Knowledge gained through experience in young problem drug users: reflections on interventions and change

Witteveen, E.J.

Citation for published version (APA):
Chapter 8

General discussion and conclusions
The core of this thesis are the six successive chapters, each of which includes an independent study about a more specific drug problem in Amsterdam. The six main study questions are: 1) do crack cocaine users start using heroin or do they change their mode of administration towards injecting? 2) which factors facilitate the initiation of cocaine and heroin in problem drug users? 3) what are the motives of young drug users for initiation into injecting and for not injecting? 4) what are the motives and methods of drug users in relation to cessation of injecting drug use? 5) what are the most important health care needs among young problem drug users and what are the barriers to health care use that they perceive? and finally 6) what factors may impede or facilitate adherence for HAART?

This final chapter summarizes the results of the six studies, discusses implications and reflects on interventions and change. The chapter has three paragraphs; an overview of the study results including the original references, the limitations of the study results and the implications for interventions and change.

8.1 Overview of the results

The first question is answered in the epidemiological YODAM study described in chapter two and shows that crack cocaine is the most popular drug among young problem drug users and that among them the incidence rate of new heroin use was 4.8/100py. Although crack cocaine users are at high risk for heroin use the majority of crack cocaine users will not use heroin in the near future. Rather than a risk factor for heroin use, crack cocaine could also be considered as a barrier to heroin use and one of the reasons for a decreasing heroin epidemic in Amsterdam.

The study also shows that the initiation rate of injectors among young drug users in Amsterdam is 3/100py and that the rate of relapse towards injecting among those with a history of injecting was 13/100py. History of injecting has been a consistent risk factor in other studies (1,2). Higher rates of new injection and relapse of injection was observed among the “former generation” of drug users described by van Ameijden et al. and among young drug users in Montreal (2,3).

Transition to abstinence or non-frequent drug use (≤ 1 per week) is common. The cumulative incidence after a four year period is 0.59 (SE: 0.05). Lower rates of transitions to abstinence or non-frequent drug use are observed among those using both cocaine and heroin at baseline (cumulative proportion after four years 0.46 (SE: 0.07). Detention is strongly associated with transition to non-frequent drug use, as well as abstinence oriented treatment. The homeless are more likely to be incarcerated, but no significant relation was found between homelessness and discontinuation of frequent drug use. Excluding the follow up periods in which ≥ 30% follow up time is spend in prison revealed that the homeless are in fact more likely to continue frequent drug use. Lack of stable housing as a risk factor is also described by Shah et al. (4).

In general, the periods of abstinence or limited drug use, are followed by a relapse. After one and a half year the cumulative incidence that showed a relapse towards frequent drug use is 0.76. This indicates the chronic and relapsing nature of drug addiction that was also observed among the former Amsterdam drug user cohort (5).

In chapter three the second question, on perceived motives to be most instrumental in the initiation of cocaine and heroin use, is answered. The findings show that 58% of the
interviewees started their initial illicit drug use between 16 and 20 years of age and that cocaine was the most common drug of initiation (42%). ‘Affect regulation’ is the most frequently mentioned motive. Initiation of cocaine and heroin is promoted because their stimulating/euphoric effects alleviate sorrow, fear and anger. Reports of prolonged exposure to multiple and potentially traumatic experiences are common among our respondents. The vast majority (90%) of the interviewees reported themselves to be struggling with problems at the time of illicit drug initiation with; 82% reporting domestic problems, 40% reporting living independently at an early age, 38% reporting symptoms suggesting psycho/pathological disorders, and 24% reporting justice-related problems. Our findings indicate that negative mood states are experienced as important precipitants of cocaine and heroin use and not merely as its consequences. ‘Availability’ was perceived as facilitating first use of cocaine and heroin. Our respondents, however, perceived ‘availability’ not as a sole motive for initiation but as strongly associated with living in marginalized situations. Although peer pressure was not mentioned, once in this marginalized situation peer influence seems to play an important role in the initiation of use. ‘Curiosity’ about these drugs, the finding that youngsters try drugs ‘to be part of a group’, for the sake of being together, and the factor ‘misinformation or accident’ also were perceived as facilitating first use. Initiation into cocaine because it ‘makes you physically fit and strong’, is in line with Magura et al. (6), who found that use of cocaine for the purpose of increasing energy is an important factor. There is a clear relation between cocaine use and nightlife with drinking alcohol. Previous research (7,8) shows that cocaine users often become involved with additional drugs as well in their attempts to balance or counteract the effects of cocaine. Our respondents sought heroin’s ‘depressant effect’ to deal with the over-excitability produced by frequent cocaine abuse.

