TIHOMIR BEZLOV CAS BARENDREGT

INJECTING DRUG USERS IN BULGARIA

Profile and risks

Initiative for Health Foundation



This study was conducted with the joint efforts of Addiction Research Institute IVO - Rotterdam; Initiative for Health Foundation - Sofia; Panacea Foundation - Plovdiv; Doze of Love Association - Bourgas; Pleven 21-st Century Foundation - Pleven.

The research team consist of Tihomir Bezlov (senior researcher), Cas Barendregt (senior researcher), Agnes van der Poel (expert), Atanas Rusev (local researcher), Atanas Louizov (local researcher), Dimitar Grancharov, Julian Marinov (local researcher), Mitko Stamatov (local researcher).



IVO, Addiction Research Institute Heemraadssingel 194 3021 DM Rotterdam The Netherlands Phone ++31104253366 Fax ++31102763988

E-mail secretariat@ivo.nl



Foundation 52A, Todor Kableshkov Str. 1680 Sofia, Bulgaria Phone/Fax +35929550472 E-mail sofianep@online.bg

www.initiativeforhealth.org

Initiative for Health



Panacea Foundation
19, Bojidar Zdravkov Str.
4006 Plovdiv, Bulgaria
Tel/fax: +359 32 626 379
e-mail: panacea@plov.omega.bg



Pleven 21-st Century Foundation 23, D. Konstantinov Str. 5800 Pleven, Bulgaria Tel/fax: +3596800271 e-mail: cnso@el-soft.com



Doze of Love Association 17, Graf Ignatief Str. 8000 Bourgas, Bulgaria Phone/ Fax +35956841488 E-mail: doseoflove@bitex.com

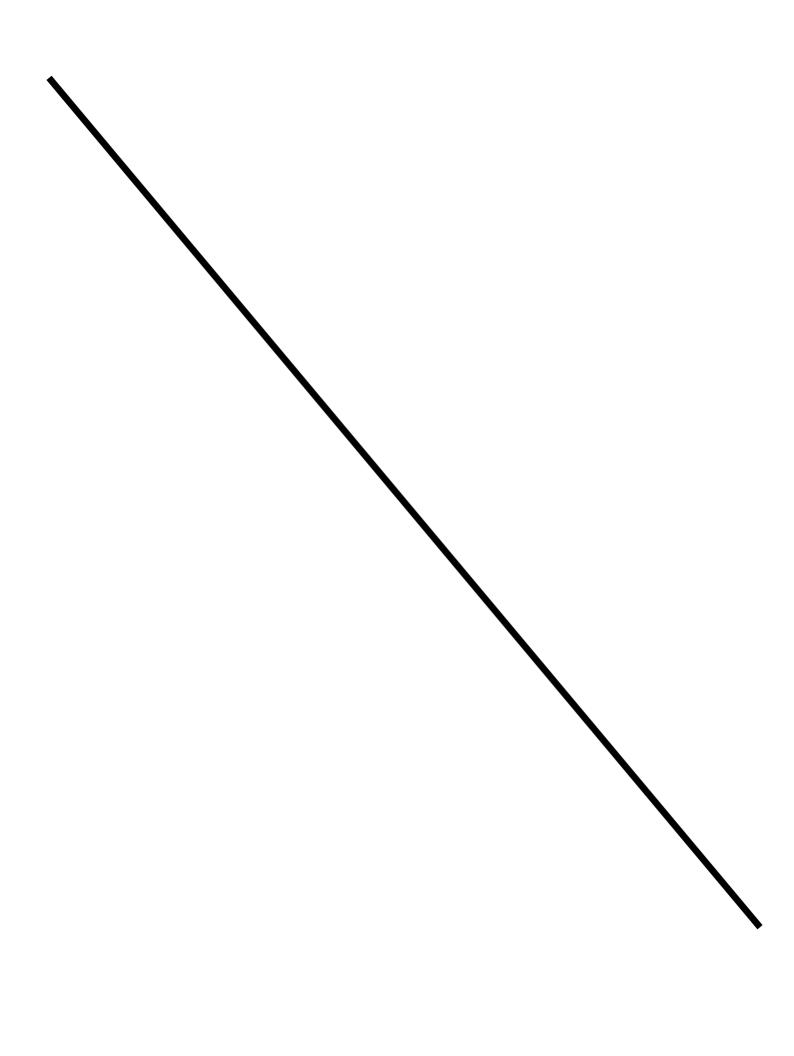
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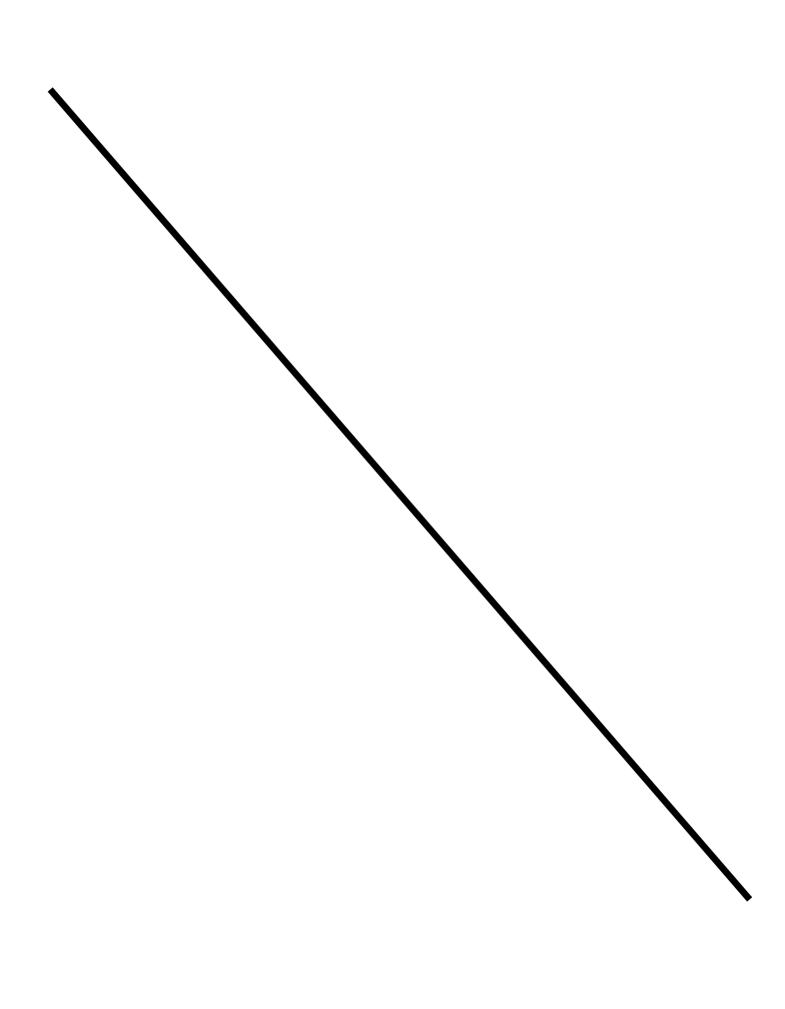
Introduction

With the falling apart of the model of total police control and the liberalization of Bulgaria's economy in the early 90ies, heroin becomes commodity easily accessible. This is highly facilitated by the country's location on the main road of heroin from Turkey to Western Europe. Unlike Central European countries such as Hungary, the Czech Republic and Poland, however, Bulgaria has been a much more isolated country during the time of Soviet domination and the heroin epidemic in the middle of the 90-ies turned into a virtual cultural shock. At the same time the country's encapsulation has preserved the conservative attitudes of the population, which is extremely hostile to drug users. As a result, the injection drug users in the country's largest cities become hermetic and marginalized groups. Regrettably, despite the epidemic rate of growing use of psychoactive substances after 1990, the public continues to know too little about the drug users, as well as about the risks related to them. The project "From Pilot to Professional", funded under the EU PHARE programme made possible the conduction of the first national survey among out of treatment injection drug users (IDU) in the country.

In the summer of 2003 four Bulgarian non-government organizations - Initiative for Health Foundation - Sofia, Dose of Love Association - Bourgas, Panacea Foundation - Plovdiv, and Pleven 21 Century Foundation in cooperation with the Addiction Research Institute IVO - Rotterdam succeeded in conducting a survey requiring special efforts. The four

Bulgarian organizations implement harm reduction programmes among the IDU in the four cities since years 1999 - 2000. They implement an outreach approach to the IDUs providing needles and syringes for exchange, as well as health services. As a result from this experience the programmes were able to secure a unique possibility to interview a great number of not easily approachable persons (from hidden and encapsulated communities) who were to provide answers to questions that are not easy to talk about.

The survey team hopes that after this survey it will be much more difficult to make incompetent statements, now that facts are available.



Design, methodology and background of the survey

The survey "Injecting drug users in Bulgaria - profile and risks" is to meet several principal aims:

- To gain an overall idea of the demographic and socio-economic profile of the country's injecting drug users;
- To attain a clear picture of the immediate environment where the drug users live (housing, family, frequency of environment change, etc.);
- To analyze the existing patterns of drug use with regard to the types of psychoactive substances, frequency of use, manner of use, crises during use, etc.
- To analyze the patterns of access to drugs;
- To describe and analyze the patterns of risk-posing social behaviour among drug users:
- To describe and analyze problems faced by drug users - difficulties with parents, law enforcement and access to health care:
- To explore the main risk factors enhancing the chances for HIV and blood-trans mitted infections, along with certain workable alternatives to change the present status quo;
- To compare the risk levels among injection drug users (IDU) covered by harm reduction programmes to those with IDU outside of the programmes. To verify the hypothesis that participants on harm reduction programmes have lower risk behaviour as related to HIV and blood-transmitted infections thanks to having better health care culture and awareness of the risks related to injecting and unsafe sex.

As method of collecting information what was implemented was benchmark interview with respondents (face-to-face). The questionnaire contained 261 variables grouped

in 18 sections, to be covered in 45 min average length of an interview.

The questionnaire was prepared as based on models used on many occasions by the Dutch partners in research projects of the Addiction Research Institute IVO, Rotterdam. The final version was the outcome of a working seminar, attended by four Bulgarian teams of sociologists - each representing one of the Bulgarian non-government organizations carrying out the project - Initiative for Health Foundation - Sofia, Dose of Love Association - Bourgas. Panacea Foundation - Plovdiv, and Pleven 21 Century Foundation, as well as by experts of the Dutch partners in the face of Cas Barendregt and Agnes van der Poel. Before the launch of the survey the guestionnaire was tested in a pilot study of 10 IDU, and was additionally modified accordingly.

A total of 501 IDU were interviewed during the interval 28 July - 7 October 2003. Selection of participants took place in 4 cities according to preliminary quotas determined. 201 interviews took place in Sofia, 100 ones in each Plovdiv and Pleven, and 99 in Bourgas. The basis for IDU recruitment were attendants of the needles and syringes exchange programmes (NEP) of Initiative for Health Foundation in Sofia, of Panacea Foundation in Plovdiv, of Dose of Love Association in Bourgas and of Pleven 21 century Foundation in Pleven. The quotas for each of the cities were divided into two groups: "participants" ("attendants") on NEP and "non-participants" ("non-attendants"). Interviewee selection followed the principle of keeping anonymity, for recruiting NEP participants their personal anonymous codes were used through which they take part in the programmes. For each of the four programmes a step was chosen to

fill the "participants" group, observing the principle that must have been NEP attendants for six months before the survey. With the "non-participants" the method used was "snowball" by one step. Each of those selected as interviewees gives the names of several non-attendants (between 2 and 6) and the interviewers randomly choose one. Each respondent was paid 5 BGN for an interview and 3 BGN for a "non-attendant" they have brought. The initially intended proportion between "attendants" and "non-attendants" was 75% to 25%.

External factors in the process of the survey necessitated certain changes of the original plan. In Pleven out of 76 regular attendants six months before the survey 62 were reached - the rest happened to be out of town for the summer season or due to police custody. As a result, the non-attendants are 38 instead of 25 planned. In Bourgas the correlation "attendants" - "nonattendants" is 51 to 49, the main reason for the change being the fact that in the vacation city the number of non-resident IDU seasonally increases times the usual, while the regular attendants scatter around the seaside and cannot be reached. In Plovdiv the correlation "attendants" -,,non-attendants" is 82 to 18. The setting up of new points for exchange of needles and syringes in Plovdiv was why the principle was opted for the new NEP attendants there to be interpreted as "non-attendants". In Sofia "the NEP attendants" are 128, and "the non-attendants" - 72. In the capital city towards the end of the inquiry all traced NEP attendants had to be interviewed, and among them "key" ones were employed to bring in 4-5 non-participants in the programme. The reasons why the approach was thus altered are the following: (1) The registration codes initially used to compile the randomized sample proved not sufficiently reliable. In fifty percent of the cases it turned out impossible to trace the person behind the respective code, even with the close cooperation of the outreach workers. (2) A large number of the programme attendants use false codes (and frequently change them), which renders their identification impossible. (3) The small number of stable NEP attendants at the outreach points was selected for the survey, which was additionally reduced, especially among IDU ethnic Roma (a considerable number of attendants were in prison at the time of the survey). (4) The seasonal specificity at the time of conducting the interviews - a significant number of IDU were outside of Sofia at the time, which largely complicated the process of recruitment of both ,,regular attendants", and "non-attendants".

Supplementary to the benchmark interview, information was collected in the form of participant observation. This observation involved our staff taking notes about the interview process, the more relevant events and issues discussed with IDU, registered as taking place in their natural environment. This information was taken down in a record book to be later analyzed for the purpose of supplementing and elucidating the data collected by the questionnaire, thus securing the external validity of the quantitative data.

1. Demographic and socio-economic profile of the injection drug users

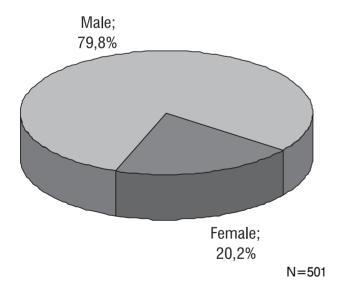
1.1. Demographic characteristics

Using the survey data, it should be borne in mind that, unlike typical representative studies, in this case we have results from two types of quotas¹, which implies that all characteristics suggested below do not claim to be representative. Yet, the data obtained are unique and there is enough evidence to presume that the demographic correlations acquired do reflect the real demographic structure of the drug users' population in Bulgaria².

A starting point for the analysis can be the distribution by gender. Data confirmed the correlation men-women attained under previous studies, medical statistics and expert estimations. The ratio is nearly 4:1 in favour of the men (see Chart 1).

Comparing Bulgaria with Western-European countries, we can see the country is naturally positioned right as a borderline case between the South-European coun-

Chart 1. Distribution by gender



tries and the Central-European ones (see Table 1).

Table 1. IDU by country and by gender (%)

	Men	Women
Sweden	64	36
Austria	72	28
Finland	73	27
Denmark	77	23
Ireland	77	23
Germany	80	20
France	80	20
Holland	80	20
Bulgaria	80	20
Portugal	83	17
Spain	85	15
Greece	86	15
Italy	87	13

Source: EMCDDA, Annual report 2003 http://annualreport.emcdda.eu.int/en/page109-en.html

Notably, cities appear to come divided into two groups: in the largest cities - Sofia and Plovdiv the correlation is 3:1, and in cities like Bourgas and Pleven - 7:1 (see Chart 2).

The most powerful factor causing this dichotomy among cities can be said to be the participation of the Roma population. As it has been mentioned, the presence of Roma among the IDU in Pleven and Bourgas constitutes single individual cases. A comparison of the Bulgarian and Roma populations by gender demonstrates that with the Roma the female proportion is considerably larger than with the Bulgarians (see Chart 3 and the analysis by ethnic presence).

¹ By cities, and by the indicator participant-non-participant in the needles and syringes exchange programmes. In this context all demographics obtained are within the set quotas and give some very general structure, not claiming to reflect the demographics of neither the country, nor even the cities where the inquiries were held.

² Due to the large number of cases and the possibility to compare different types of cities.

On the other hand, worth noting is another factor. According to the survey data, the inclination to deviant behaviour among the women is more conspicuous in larger cities as compared to the smaller ones, and among the Bulgarian ethnic group (see Table 2).

With regard to the participation/non-participation in needles syringes exchange grammes (NEP) another interesting regularity is observable -- more women's presence (Chart 4), which can be interpreted in the sense that the participants are more inclined to more risk behaviour (a hypothesis discussed later in the text).

