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Drug use among sex workers in Hungary

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Abstract

Drug use and sex work are both controversial issues with multiple interesting connections between them. This article presents findings from the first-ever survey on drug use and sex work in Hungary. The study aimed to chart prevalence, functions, and problems of drug use among various groups of sex workers. Survey forms were collected from 510 participants (average age 29,5 years, 91% female) in and nearby Budapest, during a period of six months. Results show that sex workers have manifold higher lifetime prevalence (LTP), 84,3%, of illicit drug use as compared to the LTP of the Hungarian general young adult population, 20,9%. In our studied sample, it was very rare to perform sex work for alcohol or drugs (5%), or for money to purchase alcohol or drugs (20%). Findings indicate also notable relations between location-based sex work types and consumed drug types. One third of the street sex workers reported regular amphetamine use, but none reported regular cocaine use. On the contrary, no escorts reported regular amphetamine use, but 38% admitted regular cocaine use. The location of sex work may pose an additional occupational health risk factor for substance use. Regular use of alcohol was twice as typical (64%) for sex workers who were employed in bars, salons/parlors, or alone in rented apartments than for those working in other indoor locations (33-34%). Furthermore, 74% of street sex workers smoked tobacco as compared to the 17% smoking rate of escorts. Problem drug use was roughly estimated by asking about the main problem domains (medical, legal, social, etc.) of the Addiction Severity Index (ASI) instrument. The most problematic drug was amphetamine, and the most frequent problem was prolonged/excessive drug use. These main findings may contribute to a more focused planning of health intervention services, harm reduction measures, outreach programs, and specific treatments.

Keywords: Drug Users; Sex Workers; Substance Abuse; Prostitution/statistics & numerical data

Research highlights

- The first-ever survey on the relationships between drug use and sex work in Hungary.
- Survey forms collected from 510 sex workers, charting reasons for drug-related problems and the prevalence of injecting drug use.
- Results indicate that sex work location and type may pose occupational health risks in alcohol, tobacco, and drug use.
- Offering sexual services in direct or indirect exchange for alcohol or drugs was found to be rare in the sample.
- Findings may contribute to a focused planning of health intervention, harm reduction, outreach, and specific treatment.

Drug use among sex workers in Hungary

Links between drug use and sex work

Due to their morally delicate nature, drug use and sex work are controversial issues that raise special interest for the general public, the news media, and the policy makers. However, the nature of relationship between these two topics belong also to mainstream social science studies that investigate the societal integration of sex work. Previous studies had found a high prevalence of licit and illicit drug use and misuse, as well as a higher prevalence of HIV infection, among sex workers (UNAIDS, 2008). In particular, female sex workers with an injecting drug use (IDU) habit can be seen as a high-risk group, as they may function as a 'bridge population' towards the general population (e.g., Gu et al., 2008; Nguyen et al., 2004; Strathdee et al., 2008). Professional debates are also going on about a possible causal link between the two phenomena, as well as about the direction of the putative cause-effect relationship. Drug use have been identified as a key factor shaping routes into and sustaining involvement with street-based sex work (Cusick et al., 2011). Street drug markets and sex markets are often overlapping (Inciardi & Surratt, 2001), with a reasonably assumed connection with organized crime for both markets. Geographically different degrees of this overlapping had been studied from multiple points, for instance by looking at the functional role of sex workers as also drug buyers/sellers, or of drug sellers as also sex work managers (May et al., 1999).

It is widely assumed that drug use and sex work are mutually reinforcing in early adolescence: There is a higher probability for problematic drug using teenagers to become sex workers, as well as for young sex workers to develop drug-related problems (Cusick et al., 2003; May et al., 1999). Moreover, there may be substantially similar risks for the development of problem drug use and for street sex work, such as foster-home institutions, homelessness, an instable family background, school drop-out, and low self-esteem (May & Hunter, 2006). Studies also emphasize that concerning the drug use of sex workers, a distinction should be made between drug use with clients and drug use with private partners (Cusick et al., 2003).