In chapter four the third question on motives of young drug users for initiation into injecting and for not injecting is studied in. Of our respondents, 36% (N=18) had a history of injecting and 14 gave evidence of risky behaviour. Like Crofts et al., we found ‘stronger effect or rush, a more pleasant feeling’ the most common motive for initiation. Our subjects often expressed to suffer from deep personal grief that they felt could only be soothed by injecting. As in other studies (9,10) ‘curiosity’ can be an important motive. As did others (9,11,10,12), we found ‘economy’ to be an important reason for injection. Drugs are expensive, and drug users wanted to use the drugs as efficiently as possible, believing that the effect of injecting use lasts longer than smoking or that dope is lost in smoke without it being inhaled. Finally, our findings that ‘knowing others who inject’ and ‘not dangerous, healthier’ are motives for injection are also consistent with previous research (9,12).

Fear seems to play a key role in noninjecting young DUs, as illustrated by the strong anxiety about this form of drug self-administration. Fear of needles, damage to appearance, fear for not finding veins, and fear for abscesses were expressed by most interviewees. Others have reported comparable findings (11,13,14,15). A new finding was the fear for ‘overstepping a limit, taking a way of no return’ as a reason for not injecting. Injection drug use is, perhaps more than before, associated with a despised ‘junky’ status. Another striking finding is that five of our 32 interviewees’ only mention fear of illnesses, and none mentioned fear of HIV/AIDS specifically.

Chapter five elaborates on question four, the motives and methods of drug users in relation to cessation of injecting drug use. The described study shows that cessation of injection is a dynamic and long-term process of trial and error. It has also shown that injecting drug users usually have more than one motive for cessation of injection and
that these come together at a certain point in their lives. They also use more than one method simultaneously in order to stop injecting drug use. This study shows that health problems, poor veins, significant others in the lives of injecting drug users, and a sense of feeling condemned play an important role when it comes to cessation of injecting drug use. It also became apparent that periods spent in custody or in hospital are important reasons to cessation of injecting drug use. In spite of the complaints about the addictive effects of methadone, the most frequently mentioned method for cessation of injecting is the use of relatively high doses of methadone which is in line with findings of Langendam et al. (16). A switch to smoking heroin and cocaine was the second method used for cessation of injecting drug use. Shielding oneself, the use of medication (Palfium, Seresta, Valium, and Ritalin) and accommodation were also mentioned as methods for the cessation of injecting drug use. The main methods mentioned for the cessation of injecting drug use are also mentioned as methods for continuing not-injecting use. An exception would be finding a meaning in life/having a sense of purpose. The latter does not play a major role in the cessation of injecting drug use, but does play a role in continuing to abstain from injecting drug use and is mentioned as the second most important method for preventing a relapse.

The impetus for the study in chapter six was the need to explore unmet health care needs and barriers to health care utilization (question five). The study indicated that although there was much service utilization, there were many unmet needs, suggesting that services were highly accessible but not optimally providing what is wanted. Several barriers hindering appropriate health care use were mentioned. ‘Lack of personal supervision’ makes it difficult to find your way through the range of services offered. The barrier ‘help is not based on client input’ reveals the need to respect the client’s perspective. The young adult problem DUs felt that service providers often were judgmental, that they were too prescriptive, and often did not listen to them. With concern to the barriers in relation to services it became clear that many services are ‘fragmented’. Therefore people in complicated situations have to deal with several agencies, resulting in a loss of overview. Our respondents frequently mentioned ‘fragmentation’, and as a result, dumping people back into society, in reference to custodial settings. Consistent with other studies (17,18), our respondents saw being ‘on a waiting list’ as an important barrier for health care utilization. Respondents also felt that completing treatment was quite ‘optional’, resulting in them mistakenly stopping before the end of treatment. Finally, they revealed that for users to be eligible for support, detoxification was often compulsory and that services ‘focused too much on abstinence’. It should be emphasized, however, that 36% (N=18) of our respondents indicated that they did not want to stop using hard drugs.