Analysis by age shows that the youngest respondent is 15 years old3, and the oldest - 52 vears of age. According to data, the average drug users' age is 24,2; 23,0 if median is used (see Chart 5).

Observably 81% of the drug users fall within the range 18-28 years of age, 69,8% belonging in the group below 25. These data, along with the answers to the

question, "What age were you

Table 2. Comparison of IDU by ethnic group and

		Roma	Bulgarians
Plovdiv	Men	68,8 %	75,4 %
	Women	31,2 %	24,6 %
Sofia	Men	71,4 %	76,8 %
	Women	28,6 %	23,2 %
			N=301

Chart 2. Distribution by cities and by gender

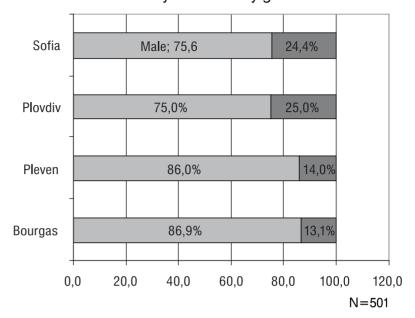
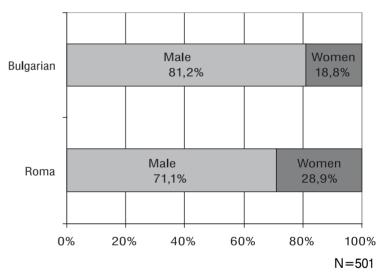


Chart 3. Distribution by ethnic groups and by gender



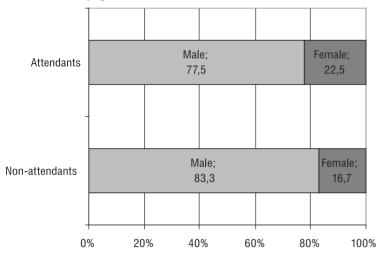
Grouping of IDU by age gives the following picture:

Age groups	Percentages
Under 20	17,2 %
20-25	45,3 %
25-30	24,6 %
30-35	10,6 %
over 35	2,4 %

³ Importantly, given the condition NEP do not work with youths aged under 18, a ,,natural" barrier existed in the sample range of programme "attendants", and nobody under 18 fell in. Along these lines the fact can be explained, that with the "non-attendant" group the average age was lower.

gender

Chart 4. Juxtaposition of attendants - non-attendants by gender (%)



N = 501

when you first injected illicit drugs?" give us grounds to assume that the most risk exposed age zone is 17-21 years of age.

As to the average age by gender it turned out there was almost full coincidence between men and women, which can be described as surprising. Another unexpected specificity of the distribution by age is the higher average age for the Roma ethnic group, respectively 25,5 (Median - 24,0).

Distributions by age for the four cities showed that the highest is the average age in Sofia -25,0. In the remaining three cities the average ages are very close to one another: in Plovdiv -22,0, Bourgas - 22,8 and Pleven - 23,6 years of age. Lower average age in cities like Plovdiv and Bourgas is caused by the fact that the oldest IDU there is 35, while in Sofia - 52, and the IDU over 40 years of age are 5% of the respondents. Lower average age in the cities outside the capital is explicable in terms of existence of users in Sofia as early as before 1990, as well the earlier beginning of the "heroin epidemic"⁴.

As in regard to the NEP non-participants, however, the hypothesis that the average age is lower was justified. The average age of the NEP participants is 25,1 while that of the non-participants is 22,0.

When the age of IDU is analyzed, extremely important is the question what the trend is like concerning the average age. Worldwide practice has demonstrated that lowering of the average age creates preconditions to expect growth of use and its related risks. The survey data, however, shows that the trend is towards growing average age among IDU. If we com-

pare with the survey⁵ of Initiative for Health of 1998, a visible shift of the IDU average age is seen - from 21,5 to 26 years of age. What is more, if then more than 3/4 of the respondents were under 25 years of age, now 60% remain within this age range. Regrettably the 1998 survey was not representative and took place solely in Sofia. These data get confirmed by the registrations of NEP attendants⁶ and the operative police statistics on the average age of users in custody.

Similar trend, however much less conspicuous, is observable with IDU looking for assistance at the National Centre for Addictions (NCA) (see Chart 6).

Lower average age is explicable in many ways. In the first place the country's demographic factors are at play. Low birth rates in the mid-80-ies gave less numerous cohorts⁷ entering vulnerability age zone (15-18 years of age) after 2000 than those in 1995-1999. Secondly, clear indications are there, that the peak of the heroin epidemic has passed in 2000-2001 and the trend is

 $^{^4}$ See "The Drug Market in Bulgaria", Center for Study of the Democracy, Sofia 2003 ϵ .

⁵ "Injection drug use: situation, trends and risks", "Initiative for health" Foundation, Sofia 1998.

⁶ According to demographic data contained in the registration files of programmes attendants in the four cities.

⁷ Those born in the same year.

Chart 5. Age distribution of IDU.

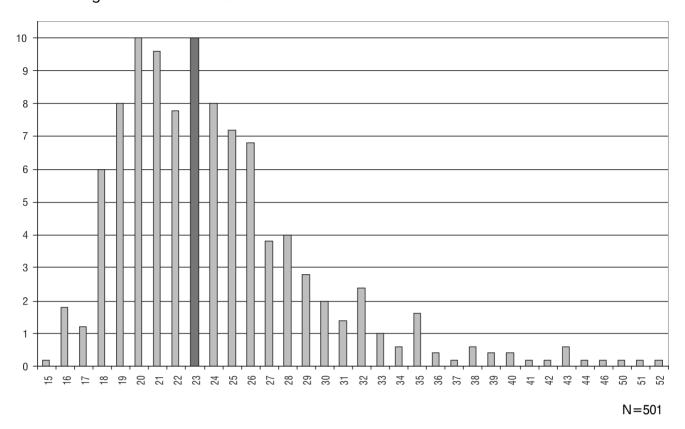
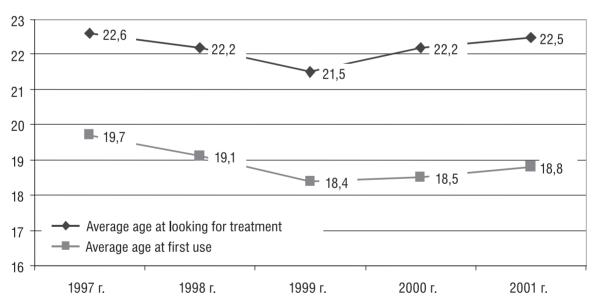


Chart 6. Average age of first use and looking for treatment (%)



Source: NCA

establishment among these age groups of cannabis).

now slightly downward. To the above two new, "fashionable" narcotic substances factors we can add the introduction and (various versions of amphetamines and

⁸ Various factors have contributed to the end of the heroin epidemic. Firstly, the public experience accumulated, hence recognition of the danger on the part of the generation of adolescents in the 90-ies. Crisis in the structure of drug distribution bringing about a drop in the quality of offered heroin, etc.

Chart 7. Average age of those seeking help for the first time (%)

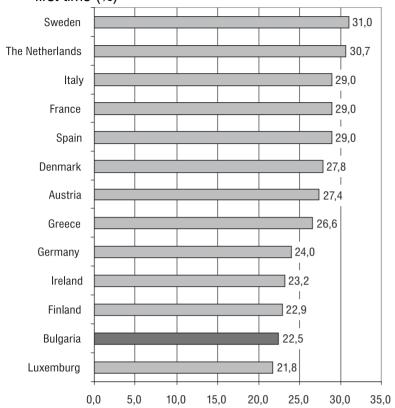
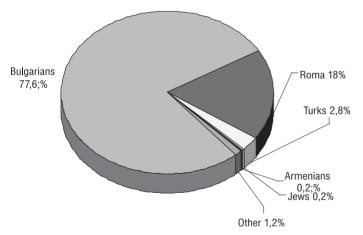


Chart 8. Ethnicity distribution



N=501

The comparison of the average age of Bulgarian IDU with that in the countries of Western Europe (see Chart 7) shows that Bulgaria is a "very young" scountry as yet. Along these lines it can be prognosticated, that probably in the future the average age

in the country will continue to grow, and that the harm reduction programmes for IDU will have to take into account that the IDU population will be growing older.

Along **ethnicity lines** the survey shows that the two groups of IDU are Bulgarians and Roma, representing 95,6% of the sample (see Chart 8).

Interpreting the data one should consider big differences between the four cities where the survey took place. Residents in Sofia and Plovdiv are a significant number of representatives of the Roma ethnic group who are seriously affected by the epidemic of injection drug use and the study has registered this saturation (see Table 3). In Bourgas and Pleven there is a special ethnic situation. In Pleven Roma ethnic group is very small, while in Bourgas - although there is a

sizeable Roma ethnic community, as per reports of the NEP working in the city, practically there are no IDU among them. The Turkish ethnic group also has its presence in three of the cities, still reasons are there to believe that in the cases of Sofia and Plovdiv it is the Roma who have Turkish self-identification. However, no clear explanation suggests itself for Pleven, where in percentage expression the share of IDU from the Turkish ethnic group is significant.

The survey data have manifested, that among the Roma ethnic group injection use in Sofia and Plovdiv is 3 to 7 times more in comparison with the Bulgarian. According to available demographic data and estimations the Roma population in the capital city is between 3,5% and 4,5%, and according to the survey the Roma IDU in Sofia are 28%. In Plovdiv the Roma ethnic group is

⁹ The sole data allowing us to draw a valid parallel of the average age of IDU in Bulgaria with those in Western Europe are the data on those seeking help for the first time. Here it must be said that NCA average age data for the period 1998-2000 come very close to the data of Initiative for Health Foundation, and seem a relatively sound basis for comparison.

Table 3. IDU comparison by ethnic groups in the four cities (%)

	Sofia	Plovdiv	Bourgas	Pleven
Bulgarian	68,7	61,0	98,0	92,0
Roma	27,9	32,0	1,0	1,0
Turkish	2,0	3,0	0,0	7,0
Armenian	0,0	1,0	0,0	0,0
Other	1,5	3,0	1,0	0,0

N = 501

assessed to be within 8% to 10% of the city's population¹⁰, and the Roma among IDU are 32.0%.

The NEP "attendants" and "non-attendants" data is relevant to analyze only for Sofia due to the insufficient number of "non-attendants" in Plovdiv. In the capital city the Roma predominate among "the attendants"- 40,2%, while in the group of non-attendants they represent as little as 9,7% (i.e. the Roma are 4 times more among the attendants in comparison to non-attendants).

Important is the issue of what the situation is with the injection drug use among the foreigners residing in Bulgaria. It is well-known that in the country after year 1990 a serious growth is observable of "the new minorities", that is persons settling in Bulgaria coming mainly from the Middle East, China and less frequently from North Africa. According to various analysts, it is through these emigrants from the Middle East that heroin started to invade Bulgaria in 1990. On the other hand, the country boasts a traditionally strong tourist industry welcoming over 3,5 million tourists annually,

and in the last 4 years the registered percentage growth is double digits. This influx of foreigners is further substantiated by emigrant channels from Asia and Africa passing through the country. In view of this human traffic, the typical practice for the transit travellers is to remain in the country longer. All this gives rise to assumptions, that foreigners are a risk factor in the injection drug use. The survey registered 0,8% (n=4) foreign presence in the sample, which matches the percentage of foreigners permanently residing in Bulgaria¹¹. Unfortunately, though, the small number of cases does not allow making any valid estimation as to whether actually the risk-bearing foreigners have been reached by NEP. A cross-section manifests that three identified themselves as "attendants", while one as "non-attendant". Notably, according to experts, among the foreigners coming from the Middle East there are a significant number of IDU, yet they are a "hermetic" community, and remain therefore difficult to reach by NEP.

Distributions by education show, that more than half (53,4%) of the IDU have secondary education and a relatively small percentage (8,4%) have no education or have a university degree: (4,2% see Table 4).

The juxtaposition of the IDU education structure with the country's education structure shows greatest discrepancy with the group of college and university degree holders, where the average percentage for the country is higher. Also with the IDU the percentage of those below basic education is

¹⁰ It must be said that researchers in Bulgaria debate at present on the size of the Roma ethnic group. According to 2001 census, the Roma population totals 370 908 (4,7% of the country's population). This figure is believed to be low due to the fact, that part of the Roma population is self-identified as Turkish, and to a lesser degree - as Bulgarian. As a result, the evaluations of the size of the Roma community range between 400 and 800 thousand. Similarly stand the evaluations by settlements. Sofia is believed that out of a population of 1 170 842 (2001) between 35 and 45 thousand are Roma, for Plovdiv - out of 375 000 - between 30 and 40 thousand. Factors additionally contributing to some fuzziness of the evaluations relate to the huge migration of the Roma population - both constant and seasonal.

¹¹ According to expert evaluations the foreigners permanently residing in Bulgaria are 1% (standing for around 62 thousand) of the country's adult population.

Table 4. Distribution by education (%)

	IDU	Average for the country	IDU "non- attendants"	Roma IDU
No education	8,4	9,0	6,9	43,3
Primary school (4-th class)	5,6		3,5	22,2
Basic school (8-th class)	27,2	27,2	24,8	25,6
secondary (11-12-th class)	53,4	50,0	57,9	7,8
college (+ two years)	1,0	4,8	1,0	
bachelor (+ 4 years)	2,6	12,0	4,0	1,1
master (+ 2 years)	1,6		1,5	
other	,2		0,5	

N = 501

Table 5. Comparison of IDU education by cities

	Bourgas	Pleven	Plovdiv	Sofia
No education	,0%	,0%	15,0%	13,4%
Primary school (4-th class)	1,0%	1,0%	8,0%	9,0%
Basic school (8-th class)	23,5%	32,0%	34,0%	22,9%
Secondary (11-12-th class)	68,4%	61,0%	40,0%	49,3%
College (+ two years)	,0%	2,0%	,0%	1,5%
Bachelor (+ 4 years)	5,1%	1,0%	3,0%	2,0%
Master (+ 2 years)	1,0%	3,0%	,0%	2,0%
Other	1,0%	,0%	,0%	,0%

N = 501

higher, still with the remaining primary educational degrees there are no significant differences. Commenting on the IDU level of education, it must be borne in mind, that their average age in the country is still low 23-24 (especially outside of Sofia), and with its anticipated movement up, it can be predicted that the educational levels will also go up. The comparison "attendants" versus "non-attendants" shows, that the "non-attendants" have higher level of education (see Table 4).

With regard to the distribution by settlements, strikingly enough, the largest cities Sofia and Plovdiv are the place of residence of the most of those with no education and primary education (see Table 5). Juxtaposition by ethnicity principle gives a clear clue to this seeming anomaly - over 91% of the Roma have education basic or below basic. Thus in the cities where the Roma ethnic group is well-represented among the IDU, the educational structure reflects that.

1.2. Socio-economic profile

Outlining the socio-economic profile three major IDU characteristics will be considered - incomes, family environment and housing conditions.

One of the least clear questions related to drug use in Bulgaria remains to be how this use is possibly funded in view of the country's utterly low average incomes. Present survey data for the first time in our country allows an analysis of the main sources of incomes and "personal strategies" among this isolated and hermetic group - the injection drug users. According to the inquiry on the personal strategies, typically they have access to more than two sources of income on average (see Table 6).

Table 6. Rating of IDU sources of incomes

	%
From parents / relatives	75,8
Other legal employment, "grey", no contract	43,3
Crimes against property: thefts	38,7
Other	26,6
Legal employment, "white" employment,	
under contract	19,8
Dealing in illicit drugs (for their own account)	13,6
Employment for a dealer as shipping,	
racketeering, intermediating, dealing, etc.	11,8
Begging	11,2
Crimes, involving violence	
(burglary, assault, blackmail, etc.)	8,0
Selling sex services (for themselves)	8,0
Rents	6,2
Social benefits	4,6
Selling sex services (through others)	3,6
Dealing in medical drugs or methadone	3,4
Scholarship	2,4
	N=501

As seen, 75% of the IDU depend on means from their parents (relatives), second to which comes employment without contract, and third - thefts. At the same

time, it becomes clear that there is a really impressive "diversification" of sources. Out of 15 pointed to in the inquiry, only 5 of the sources yielded less than 8%. When interviewees were asked to determine which is the most important source for them, "first" and "second" places were again "parents" and "employment without contract". Defining the sources in this way we are able to see that there are two almost equal groups, with various personal strategies to earn income (see Table 7). A more numerous group - 38% of the IDU depend on their parents first, then on some other source. The second largest group of 32% puts first a source of incomes different from parents (relatives) like employment without contract, thefts (no violence), selling sex services etc. enlisted. The cross-analysis shows, that 85,4% from those supported by their parents also live together with them. How very significant parent support is comes substantiated by the fact, that even when relationships with their parents are poor, 64,3% continue to receive support.