Sex work may vary notably in its worksite and principal mode of soliciting clients (Harcourt & Donovan, 2005), thus are associated with various lifestyles and social statuses. Previous findings on drug use patterns revealed notable differences between street-based and

home-based sex workers. A UK survey indicated 84% problem use rate among sex workers on the street, while this rate was only 13% for those working indoor (Cusick et al., 2003).

Similar to street drug markets, violence is often associated also with street sex work (Barnard, 1993; Cusick, 2006). Goldstein (1985) separates three kinds of drug market related violence: (1) psychopharmacological violence, i.e., violent behavior under the direct influence of a drug; (2) violence due to economic pressure, i.e., drug addicts committing acquisition crimes in order to fund drug use; and (3) systematic violence related to drug trade, i.e., redivision of drug markets. Acquisition of drugs is related to primarily non-violent minor crimes, while systematic violence often involves brutal and ruthless criminal acts. Hence, drug-dependent sex workers have an increased chance to become victims of violence (Sterk & Elifson, 1990).

In virtually all regions outside of sub-Saharan Africa, HIV disproportionately affects injecting drug users, men who have sex with men, and sex workers (UNAIDS, 2008). Thus, the combination of sex work and IDU may particularly worsen HIV epidemics, increase discrimination and exploitation, and yield in negative social and health consequences. This view is supported by a study in Russia which estimated that 80% of HIV positive women were involved in both drug use and sex work (Rhodes et al., 1999). In the Central Eastern European region, IDU among sex workers varies greatly: In some cities, local harm reduction programs estimate 80-95% IDU among sex workers, while in other cities the rate is below 10% (CEEHRN, 2005, Table 8). In spite of a high-risk perception of sexual behavior, and despite that IDU is perceived as being more dangerous, these perceptions are not necessarily accompanied by low-risk behavioral patterns (Márványkövi et al., 2009).

Sex work in Hungary

In Hungary, the estimated number of sex workers is around 15000, of which approximately 3000-5000 persons work in the capital city Budapest (CEEHRN, 2005, Table 7). The status of individual sex work is best described as “quasi-legal”. Local governments have the authority to designate so-called tolerance zones where sex workers can work, provided that they possess a valid three-month hygienic card (which can be obtained upon negative test results from a local Sexually Transmitted Infection screening center) and a private entrepreneur license (which is needed for taxation). Sex workers offering or providing their services outside designated tolerance zones are considered to commit a minor criminal offence, and thus may get arrested and fined. While in theory sex work is regulated and not punishable (under certain

conditions), in practice the law is often used against sex workers, as local governments may refuse to designate tolerance zones, and the police may change unpaid fines to a conditional prison sentence (CEEHRN, 2005). Given this peculiar situation, not much is known about the working conditions, treatment needs, or driving factors of women and men sex working in Hungary. However, it has been reasonably speculated that rural poverty may play an important role in young girls ending up as "pimped" sex workers on the roadsides, in Budapest, or in Western European cities, while economic burdens – such as bank debt from the recent economic crisis – seem to increasingly force adult women to enter the sex markets (Földi, personal communication, 23 January 2013). These observations are in line with the literature of sex work concluding that economic necessity is the main imperative for women becoming involved in prostitution (Hester & Westmarland, 2004).

Aims of the present study

Previously, the only survey carried out among sex workers in Hungary was related to their civil rights (Juhász & Csikvári, 2006). The present study aimed specifically to explore the drug use habits of sex workers in Hungary. The purposes of this study were to shed more light on the functions of drug use within various contexts of sex work, as well as to compare sex workers' drug use habits with those of the general population. In particular, we were interested in the patterns of use of both licit and illicit substances, the prevalence and reasons of problem drug use (especially IDU), the relationships between sex work and drug use, and sex workers' accessibility to various prevention and therapy services. A more detailed understanding of the types and nature of local sex work, in combination with occupation-related drug use habits, may thus help developing complex and selective health promotion programs (Harcourt & Donovan, 2005).