Finally, in addressing question six, chapter seven shows that 44.5% of the hard drug users interviewed showed poor adherence to HAART. This is a serious development in view of the selection of resistant mutations, as a result of which HAART will no longer work at the individual level and resistant strains of HIV may be transmitted to other people. This study has shown that adherence in hard drug users is impeded by determinants to do with the medication itself, the individual and the environment. Side effects which may be worse than the condition itself, a treatment regimen which is difficult to fit in with the irregular lifestyle the drug user has had for years, the form of the medication and the bad taste were mentioned as determinants which have to do with the medication. According to interviewees, denial of one’s condition, insufficient knowledge and cognitive aspects such as doubt about the effectiveness, a high degree of
addiction, and feelings of powerlessness are determinants to do with the individual which are an impediment to adherence. Important determinants that have to do with the environment, and that play a role in adherence, are the individual’s relationships with doctors/nurses and social support.

8.2 Limitations

For the Amsterdam cohort study among drug users, to include as heterogeneous a group as possible, drug users are recruited at various locations. Originally (see chapter one), participants were recruited via the methadone programs, through a special STD clinic for drug using prostitutes (until 1997), and to a lesser extend by word of mouth. For the YODAM study, participants were recruited at the aforementioned cohort, but also on the street, and by respondent driven sampling. However, the original cohort group is a selection of all drug users because most of those who participated in this study were recruited within the Municipal Health Service and were on a methadone program at the time of the interview. For the YODAM the inclusion of young drug users already participating in the original Amsterdam cohort study and recruitment at methadone outposts may also have led to an overestimation of the proportion of opiate and methadone users. With respect to the respondent driven sampling in the YODAM, for the first stage of the snowball chain several respondents should be randomised from the original population to prevent moving in a circle within one subgroup. However, first stage respondents were selected from the cohort sample. Moreover, we also may argue whether we succeeded to recruit young drug users in the YODAM; half of the population was 27 years of age or older and was a problem drug user for seven years or more. However, the figures of low threshold methadone programs and methadone prescription to opiate addicted arrestees at police stations continue to show low and decreasing numbers of young heroin users. The difficulties to reach younger newly started drug users may also reflect the limited number of these drug users in Amsterdam. Another limitation we have to consider is the ratio of men and women in both the cohort and YODAM studies. We don’t know whether this reflects the gender distribution among hard drug users in the field. However, I do not feel that this eventual skewed gender distribution impacts on the findings of this study because the phenomena we studied are, except from those concerning health care utilization, not gender-based.

Given the limitations of our sampling design, objections may raise concerning the representativeness of our samples. In this respect it can not be ignored that illicit drugs and stigmatised behaviour have led to a situation in which nobody exactly knows the nature and size of the total population. So I think, it is doubtful whether research among hidden populations allows recruitment of a representative sample and research into drug use is one of the most speculative research fields. For both samples therefore, representativeness is not warranted and one should be careful in generalizing the present findings.

The epidemiological study has several limitations to consider when interpreting its findings: The size of the study is limited. Statistical power did not allow for studying the risk factors for injecting heroin use nor relapse. In determining abstinence and relapse the difference in frequency of drug use multiple times a week and once a week or less is arbitrarily. Selective loss to follow-up is a potential problem in relation to determining incidents.
Except for the epidemiological study, different sub-samples of participants in the original cohort and the YODAM study were approached to participate in the current exploratory qualitative studies. To guarantee for representative samples in a qualitative sense, this means samples which illustrate the phenomenon’s diversity and complexity, and which represent the variety of drug-using behaviour and health care problems in mentioned populations, we stopped interviewing when no new information was forthcoming. Although saturation of the data was achieved it is not for 100% sure that the motives, reasons and their content, described in these studies are generalizable to the represented populations. However, the quantitative data in these studies, are not generalizable.

In relation to the interviews we have to consider several limitations; first, current qualitative studies relied heavily on retrospective self-reports. However, problem drug users may have impaired memory. Besides, memory may be more impaired for some groups of users, e.g. drug users with coexisting psychopathology or HIV / HCV. Difficulty remembering behavioural events, differential recall and distortion influence the degree to which respondents provide reliable information. To minimize recall bias, we attempted to assist the interviewees by using a chronological interview structure and by referring to memorable biographical events when they were recalling their early behaviour. In relation to differential recall and distortion of facts one may say that problem drug use concerns potentially self-destructive and embarrassing behaviour and, although the interviews are done by a trained interviewer, may be difficult for respondents to admit. However, despite the potential problem of impaired memory, both earlier research elsewhere (19), and in the YODAM study (20) suggests that drug users generally give truthful and accurate information. Finally, although the interviewer encouraged free expression of feelings, the interviewees might sometimes have given socially desirable answers. However, our evaluation of the internal inconsistency of the interviews minimized potential distortions of this type.