The attempt to describe any strategies different from these two where the parents are the pillar, demonstrated that over factorial analysis¹² of 15 sources of incomes, several alternative patterns shape themselves. The first factor, which we provisionally call "crime activity", shows a high positive correlation value with such sources of incomes as "crimes against property", "crimes using violence", "employment for drug-dealer" or "as drug-dealer" and negative feelings for incomes from "parents" and "incomes from employment". Such "anti-parent" scheme is also found with the two factors where

¹²Statistical analysis outlines 6 significant factors

Table 7. Rating of sources of incomes for IDU (%)

	First in	Second in
	importance	importance
Parents	37,7	32,4
Other legal employment, "grey", no contract	15,4	16,7
Crimes against property: thefts	11,6	14,1
Other	7,0	13,8
Selling sex services (for themselves)	5,0	1,2
Dealing in illicit drugs (for their own account)	3,0	1,9
Selling sex services (through others)	1,6	0,7
Rents	1,4	2,3
Employment for a dealer as shipping, racketeering, intermediary, dealer, etc.	1,2	3,3
Begging	1,0	2,8
Social benefits	0,8	1,4
Crimes, involving violence(burglary, assault, blackmail etc.)	0,6	2,3
Dealing in medical drugs or methadone	0,4	0,7
Scholarship		0,7
		N=50

Table 8. Comparison by factors

	Crime		Selling sex services (1)	Selling sex services (2)
From parents	-0,174	From parents	-0,525	
Legal employment under contract	-0,251	Legal employment under contract	-0,393	
Crimes against property	0,696	Social benefits	0,524	
Crimes, involving violence	0,502	Crimes, involving violence		-0,360
		Selling sex services (for themselves)	0,535	0,549
		Selling sex services (via somebody else)	0,173	-0,572
Drug dealer (working for other)	0,658	Drug dealer (working for other)	-0,288	0,212
Drug dealer (for their own account)	0,673	Drug dealer (for their own account)	-0,318	0,232
·		Begging	0,373	

N = 501

income from selling sex services is highest (see Table 8).

Income sources data serve as good grounds to draw several central conclusions:

■ Based on the average frequency of heroin use (see Table 25) and price per dose¹³ the approximate average monthly IDU spending on heroin could be tentatively calculated. That is lowest in Pleven - between 38 and 45 leva, moving up to 115 - 174 leva in Bourgas, reaching 180 - 260 leva in Sofia to go highest in Plovdiv between 205 and 480 leva. It is noteworthy that the IDU

spending in Bourgas and Sofia might in reality go significantly up due to poliuse infiltration, as compared to Plovdiv for instance (see Part 2). Juxtaposing these figures it must be borne in mind that at the time of survey the average salary in Bulgaria was 280 leva, while the average per capita income was around 130 leva. Hence, the only possible strategy for the IDU can be none other than looking for different sources of simultaneous incomes.

Primary source of funding for drug use undoubtedly are the parents. The argument, IDU explain their parents'

During the summer of 2003 a dose of heroin cost an average of 6 leva in Sofia, 5 leva in Bourgas and Plovdiv, and in Pleven - 3 leva.

behaviour here is, that "My parents give me money since they consider that better than me going out stealing it"14. The factorial analysis shows, that the alternative behaviour really is crime proper (violence or no violence), selling sex services, drug dealing and begging. Discussing the role played by the parents in IDU behaviours, it must be taken into account that, due to cultural specificity, the preservation of the family as a source of income also gives them a chance to evade isolation and marginalization. Notably, this cultural tradition exerts influence on refraining from extreme behaviour (participation in crime groups, use of violence, vagrancy, etc.).

■ Evidentially, some 80% of the IDU do not make social and health security contributions. The reason is that they do not have normal labour contracts. Even those who work, usually do so being employed in the grey economy. Numbers vary in different cities. The situation is harshest in Plovdiv where only 8% have contract employment, in Pleven so have 14%, in Sofia - 18%, and in Bourgas - 41%¹⁵. The contract employment difference is in favour of the "non-attendants", who are 24%, while with "the attendants" it is 17%.

The survey registered, that **nearly 22% do not have identification documents**. This fact, along with the estimated 80% having problems with their health and social insurance, creates conditions for further social isolation. People with no personal identification have difficult access to nearly all types of

public services (administrative, health care, education, etc.) In the four cities, where the survey was held, the percentage of IDU without identification papers varies, and respectively the NEP "attendants" can be considered as exposed to a different degree of risk. Largest is the number of persons without identification in Plovdiv - 36%, followed by Sofia - 25%, then Pleven - 11%, and Bourgas - 12%. Again the main factor to increase the risk here are the Roma. While with the Bulgarian and the Turkish ethnic group 15% and 14% respectively have no identification documents, among the Roma they are more than half - 51%.

As it has become clear that the incomes of IDU are strongly dependent on the parents, the question arises what is the family environment where they live. How far is the hypothesis justifiable, that the deviant behaviour has led to the isolation of the drug users from their families? The present survey data reject such an assumption and demonstrate, that 60% of the IDU continue to live with their parents (see Chart 9).

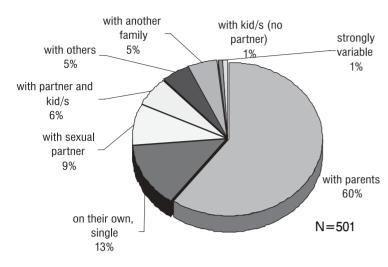
Cohabitation with parents has its both economic and cultural roots. It is very hard for the "kids" to leave their family due to high housing prices, thus the co-habitation of two, even three generations is common in Bulgaria. On the other hand, the living together with parents, and grand parents (5%) secures easier support (financial, social, etc.)

Analysis by cities shows, that relevant differences exist, the family cohabitation model being most visibly "impaired" in Sofia (as could have been expected) with nearly half of the IDU living separately from their par-

¹⁴ See for more detail the field observations data collected in the course of the interview field work. Such descriptions can be found for instance Atanas Rusev in his analysis of the drug use in Sofia (Rusev, Atanas; Injecting Drug Users in Sofia, Sofia 2004, Initiative for Health Foundation).

¹⁵ It can be assumed that the NEP "non-participants" are the ones mainly contributing to the high "white employment" in Bourgas. The "non-participant" interviewees were probably holiday makers in the city, which implies better financial means correlating with legal employment.

Chart 9. Social situation in the last six months



ents (see Table 9). Regrettably there is no research to help evaluate how far the drug use affects the social situation, and how far "the destruction" of the cohabitation pattern has been resultant from the social and economic changes in recent years.

Possibility for comparison of the IDU social situation over time gives the survey conducted by Initiative for Health in Sofia of 1998. This

survey has found out that then 2/3 of its respondents lived with their parents as against 51,7% at present. The patterns of "living without parents" have visibly become more. The changes are most significant with those who live on their own they total nearly three times more now -15,9% against 4% in the 1998 survey. Figures with regard to those living with a partner generally coincide - 11% in 1998 versus 10% in the present study.

The pattern of cohabitation with parents is most common with the Turkish ethnic group - 71,4%, then with the Bulgarians - 61,7%, and least

so with the Roma - 50,0%.

The cross-section by ethnic principle gives the greatest percentage of Roma living as a separate family. The Roma subgroup displays more substantial differences with the Bulgarians, the Roma observably more frequently have a family with kids - if among the Bulgarian IDU the percentage of family people with kids is 3,9%, among the Roma this percentage is more than four times higher: 16,7%. With them, too, the share of single parents with kids: 2,2% to 0,5% -- is different. These are facts easily explicable in view of the cultural specifics of the Roma ethnic group, where marriage (and early marriage at that) is a social norm.

Considering the social situation by gender we had to face a surprise - it turned out the women have visibly stronger "anti-traditionalist" behaviour as against the men - only 43,5% live with their parents, while 22,8% live with their sexual partners (see Table 10).

Table 9. Comparison of social situation by cities (%)

	Bourgas	Pleven	Plovdiv	Sofia
on their own/single	9,1	20,0	6,0	15,9
with an intimate partner	6,1	9,0	8,0	10,0
with partner and kid/kids	3,0	2,0	9,0	8,5
with kid/kids (no partner)	2,0	0,0	0,0	1,0
with parents	69,7	59,0	68,0	51,7
with another family	1,0	3,0	5,0	8,0
with others	7,1	5,0	4,0	4,5
other	2,0	2,0	0,0	0,5
				N=501

Table 10. Comparison of social situation by gender (%)

	Men	Women	"Attendant" of NEP	"Non-attendant" of NEP
on their own/single	13,8	11,9	10,8	15,1
with intimate partner	5,0	22,8	7,4	9,4
with partner and kid/kids	5,8	7,9	1,0	9,7
with kid/kids (no partner)	0,5	2,0	0,5	1,0
with parents	64,4	43,5	69,0	54,0
with another family	4,5	6,9	4,4	5,1
with others	5,0	5,0	5,4	4,7
other	1,0	0,0	1,5	1,0

N = 501

Among the men only 5% live with their partner and 64,4% with their parents. It is not clear here what the effect is of the Bulgarian cultural tradition, according to which the girl is to live with the boy's parents. In the correlation "attendants"- "non-attendants" of NEP, "the attendants" have displayed visibly more conservative behaviour.

The substantial share of those living with their parents is predetermined by the Bulgarian cultural specificity that the average family in cities has their own place to live, and that explains why only with 9% of those living with their parents do not have an apartment. (see Table 11).

Comparing the housing conditions among the 4 cities, notably those living in their own places in Sofia are fewest, and those renting a place to live are the most numerous. This is explicable in terms of the fact that in the capital city the housing prices are the highest. On the other hand, the fact that the "cohabitation with parents" pattern is weakest in Sofia leads to looking for housing alternative to the parents' housing with 45.8%.

The survey shows, that 94,4% of the IDU live in the four surveyed cities, another 4,6% - in municipalities close to the cities, and 1% describe themselves as homeless, all of whom are from Sofia. According to the field observation, these mainly live in the area of the Central Railway Station. The 1% living in abandoned houses must be added to the

homeless category (virtually homeless, too). However the share of homeless IDU is relatively small, it remains unclear whether NEP manage to reach out to this highly risky group due to the fact that the homeless fall within the utterly marginalized and hermetic social groups. The analysis of Sofianep IDU shows, that there is a group (3,5%), and mainly of Roma origin, who live in municipal housing facilities. In view of the poorest condition of these hostels, it might be fair to refer them to the category of those living in abandoned houses. Going deeper into the category "other" and "strongly variable" including a significant percentage of IDU (7,2%), it became clear, that whoever falls here live in the homes of relatives or friends, these being variants occurring more among the Bulgarians, than among the other ethnicities.

As data made evident, living together with their parents, and in the houses of their parents, respectively, refutes the hypothesis that IDU are isolated from their family environment. Another assumption indirectly denied is the one about "the nomadic way of living" of the drug users. A specifically targeted block of questions dealing with IDU migration casts light on the fact that nearly 60% of them have not changed their place of residence for more than five years. Some 22 --23% of the sample can be described as the most mobile. They have changed their place of residence in the

Table 11. Comparison of housing conditions (%)

Lives in (%):	Bourgas	Pleven	Plovdiv	Sofia	Average for the 4 cities
Their own apartment	36,4	30,0	21,0	15,4	23,6
Lease apartment	5,1	3,0	7,0	14,9	9,0
Abandoned house			2,0	1,5	1,0
Hostel		1,0		3,5	1,6
Parents' apartment	53,5	58,0	67,0	54,2	57,5
Very different	2,0		3,0	4,0	2,6
Other	3,0	8,0		6,5	4,8

N = 501

last year, with about half of them having done that in the past 3 months.

Therefore, the conclusion may be drawn that in the country there is a sizeable and very mobile group of IDU that can be described as risky, and is to be followed closely by NEP.

Comparison by ethnic groups exposes the Roma as a little bit more mobile than the Bulgarians. The Bulgarians have lived at the same place for 135 months (11,3 years) on average, versus 131 (10,9 years) months with the Roma. This approach of finding an average value, however, seems much too formal, and if the most mobile parts of both ethnic groups are subject to comparison, the reverse situation will be observed. During the last 12 months 24,7% of the Bulgarian IDU have changed their place of

residence against 14,4% with the Roma. These results are surprising and contradict the findings of various surveys of the Roma ethnic group giving evidence of considerable Roma migration from small settlements to the largest cities (especially to Sofia)¹⁶. In this context it must be said that probably with the Roma IDU the explanation is economic more than it is cultural. It is likely that probably the Roma in the sample have been victims of the "heroin epidemic" in the late hence they are economically trapped within their neighbourhoods. These data yet pose the question whether the new Roma migrants coming from small cities have withstood drug use, or they are isolated and the NEP have not managed to reach out as far as them.

The main reason for this migration in the first years after 1990 was looking for cities where social benefits are regularly paid and some legal or illegal income can be found. Most attractive here are the largest cities - Sofia, Plovdiv, Varna and Bourgas.

1.3. Contacts with public institutions

The survey attempted to depict and analyze the relationships between IDU and two types of institutions they are most dependent on - the law enforcement and health care.

The survey findings demonstrated that a significant portion of the incomes of the drug users depends highly on illegal sources such as selling drugs, employment for a drug dealer, thefts, crimes involving violence, procuring, selling sex services, begging and so on (see Table 6). These sources of incomes are reported by over 50% of the IDU. It is also noteworthy that the very possession of illicit psychoactive substances is also grounds to be taken in police custody¹⁷. It became clear from the interviews that in the past six months 35,1% have been detained by the police. The average length of detention, as pointed by the interviewees was 16,04 days (if recalculated as median - 2,0 days). It must be borne in mind that probably this long average period of 16 days is the result of 12% of those having been detained who mix up police custody with serving effective time in prison.

The reasons why IDU have been detained in the last six months are:

	%
Crime against property	
(thefts and the like)	22,7
Possession and dealing in illicit drugs	12,8
Crimes, involving violence (battery,	
burglary, murder, unpremeditated	
murder, arson and other)	5,0
Other crimes (vandalism, illegal arms	
possession)	3,4

Apart from detentions, as per the survey, the contacts with the police are unusually frequent - 68,3% have had their papers checked in the last six months, while 53,1% have been searched. Violence on the part of the police has been reported by 2% of survey respondents, and unlawful activities like seizure of syringes and needles - 15,6%.

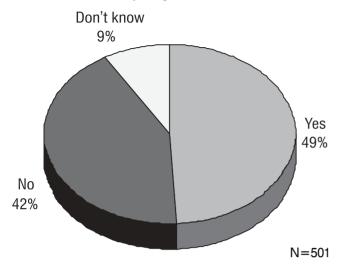
The distribution by cities shows, that the percentage of detentions is highest in Plovdiv - 40,0% of all IDU, followed by Bourgas with 32,8%, Sofia - 34,3% and Pleven - 28.0%. An unexpected finding was that IDU of the Bulgarian ethnic group get detained more often than the Roma - 35,2% against 34,4%. 39,6% NEP "attendants" have been detained, while the "non-attendants" are 28,6%. As expected, the number of detentions with the men is double that of the women: 39,3% to 18.8%¹⁸. The distribution by age shows, that there is no clear tendency of older age - fewer detentions, like with the non-users of drugs. The data revealed, however, that with the youngest age group (below 20 years of age) detentions are most frequent - 43,0%.

The high riskiness associated with IDU, both from the point of view of their health, and in terms of risks for the public overall (because of dangers to transmit various diseases) must presumably provoke the special attention on the part of health care institutions. Unlike "access" to the police, "entry" to health care institutions is quite restricted - less than half of the IDU have "health insurance" (see Chart 10). In view of the absence of legislative solution for the persons for some reason not having paid

¹⁷ Presumably, now that the allowable personal dose of drugs has been denied, the possibilities for detention of drug users by the police have become limitless.

¹⁸ Evidently female detention with IDU is much higher than the country's average, where the proportion is 5:1 in favour of the men.

Chart 10. "Have you got health insurance?"



their health insurance contributions, and the estimated number of IDU between 15 and 25 thousand, it can be assumed that 42% not health-insured drug users in the country account for between 8 000 and 12 000 persons bearing unpredictable risks.