Methods

Survey data was collected during a period of six months (ending in spring 2010) in and nearby Budapest, Hungary. We studied six location-based types of sex markets, namely (1) on the streets; (2) in jointly rented apartments; (3) in privately rented apartments; (4) in privately owned apartments; (5) in bars, salons, or parlors; and (6) as call girls or escorts. These categories did not show notable overlaps; the regular seasonal increase in street sex work in the

summertime was outside the study's duration. Street sex worksites included some of the officially appointed "tolerance zones" within various districts of Budapest, as well as roadside locations nearby main traffic routes around the city. Thus, throughout this study, the term "sex work" refers only to these above listed forms of prostitution and sex contact services, but not to pornography, phone sex lines, erotic dance, etc.

Participants were reached through the Hungarian Sex Workers Association (HSWA), a non-governmental advocacy organization established in 2000. Survey forms were handed out personally during the HSWA's regular outreach visits at various venues of sex work (street, apartments, etc.) and also at the office of the HSWA, which is frequently visited by sex workers for actual information (and free condoms). Data collection by self-administered interviews was unusually hard for several reasons. Firstly, as the target population belongs to a rather hidden group, a network of trust built by HSWA was crucial to find and convince sex workers to participate in the study. Secondly, as the data was collected during the participants' working hours, form-filling had to be paused whenever potential clients appeared on the scene, and to be resumed later. Thirdly, some of the lowest educated (street) sex workers were practically incapable of reading, interpreting, and filling in the form properly; in these cases, HSWA helpers had to read aloud the questions and mark the answers on the participants' behalf. A total of ten assistants were used to distribute the empty forms, to help participants in the fill-in process, and to obtain back the completed forms. Besides HSWA staff, the data collection process was voluntarily assisted also by some of the sex workers.

Due to these hard circumstances, the six-page questionnaire form was designed to be relatively brief: It only consisted of one page obtaining informed consent, four sociodemographic questions, and 12 sex work related questions. For substances, 15 categories of both licit and illicit drugs were asked about: (1) Alcohol, (2) Tobacco, (3) Inhalants, (4) Medical drugs without a diagnosis or prescription, (5) Medical drugs and alcohol combined, (6) Marijuana and hashish, (7) Ecstasy, (8) GHB (gamma-hydroxy-butyrate), (9) Nitrous oxide (N2O, 'laughing gas'), (10) Speed (amphetamine), (11) Cocaine, (12) Heroin, (13) LSD (lysergic acid diethylamide), (14) Magic mushrooms, and (15) Other.

The reasons for not including a "dummy drug" in the questionnaire were to keep the admission process faster and to ensure trust by not attempting to "trick" the participants (and thus possibly causing inconvenience for the data collection assistants who might be asked about

this drug item). Based on our experience from a previous study, all "dummy drug users" tend to mark all other available drug items as well, which did not happen in this study.

For each drug, the type of use could be marked as "Never", "Trial use" (i.e., one or two occasions), "Previous use", or "Recent use". The latter two types of drug use could be further specified as "Regular" (at least once a week) or "Occasional" (less than once a week) drug use. We did not ask separately for last-year prevalence or last-month prevalence of substance use.

Problems related to substance use were roughly assessed by charting potential problem areas described in the Addiction Severity Index (ASI) instrument (McLellan et al., 1980). Survey questions concerning substance-related problems were based on a validated Hungarian version of the European Addiction Severity Index (EuropASI), 5th edition (Gerevich et al., 2004; Rácz et al., 2002). We asked about 11 problems relating to some of the seven problem areas of EuropASI, such as negative medical, legal, or behavioral consequences of drug use, and the participating sex workers could name the substance (or substances) that may have contributed to those problems. Note that we had neither intentions nor resources to conduct a full assessment of the sex workers with the ASI instrument, as administering the full 160-item semi-structured interview questionnaire requires 35-40 minutes by trained professionals (Rózsa, 2009). (Moreover, we did not assume the participating sex workers to be "substance-abusing patients"; for the study purposes, we thus charted only the approximate domains of self-reported problems, not in-depth clinical relevance.)