To conclude; the main objective of this thesis is not to test some hypotheses on a representative sample, that allows for generalizations in a quantitative sense. Rather, it is to enhance the understanding of problem drug use behaviour in all its diversity and complexity for developing rational policies and effective interventions. Given the limitations of our research, I think for the subpopulation of problematic opiate users (heroin, methadone) who also use crack and/or had contact with health care we can draw conclusions from our findings.

8.3 Reflections on interventions and change

In the above summary several recurring themes can be distinguished. Drug use seems to fulfil several important functions and affect regulation, economy and status are mentioned in this thesis. Also the themes illness versus health, curiosity, peer influences, detention and basic needs - such as housing, social support, financial security and useful work - are noted. Finally, servers providers, attitude and supervision are regular mentioned. In the following paragraph I reflect on the implications these findings can have for interventions and change, making a distinction between preventive interventions on the one side, and cure and care interventions on the other.
**Prevention**

**Prevention of use**
At the time of cocaine/heroin initiation, the vast majority (90%) of the interviewees in the YODAM sample were struggling with problems. They were dealing with foster care/juvenile correctional institutions, addicted parents, (sexual) violence, psychopathology, or problems with justice. In terms of prevention and early intervention these results suggest that these youngsters could be a focus of specific programs. Because mentioned problems mostly reveal themselves in poor parent-child relationships and school problems, it makes sense to focus first on these aspects of child’s environment. Moreover, adolescents could be helped to more effectively identify and articulate their own problem experiences to family members or to other concerned persons.

Our observations on the motives and reasons related to drug use mentioned, do suggest that drug use mostly fulfils important functions. According to the interviewees, initiation of cocaine and heroin is promoted because their stimulating/euphoric effects alleviate sorrow, fear, and guilt, and thus fulfils an important psycho/emotional function. Drug use can fulfil a symbolic function too. Young people judge each other on the basis of image, style and possession of status symbols. Such symbols change constantly and may include drugs. Currently held negative images of heroin use and injection drug use, perhaps more than before, lead to a despised ‘junky’ status and a sense of feeling condemned, contributing to their decline.

To target interventions precisely at issues that are personally relevant for the specific populations, programs to be more effective should focus on these functions behind use, rather than haphazardly intervene or trying only to discourage use.

Experimentation with illicit drugs starts at a relatively young age (mean 16.5 years), therefore such programs must target these groups while they are still in elementary school, as well as thereafter.

‘Availability’ in marginalized places and being offered drugs on the one side and ‘trying drugs to be accepted by the group’ on the other side are other important perceived factors associated with first use mentioned in this thesis. Interventions focusing on these motives should equip young people with a critical attitude and the interpersonal tools to deal with the various situations in which drugs may be available or on offer.

**Prevention of injecting**
Despite a decreasing trend in injecting drug use in Amsterdam, intravenous use still occurs among opiate users and those with a history of injection. ‘Affect regulation’ as an important motive for initiation of use and ‘better effect or rush, a more pleasant feeling’ as a motive for injecting may both have the same function and indicate traumatic experiences and deep personal grief, for which drug use serves as self-medication. Effective psychological and medical interventions in a very early stage can prevent youngsters both from initiation and injecting.

In this thesis two chapters focus on the motives in relation to injecting drug use. Chapter 4 reveals motives for and against injecting drug use among the new generation of drug users. Chapter 5 shows motives and methods of cessation among a ‘former’, mainly heroin addicted generation. Comparing the motives against injecting drug use (chapter 4), with the motives of cessation of injection (chapter 5), shows important resemblances.
‘Health problems’, ‘not being able to find veins and abscesses’, ‘dependence’ or ‘overstepping a limit’, and ‘fear of overdose’ were mentioned in both generations, suggesting strong and timeless motives for non-injecting. ‘Damage to appearance’ and ‘satisfied with smoking’ were motives of the new generation.

‘Curiosity’, to obtain ‘available’ drugs, and ‘knowing injectors’ are important factors associated with initiation of cocaine and heroin and to start injection. However, in order to satisfy their curiosity and to get drugs and information youngsters depend heavily on their drug-using peers. Most of the initiator’s peers used drugs, learned how to use from peers, obtained free drugs from them and used drugs in the presence of other drug users. However, since we found no proof of peer pressure to use drugs, I believe that interventions can be based on peer networks. Significant others in the user’s social network also play an important role. Interventions which make use of the influence of these persons may turn out to be effective also.