Despite the absence of health insurance, health care institutions continue to

service IDU obviously out of what has remained of the "socialist inertia", or the medical doctor's moral commitment. Of those reporting that they have not been insured, 41% have visited GP or an outpatient policlinic. Only around 14% state that they have been to some degree dissatisfied with the service.

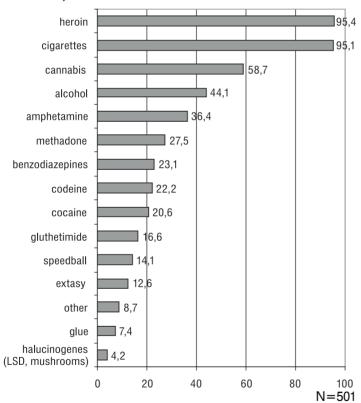
The percentage of persons without health insurance varies in the four cities - surprisingly few have been insured in Sofia - 36,8%, followed by Plovdiv - 37,0%, Pleven - 44,0 and Bourgas - 56,6%. As expected, what placed Sofia and Plovdiv first and second for lack of insurance, is the Roma population. Only 20% of them know that they have been insured - versus 48% with the Bulgarians. Along the "attendants" - "non-attendants" distribution again data show, that the "non- attendants" are less risky, among whom 45,8% have health insurance - versus 39,6% among "the attendants".

2. Drug use, patterns, sources, mobility with IDU.

2.1. Patterns of use by psychoactive substances (PAS)

A point of departure in the analysis of the use of psychoactive substances is how much they are actually used and what the preferences are. Ranking the substances according to the percentage of those who have used them in the last month allows a fairly accurate relative rating (see Chart 11).

Chart 11. Rating of psychoactive substances as used in the last month (at least once during the last month %)



One more possibility to present the data below goes according to the first choice of PAS (see Table 12). It must be reminded, that the survey is focused on IDU, and this pattern of drug use throws light mainly on the heroin users, hence does not reflect the actual infiltration and use of PAS in the country.

These two manners of arrangement underlie the forthcoming in the text analysis attempt of PAS according as to preference levels.

Heroin is the first choice per the survey, as report 95,4% of interviewees, which have used it at least once in the last month. The question, "Which substance is your "first" or most important substance?" is answered by 74,9% pointing to heroin (Table 12), and as ,, a second substance" heroin is a choice for 17,9%. 47,2% state they use heroin every day. The average use is 20,3 days a month, 25,0 days median. 94,0% of the interviewees claim that they have used heroin injecting it. For the sake of comparison, 4% would prefer to smoke heroin, while 3,4% -- to sniff it. Yet field observations have demonstrated that non-injection use is too much of a luxury for the heroin users. Due to low quality and high price of the heroin, smoking and sniffing are exotic behaviours¹⁹.

Contrasting the four cities reveals serious differences (see Table 13).

¹⁹ During the inquiry high-ranking dealers were described as predominantly smoking heroin as being able to afford it. Also references to past experience when they were able ,,to afford it years ago".

Table 12. Which substance is your "first" or most important substance?

	Number of persons	Percentage of the sample
heroin	375	74,9
methadone	30	6,0
cannabis	24	4,8
cocaine	20	4,0
alcohol	11	2,2
amphetamine	8	1,6
other	7	1,4
other opiates	6	1,2
gluthetimid	6	1,2
speedball	4	0,8
benzodiasepines	3	0,6
LSD	3	0,6
cigarettes	2	0,4
gluthetimid	2	0,4
Total	501	100

N=501

As per data absolute leader among the cities is Plovdiv by all three indicators, while the indicators are lowest in Pleven. Regrettably, the information is not sufficient to allow determining the factors creating those significant differences. The survey data and the field commentary information can yet outline part of those.

■ The economic situation in the city - according to NIS (National Institute of Statistics) data and survey data: personal income scores for the cities position Sofia first, and Pleven - last, Bourgas and Plovdiv standing nearly equal in-between. This is also validated by the prices of a heroin dose. In Sofia this price in the summer of 2003 was 6 BGN, in Plovdiv and Bourgas - 5 BGN, while in Pleven it could go down to 3

BGN. (Unfortunately, the survey was unable to compare the exact content, that is, quality and quantity of an average dose in the four cities.)

■ The availability of alternative drugs and traditions in the city. Revealing in this regard is Plovdiv where PAS alternatives are fewest, and the Roma population, itself setting the city profile, looks mainly at heroin.

Methadone has been placed second next after heroin as preferred psychoactive substance by 6% (as first choice, see Table 11) and by 6,3% as second choice. This substance occupies a very special place for the IDU. The contrast of 6% preferences for methadone to the 74% for heroin cannot but give an idea of a nearly marginal use of methadone. If we look at Sofia results, however, the situation appears virtually different. In the capital city heroin has 49,3% every day use, while methadone goes as high as 15,4%; adding those who claim that they use it every other day, the regular users of methadone become 43,6% of the sample. The huge difference registered between Sofia and the other cities, where methadone users in the last month were in Pleven - 3 %, in Plovdiv - 1,6% and in Bourgas - 1% is explicable by the fact, that methadone programme only exists in Sofia²⁰. Evidently, the presence or absence of methadone on the respective town's "market" (regardless of whether legally obtained or bought on the black market) takes powerful effects on the structure

Table 13. Comparison of heroin use in the four cities (%)

	Bourgas	Pleven	Plovdiv	Sofia
Having used in the last month	98,0	94,9	100,0	92,0
Every day users	43,4	17,2	77,0	49,3
Average number of days used during the month	20,6	14,2	28,0	19,3

N=501

Although methadone programme in Sofia was launched as early as in 1996, until the autumn of 2003, when the Varna project started, it was the only one running.

of heroin use. Expectations that methadone programmes will be launched in 10 more large cities of the country render this pattern of particular interest. Along these lines it is noteworthy to mark out certain specificities observable with interviewee drug users in Sofia. The first one is that the use of methadone has given rise to crime practices. Due to various reasons the legal access to methadone has been restricted exclusively to the methadone programme at the NCA. As a result, access to methadone, at the time the survey was taking place, had as few as some 350²¹. Accordingly the survey registered, that 78,4% of the respondents bought methadone on the black market. For comparison's sake, the Initiative for Health survey back in 1998 had not detectphenomenon, such а methadone programme had already had a history of two years. Hence, within 5 years the capital city developed a "black market" of methadone, well-structured at that - it is no coincidence that 8,5% of the respondents in Sofia receive incomes from selling methadone and other drugs versus none in the other 3 cities. On the other hand, data have demonstrated, that the black market has not managed to spread nationwide, and even a geographically close market such as Plovdiv has remained "unreached". The second peculiarity is that the model of injection use of heroin gets "transferred" to the use of methadone, too. The survey gave evidence that 32,3% of the methadone users inject it. The field observations uncovered that, despite the awareness of most users regarding the risks, they still do it either out of habit, or expecting that they are

going to get "the kick" felt with heroin. In this light field observations describe two groups of methadone users. The first is typically comprised by the attendants of the methadone programme, (and) persons trying to terminate their heroin dependence. They have legally provided daily dose, yet do not manage to resist ,, the heroine craving", and regularly, or from time to time "treat themselves"22 with heroin. Of all interviewees only some 9% participating in the methadone programme declare that they have not used heroin in the last month²³. The second group are persons who are heroin users and are outside the treatment programmes. For them methadone becomes a special type of substitute for heroin. Among the reasons why they "discover" methadone as surrogate are: the drastic lowering of the quality of heroin sold in Sofia after year 2001 and the low price of methadone. As reported, a dose of methadone in the summer of 2003 was sold in the capital city for an average of around 3 BGN, i.e. twice cheaper than a dose of heroin. Also notably, despite the quality of heroin went down, its price still rose from 5 BGN per dose in the summer of 2001 to 6 BGN in 2003. As seen by NEP, however, methadone users must also be included in the risk monitoring, since at least 1/3 of them are facing the same threats related to blood-transmitted diseases and HIV, just as the IDU of other substances.

The tracing of personal "replacement strategies" have shown that apart from substitute №1 - methadone - 16,6% of interviewees also use traditional medical opiates such as - morphine, lydol and codeine.

²¹ The situation has not changed substantially as at mid-2004 - the number of attendants has grown by just 100-120, although two private programmes in Sofia and a municipal one in Varna started operation.

²² The issue of how efficient the methadone programmes are is not an area of concern for this text, and the problems related to intravenous use of a product intended for oral use will not be discussed.

²³ It must be reminded here, that the respondents were recruited predominantly among heroin addicts and these data are not representative for the methadone programme in Sofia.

Here, too, use in the capital city is higher -20,4% against 14,0%. Probably here, too, as with methadone, both prerequisites are at work - poor quality heroin and high price. The use of this group PAS is relatively limited - only 4,6% use some of the surrogates more frequently than every other day. In view of this, the hypothesis has been disproved, of a fast growth of "the black market for prescriptions" (as has been predicted by some analysts)²⁴. Observable with this group of substitutes, yet, is a much less intense injection use, which is explicable by the fact that the most popular one - codeine is in use mainly orally in combination with gluthetimid (these substances are very rarely taken one at a time).

Amphetamines are the group of psychoactive substances stirring up most interest in the past few years. The reason for that are both many expert estimations, foreseeing "amphetamine epidemic", and serious reshuffles on the "drug market". In this light it is of interest to see that the infusion of amphetamine among IDU is also significant. Despite the strong focus of this group on heroin, more than 1/3 - 36,4% report, that they have used amphetamines in the last month. For comparison, nationally representative surveys have demonstrated, that around 1%, or some 67 thousand in Bulgaria (aged above 15) have tried amphetamines²⁵.

According to expert estimations "amphetamine use among IDU is a phenomenon of the last 1-2 years and the proof here are the comparative data on Sofia. If in 1998 only 9%

of IDU used amphetamines, in the summer of 2003 they represent already 40.8%. What is more, field observation provides evidence that the summer of 2003 may be a turning point in the amphetamine use. There are several preconditions for that. First, over the interviews attitudes were observed among heroin users to look for "something new", "something to lift you up from your pessimism", "something to cheer you up", "to change the colour", etc. This motivation was enhanced by the overt awareness of the ever poorer quality of the street heroin. Similar processes of adding some other type of psychoactive substances are observable in many WE countries and the USA. In the past two years combining and even substitution of heroin by cocaine has been registered in most of Western Europe. In a country like Bulgaria, however, the price of cocaine is too high and the amphetamines turn out to be the single replacement. The second precondition, is the change in the supply. The survey registered, that the street drug dealers, who before 2001 offered mainly heroin, in the summer of 2003 already 16,7% of them also sell amphetamines. The motivation for this "shift" is that the import of heroin (largely from Turkey) is facing serious troubles (the extremely low quality of the street heroin speaks of that). On the other hand Bulgaria has traditions and well-developed industrial capacity for the manufacture of amphetamines, which so far have been exported to the Middle East 27. Low quality here is compensated by the quantity due to very low prices.

According to this hypothesis due to low control of pharmacies and doctors authorized to prescribe opiate medication, a boom is observable in the use of morphine, lydol, codeine, etc.

²⁵ Inquiries took place in December 2002 - January 2003 and June 2003. See "The Drug Market in Bulgaria", Sofia, Center for the study of democracy.

²⁶ See "Injection drug use: situation, trends and risks", "Initiative for health" Foundation, Sofia 1998.

Early back in the 80-ies Bulgaria mastered the production of captagone and managed to secure markets for its product in the Middle East. Although the production was stopped in the late 80-ies, with the advent of democracy after 1990 specialists from former state-owned enterprises start establishing cheap manufactures in small illegal facilities. By and large yet, up until 2002 the amphetamine produced is intended for the Middle East markets. See for more details ,,The Drug Market in Bulgaria'.

Table 14. Comparison of amphetamine use in the four cities (%)

	Bourgas	Pleven	Plovdiv	Sofia	Average
Used in the last month	59,6	18,2	16,4	40,8	36,4
Every day users	4,0	0,0	0,0	3,5	2,4
Average number days used per month	4,3	0,7	0,7	3,0	2,4
"Does the dealer whom you bought heroin					_
from most frequently in the last month sell					
amphetamines/pico?"	4,0	11,0	14,0	27,9	16,8

N = 501

Juxtaposition of the data on the 4 cities show, that amphetamine has not infiltrated different settlements equally. As seen from the table (see Table 14), in Bourgas and Sofia the infiltration is 2-3 times higher in comparison to Plovdiv and Pleven. Despite the high number of victims, as per evidence, the use is still low in intensity - 2,4 days monthly, with 5,4% possibly called regular users (2,4% every day and 3% every other). The survey registered an interesting paradox, the city with highest infiltration and highest intensity of use - Bourgas has lowest supply of amphetamines on the part of the heroin dealers (see last row of Table 14). One possible interpretation of such a fact is that while the distribution networks of heroine and amphetamines in Sofia almost coincide, Bourgas may be having them apart.

The survey also registered an unexpected distribution by age. The juxtaposition along the five age groups showed that those using most amphetamines belong to the age group 25-30, followed by the age group of 20-25 (see Table 15). These data uphold the hypothesis that change is sought of the drug in use. It is not the

youngest, but those with 7-8 years of experience are the ones looking for stuff different from heroin.

When analyzing amphetamine use, it is noteworthy that 11,8% of the interviewees declare that they have used ecstasy in the last month. Interviewers' observations have revealed that interviewees do not differentiate ecstasy and amphetamines. A confirmation of this assumption are the laboratory inquiries under forensic expert opinions, which give evidence that in 2002 not a single dose of ecstasy was seized. In this context experts are unanimous that the use of ecstasy in the country is extremely rare due to high price and absence of domestic production. It can be speculated that the respondents, who declared that they used ecstasy, are actually using some other group of amphetamines. Redoing the data calculations adding to amphetamine users those of pseudo-ecstasy, we gain a slight growth by 4,2%. Thus the percentage of amphetamine users per month in the country reaches 40,6%.

Among the most important findings of the survey was the injection use of amphetamines. Up until now it was

Table 15. Comparison by age with amphetamines use (%)

	below 20	20-25	25-30	30-35	over 35	Average
Used in the last month	33,3	37,7	39,7	33,3	16,7	36,4
Average number of days used per month	1,2	2,5	3,4	2,0	0,0	2,4
Regular users	4,8	5,9	6,9	2,0	0,0	5,4

N=501

believed that in the country there are no such practices. Surveys gave evidence that amphetamines were taken either orally as pills²⁸, or sniffed as powder in imitation of the prestigious, yet unaffordable cocaine. With the IDU, however, similar to methadone, it turned out that the heroin habits get transferred to amphetamines, too - 17,8% of interviewees injected it. Moreover, evidence is there that no injection use (not a single interviewee) was registered in Plovdiv and Pleven, while this pattern of use goes up to 42,2% in Sofia and 31,0% in Bourgas.

The cross section by ethnicity discloses that among Roma population amphetamine use is much lower - 17,4% as against the Bulgarian ethnic group - 40,2%. The comparison "attendants" - "non-attendants" in terms of amphetamine use shows that "the non-attendants" are slightly ahead - 39,6% against 32,2%.

Assessing the risk of injection use with amphetamines what can be enlisted are all the problems related to blood-transmitted infections and HIV. Apart from those, however, the injection use of amphetamines should urge NEP programmes to consider that this type of PAS are not meant for injection use (especially those offered on the Bulgarian market). Besides causing harsh damage to the blood vessels and eczema, this group of PAS leads to high risk of heart attacks and strokes when injected.

Cocaine is perceived by Bulgarian drug users as very prestigious, yet too expensive and different from heroin²⁹, hence many researchers in the country believe that it is rarely used by this group. The survey data displayed that was not quite the case. 20,5% have used cocaine in the last month, yet with very low intensity - 0,9% have taken it every day, another 1% -every other day, or more frequently. Similar to the amphetamines methadone, significant injection use is observable with cocaine, too - 12,0% -- the main motive being that unlike the other manners of use, the injection use secures the fullest sensation ("drug is not wasted").

The only available data to compare are again on Sofia and show, that unlike the fast growth of amphetamine use, a slight movement up is visible. From 18% in 1998 to 23,9% in 2003³⁰.

The comparison of the four cities does not give any statistically significant differences (see Table 16). Similar is the situation over juxtaposition by ethnic groups and "attendants"-- "non-attendants". With the Bulgarians cocaine use is 19,8% versus 18,4% with the Roma. The figure for the "non-attendants" is 21,6%, while for the "the attendants" - 19,9%.

