

SEX WORK

Sex work in Tallinn, Estonia: the sociospatial penetration of sex work into society

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Background: It is important to describe and understand the underlying patterns and dynamics that govern sex work in societies undergoing rapid political and social changes, its heterogeneity across populations, and its evolution through time in order to inform future research, sound policy formation, and programme delivery.

Objectives: To describe the socioeconomic and cultural determinants, organisational structure, distinct categories, and spatial patterning of sex work in Tallinn, Estonia, and identify recent temporal changes in sex work patterns.

Methods: In-depth interviews with key informants; naturalistic observations of sex work and drug use venues, geo-mapping of sex work sites, review of media, public policy, and commissioned reports, and analyses of existing data.

Results: Sex work takes place in a hierarchy of locations in Tallinn ranging from elite brothels and "love flats" to truck stops. These sites vary in terms of their public health importance and social organisation. There are full time, part time, and intermittent male and female sex workers. Among others, the taxi driver, madam and the bartender are central roles in the organisation of sex work in Tallinn. Cell phone and internet technology enable sex work to be highly dispersed and spatially mobile.

Conclusion: Future research and programmatic service delivery or outreach efforts should respond to the changing profile of sex work in Tallinn and its implications for STD/HIV epidemiology.

Sex work is a dangerous profession and sex workers are exposed to serious risks.¹ Beyond sex workers' own risk of sexually transmitted disease (STD)/HIV acquisition, in the absence of condom use sex workers may play an important part in the spread of sexually transmitted infections (STI) into the general population.² Differences in the social context³ and social organisation of sex work^{4–5} may have important implications for sex workers' risk of acquiring and transmitting STI and for the delivery of clinical and social services. Understanding the social context and social organisation of sex work is also necessary for planning and implementing effective STD/HIV interventions targeting sex workers.¹ Societal collapse, poverty, war, and globalisation have all been associated with changes in the volume and societal patterning of sex work.^{3–6} It is important to describe and understand the underlying patterns and dynamics that govern sex work in societies, its heterogeneity across populations, and its evolution through time.^{4–7} In several previous studies, we described organisational patterns of sex work in several Russian locales, noting marked diversity in the organisation and marketing of sexual services in different Russian cities.^{4–7} This report describes the results of a rapid assessment in Tallinn, Estonia, which attained independence from the former USSR in 1991.

Tallinn, Estonia, is a particularly interesting city for the study of sex work because of its historical and demographic characteristics. Following 50 years of occupation by the Soviet Union, Estonia gained its independence in 1991. The transition from Soviet occupation to autonomy brought about major societal upheaval economically and socially. Many men and women lost their jobs, positions, and security as Soviet factories and military installations closed, creating substantial unemployment, especially in the north eastern region of Ida-Virumaa abutting Russia but also in Tallinn. Many of the unemployed were ethnic Russians who were originally imported from the Soviet Union to control the

military, industry, and governance in Estonia. As ethnic Estonians emerged into social, economic, and political prominence with independence, ethnic Russians found themselves without the status and privilege they formerly enjoyed. As in most transitional societies, sex work has expanded into an important mode of coping with the economic inequality and societal unrest of the past 15 years.

Estonia is a small country with a population of 1.4 million and the capital city of Tallinn has 400 000 residents. The small population size has implications for the practice of sex work since, unlike more populated cities, both sex workers and clients express concern about being recognised. Consequently, observable street sex work is limited in Tallinn. Conversely, there are demographic pressures that increase both the demand for and supply of sexual services. Like many other European countries, Estonia has undergone the second demographic transition and Estonians now spend a larger portion of their adult lives childless and unmarried.⁸ The fertility rate in Estonia declined steadily from 2.02 in 1980 to 1.37 in 2003. Fertility in Estonia has remained below replacement levels since independence in 1991. The mean age at first marriage increased from 24.4 and 22.6 in 1980 to 28.2 and 25.7 in 2003 for men and women, respectively and marriages per 1000 declined from 8.78 in 1980 to 4.21 in 2003.⁹