Cure and care
The Amsterdam drug problem has primarily been interpreted as a heroin problem. Both treatment services and research are mainly focused on heroin users and, during the 1980, with the spread of HIV more specifically on injecting drug users. In most European countries, treatment programs have been developed for these patients and services have something on offer mainly for heroin users. Although interviewees did indicate that they saw the addictive nature of methadone as a big problem, analysis of the interviews showed that the use of high dosages of methadone still play an important role in relation to controlled heroin use and cessation of injecting heroin use.

However, as in other European regions, studies show a clear tendency towards increasing cocaine use in Amsterdam and we should realize that we have to do with a new generation of users. Cocaine is now the most common drug of initiation and addicts who exclusively used heroin in the 1970s, became the current multiple-substance abusers with an excessive reliance on crack. Moreover, the majority of crack cocaine users without a history of opiate use will not start using heroin in the coming years.

However, due to the complexity of the problems of many crack cocaine users and a lack of evidence to support interventions, we see health services that have little on offer for crack users. This not-optimal service quality for crack cocaine users has resulted in dissatisfaction and presumably the reason they are difficult to reach. From this perspective it is better to speak about ‘difficult to offer’ instead of ‘difficult to reach’ and to my opinion health care provision for current problem drug users is a new challenge that requires a different approach.

1. From the results one knows that service integration of addiction, mental, physical, and social services is necessary for the success of current problem drug users to help. Integration helps providers meet user’s need, since few have expertise in all areas. Because ‘fragmentation’ was frequently mentioned in reference to custodial settings, I think that workers, (e.g. probation officers) could identify drug users through the jails and start them with integrated services, especially those focusing on users’ basic needs.
2. Next, ‘lack of personal supervision’ makes it difficult to find your way through the range of services on offer and even with integrated services a case-management approach seems important. The case-manager also should focus more on users as individuals and must realize that communication begins with his/her listening to the
stories that the problem DUs need to tell. An optimal relationship involves trust, concern and continuity.

3. For both, users who want to stop drug use and for users who don’t want to stop, it should be emphasized that health care focuses primarily on the basic needs - such as housing, social support, financial security, and good working conditions - of these marginalized individuals. It might keep them in better contact with health care services. At least some of users’ needs would be met, which would benefit them and the community, and such contact might later lead to additional help or treatment.

4. Special for the subpopulation of the difficult to help problem drug users, great emphasis could be placed on outreach activities to motivate them to come in contact with health services.

5. Periods spent in custody and to a lesser extent in hospital, are strongly associated with transition to non-frequent drug use, as well as abstinence oriented treatment. Once the user is away from other drug users and is given the correct dose of methadone and/or other medication, time spent in custody or in hospital may leave the user feeling calm and safe, which may in turn afford him/her the opportunity for reflection. Reflecting on their own situation appears to be an important condition for a change in behaviour. However, these high rates of transition to non-frequent drug use and abstinence, are followed by high rates of relapse. Therefore, these periods may be suitable points in time for interventions that specifically target drug users who temporarily control their drug use in order to prevent relapse.

6. To prevent further deterioration I am also of the opinion, that besides motivational interviewing and assertive treatment activities, because of high percentages of psychopathology, using legislation to compel users to make a choice between treatment or detention, is important.

7. Next, effective treatment strategies must be developed and implemented for the growing population of crack cocaine users.

8. From the results we know that problem drug users generally are enthusiastic about learning practical skills. To prevent them mistakenly stopping before the end of treatment (abstinence-oriented) and making it more effective, maybe treatment should focus more on practical skills instead of therapeutic sessions. For most problem drug users, with their lack of scholastic attainment, therapeutic sessions are difficult to follow. Besides, this study shows that having a sense of purpose/occupation does play an important role in continuing controlled drug use and abstinence. Practical skills better prepare these patients for finding a meaning in life (work, computer, music).

9. Finally, it should be emphasized that about one-third of our YODAM respondents indicated that they did not want to stop using hard drugs. Although their response could not be compared with other recent quantitative studies, this can be considered as a high number. It raises the policy question as to whether addicted people not in treatment should be offered all kinds of services. The answer should be based primarily on a pragmatic, public health perspective rather than on ideology. On the first place I believe it remains important to focus on users’ basic needs as I mentioned before. I’m also of the opinion that controlled drug use, as a goal of treatment for problem drug users, should be considered.
References
17. Carroll, KM; Rounsaville, BJ. Contrast of treatment-seeking and untreated cocaine abusers. Arch Gen Psychiatry 1992, 464-471
20. Welp, E; Bosman, I; Langendam, M; Ameijden van, EJC. Amount of self-reported illicit drug use compared to quantitative hair test results in community-recruited young drug users in Amsterdam. Addiction 2003, 987-994