Speaking about cocaine use cannot overlook the simultaneous use of heroin and cocaine, the so-called speedball. Data reveal, that 14,1% of the interviewees have

Table 16. Comparison of cocaine use in the four cities (%)

	Bourgas	Pleven	Plovdiv	Sofia	Average
Used in the last month	15,3	25,0	12,0	23,9	20,5
Every day users	0,0	1,0	1,5	1,2	0,9
Average number of days used per month	0,67	1,27	0,91	1,0	1,6

N = 501

Various forms, stamps and colours of pills are used by the addicts as orientation for the strength and quality of effect the pills are believed to secure.

²⁹ Survey field interviews in the summer of 2003.

³⁰ See "Injection drug use: situation, trends and risks", "Initiative for health" Foundation, Sofia 1998.

used this mixed form. Most probably, at that, the infusion takes place in one injection. The analysis shows, that around 15% of the speedball users do not normally use cocaine by itself (that is cocaine always comes mixed with heroin). Recalculations done, it became clear that some 26,9% have used cocaine during the last month (mixed use included). The survey is unable to answer the question how far the assertion is true that the so-called *speedball* in Bulgaria contains amphetamines instead of cocaine.

Cannabis³¹ is the most popular PAS in the country (excluding the legal PAS - alcohol and tobacco). According to nationally representative surveys about 1,5-2,0% of the population in the country (that is some 100-130 thousand) declare that they have tried cannabis. Surveys among students and schoolchildren in Bulgaria's largest cities (Sofia, Plovdiv and Varna) show that various forms of cannabis have been tried by up to 40% of them.

At the same time, among analysts and users of various PAS (including heroin) belief is wide-spread that "heroin and grass are incompatible." Data refute this opinion - among IDU cannabis ranks second as used by 58,7% declaring they have used it in the last month, out of whom 30,4% being regular users (every other day or more frequently). On the other hand, in view of the fact that the average user of cannabis products in Bulgaria uses them between 2 and 3 times a week, it can be claimed, that this group of regular users is even larger - going

up to 40% of IDU. The comparison by cities shows distinctive features for each of the cities, but also that in some of them IDU number over 70% (see Table 17). Plovdiv is different, where the focus on heroin takes its effects on the use of cannabis.

The juxtaposition of heroin and cannabis use with IDU discards the hypothesis that the more frequent the cannabis use, the less frequent the use of heroin. The sole exception turned out Sofia, where in reality there is significant, but weak negative correlation between the use of both groups PAS, i.e. the more heroin is used, the less so is cannabis.

Comparing by ethnicity principle displays that the use of cannabis among the Roma is nearly twice lower as against that of the Bulgarians - 36,7% versus 65,2% -- have used cannabis in the last month (median 0,0 days versus 4,0 days). With the "non-attendants" the use of cannabis products is 71,4% against 50,9% with "the attendants".

Another correlation clearly shaping itself is by age. The younger the IDU, the higher the percentage of cannabis users (see Chart 12). Over dispersion analysis by number of days substance use during the month, this tendency becomes even more conspicuous - below age 20 the average use is 11,43 days (median 6,50); with the 20-25 year-olds the average use is 9,59 days (median 3,00); with those aged 25-30 - 8,08 (median 1,00); with the 30-35-olds - average 4,45 days (median 0,00) and over 35 the average is 3,75 days (median 0,00). This tendency is observable in Sofia, too, where the age of IDU is highest, the use

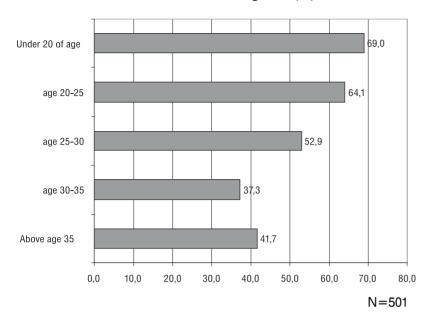
N = 501

Table 17. Comparison of the use of cannabis in the four cities (%)

	Bourgas	Pleven	Plovdiv	Sofia	Average
Used in the last month	71,7	79,0	35,1	50,7	58,7
Every day users	23,2	20,0	3,1	11,9	14,9
Average days use per month	12,5	13,3	5,4	7,0	2,0

³¹ By cannabis use is meant the use of all cannabis derivatives known under various labels in Bulgaria - marijuana, hashish, grass, ganja, joint, etc.

Chart 12. Use of cannabis among IDU (%)



of cannabis is more moderate than in Pleven and Bourgas. Evidence is there that with IDU cannabis is more popular with the young, and many factors cause that ranging from looking for a change (as observations on location demonstrated) to socio-economic and cultural peculiarities.

Benzodiazepines (diasepam, lexotan, rivotril) turned out the most frequently used "medical PAS" - 23,1% of those surveyed. At the same time, with a relatively small group of IDU - 5,2% -- we can speak about regular use. The specificity of the use of this medicine is that it has been pointed to as "second substance". The question, "Which substance would be your first choice?", diasepam has been indicated by scarcely 0,6%, while the question "Which one comes second?", it has been the choice of 6.6%, i.e. runs ahead of methadone and cocaine as second choice. A possible explanation is that, unlike the above described typical drugs, in this case IDU use the substance as a peculiar "medication". According to interviewers, the drug users explained that was a simple and accessible means to counter some of the consequences of the use of heroin - most often insomnia, high anxiety, pains, etc. The other case when there has been use of diasepam, it was over hospitalization when they had for a certain period of time to stop the use of heroin. According to the analysis focused on Sofia³² diasepam is frequently used by those on methadone treatment. The juxtaposition by cities again registers a dichotomy, the first group comprising the capital city with 29.4% and Pleven - 25.0%. and the second one - Plovdiv -16,7%, and Bourgas - 13,1%. The distributions by ethnicity principle

again demonstrate the Roma as less often using surrogates versus the Bulgarian ethnic group - 16,9% against 24,3%. The line "attendants"- "non-attendants" shows a correlation within error range 21,1% to 24,7%.

Among the PAS used very rarely may be mentioned the hallucinogenic drugs and the glue. Their use by IDU is 4,2%. Notably Bulgaria lacks almost completely the tradition in the use of this type of PAS, very revealing at that is the absence of supply. According to interviewees, only 0,4% state that they can find LSD or mushrooms with their dealer. The analysis by age groups and cities outlines more or less expected correlations: almost 65% of the users are aged below 25 and 44% are in Sofia.

Glue is more popular than the hallucinogenic drugs, 7,4% having used it during the last month. The surprise is that this type of PAS is not used solely by adolescent Roma, as anticipated, but use is visible with all age groups below age 35. The correlation Roma-Bulgarians is 14,9% to 6,2%.

The use of legal PAS - alcohol and cigarettes among IDU.

³² See Rusev, Atanas; Injecting Drug Users in Sofia. Sofia 2004, Initiative for Health Foundation

Table 18. Comparison of the four cities by alcohol use (%)

	Bourgas	Pleven	Plovdiv	Sofia	Average
Having used at least once during the last month	57,1	82,0	16,9	27,4	56,0
Users (every other day and more often)	29,6	26,0	3,1	18,4	20,3
					N=501

Interpreting the data in regard to the use of cigarettes, it is noteworthy that, even with the record high use typical for Bulgaria, the 95,1% registered among IDU, is considerably above the average for the country.

Alcohol, too, marks levels of use higher than the country's average. The question: "How many times in the last month have you consumed more than 200 gr concentrate, or 2,5 l of beer?" - 44,1% have answered positively³³. 17,4% drink regularly at that (every other day). The hypothesis that intensive alcohol use is a scheme for reducing heroin use did not get confirmed. The correlation proved insignificant on the whole for the sample overall (p = -0,186), just as for those who use it regularly (p = 0,096). The comparison by ethnicity principle on the survey demonstrated that the IDU of Roma origin use alcohol visibly less fre-

quently in comparison to Bulgarians. At least once during the month did use large quantities of alcohol 51,3% of the Bulgarian IDU, versus 14,7% of the Roma; regularly do so (every other day, or more often) 23% of the Bulgarians versus 6,7% with the Roma. Comparing cities, serious differences again stand out - see table 18.

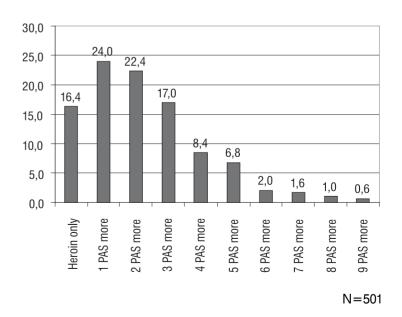
2.2. The use of heroin and its alternatives

Data give proof to a statement that what is observable with IDU

at present is rather poli-use of PAS than a typically heroin addiction as has been the case 3-4 years ago. At the same time heroin use remains the primary PAS, yet is used along with at least one other type of drug. The analysis shows, that for the four cities the average use of PAS, excluding alcohol and cigarettes, is 2,23 (median 2,00). As per results only16% of IDU use exclusively heroin, 24% use one more, while 22% two more PAS (see Chart 13).

As experts see it, poli-use as dominant pattern has observably developed in the recent years. A confirmation of this assumption is Sofia, where in the summer of 2003 only 8,5% of the interviewees used nothing else but heroin, versus 50% in 1998³⁴. Juxtaposition of poli-use by cities shows, that in Sofia the poli-use is most widely spread, while the pattern heroin as

Chart 13. Poli-use of PAS



³³ This study did not set it as its goal to analyse alcohol use among IDU overall, but only the intensive patterns of use.

³⁴ See "Injection drug use: situation, trends and risks", "Initiative for health" Foundation, Sofia 1998.

single drug is strongest in Plovdiv - 39% (see Table 19).

Table 19. Comparison of the poli-use of PAS in the four cities(%)

	Bourgas	Pleven	Plovdiv	Sofia
Exclusively				
heroin	14,1	12,0	39,0	8,5
1 more PAS	18,2	35,0	29,0	18,4
2 more PAS	31,3	21,0	17,0	21,4
3 more PAS	24,2	14,0	7,0	19,9
4 more PAS	2,0	8,0	6,0	12,9
5 more PAS	5,1	5,0	2,0	10,9
6 more PAS	2,0	2,0		3,0
7 more PAS		1,0		3,5
8 more PAS	2,0	2,0		0,5
9 more PAS	1,0			1,0
Average number				
of PAS	2,2	2,1	1,2	2,8
				NI FO1

N = 501

2.3. Starting and length of injection use

The average starting age of injection use for the country is 18,64 (median 18,00). Juxtaposition by cities shows, that the city with earliest start of use is Plovdiv - 18,00 (median - 17,00), and the latest - Sofia - 19,08 (median 18,00), in Bourgas the average age is 18,21 (median - 18,0), and in Pleven - 18,77 (median 18,50).

Extremely interesting is the answer to the question at what age the regular drug use (3 or more days a week) starts. The survey manifested that with heroin or other opiates (not methadone) it starts at the average age of 18,03, median 17,00.

The present study data give an answer to the question how long is the period of transition from trial to regular use of heroin. The analysis demonstrated that on average **2 to 6** months are needed **from the first injection to the regular use of heroin**³⁵. Comparing the first use with the regular use of opiates and heroin registered another interesting fact - before trying injection use and before regular use of heroin some 66% of the interviewees had used others opiates. Unfortunately, the survey cannot provide the answer whether they were experimenting with "light drugs"³⁶.

Contrasting the first use by ethnicity principle shows, that the representatives of the Bulgarian ethnic group start injecting themselves at the average age of 18,34 (median 18,00), while the Roma - at 19,94 (median 18,00). Higher average age of the Roma can be clarified by the fact that there are a significant number of persons in this ethnic group who have started to inject themselves late - at an age above 30.

Analysis by NEP attendants and nonattendants shows that the average age of attendants is higher than that of non-attendants with all varieties of use - first injection use, regular use of heroin and regular use of other opiates (see Table 20).

Juxtaposition by age shows an anticipated regularity: the lower the interviewee age, the earlier they have started with injection use (see Table 20 and Chart 14). At the same time the hypothesis that the lower the age, the faster the transition between trial and regular use, proved right (see Table 21). With both groups "under 20" and "20 to 25" there is nearly a match of the average age for transition - 1.7 to 1.8 months; similar is the match with the age groups of those aged 25-30 and 30-35

³⁵ The ground for such an interpretation gives the T-Test of the two variables (mean 0,40; Confidence Interval of the Difference 95% - Lower - 0,59 Upper - 0,20).

³⁶ It is unclear how to interpret the declared earlier ,,regular use" of other opiates as against the first injection use - the average age of ,,first injection use" is 18,64, the median being 18,00, while the age of ,,regular use of opiates" is 18,03, median 17,00.

Table 20. Correlations by average age over first and regular use

		First injection	Regular use of	Regular use of
		use	heroin	others opiates
Non-	Mean	18,3	18,7	17,4
attendants	Median	18,0	18,0	17,0
Attendants	Mean	18,9	19,3	18,5
	Median	18,0	18,0	18,0

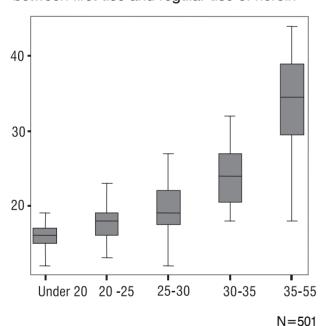
N = 501

Table 21. Distribution by age groups for span between first use and regular use of heroin

	Average start age	Median	Average transition time from trial to regular use
Under 20	16,08	16,00	1,8 months
20-25	17,63	17,00	1,7 months
25-30	19,37	19,00	5,5 months
30-35	23,28	23,00	6,0 months
Over 35	27,92	26,50	5,6 years

N = 501

Chart 14. Distribution by age groups for span between first use and regular use of heroin



where the transition takes some 5.5 to 6.0 months.

Analysis by years of "first use" and "regular use" among respondents gives the exclusive opportunity to reconstruct how the "heroin epidemic" developed

over time (see Chart 15). The survey results confirm and uphold the hypothesis of the end of heroin epidemic in 2001. Yet only a longer observation of the new NEP attendants can confirm or reject the fact of drastic drop in the "hooking" of new IDU seen on the chart (see Chart 15). It is very likely that the harm reduction programmes need a period of 2-3 years to find new IDU, i.e. the established abrupt drop (see chart for years 2002 and 2003³⁷) may merely be reflecting this lag (much smaller number of IDU for 2003 may also be explicable in terms of the fact that the survey took place in the middle of 2003).

On the other hand, the possibility to compare data on the start of injection use in the four surveyed cities for the first time made it possible to delineate the time lines of the "heroin epidemic". From the survey it becomes clear that in Sofia the peak of the "heroin wave" is in 1998, while in the other cities the peaks are as follows: Bourgas in 2000, Plovdiv and Pleven

³⁷ Dipping IDU figures for 2003 may also be explicable by the fact that the survey took place in the middle of 2003.

Chart 15. Comparison of estimated development of heroin use with the year of starting regular heroin use by interviewee IDU.

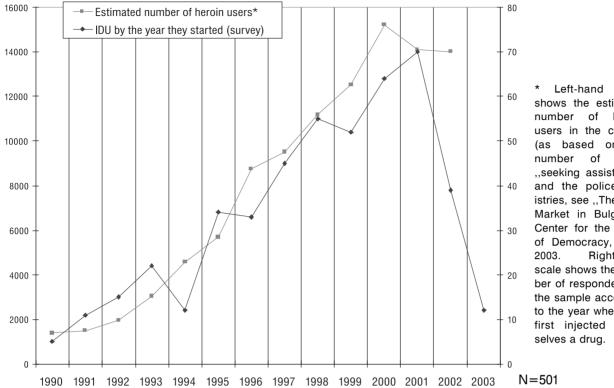
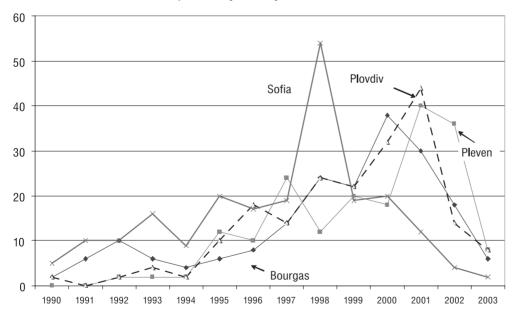


Chart 16. Four cities compared by start year of new IDU.



in 2001 (see Chart 16). Analysis by cities shows, that declining numbers of newly "hooked" in Sofia and Bourgas is a natural trend, since for 3-5 years they should

have been reached by the programmes. Hence, more evidence is there for the "end of the epidemic", than for new IDU technically not having been reached.

shows the estimated number of heroin users in the country (as based on the of those "seeking assistance" and the police registries, see "The Drug Market in Bulgaria", Center for the Study of Democracy, Sofia Right-hand scale shows the number of respondents in the sample according to the year when they first injected themselves a drug.

