents often commented on how when they first started injecting they were only experiencing "positive" effects from injecting and therefore were not concerned at the possibility that they may be encouraging a NIDU to inject. In the open-ended responses recorded during the interview the most common reason given for not encouraging some to inject was "I don't want someone to end up where I am".

Most (60/70%) of the respondents reported mainly talking about the bad aspects of injecting when they talked to NIDUs about injecting. However, what the findings of the research suggest is that while the anti-initiation value position was genuinely held by the majority of the respondents the behaviour reported by a substantial proportion of them could possibly be increasing rather than decreasing the likelihood that a NIDU will inject.

In descriptions of talk about injecting with NIDUs provided by the respondents during the interview they did indeed talk mainly about negative aspects of injecting. However, many respondents, in an attempt to give an "honest account", would also describe the benefits of injecting. Often the pleasure and excitement in their voices when they recounted injecting experiences seemed likely to negate much of the impact of their explanations as to why the NIDU should not inject. NIDUs' selective

attention to positive aspects of injecting in the accounts of respondents may mean that what is intended as a balanced but discouraging account does not have this effect.

These unintended effects may leave people more inclined to inject despite what is evidently the IDUs wish to discourage initiation. Understanding more precisely the way this process operates would help inform interventions regarding the question of whether it would be preferable to discourage any talk about injecting with NIDUs at all, or to encourage talk which only details the risks.

CONCLUSIONS

The findings of this research underline the need to develop interventions that focus on raising awareness of the socially transmitted nature of injecting drug use within using and peer networks. This may be of particular value if it can be accomplished with new injectors. Where it has been attempted, work to prevent the transition to injecting has targeted those people at risk of beginning to inject such as heroin "sniffers" (Casriel *et al.*, 1990). A disadvantage of this approach is that many people who are "at risk" do not use drug services and will consequently elude such interventions.

The gatekeeper and modelling roles that current injectors fulfil, coupled with the aversion that many of them hold to initiating non-injectors provide an opportunity for reducing initiations into injecting. Strategies targeted at current IDUs offer the prospect of providing deliverable interventions that will result in a reduction in the number of "at risk" drug users being initiated into injecting without needing to wait for them to come into contact with a formal treatment or outreach service. Such an approach would be consistent with the known values of many IDUs regarding initiation and is therefore likely to be acceptable to them.

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