Results

Socio-demographic characteristics

In total, completely filled survey forms were collected from 510 sex workers (46 male, 9%, and 464 female, 91%). Participants' ages ranged from 18 to 56 years (M = 29.5) and it was lower for males (range 20-35, M = 26.2 years) than for females (range 18-56, M = 29.8 years); generally it can be stated that typical sex workers in Hungary are young adults. Nearly half of the survey participants (46%) live in Budapest, and only less than one quarter lives outside a city or town. More than one third of the participants has only primary education (i.e., eight years), and half of them have secondary education (i.e., four more years).

Sex work types

Nearly 40% of the survey participants are street sex workers, 20% work together with others in jointly rented apartments, and 14% are employed in bars or salons/parlors. In addition, 10% of the participants work in privately rented apartments, another 10% work in their privately owned apartments, and 6% work as escorts or call girls. Typically, persons with the lowest education level work on the streets, secondarily educated work in rented apartments or as employees, and those with the highest education work in their own premises or as escorts (see Table 1).

Drug use

Drug use prevalences

The general drug pyramid for our sampled sex workers is shown in Figure 1. The most frequently used substances among sex workers were alcohol (LTP: 89%, current regular use: 48%, current occasional use: 29%) and tobacco (LTP: 86%, current regular use: 62%, current occasional use: 2%).[1] LTP of illicit drug use among sex workers was 84,3%, with cannabis (75,2%), speed (62,0%), ecstasy (59,5%), and cocaine (54,5%) in a distinct top group. Currently used illicit drugs followed this same order: cannabis (27% regular use, 15% occasional use), amphetamines (17% regular use, 9% occasional use), ecstasy (12% regular use, 11% occasional use), and cocaine (8% regular use, 12% occasional use). Current use rates of other substances (e.g., medical drugs without a prescription; GHB; heroin; inhalants; etc.) varied only between 1-4%.

Multi-drug use

On average, participants had tried out or previously used 4,3 different types of substances (3,4 different types of illicit drugs), and they are currently using 2,3 different types of substances (1,7 different types of illicit drugs). These multi-drug use rates were highest among street sex workers, and lowest in the group of call girls or escorts.

[1] As we did not obtain more detailed usage data on these two licit substances – such as alcohol units per week, or cigarettes per day, respectively – we unfortunately cannot compare their use frequencies with those of the general Hungarian adult population.

Drug use purposes

The most typically reported purposes of drug use were mood enhancement (60,3%) and partying (46,3%). Thus, for the majority of participants, the most typical purposes of drug use were not (at least directly) related to sex work, but – similarly to the general population – to recreation. Only 14,0% of the participants reported drug use with a purpose "to help to bear with the client", and 10,7% were using drugs in order to "better satisfy the needs of the client or of the pimp". However, 28,1% reported drug use for "preventing fatigue from being awake at nighttime"—a purpose that might be well related to sex worker lifestyle.

Sex work and drug use

Drug use prevalences

Survey results met preliminary expectations about significant differences in drug use habits of sex workers, especially in respect of consuming drugs with their clients vs. their private partners. 63% of the participants reported using drugs with their clients (13% frequently, 50% rarely), most typically cocaine (29%), cannabis (19%), alcohol (16%) and amphetamines (14%). However, only 38% of the participants reported using drugs with his/her private partner, most typically alcohol (22%), cannabis (20%), cocaine (12%), and amphetamines (8%).