N=501

3. Types of risks with PAS use

3.1. Overdose

Overdosing has been pointed to as the main reason causing death among IDU in Bulgaria. As per expert estimations between 1/3 and 1/2 of the death cases in the country³⁸ can be accounted for in this way. Regrettably the overdosing problems have not been studied in Bulgaria, and the statistics are much too controversial. According to the NCA the annual overdose death toll is between 60 and 100³⁹, while according to the Ministry of Interior this figure is bigger - between 100 and 150⁴⁰.

Data from the present survey show that overdosing is a real threat for the Bulgarian IDU. As seen in the table (see Table 22) 16,6% have overdosed at least once in the last six months. 7% of the IDU have overdosed more than once during the same interval. This group should be considered particularly risky in regard to death.

Table 22. Overdose numbers

Number of times	Number of cases	%
1	48	9,6
2	16	3,2
3	6	1,2
4	6	1,2
5	1	0,2
8	4	0,8
9	1	0,2
10	1	0,2
		N=83

Juxtaposing by cities discloses various degrees of vulnerability regarding overdosing. The distinction is very clear between the

first group: Pleven - 2 % and Bourgas - 8,1%, and the second group Sofia - 21,9% and Plovdiv - 31,0%. What are the reasons why such huge, times differences are observable, the survey findings do not seem to provide the answer. A factor undoubtedly contributing to the higher percentage in Sofia and Plovdiv, is the Roma ethnic group. The analysis of data in the last six months gives 28,9% of the Roma having overdosed as against 13,1% Bulgarians. Still the ethnicity factor cannot be described as sufficient to explain such big differences. Field observations on location did not provide answer to these differences.

The attempts to find correlations demonstrated no connection between frequency of injection use and overdosing, just as between alcohol abuse and overdosing (the hypothesis was that alcohol use might be leading to less careful heroin use). Other hypotheses were refuted of overdosing taking place after coming out of prison and with persons' participation in methadone programmes. On the other hand there is certain correlation between age (experience) and overdosing (see Chart 17). With the fluctuating exception of the age group of 30-35, the data show overt tendency of decreasing overdosing with growing age.

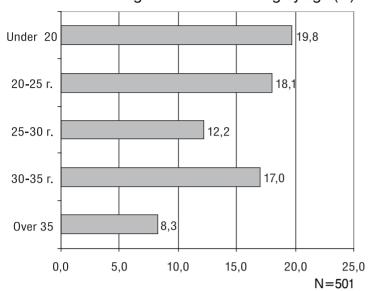
The cross-section by education manifested, yet, as expected, that more frequently overdosing are mainly the IDU with lower education: 29,2% with no education and

³⁸ It is disputable whether the impurities added to injected PAS in the country are not the more significant death factor in Bulgaria.

³⁹ See newspaper Every Day 11February 2004.

The National Institute of Statistics cannot supply correct mortality statistics related to drugs. The main reason is that the relatives of the deceased prefer not to enter the actual cause of death in the death certificate. According to the press centre with the Ministry of Interior in 1999 in Bulgaria 57 died of drug overdose (aged 14 to 18 - 11, 19 to 30 - 44, above 30 - 2). In 2000 102 died in Bulgaria of overdose. For 2001 75 have died of either overdose or low quality stuff, as per a study of the Center for Social Research. And in the first six months of 2002 there were 17 death cases. For 2003 no government institution has announced data on overdose deaths.

Chart 17. Percentage of those overdosing by age (%)



basic education, versus 12% with secondary education and 6,7% with university degree.

The field observations revealed the most common cause for overdosing is the difference in the purity of the street heroin. In Sofia IDU share that "rarely do they come across very pure heroin, and overdosing takes place when they get hold of a weaker dose, and in a haste to "feel" the effect, take a second dose almost immediately". The observations in Plovdiv go along the same lines - very low quality heroin, that probably gets overdosed with the same intentions.

3.2. Places of use

Two patterns exist almost dividing the Bulgarian IDU with regard to where they inject themselves. The first one is "around" home and 46,5% use it as first choice, the second one is preference for outside of home. Choosing where to inject outside of home, 29,5% go for public places as first (gardens, entrances to residential buildings, etc.), 11,2% speak about a friend's home, followed by less significant places - abandoned houses - 6,0%, and the dealer's home - 2,0%. Data demonstrate that IDU

use more than one place and they change their behaviour depending on the season. During the warm seasons the use of public places grows abruptly, while during the cold periods that is replaced by use at home, or at friends' homes, or other accessible premises staircases of residential buildings, entrances, attics and cellars.

Observations after the amendments to the drugs legislation from the spring of 2004 show that the public places get more and more overtly avoided. In view of this when developing strategies for the collection of used needles,

syringes and consumables NEP must be highly adaptive not only to season, but also to social changes - like activity of the police, the public administration, the media, etc.

3.3. Mobility of IDU

A very important issue when assessing risk is the level of mobility among IDU. Unfortunately, as of now no empirical data was available on how far encapsulated are the drug users, how far they buy and use outside of the places where they reside. The present survey showed that we can speak about considerable mobility in the country, variation by cities ranging from 50,7% in Sofia to 100,0 in Plovdiv (Table 23).

The most common reason respondents quoted as reason for their mobility is "to buy drugs". As compared to this, injection use elsewhere is much rarer, while the use of somebody else's instruments is times below buying. The other important contrast is by average sharing of injecting instruments for the respective city - the study shows that in their own cities IDU have considerably more risky behaviour (see last row of Table 21).

Analyzing the settlements where IDU bought drugs it is seen that the surveyed cities have different patterns of supply.

Strikingly enough in Sofia one settlement pattern is prevailing as source of supply (32,8 have bought from one place only, and 8,5% -- from two settlements). In Plovdiv the predominant pattern is 2 set-

tlements, while in Bourgas and Pleven three places are relatively well represented (see Table 24).

The analysis of where stuff was bought from, demonstrated Pernik as source №1 for Sofia with 35,8%. (see Map and Table 25). These results get conformed by field observations which disclose that in the summer of 2003 a great number of users travelled to Pernik to acquire better quality heroin⁴¹.

Table 23. Mobility in the four cities (in the last six months) %

	Bourgas	Pleven	Plovdiv	Sofia
Bought drugs in other cities	73,7	59,0	100,0	50,7
Injected in other cities	68,7	41,0	38,0	45,3
Having used already used needles				
and syringes in settlements outside				
of the city where they live	7,1	8,0	5,0	13,4
Average use of used needles				
and syringes (in general)	51,5	30,0	68,0	63,2
				N=501

Table 24. IDU distributions according to the number of settlements, where drug was obtained from, in the last six months (the figure shows number subtracted by the settlement where the IDU lives)

	Bourgas	Plovdiv	Sofia	Pleven
1 settlement	31,3	67,0	32,8	26,0
2 settlements	22,2	25,0	8,5	16,0
3 settlements	15,2	6,0	5,0	14,0
4 settlements	4,0	1,0	1,0	2,0
5 settlements	1,0	1,0	3,0	1,0
6 settlements			0,5	

N = 501

Map. Where IDU from 4 cities bought drugs



Pernik is a town of population 85 thousand situated 25 kilometres from Sofia. As per police data the heroin use there corresponds to that in country's large cities (see Table 34) with its 100-150 users. The main reason for Pernik turning into a "preferred place for buying heroin" is that the dominant criminal group there does not play by the rules of the big drug groupings in Sofia and sells better quality heroin at lower prices.

Table 25. Comparison of IDU from the 4 cities by where they bought drugs(%)

	Bourgas	Plovdiv	Sofia	Pleven
Sofia	31,3	23,0	99,5	35,0
Bourgas	99,0	14,0	1,0	3,0
Plovdiv	6,3	99,0	9,5	10,0
Varna	53,6	13,0	9,0	20,0
Pleven	0,0	5,0	10,9	94,0
Pernik	3,0	2,0	35,8	
Sozopol	6,1		5,5	2,0
Sliven	8,1		1,0	
Rousse	5,1			7,0
Stara Zagora	6,3	2,0	1,0	1,0
Blagoevgrad	1,0		5,0	1,0
Nessebar	7,0		1,0	
Yambol	5,0		0,5	
Cherven Briag			0,5	19,0
Lovech				5,0
Pazardjik	1,0	4,0	1,0	1,0
Blagoevgrad			3,5	1,0
				N=501

Similar is the situation in Bourgas, where travelling to Varna for the purpose of obtaining quality heroin has history of long vears. Varna is an important supply source for Pleven, too as per location observations. The survey provided evidence that 20% of the IDU have bought from Varna. Somewhat paradoxical is that Sofia is the source №1 for Pleven (with 35,0%) and Plovdiv (23,0%) given that over 1/3 of the capital city IDUs travel to Pernik for better heroin. Apart from travelling to the respective settlement for the purpose of supplying cheaper stuff, the findings can be explained in terms of temporary migration of the population for studies or work. For instance, according to field observations, IDU NEP "attendants" in Sofia are from Pleven and vice versa. The summer period when the survey was held additionally enhances the number of settlements for vacation reasons. Data on all four cities

demonstrated 9,0% of the IDU had bought drugs from small settlements around them.

From the point of view of the risk involved, the survey data make it possible for NEP, interested NGO and government institutions to trace major IDU flows between the respective settlements. Thus over eventual critical situation being localized in some of the settlements related to blood-transmitted or sexually-transmitted diseases with IDU, active preventive intervention can be planned. For instance a problem situation in Pleven should focus attention not just to Sofia, but also to cities such as Varna and Cherven Briag.

3.4. Frequency of injection use

The act of injecting is among the most serious risks for the drug users and the survey provides good opportunities for determining its features and specifics in the country. A point of departure for the study can be the frequency of injecting and use of PAS. Contrasting the 4 variables⁴² registering the frequency of injection behaviour, we get that the average daily number of injections in the country ranges between 1,42 times and 1,48 times (see Table 26).

Lesser number of injections on average, registered in answer to the question on the "number of injections in the last six months" is probably explicable in terms of having periods of lower use and interruptions, IDU declare they have for various reasons. Another possible explanation is lowered IDU estimations. Juxtaposing declared injection behaviour and heroin consumption shows

⁴² The 4 variables registering the frequency of injection behaviour show certain contradictions, which can be justified by IDU problems remembering things and making judgments. Yet data can be described as sufficiently homogeneous to be considered a good empirical basis.

Table 26. Average number of injections

	Number of injections yesterday	Number of injections in the last week	Number of injections in the last month	Number of injections in the last six months	Average number of heroin use days per month
Average (Mean)	1,46	9,95	44,42	204,27	20,3
Median	1,46	7,00	28,00	120,00	25,0
Recalculated injections					
on average per day (Mean)		1,42	1,48	1,13	
Recalculated injections					
on average per day (Median)		1,00	0,93	0,67	

N=501

Table 27. Comparison of injection practices by settlements

	Number of injections yesterday	Number of injections in the last week	Number of injections in the last month	Number of injections in the last six months	Average number of heroin use days per month
Bourgas					
Average (Mean)	1,2	8,2	34,8	169,2	20,6
Median	1,0	5,0	23,0	100,0	25,0
Pleven					
Average (Mean)	0,5	3,5	15,1	84,5	14,2
Median	0,0	2,0	12,5	70,0	15,0
Plovdiv					
Average (Mean)	2,5	16,7	96,1	297,6	28,0
Median	2,5	14,0	41,0	240,0	30,0
Sofia					
Average (Mean)	1,6	10,9	43,3	259,4	19,3
Median	1,0	7,0	30,0	180,0	29,0

N = 501

that the average number of injections a day is significantly higher than the declared injection use of heroin. This fact may have two mutually complementary explanations. The first one is that, as demonstrated by the survey, a large portion of "surrogate" PAS such as amphetamines, methadone and even cocaine, get injected. The second explanation goes along the lines that IDU often make several injection attempts until they successfully inject the respective PAS.

Comparison by cities manifests that intensity of injecting varies a lot (see Table 27) following on the whole the consumption of heroin (the last column of Table 27). Unmatched leader in the intensity of injection behaviour is Plovdiv, and last, with times lower figures is

Pleven. Data reinforce cities' specificities established over the analysis of heroin use.

For the sake of better evaluating the injection behaviour an attempt was made to analyze the 5 variables registering the frequency of injecting and heroin use by means of cluster non-hierarchical analysis, obtaining meaningful results mainly with K-means cluster, still only implementing two clusters (see Table 28). The first centurion is found among those using a little more often than every other day and those injecting themselves once a day - ,,cluster moderate IDU"; the second one is among those who use heroin almost every day and inject themselves an average of three times -- ,,cluster intensive IDU". These findings give grounds to inter-

Table 28. IDU clusters

	Cluster 1 (,,moderate")	Cluster 2 ("intensive")
Average number of days of heroin use	18	29
Number of injections yesterday	1	3
Number of injections in the last week	6	24
Number of injections in the last month	24	103
Number of injections in the last six months	128	606

N = 501

Table 29. Types of IDU

	Group's percentage presence in the sample	Number of injections yesterday	Number of injections in the last week	Number of injections in the last month	Number of injections in the last six months
"Moderate IDU"	12,7	0,1	1,1	16,6	85,2
"Regular IDU"	31,3	0,6	9,3	23,7	124,2
"Intensive IDU"	13,5	0,8	19,4	59,0	229,7
"Every day IDU"	16,0	2,0	23,2	88,4	354,0
"Highly dependent IDU"	21,2	3,7	38,3	217,8	589,7
"Incohesive IDU"	5,3	0,8	4,2	15,2	183,5
,,Average"		1,5	17,7	78,6	272,0

N=501

Table 30. Comparison of the types of IDU by cities (%)

	Bourgas	Pleven	Plovdiv	Sofia
"Moderate IDU"	11,2	22,2		14,9
"Regular IDU"	38,8	54,5	14,6	23,9
"Intensive IDU"	15,3	14,1	14,6	11,9
"Every day IDU"	20,4	3,0	20,8	17,9
"Highly dependent IDU"	11,2	1,0	50,0	22,4

N = 501

pretations that the IDU in the country mainly belong to these two types.

Lack of enough efficiency of the cluster analysis prompted looking for ways of grouping IDU as based on the findings of the reports on the 4 cities and the field observations. As a result six groups were formed (see Table 29), which were allotted provisional names as based on the frequency of injecting. The first group was called "weak IDU" stating that up to 5 days a month they have injected themselves once a day. The second group was called "regular IDU" and they have injected themselves from 6 to 20 days a month in 90% of the cases once. The third group was called "intensive IDU" and

they inject themselves between once and twice 12 to 29 days a month. The fourth group was "every day IDU" who claim that they inject themselves more often than 21 days and do it twice a day. The fifth group was called "highly dependent IDU" and these are persons who inject themselves three or more times every day. The sixth group was called "incohesive IDU" comprising 5,3% of the sample, who by frequency of injection behaviour stand between "the moderate IDU" and "the intensive IDU", yet due to very incohesive behaviour patterns reported were not subject to further analysis.