In light of the massive sociopolitical changes in Estonian society since 1991, it is not surprising that the unemployment rate has been high in Estonia. Average annual unemployment has varied from 6.5% and 6.6% in 1993 to 10.4% and 8.9% in 2004 for men and women 15–74 years of age, respectively. During this period the maximum unemployment rate peaked at 16.5% and 12.6% in 2000 for men and women, respectively. Employment disparities have been

Abbreviations: HSV, herpes simplex virus; STD, sexually transmitted diseases; STI, sexually transmitted infections

considerable across geographic regions and remain high; in 2004 the unemployment rate was 10% in Tallinn, but 17.9% in Ida-Virumaa. High and heterogeneous unemployment rates often are important predictors of the volume and spatial patterning of sex work.⁵ A similar pattern of disparities is also observed in average monthly net wages and in the gross domestic product per capita.¹⁰ Interestingly, as of 2003, ethnic Estonians were the majority population of Tallinn but only a small minority of the population in Ida-Virumaa which remains predominantly Russian. Ida-Virumaa is at the easternmost border with Russia and its Soviet industrial base suffered after independence, leaving this region with the highest unemployment rates in the country. A sizable majority of the region's Russian speaking population was not eligible for Estonia citizenship after independence and the area has experienced considerable political dissent since independence regarding potential secession from Estonia and many of its residents and leaders do not speak Estonian, which places them at a disadvantage for entering universities and competing for jobs, all of which now require fluency with the Estonian language.

Organised crime is a notable component of the social context in modern Estonia. The police conceptualise the history of crime in the recent past as being composed of two distinct periods. The first era (1991–1996/7) was marked by intense struggle and competition for primacy among different organised crime groups and experienced 400 murders per year. The second era (1996/7–present) is marked by a dynamic equilibrium of power among a smaller number of surviving organised crime cartels and 70–80 murders per year. (Law enforcement officials in Tallinn, personal communication May 2005.)

Following independence, the Estonian Parliament debated whether prostitution should be criminalised or legalised and concluded that neither option would prevail. Currently, adult exchanges of sex for money are not punishable under Estonia's criminal code so long as they take place within one's own residence and involve only adults, but acting as the middleman (pimp or procurer) is criminalised.¹¹

As in other places, bacterial sexually transmitted diseases (STD) are on the decline in Estonia while viral STI incidence is increasing (Anneli Uusküla, unpublished data). Syphilis, gonorrhoea, *Chlamydia trachomatis*, trichomoniasis, and genital herpes simplex virus (HSV) infections are all reportable in Estonia,¹² but misdiagnoses and under-reporting are frequent.¹⁶ The population of Estonia is concentrated in Tallinn and the majority of STD are reported from Tallinn. Following independence, bacterial STDs and syphilis increased markedly in the country.¹³ Trichomoniasis and chlamydial infection are the most frequently reported STDs.¹⁴ Underscoring the importance of social context, in a recent study changes in syphilis incidence rate were correlated with concurrent changes in the unemployment rate and tuberculosis incidence.¹⁵ Similarly, underscoring the importance of health system parameters, adherence to treatment guidelines seems to be less than perfect.¹⁶ Seroprevalence of HSV-2 among low risk populations is considerable.¹⁷ The HIV epidemic was slow to start in Estonia and began to develop only after it entered into the drug injecting community.¹⁸

Substantial public attention, a recent scholarly conference, and a number of commissioned reports address trafficking of Estonian women for sex work abroad although few reports consider sex work within Estonia.¹⁹ Despite the absence of any statistics on the trafficking of women in Estonia, several articles in the popular press and multiple reports estimate this is a considerable problem for Estonian women.

A rapid assessment was conducted in Tallinn in May 2005, to describe the socioeconomic and cultural determinants of sex work; assess the magnitude of sex work and trafficking;

describe the organisational structure and distinct categories of sex work; depict the spatial patterning of sex work in Tallinn, and identify recent temporal changes in sex work patterns. In this article we describe the patterns of interaction we observed among sex workers, taxi drivers, organised crime, and the general population. We discuss the implications of our findings for the spatial and social dispersion of sex work; the effect of population size on sex work; and the impact of globalisation on sex work. Finally, we discuss the implications of our findings for public health programmes, policy formation, and future research.