Sex (for money) for drugs

In the studied sample of sex workers, it was extremely rare to offer sexual services in direct exchange for substances. 95% of the survey participants never performed sex work in return of alcohol or drugs, and the 5% admitting it did so only rarely. Thus, the media-portrayed phenomenon of pimps getting young girls hooked up on drugs, then demanding sex work in return for subsequent daily doses is fictitiously far from typical for our study participants. Moreover, only 20% of the participants had admitted occasionally performing sex work for money to purchase alcohol or drugs. These findings contradict previous assumptions about drug dependence being an important motivational factor for sex work, as this behavior was typical only for a minority of participants. However, previous findings on the sex-for-drugs bartering phenomenon came mostly from studies on crack cocaine users (Baseman et al., 1999; Goldstein et al., 1992), and do not seem to be generalizable for users of other, less addictive types of drugs.

Sex work types and drug types

Results from our studies revealed also significant connections between drug types and locations of sex work. One third (33%) of the street sex workers reported regular amphetamine

use, but none reported regular cocaine use. On the contrary, none of the escorts reported regular amphetamine use, but 38% admitted regular cocaine use. These findings reflect also the prices of the two drugs on the black market: Street sex workers use cheaper stimulants (especially amphetamines that are indeed being referred to as the 'cocaine of the poor').

In accordance with previously reported data (Li et al., 2010), workplace-related alcohol use in the sex work environment were identified. Regular use of alcohol was twice as typical (64%) for sex workers who were employed in bars, salons/parlors, or alone in rented apartments than for those working in other indoor locations (33-34%). Furthermore, 74% of street sex workers smoked tobacco as compared to the 17% smoking rate of escorts. All the 11 heroin-using participants, 2% in the sample, were street sex workers.

Problem drug use

Within previously and presently drug-using sex workers, the most drug-related problems were reported in connection with amphetamine (30%). The next substances in order were almost a three-tier: alcohol (17%), cocaine (17%), and cannabis (15%). Problems with heroin and ecstasy were reported in the 6-10% range; all other drugs were mentioned only marginally (below 3%).

The most severe problem mentioned by sex workers was prolonged/excessive drug use (21%), closely followed by continued drug use in spite of putative negative consequences (16%), excessive money and time spent on purchasing drugs (15%), and developing drug tolerance (14%). Thus, the majority of drug-related problems were associated with addiction and the consequently increased money/time expenditure; other drug-related problems were below 8%. Drug use was not associable with high-risk behavior (e.g., driving a car under the influence). In total, 10% of all participants had already been treated for substance-related problems (including alcohol, tobacco, and other drugs) once, and 1% received such treatment more than once.

When comparing these problem drug use views with the numbers of all drug users (trial, former, current occasional, and current regular), relative disproportions can be immediately noticed. In spite of their high-prevalence, certain drugs were related to less reported problems, while other substances are considered as bigger problems even when marginally used. For instance, cannabis (with a LTP of 75%) was related to 2.3 drug use problem types on the average, cocaine with a LTP of 55% was related to 3.1 problems, while heroin with a LTP of 13% was related to 5.7 problems (on the average, out of 11 possible drug use problem types).

Current regular drug use (at least once per week) increased the average number of problem types only slightly with cannabis (24,8% of participants, 2.5 problems) and cocaine (7,4% of the participants, 4.1 problems), while heroin increased much more (1,7% of participants, 8.0 problems). However, it is to be emphasized that these problems are subjectively perceived and evaluated, as it is difficult to objectively self-evaluate certain problems (e.g., consequences of withdrawal, or drug-related legal issues). Moreover, drug-related problems that are caused by sociocultural or political factors (e.g., problems due to social stigmatization, or to the illicit status of a drug) are not primary effects of the drugs' properties or their use patterns, and thus may remain little known.