Implementing this grouping in the analysis by cities a much more detailed and compre-

Chart 18. Comparison of IDU types by ethnicity (%)

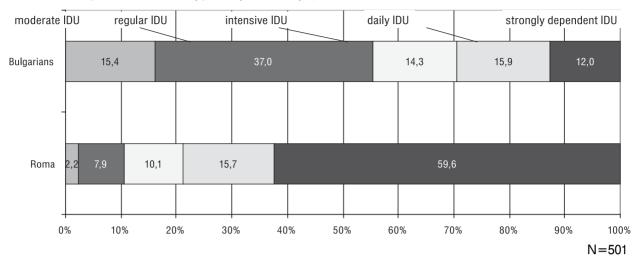


Chart 19. Contrasting ,,attendants" and ,,non-attendants" as IDU types (%)

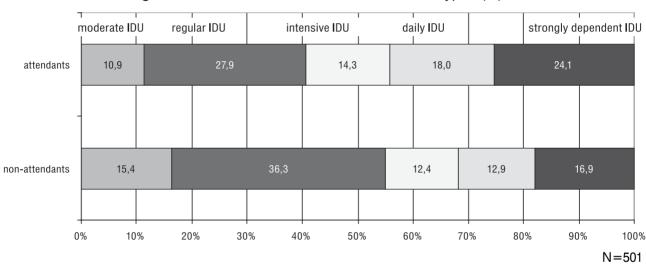
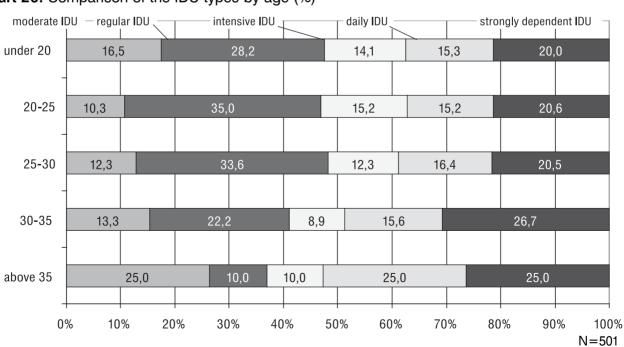


Chart 20. Comparison of the IDU types by age (%)



hensive picture is attained confirming and enriching the average use data illuminated above.

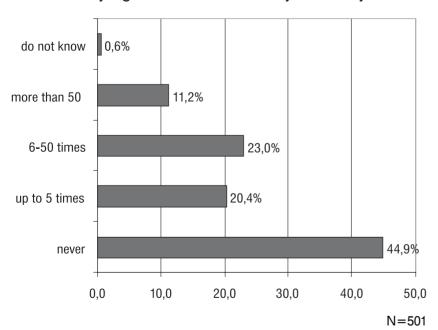
With regard to ethnicity background, the Roma ethnic group is represented by very intensive injection behaviour, while various patterns of intensity with the Bulgarian IDU come nearly evenly distributed among the group (see Chart 18).

Comparing "attendants"-,,non-attendants" again the regularity is validated that "the attendants" have more risky behaviour (see Chart 19). Analysis by age does not show any clear correlation (see Chart 20).

3.5. Using shared injecting instruments

Thus described injection use itself is an indirect risk. Direct risk can be called the using of shared needles and syringes, the sharing of attributes (caps, filters, water, etc.), the sharing of PAS in the same syringe (mainly heroin) and other similar

Chart 21. "Ever since 1980 have you injected yourself with a needle or a syringe that had been used by somebody else?"



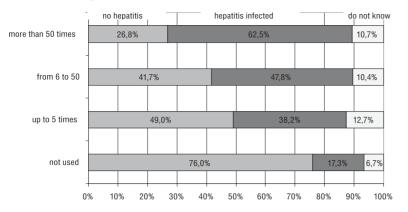
practices. To assess what portion of the IDU have risky behaviour and what is its intensity, two questions were asked. The first one was about how many times since year 1980 needles and syringes have been shared, and the second - about how many times in the last six months they have been shared⁴³. Survey data demonstrated that 55,1% of the IDU have at some time at least once shared a needle or a syringe and 27,4% have done that in the last six months. Such high scores were expected, and even seem low in view of the technoloay of heroin use, the environment where it is used (friendly and group relationships, culture of sharing), the way it is started, the degree of marginalization and encapsulation of typical IDU, etc. In this context this survey's goal is rather to evaluate the levels of risk and what the proportions are between different types of IDU. As seen on the chart (see Chart 21) the question on ever shared needles and syringes provisionally outlines 3 risky groups. The first,

"highly risky" group according to data covers 11,2% of the IDU - persons having shared syringes more than 50 times. The second, "medium risky" consists of 23% of the IDU (shared between 5 and 50 times) and the third, "low risky" one - 20,4% (below 5 times).

The hypothesis that the more frequently needles and syringes are shared, the more risky are the persons, is very clearly validated drawing a comparison with hepatitis infections levels (see Chart 22).

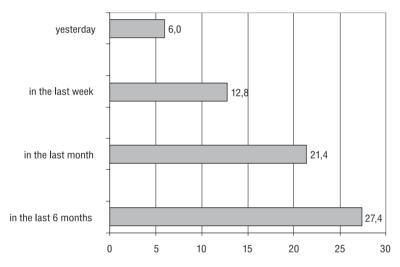
The first question is "Ever since 1980 have you injected yourself with a needle or a syringe that had been used by some-body else?" the second one is, "In the last six months, how many times have you injected yourself with a needle or a syringe that had been used by somebody else?"?"

Chart 22. Comparison of shared instruments figures with the number of hepatitis infections



N=501

Chart 23. "How many times have you injected yourself with a needle or a syringe that had been used by somebody else?" (%)



N=501

The actual degree of risk involved with IDU can be further weighted by the block of questions specifying when in the last six months instruments were shared. (see Chart 23).

Matching the question of how many times instruments were shared against the guestions registering the use in the last six months demonstrate certain contradictions. For instance, those having said that they have never shared needles and syringes, later say that they have done so yesterday or in the course of the previous week, etc. Certain inconsistency arises between the four questions where the interviewees state that they have shared in the last week needles and syringes, later stating that they have not done so in the last six months. To attain a single rating comprising all having declared that they have shared instruments, the count procedure for the 5 questions was

Chart 24. Provisional distribution of risky IDU

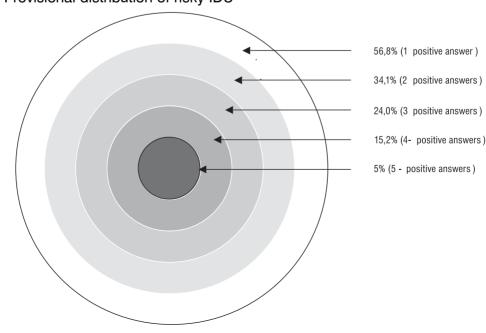


Table 31. Comparison of the use of shared instruments by the types of IDU (%)

	Not having shared	Up to 5 times	From 6 to 50 times	More than 50 times	Does not know
"Moderate IDU"	16,1	6,1	13,3	10,7	
"Regular IDU"	37,5	36,4	22,1	16,1	33,3
"Intensive IDU"	11,2	19,2	11,5	16,1	33,3
"Every day IDU"	15,2	15,2	16,8	17,9	33,3
"Highly dependent IDU"	14,3	16,2	32,7	35,7	

^{*} Difference to 100% is due to incohesive IDU being excluded from calculations

implemented. The result has been represented graphically including everybody who has answered any of the questions positively. Those exposed to lowest risk having answered positively to one question only take the periphery; and those having answered positively to all five questions, facing highest risk - in the centre (see Chart 24).

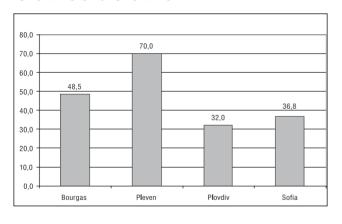
Juxtaposing the risky use with the above implemented 5 types of IDU, it becomes clear, that just with some IDU there is visible correlation between the intensity of injecting and the using of shared needles and syringes (see Table 30). This correlation is

strongest with the group of "highly dependent IDU" (see grey cells in Table 31).

The distribution by cities of "non-users" of shared syringes shows that serious differences exist between the cities. Sofia and Plovdiv come again with the most risky IDU and the main reason may again be looked for in the ethnicity distribution. As seen from Chart 26 the Roma IDU are in the more risky groups and this contributes for the smaller number of persons not sharing instruments in Sofia and Plovdiv.

Comparing "attendants" - "non-attendants", as with other types of risky behaviour,

Chart 25 and Chart 26



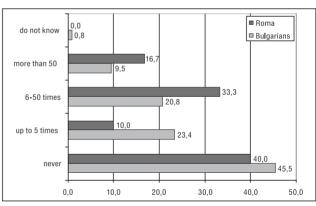
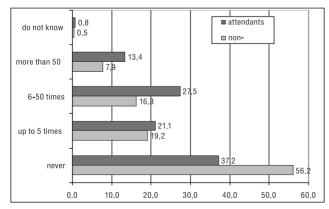
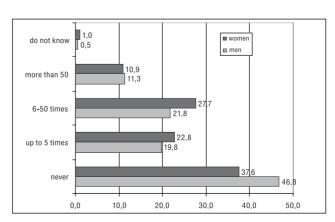


Chart 27 and Chart 28





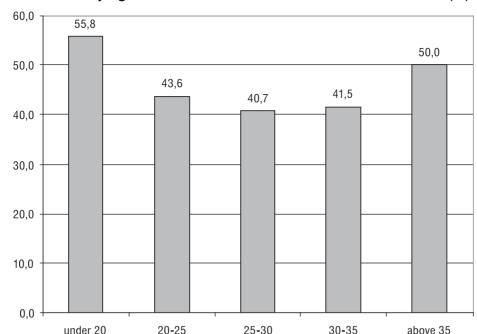


Chart 29. Distribution by age of the answers have never shared instruments (%)

the "attendants" are again more risky (Chart 27). Interestingly enough, the female IDU turn out less precautious than the male ones (see Chart 28).

Evaluating the age one can only rely on the answer "have never shared" (Chart 29) due to the fact that with growing age IDU gain proportionally more experience as drug users, hence the longer they have been using drugs, the more times they have shared needles and syringes.

In regard to lending used personal instruments in the last six months things stand somewhat differently. Borrowing used instruments occurs more frequently not just among the commercial sex workers, but also with the Roma, however that holds no relation to age.

3.6. Time in prison

As demonstrated by worldwide experience, prisons are among the places where risky behaviour is most frequently observable over the injection use of drugs⁴⁴. In this respect, too, Bulgaria is getting closer to the world practice. If before 1999 available surveys45 give practically no evidence of injection use in prisons, the present survey data register a visible change. According to survey data 15,2% of the IDU have been in prison, 3,9% have been behind bars more than once. While being in prison 36,8% of the respondents say they have used drugs. Recalculated as against all survey respondents, 5,6% have experience using PAS inside prisons, and 2,4% i.e. nearly half, have injected themselves with shared needles and syringes. These findings have manifested that as compared with all IDU population, the country's prisons do not yet look like a serious risk generator, still in view of the speed of drug spread growing at penitentiary institutions, it can be prognosticated that within 2-3 years NEP will have to pay special attention to this group.

⁴⁴ Drug Use and Prisons: An International Perspective, 2000, Glasgow Caledonian Univ., Scotland, *David Shewan, John B. Davies, John Booth*

⁴⁵ Drug users in Bulgarian prisons, Sofia 1999, *Eleonora Nesheva and Philip Lazarov*

3.7. Patterns of risky sexual behaviour with IDU

The survey dedicated special attention to the risk related to IDU sexual contacts. In this context key for the country should be considered the possibility HIV-infected persons among the drug users to sexually pass it on. Due to their encapsulation and marginal position in society IDU are considered a community among which a HIV epidemic is likely under the conditions in Bulgaria.

The likelihood of such a scenario gets confirmed by the survey which discards a widely believed idea in Bulgaria that the heroin users have low sexual activity. Data manifest that 91,6% of the respondents have had sexual contacts in the last six months⁴⁶. What is more, the average number of sexual partners the interviewees declared they had had in the course of their sex life are 42,8 (mean) and median 25,0. Within the last six months 55,6% of the IDU claim they have a permanent sexual partner, yet matching that with the question whether they have other (casual) sexual

partners, it turned out that around 41% also have more than one intimate friends. On this variable the average number of sexual partners in the last six months have been 6,4 persons, median 3,0 (that is 2/3 IDU of those claiming that they have more intimate partners).

Evaluating the risk one must bear in mind the specificities in different IDU subgroups. The distribution by age shows in regard to the number of partners in the last six months respondents below 30 have almost equal average number of partners and equal median. After 30, as registered by the survey, an abrupt drop takes place of the number of partners (see Table 32), which can be interpreted as reduced riskiness.

Juxtaposition by cities displays a varied picture as to average figures, yet that seems to be mainly due to some extreme cases, and with the significantly more reliable median differences are detectable mainly between: on the one hand, the cities Bourgas and Pleven; and on the other - Plovdiv and Sofia (see Table 33)

Concerning the ethnicity distribution between Bulgarian IDU and Roma IDU anticipated differences are detected. The question about permanent sexual partners in the last six months with the Bulgarians the average number is 1,97 at median 1,00; while with the Roma ethnic group 5,34 is the average number at median 1,00. The question about other (casual) partners with the Bulgarians 5,99 is the average number at median 3,00. For the Roma the average

Table 32. Average number of sexual partners among IDU by age

	До 20 г.	20-25 г.	25-30 г.	30-35 г.	Of 35 r.
Average	4,21	4,25	4,47	2,81	2,92
Median	2,00	2,00	2,00	0,00	0,00
					N=501

Table 33. Average number of sexual partners among IDU by cities

	Bourgas	Pleven	Plovdiv	Sofia
Permanent partners average	1,25	1,38	6,99	1,28
Permanent partners median	1,00	1,00	1,00	1,00
Casual partners average	7,05	6,81	4,11	6,85
Casual partners median	4,00	4,00	3,00	3,00
				N=501

⁴⁶ It is important to mark for the purposes of NEP the different patterns within the Roma communities. In Sofia some 25% of the Roma IDU do not have sex life (versus 4,3% of the Bulgarians) as being rejected by their own community. In Plovdiv - the second largest city by number of Roma IDU - such isolation is not observable in the Roma neighbourhoods, as per the survey data. The respondents having no sexual contacts are 6,6% among the Bulgarians and 6% among the Roma.

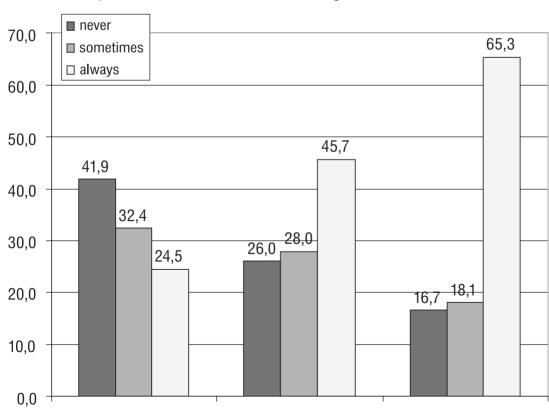
number is 8,34 at median 3,00. Juxtaposing NEP "attendants" and "non-attendants" more conservative is the behaviour of the "non-attendants". The average number of regular partners among the "non-attendants" is 1,89 (median 1,00), while with the "attendants" it is 2,90 (median 1,00). With the casual partners the difference is less conspicuous - the average number is 5,85 (median 3,00) for "non-attendants" and 6,84 (median 3,00) for "attendants".

In terms of sexual orientation the survey registers that 15,5% of the sample are bisexual. Within this group 19,0% of the women have declared that they are bisexual versus 14,6% with the men. Homosexual have defined themselves 1% of the men and 1% of the women. Importantly, from the point of view of risk bisexual behaviour among men constitutes considerably more serious risk in comparison to that among women due to the fact that 38% of them are commercial

permanent

sex workers as against 17% of the women (just 3 cases).

The type of survey makes it hard to say what the exact presence is of commercial sex workers among the IDU. As per the present survey the question whether ,,sex has been carried out for money or drugs" in the last six months has been answered positively by 16,4%. As regular commercial sex workers, yet can be defined some 10% of the interviewees (at least once a week). The persons having stated that they provided sexual services against payment or drugs display several specificities. Data show that 30,5% of the women IDU have been commercial sex workers versus 4,8% with the men. Men, however, provide sexual services less intensively - an average of 2,4 times weekly, while with the women the average number is 13,2 times. Analysis verifies that the female commercial sex workers constitute two groups. The first group is occupied



temporary

Chart 30. Juxtaposition of sexual behaviour to using condoms

N = 501

selling sex services

by persons to whom selling sex services is the primary source of income and the number of their sexual contacts is more than 3 times a day. The second group is made women to whom this is side, or casual income (their first source of income are reportedly parents) and they have 2-3 sexual contacts for money a week on average.

Of special relevance in regard to sexually-transmitted infections (STI) is the using of condoms. Along these lines the use of such protective means can be considered an indicator as to how far risky the sexual behaviour is with different IDU. In order to conduct a more efficient analysis IDU have been divided into three groups depending on the type of their sexual behaviour. The first one is of the least risky behaviour and includes persons with permanent partners, the second degree of risk concerns persons with non-permanent partners, and the third, the most risky are the commercial sex workers. Grouping them in this way reveals that IDU make attempts, depending on their type of sexual behaviour to use means of protection (see Chart 30).