METHODS

The rapid assessment methodology for this study included five data collection techniques: in-depth interviews with key informants; naturalistic observation of commercial sex work and drug use venues; geo-mapping of sex work sites; review of existing media policy and commissioned reports on sex work and trafficking of women; and analysis of existing surveillance, epidemiology, and sociological data.

Using snowball sampling we conducted 32 in-depth interviews with key informants and gatekeepers. Table 1 summarises the individuals who were interviewed in this rapid assessment. Some interviews yielded very rich material that could not be completed in one sitting or discrepant opinions that diverged from information provided in earlier interviews, necessitating re-interviews to gather additional

Table 1 Key informants interviewed during the rapid assessment

1 Taxi driver	Key informant
2 University faculty and research centre	Estonian Institute for Open Society
3 University faculty and researcher	Estonian Institute for Open Society
4 Chief of dermatovenerology	West Tallinn Central Hospital clinic
5 Clinic director	West Tallinn Central Hospital
6 Director	World Health Organization, Estonia
7 Television reporter	Local media Filmimees
8 Psychologist	NGO "Eluliin" ("Life line").
9 Psychologist	NGO "Eluliin" ("Life line").
10 Epidemiologist	Health protection inspectorate.
11 Chief specialist	Ministry of Social Affairs
12 Organisational representative	NGO Gay and lesbi infokeskus. Ardi
13 Organisational representative	NGO Gay and lesbi infokeskus. Ardi
14 Management	Responsible for elite brothels in five countries for organised crime cartel NGO ENUT
15 Organisational representative	NGO Convictus Eesti
17 Staff and former drug user	Syringe exchange project City of Tallinn Police Vice Unit
18 Organisational representative	Police, Youth Department
19 Organisational representative	Institute of International and Social Studies
20 Organisational representative	Key informant
21 Sex worker	Key informant
22 Taxi driver	National Institute of Health Development
22 Director	Global Fund, Estonia
23 Director	Global Fund, Estonia
24 Analyst	Homeless shelter at Kauge 4
25 Shelter staff (5)	AIDS Support Center
26 Director	AIDS Support Center
27 Nurse	AIDS Support Center
28 Physician	Parliament of Estonia
29 Member of Parliament	NGO living for tomorrow, hotline
30 Telephone interview	University of Tartu
31 Dr Anneli Uusküla	Key informant
32 Physician	

information or to clarify the reasons behind the discrepancies. Therefore, the actual number of interviews exceeded the number of key informants shown in table 1. Interviewees included individuals responsible for AIDS and STD prevention; coordinators of outreach and service programmes; social scientist; physicians, epidemiologists, a member of Parliament, needle exchange staff, individuals involved in the sex industry (taxi driver, organised crime, sex workers), current or former drug users, and representatives from the police units tasked with regulating the sex industry and youth services. (Note: some individuals are represented in more than one category.) Interviews were conducted in Estonian, English, or Russian depending upon the language preferred by the interviewee.

Naturalistic observations took place while riding in cars, walking on streets and in parks, or in indoor locations such as hotel lobbies and bars that were identified during the interviews as prominent locations where commercial sex work was concentrated.

The quantitative data were from locally available data sets shared with us by interviewees. Surveillance data were collected using standard methods currently in place for disease monitoring in Tallinn. Other data were recorded in clinic reports or collected for specific research projects and shared with us by the sources. While we were able to access a comprehensive array of data from different disciplines and organisations, these were entirely secondary data collected for local purposes and we are, therefore, unable to comment upon the reliability or generalisability of this information. Commissioned reports on sex work and on trafficking of women were provided to us by their authors or by the agency that commissioned the reports.

At the end of each day and at the conclusion of each data collection activity, the rapid assessment team conducted systematic debriefings and cross comparisons of their individual observations and interpretations. Any discrepant impressions were followed by repeat observations or further information gathering to clarify and resolve the discrepancy. Discrepancies between the researchers in interpretation were followed by in-depth discussion about the observations that led to those conclusions and by either repeat interviews or additional data collection until the discrepancy was resolved.