Injecting drug use

Injecting drug use was not typical for the survey participants: 80% had never injected drugs, 16% have done it rarely, and only 4% did or do it frequently. Ever-injected drugs were heroin (13%), amphetamines (6%), cocaine (2%), and ecstasy (0,2%). These 110 injections were administered by 102 drug users; eight persons had thus injected two different types of drugs, most typically heroin and speed/amphetamine. From all sex workers participating in the survey (N=510), the number of currently injecting drug users is estimated to be around 30 persons (6%). While injecting use of heroin or speed/amphetamine appeared mostly in the group of street sex workers, injecting use of cocaine was found among those who work in shared apartments.

Discussion

The survey yielded data about both regular and occasional use of certain licit and illicit substances within different groups of sex workers; reasons and prevalence for problem drug use (e.g., IDU); and various relationships between sex work and drug use. Findings indicate that sex workers' LTPs of illicit drugs (84,3%), of cannabis (75,2%), of speed/amphetamines (62,0%), and of ecstasy (59,5%) are manifold higher in comparison with the young adult age group of 18-34 years in Hungary: The latest general population survey on a representative sample had found corresponding LTPs of 20,9% for illicit drugs, 19,1% for cannabis, 5,1% for ecstasy, and 4,0% for amphetamines (Paksi & Arnold, 2007). Our findings about sex workers' manifold higher LTP of illicit drug use is also coherent with recent results from another Hungarian sex worker survey (FACT, 2011) that had found a lower (but still rather high) illicit drug LTP value, 66,3%. The difference is probably explainable at least in part by the other sampled population living

mostly on the countryside, while our participants were primarily from and around the capital city—therefore generally associable with higher potential accessibility to illicit drugs. Compared to other findings dealing with the drug involvement of other special groups in Hungary, our sampled sex workers had a notably higher LTP of illicit drugs (84,3%) as compared with homeless people (16,3%), adolescents living in residential homes (28,3%), or young people from Budapest attending entertainment venues (63,8%) (Paksi & Arnold, 2009). Concerning substances, the most notable difference is in the low prevalence of LSD use among sex workers, in comparison with all these other special groups and the general young population in Hungary.

Our finding showed very clear differences in drug use patterns within distinct groups of sex workers: While better educated 'elite' escorts use cocaine, street sex workers must content themselves with amphetamines. This difference could also explain why amphetamine was subjectively viewed as the most problematic substance: It is strongly related to the most undereducated and underprivileged sex worker group, namely those on the streets. The disadvantage of street sex workers had been previously shown to manifest also as increased frequencies and quantities of drug use – including more addictive drugs such as heroin – as compared with sex workers in indoor venues (Church et al., 2001; Jeal & Salisbury, 2007). Our results also support these previous findings, as all heroin-using participants in the sample were street sex workers. Hence, for instance, the relatively low problem rates associated with cocaine consumption in our study may be partially explained by the virtual absence of cocaine use among the most vulnerable group of participants, i.e., street sex workers. Low cocaine-related problem rates may also occur due to the fact that higher-risk forms of cocaine consumption – such as injecting use and smoking use (of freebase 'crack' cocaine) – seem to be fundamentally rare in Hungary (EMCDDA, 2012).

However, drug-related problems did not seem to rise proportionally with the high prevalences of drug use. This finding is in line with researches carried out during the recent years in Hungary, convincingly showing that the vulnerability of specific populations is not just in the higher prevalence rate, but rather in the more intensive consumption patterns (Paksi & Arnold, 2009). In further investigating this phenomenon in the case of sex workers, we have been offered several speculative explanations by the HSWA (Földi, personal communication, 23 January 2013). Relatively low problem drug use rates among sex workers may be partially explained with the tight control system in street sex work: Pimps are constantly monitoring the 'girls' to

keep them able to work, and limiting (although not banning) their money-makers' substance use. Secondly, sex work carries notable risks due to unknown and unpredictable clientele, so sex workers need to be reasonably alert to avoid dangerous situations, or at least must react swiftly. Moreover, while illegal sex work is often tolerated by the police, illegal drugs are not tolerated. Hence, sex workers in rented apartments wish to keep their drug use as low as possible in order to avoid eviction and drug-related trouble. Lower drug prevalences and problem rates among the more independent and higher-income sex workers (such as escorts and call girls) are explainable by their profit-oriented attitude: They simply prefer money over drugs.