The survey gives grounds to draw conclusions that the hypothesis of high risk among the IDU is fully grounded. Having so many sexual partners, we see that with the first two groups less than half of the interviewees use condoms regularly. With the commercial sex workers as per analysis, actually only those having small number of sexual contacts do not use condoms. With a single exception, everybody practising more frequently than once a week, uses condoms.

Evaluating how far IDU attempt to protect their partners and clients, of interest is the analysis by sexually-transmitted infections (STI). According to the survey 6,9% of the drug users have had some STI. Upon juxtaposition it was demonstrated a very small percentage of the infected, who know that they are infected, protect their sexual partners and clients. With the commercial sex workers some 38% of those infected do not always use condoms. As to the IDU with casual partners, 75% of those infected do not use condoms. Notably, the group second in risk exposure (the one with temporary partners) has highest presence of STIinfected - 12,1%. Among the least risky group, IDU with permanent sexual partners. 56.0% of the STI-infected do not regularly use means of protection.

4. Evaluation of risks and the place of harm reduction programmes

Among the survey's primary goals was to review the impact of the harm reduction **programmes**. To set the framework of this analysis the "coverage" effected by the programmes of the injection drug use in the country is to be described, i.e. what portion of the IDU are able to access NEP in their city. According to most expert estimations as at present in Bulgaria the injection drug users (mainly heroin ones) are totally between 7 and 30 thousand⁴⁷. Various survey data give evidence that more than 90% of those drug users are concentrated in the cities of over 50 thousand residents⁴⁸ (these cities number 21 in the country⁴⁹). At the same time the greatest number of drug dependents is concentrated in the country's 4 largest cities - Sofia, Plovdiv, Varna and Bourgas, and still more smaller cities like Blagoevgrad, Rousse, Pazardjik, Pernik and Pleven. NEP are present in 4 of those cities: Sofia, Plovdiv, Bourgas and Pleven. If we take that drug dealer detentions data of the Ministry of Interior⁵⁰ by districts⁵¹ roughly reflect the proportion of the number of drug users by cities, it can be asserted that with their presence in the four cities, NEP have a national coverage of between 60% and 70%

of all drug dependents (see Table 34, grey columns).

Evaluating the NEP impact, it should also be taken into account that the programmes operate in cities of different size and with different numbers of IDU. Matching the ratings of the number of IDU in the cities and the number of NEP "attendants" presents different degree of "coverage" ("penetration") in the drug users' communities. Comparing "unique attendants" that is, persons who have at least once used NEP services⁵² in the 4 cities and the estimated total number of IDU in these cities, with all due provisions gives the following levels of ",coverage": For Sofia - 50-70% over approximately 5000 "unique attendants" and 7000 -10 000 heroin users, for Plovdiv - around 25-30% "coverage" over 670 "unique attendants" and 2500-3000 heroin users, for Bourgas - 45-55% over 650 "unique attendants" and 1200-1500 heroin users and for Pleven - 70-85% "coverage" with 415 "unique attendants" over 500-600 heroin users (together with Cherven Briag)⁵³. At the same time the survey experience undisclosed that the number of unique attendants is to be evaluated very cautiously due

⁴⁷ The lowest estimations of heroin use are Ministry of Interior's - between 7000 u 8000. As per analysis of the Center for the Study of Democracy, the number of heroin users can be assessed approximately between 15 000 and 25 000. According to the evaluations of the National Center for Addictions, there are around 30 000 heroin users in the country.

Several settlements have not too large groups of IDU which are exceptions to this rule: Radomir, Dupnitsa, Cherven Briag, Petrich and Sandanski. The presence of IDU registered in small resort settlements like Sozopol, Nessebar, Pomorie and others is explicable mainly in terms of presence of big cities residents during the vacation season.

⁴⁹ As per latest census of population held by the National Institute of Statistics.

⁵⁰ Unfortunately the sole relevant information for comparison on a national level is the operative police statistics. The problem with this type of information is that it is highly contingent on the specificity of the district police departments (DPD). Data may get locally distorted with more active DPD, and over detentions of the same drug user within the same year. Still, juxtaposing police data to other independent sources proves that they present a relatively sound basis for comparison.

⁵¹ Although, the statistics are for a district, over 95% of the detentions take place in the respective district centre, and that gives grounds to talk about the city's IDU.

⁵² Utilizing the services of NEP, attendants receive unique code number which, apart from guaranteeing their anonymity, evades the possibility of counting one and the same person more than once.

The suggested figures of total number of IDU for the respective city are debatable, the number of NEP attendants changes in a dynamic way. This is why the estimations are more or less provisional.

Table 34. Percentage shares by detention districts

Districts	2002 (%)	Prior to 30
City Sofia	50,49	September 2003 (%) 51,56
Varna	9,34	11,65
Plovdiv	10,01	<u> </u>
		9,62
Bourgas	4,49	3,59
Blagoevgrad	3,70	3,46
Rousse	1,09	2,24
Pazardjik	1,21	2,03
Pernik	1,27	1,56
Pleven	2,25	1,49
Kyustendil	1,33	1,29
Stara Zagora	1,46	1,29
Haskovo	1,09	1,29
Montana	1,15	1,08
Sliven	1,52	1,08
Dobrich	2,00	0,95
Smolian	0,85	0,88
Gabrovo	0,91	0,81
Lovech	0,36	0,68
Veliko Tarnovo	0,3	0,54
Shoumen	0,3	0,47
Vratsa	0,36	0,41
Silistra	0,18	0,41
Razgrad	0,49	0,34
Kardjali	0,55	0,20
Yambol	1,03	0,20
Vidin	0,42	0,14
Region Sofia	0,36	0,14
Targovishte	0,36	0,14

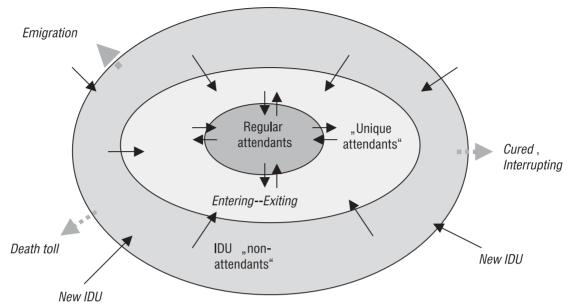
to the large number of persons using more than one code. Juxtaposing NEP registries with the actual number of IDU gives grounds for a reduction of the unique attendants' numbers by 30-40%. Thus the coverage for Sofia, for instance, can be estimated at 30-40%, in Bourgas - at 30-35%, etc. It must also be taken into consideration that the size of a city creates different conditions for work: the capital city with its 1,1 million residents and more than 50% of all IDU is much more difficult to "cover" versus a 120 thousand city, for instance, like Pleven.

Apart from the indicator "unique attendant" showing the maximum number of persons reached by the programmes since they started operation, another relevant characteristic of NEP is the number of their "regular attendants", that is IDU who frequently use the services provided by the programmes. According to programme data the "regular attendants" count between 1/5 and 1/3 of the number of "unique attendants". Attempting schematically represent the work of the programmes, this can be depicted by means of three concentric circles. The first one is the widest and includes all IDU in the respective city, the second one gives the "unique NEP attendants" and the third is a "core" representing the "regular NEP attendants" (see Chart 31). NEP practice has shown that the group of ,,regular attendants" is very dynamic while some attendants remain steady for years, others disappear after a certain period of regular visits, then come back again, still others come several times and then stop, etc.

Analysis of NEP raises the question of what are the prognoses about the IDU community. Stepping on available data, it can be said that despite the smaller number of new heroin users after the end of the heroin epidemic in 2001 (see Part 2), and regardless of the receding intensity of heroin use, expert estimations hold that the number of those exiting the IDU community is not sufficient to claim that there is a reversal change of tendency from expansion to shrinking of this community⁵⁴. This is the reason why it is very likely that in the several upcoming years, the total (cumulative) number of IDU will continue to increase, although the heroin market will continue to

It is extremely complicated to estimate what the actual number is of those ,,exiting" IDU. Apart from the arguable death toll figures (see for more detail the overdosing section), it is not clear what portion of the IDU per year temporarily or permanently leave the country, there is no authentic information about the cured and temporarily break offs (the situation with methadone programmes is much too debatable and it is not clear what portion of their participants have actually fully stopped their heroin use).

Chart 31. Scheme of the three groups of IDU - non-attendants, unique attendants and regular attendants



reduce in consumption size⁵⁵.

Having schematically outlined the framework of NEP operation the question arises of the pointers as to how their activity can be described in terms of covered IDU. This in mind a worthwhile possibility is juxtaposition of the alternative sources of new needles and syringes in the last six months. As seen from the data (see Table 35), NEP are the second in importance source, which can be interpreted as their being undoubtedly an extremely important factor as source of needles and syringes. Here it does not matter what percentage of the IDU are using NEP as first source, and what - as "reserve" - the fact is that NEP secure a visible reduction of the risk.

Regrettably, due to absence of other comparable data on the NEP activity, the sole juxtaposition that can be made is by the average number of needles and syringes by cities (Table 36). This, however,

must not be turned into an indicator of efficiency, since the exchange of needles and syringes is affected by various factors like different intensity of use, economic situation, attitude of sales people at pharmacies, etc.

A different cross section to the question how far does the operation of NEPs reduce the risky behaviour among IDU is the comparison of the characteristics of the "attendants" and "non-attendants". The preliminary hypothesis was that the programmes "non-attendants" should be more risky than "the attendants". This presumption was fully rejected by the survey data. As has been demonstrated in previous parts, in Bulgarian context "the NEP attendants" are more risky along almost all types of risky behaviour - in regard to the number of injections, the using of shared needles and syringes, the using of protective means during sex, etc. The reasons for that appear

There are more pessimistic scenarios referring to the Western experience, where after declines of several years drug consumption is observably restored. Along these lines it can be assumed that after the crisis in heroin supply in 2002-2003, a new wave of cheap heroin can be expected, as the country is located on the main heroin road from Afghanistan through Turkey to Western Europe. Another important prerequisite is that the population's income levels will continue to rise and better quality heroin will become affordable for more.

Table 35. Comparison by source of new needles and syringes for the last six months

	Bought from pharmacy %	Bought elsewhere: %	from NEP %	Given by friends or others: %	Obtained in another way % s
Average (Mean)	68,5	16,7	55,2	33,0	39,8
Median	82,5	10,0	50,0	20,0	10,0
Mode	100	10	100	10	10

N = 501

Table 36. Sources of needles and syringes by cities

	Bou	ırgas	Plev	en	Plov	div	So	fia
	bought from	from NEP						
	pharmacy %	%						
Number of cases (n)	95	52	88	48	86	71	168	127
Average	71,4	43,6	72,4	59,7	60,3	50,2	68,8	61,1
Median	90,0	45,0	90,0	65,0	60,0	50,0	90,0	70,0
	Number	Average	Number	Average	Number	Average	Number	Average
	of injections	number						
	in the last	of heroin						
	six months	use days						
		per month		per month		per month		per month
Average (Mean)	169,2	20,6	84,5	14,2	297,6	28,0	259,4	19,3
Median	100,0	25,0	70,0	15,0	240,0	30,0	180,0	29,0

N=501

more evident over comparison of the socioeconomic and demographic characteristics of the IDU (see Part 1). It turns out that Bulgarian NEPs are a venue for IDU of lowest social status - persons with lower education (see Table 3), persons without legal employment, representatives of the Roma minority (including those isolated from their own community), persons with no social and health insurance, selling sex, etc. In this context it can be presumed that the NEPs have actually covered the most risky IDU - the ones with the lowest social status. Thus through their activity they have limited the impact of this more risky group both on the less risky IDU, and on the country's population on the whole. HIV testing data manifest that one of the factors for the absence of a great number of infected persons among IDU is the activity of this type of organizations. Comparing the HIV testing data it is seen that the attendants, regardless of their more

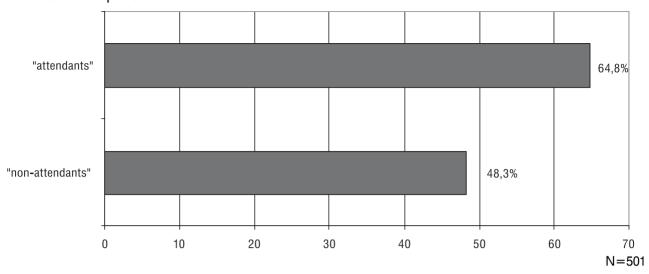
deviant behaviour, have been tested more (Chart 32). Moreover, 30% of the interviewees have done the testing in 2003, i.e. less than six months before the survey took place, while 25% have been tested in 2001 and 2002.

In different cities the number of those tested is different, in percentage terms three of them - Bourgas, Plovdiv and Pleven have approximately equal shares of tested - nearly half of the interviewees, while in Sofia the portion of those tested reaches over 2/3.

Analyzing along the lines of "attendants" - "non-attendants" it is worthwhile mentioning several characteristics of IDU taking shape in the course of the socio-demographic analysis.

In the first place, closer look at findings would suggest that the extremely young age of the new IDU (especially outside of Sofia) poses a serious risk which NEP have not developed the tools to counter. Probably the harm reduction programmes

Chart 32. Comparison of HIV tested



might be able to enter schools via educational programs thus raising the awareness of their activity among the IDU at school age. On the other hand, it must be borne in mind that the average age of Bulgarian drug dependents will continue to go up, hence NEP will have to prepare themselves for work with older IDU.

Secondly, as the survey demonstrated, the parents are an utterly important factor for IDU - they live with them and are their main source of income. In view of this NEP can try and reduce risky behaviour via developing programmes to reach out to parents. Provision of needles and syringes, test results, etc. Active forms of work with the families of the drug users.

Thirdly, as demonstrated by experience, the actions of the Roma communities in Sofia and Bourgas lead to evident results. Along these lines NEPs in cities like Plovdiv may attempt to change the attitudes among the Roma communities through active work with their leaders⁵⁶.

In conclusion the issue arises of what are the problems faced by harm reduction programmes? Probably the harshest one faced is the change in the way drug distribution networks work. If at the launch of Bulgarian NEPs (1998-2000) most sales in the cities were conducted at places where drug dependents by tradition got together, after 2001 transition took place of sales over mobile phones. Turning pre-paid cards for the mobile phones into a mass service, the street sale patterns finally gave way. According to survey data 69% of the interviewees already use this pattern, the single exception to this domination being Plovdiv (see Table 38).

Transition to GSM sales creates serious difficulties for NEP - if earlier it was enough

Table 37. Tested IDU by cities

	Bourgas	Pleven	Plovdiv	Sofia
Number of tested	46	48	52	145
Percent of all interviewees	46,5	48,0	52,0	72,1
				N=501

Experience from various social programmes has demonstrated that the local Roma leaders have extremely high influence within their ethnic group.

Table 38. Comparison of the 4 cities by drug procurement

	Bourgas	Pleven	Plovdiv	Sofia	Average
Dealer contacted on the phone	94,9%	80,0%	26,0%	72,1%	69,0%
Dealer met in the street	16,3%	19,0%	73,0%	55,8%	44,0%
Dealer visited at his/her apartment	1,0%	8,0%	22,0%	8,1%	9,5%
Dealer at a cafe, bar, or restaurant	6,1%	14,0%	4,0%	14,7%	10,7%

N = 501

for them to be present at places where IDU get together to be able to buy the drugs they need, in 2002 - 2003 things change rapidly. For their own security the street drug dealers start arranging their sales at various places within the city. As a result it becomes ever more difficult to reach IDU. As seen from Table 35, at the time of carrying out the survey (the summer of 2003), the old model of buying at a place was still sustained (street dealer or dealer's apartment) in Plovdiv and Sofia, while in a city like Bourgas, where the police is really very active, it has almost disappeared (especially with the apartments). Along these lines it is very important to bear in mind that with the amendment of the law and the denial of

the "one-time dose"57, the "mobile phones and secret places" pattern will irreversibly oust the old forms of drug distribution. The NEPs have been trying to adapt themselves to the new sales schemes since as early as they emerged, yet the latest legislative vents raise concerns that under the new conditions this is extremely hard. As practice has demonstrated, harm reduction programmes have so far been the only organizations actively seeking access to marginalized groups of IDU. Without any changes to the legal framework, however, the threat is real that the society may lose a major channel for access to these hermetic groups of IDU58.

The state of the dealer and the buyer are equally vulnerable from a legal point of view.

The currently existing law in practice allows for the programmes "attendants" to be prosecuted by the law enforcement.

Notes