RESULTS

Despite considerable public discourse and publicity directed to the subject of trafficking of women for sex work to and from Estonia there is a scarcity of any empirical support for this argument. Reports of such cases over the past several years are in single digits. One author noted her surprise that all sex work was not regarded as trafficking by the people she interviewed and surveyed for her report, suggesting the contradictory differences between reports and interviewees on the subject may result from the lack of a common definition of trafficking that confounded interpretation. Popular media and community participants frequently voiced “falling victim to trafficking” as the core issue that underlay sex work. In contrast, interviews and reports from opinion leaders and sex workers who were well informed about sex work touched upon trafficking very rarely, tending to see sex work as a conscious choice influenced by economic choices, underscoring the importance of economic determinants of sex work in the region.²⁰

Organisational structure of sex work

In Tallinn, sex work takes place in a descending hierarchy from elite brothels, hotels, nightclubs, dance clubs and strip tease bars, massage parlours, saunas, apartments or “pleasure flats,” along the streets, bus stations, truck stops, to specific highways (such as via Baltica which runs between

Tallinn and Parnu in the south west). Both the police and representatives of organised crime agree that a large portion of sex work in Tallinn is controlled by organised crime. Unlike the organisation of sex work in Moscow,⁴ organised crime in Tallinn is primarily involved in the operation of elite brothels, hotel sex work, and some of the more luxurious “pleasure flats,” but not in street sex work.

Interestingly, taxi drivers are key to the organisational structure of sex work in Tallinn, particularly with respect to the functioning of elite brothels and “pleasure flats.” The most effective way that sex workers access clients and clients locate sex work is through taxi drivers. Few sex workers stand on the streets and those who do, usually drug users, are verbally discouraged by the taxi drivers. Additionally, clients would not be welcomed into a brothel without a character reference from the taxi driver. Thus the taxi drivers serve two functions—that of informants for clients and of gate keepers who screen potential clients for inebriation or disruptive behaviours for the brothels. There are 2000 taxi drivers in Tallinn, approximately 500 of whom are estimated to be involved in the sex trade. Taxi drivers can earn considerable additional income per customer through their involvement in the sex trade. They are paid by the brothel for each client they deliver and wait outside the brothel with the meter running for so long as the customer remains inside. Thus they have a vested interest in the primacy of the sex trade located within brothels and “pleasure flats” and discourage freelance street sex work. This current system was established in 2000. Taxi drivers have always driven customers to and from brothels, but currently brothels compete to pay the drivers more than other brothels, thereby increasing their share of the market. Some taxi drivers are salaried from the brothels and the salary amount is highly variable. Brothels do no advertising for clients and rely entirely on the taxi drivers for their clientele, whereas free standing “pleasure flats” advertise for clients in magazines and newspapers.

Another key player, particularly in the organisational structure of the elite brothels and to a lesser extent in the “pleasure flats” is the “madam” who is responsible for the day to day management of the workers within the brothel. The madam functions as the onsite mother figure, psychologist, conflict resolution expert, and organises work schedules. The importance of her role is well recognised by organised crime and the madam is highly compensated for her work.

Another key position in elite brothels is that of the bartender. The bartender mixes drinks, collects payment at a highly inflated rate in comparison with charges outside the brothel, and fulfils an accounting function by maintaining a record of the amount of alcohol consumed by each sex worker’s clients since she will receive supplemental payment for every drink her clients consume and for non-alcoholic drinks the client purchases for her. In some cases the functions of taxi driver and bar tender may be performed by the same individual at different times.

Within the elite brothels there often is a security guard who combines the functions of a butler and bouncer, controlling the entry and exit of clients to and from the house. A central position is the sex worker herself who functions as a conversational or drinking companion and/or sex partner, depending on the wishes of the client. It is clear that a non-negligible proportion of the clients purchase the company of young women without engaging in sex. Several interviewees estimated that 50% of the visitors to the elite houses are looking only to purchase companionship without the sex. Costs are the same.

Entry into organised sex work is usually self initiated in response to employment advertisements or word of mouth from friends who are already employed within the industry.