We found no support for a hypothesis that drug addiction or a resulting exploitation would be a strong motivating or facilitating factor for sex work. For the majority of sex workers, there are clearly separable functions of drug use during work (e.g., primarily stimulants with the clients) and outside work (e.g., primarily alcohol with a private partner). Drug use did not seem to influence negatively the existential circumstances of sex workers (such as dropping out from the educational system or losing a job) because of duty negligence due to their drug using lifestyle. However, such existential changes were not directly asked about in the survey, therefore results are best interpreted cautiously.

Current IDU rates were relatively low within the sampled Hungarian sex worker community; intravenous administration existed primarily among heroin-using street sex workers. Even though it has been shown that it is possible to have a large number of sexual partners and remain free from sexually transmitted infections provided that condoms are used consistently in this 'risky business' ((Ward et al., 1999), a recent Hungarian study had found out that only 77,2% of sex workers are using condoms consistently (FACT, 2011) (and that only 30,1% of them are refusing to skip condom use in spite of extra money offered), which may indeed raise concern about this potential bridge population. The practices of sharing and disposing needles may pose an elevated public health risk for the wider society, which justifies considering special sex work harm reduction, such as preventive and outreach programs (Rekart, 2005). Moreover, in the light of the finding that almost 90% of sex workers had never received drug treatment, it would be needed to conduct further quantitative studies in order to shed light on sex workers' actual accessibility to the provided public health services.

In the light of our findings, an important issue that the treatment sector might need to address is the occasionally problematic use of stimulants among sex workers. A reason for

additional concern is that since the survey data collection period in 2009-2010, a large number of novel psychoactive substances (NPS), such as various cathinone type stimulants and synthetic cannabinoids, have been spreading rapidly also in Hungary (EMCDDA, 2012). Keeping in mind the high prevalence of stimulant and cannabis use among sex workers, there may arise a need to inform them about the effects and risks of these new drugs that may have substitutive uses for similar purposes due to similar effects.

Given the high prevalence of drug use but low drug-related problem rates among sex workers, Hungary does not seem to need a radically new type of outreach, or to import an existing model from another country. In the current situation, a trusted non-governmental advocacy organization (i.e., the HSWA) is able to contact a notable share of sex workers for monitoring and educating purposes. Having an extensive informal network with 7000-9000 sex worker contact addresses (Földi, personal communication, 23 January 2013), the HSWA is potentially able to efficiently disseminate information and to campaign for various health behavior issues. Thus, a “grass-root” urging of sex workers may be able to increasingly drive them to be included into the state health system, in where specialized medical staff can handle also drug-related issues, if any. This process could be, perhaps, best facilitated by clarifying the legislative practices concerning the designation of tolerance zones, which may well increase the number of licit sex workers who are also connected to the state health system. We sincerely hope that our study results will worthily inform the discussion and conclusions on these matters.

Table 1

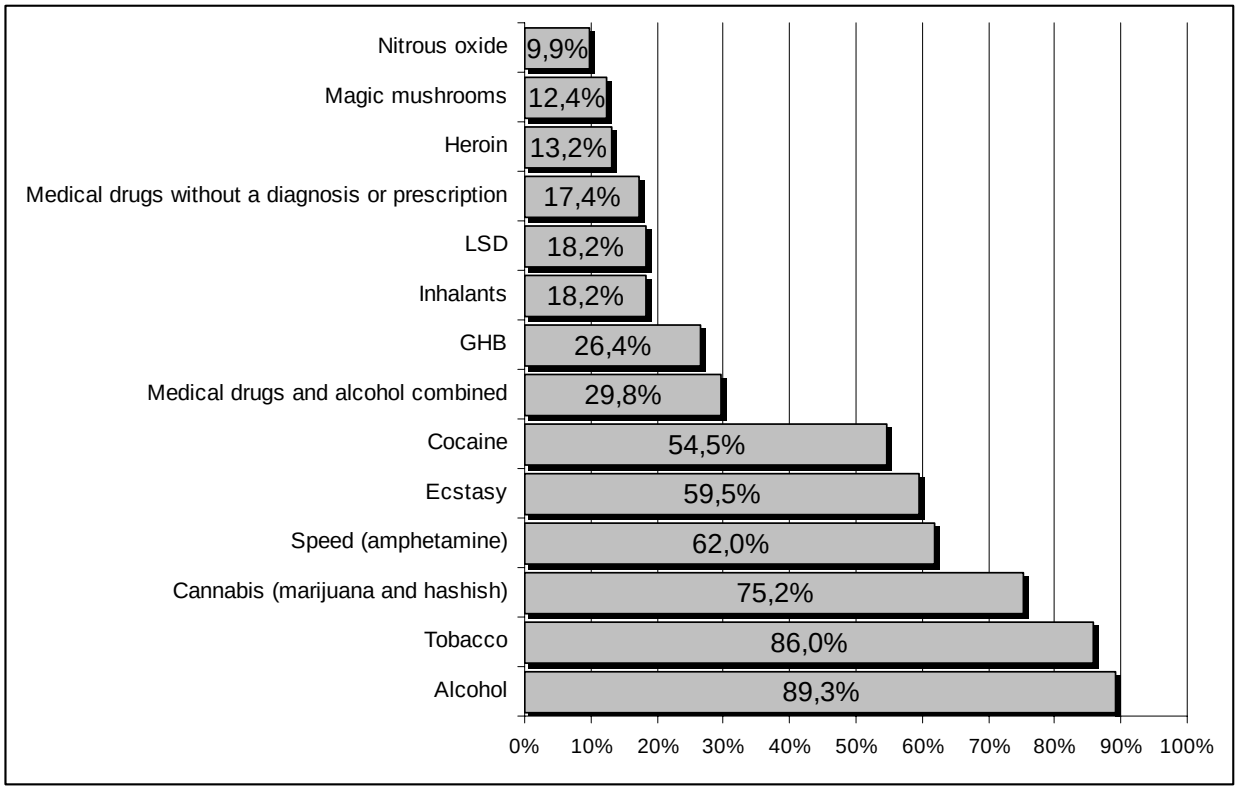
Statistical descriptions of location-based sex markets

Sex market type	S-%	LE	IDU	PR	A	T	S	H	C
In owned apartment	10%	3.5	2%	1.4	33%	60%	7%	0%	7%
In rented apartment, alone	10%	2.3	2%	2.2	**64%**	64%	0%	0%	9%
In rented apartment, w/ others	20%	2.4	3%	0.7	34%	66%	6%	0%	9%
In a bar or saloon	14%	2.6	3%	1.1	**64%**	71%	7%	0%	14%
On the street	40%	1.4	**9%**	2.0	51%	**74%**	**33%**	**2%**	**0%**
As call girl or escort	6%	4.3	0%	1.7	33%	**17%**	**0%**	0%	**38%**

Note. S-% = Percent in sample; LE = Level of education by school type (1-5); IDU = Lifetime prevalence of injecting drug use; PR = Average occurrences of self-considered drug-related problem types (0-11), per current regular drug users; A, T, S, H, C = Current regular use of Alcohol, Tobacco, Speed/amphetamines, Heroin, and Cocaine. Key findings that are discussed in the text are shown in boldface.

Figure 1

Sex Workers' Drug Pyramid



Note. Figure based on lifetime prevalence (LTP) rates; N=510.

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