Within the elite brothels there is a well defined probationary period. Potential cohorts of five to six sex workers spend 1–7 days being observed for the possibility of drug use and undergo HIV and STD tests before they can begin providing sex services. A 3 month trial period in Tallinn is followed by a 2 month rotation in Helsinki. After that time, the probationary cohort is separated in order to minimise any interpersonal conflicts that develop among the members of the cohort after being in such close proximity to one another for 5 months. At that point, they have the option of returning to a Tallinn brothel or may select a location abroad in Finland, Norway, or Sweden. Income potential is reportedly greater in the foreign locations and the sex workers maintain the privilege of choosing where they work throughout their career. Some reported that they rotate back and forth at will between countries as they wish. Drug, HIV, and STD testing is reportedly repeated intermittently in the elite brothels and condom use is encouraged by the management.

The legal owner of the elite brothel is typically registered as owning a legal business such as a hostel, dance club, striptease bar, or massage parlour. For example, one consortium includes 14 elite brothels that are owned by six individuals who jointly set policy, prices, and rules in common for the operation of these brothels. While they are the legal owners, they answer to higher echelons of organised crime. Recently, a concerted effort at brothel closure by the police reduced this cartel's brothels from 21 to the current 14.

The positions described above are highly differentiated and their roles highly scripted. Such specificity characterises the operation of the elite brothels. In smaller establishments such as "pleasure flats," the same functions are served; but the extent to which positions and roles are differentiated depends on the size of the establishment and the economic resources. In the smallest and cheapest establishments, all of the above functions may be served by one or two people. The existence of freelancers who work on their own and perform all of the above functions themselves has been mentioned. However, it appears that survival as a freelancer is difficult and time limited in the face of severe and organised competition.

Last, but not least, is the central importance of the client, who provides the financial foundation on which the entire system relies. Approximately half of the male clients are from Finland—only 3 hours away by ferry, and another 25% come from other Scandinavian countries. Recently the proportion of clients from England has increased as a result of the entry into the industry by travel companies that arrange "stag parties" to Tallinn for British men. Clients may also be from Russia, Italy, Spain, Japan, or other international origins. It is estimated that only 12% of Estonian men, in contrast with 50% of Italian men, have visited a sex worker in their life times (I Pettai, personal communication, 23 May 2005). The same informant estimated that only 2–3% of Estonian men purchase sex services regularly. Estonia is an attractive destination for international clients because both alcohol and sex are cheaper than in surrounding countries. For example, in Norway the cost for sex services and for alcohol is reported to be four to five times higher than in Estonia. Interestingly, Tallinn also provides counterfeit Viagra for clients of sex workers as they disembark from the ferry at the port. It is said that children from orphanages are used to sell this fake Viagra, as well as mislabelled cigarettes, and other supplies to unsuspecting purchasers entering Tallinn.

Impact of technology on sex work

All over the world, new technology, particularly the cell phone and the internet, are having a major impact on patterns of sex work.⁷ Such influence is visible in the way sex workers market their services, in the ways in which clients

get information and access to the services they desire, in the ability of clients to share information with one another, and in the increased ability of sex workers to be spatially mobile. All of these influences are observable in Tallinn.

Clients can receive information regarding available services through newspaper and magazine advertisements and through the internet. The information that is available on the internet includes pictures, specific services that are available, and the prices associated with each sex worker for each specific service. Access to the services is attained through telephone calls or the assistance of taxi drivers who function as middlemen between sex services and potential clients.

Clients also use the internet for "quality assurance." Client networks that are open to any interested party provide first hand information from the recipients of services regarding the attractiveness of specific sex workers, quality of and satisfaction with her services, and the ambiance of settings in which the services were provided.

The cellular telephone and the internet (in conjunction with the special part played by taxi drivers) have given the providers of sex services markedly enhanced spatial mobility. Consequently, apartments in which sex services are provided have become remarkably transient, changing locations as often as every 2–3 months.

Spatial patterning of sex work

Elite brothels are disseminated throughout the city in higher cost suburban and residential neighbourhoods. Issues of access between sex services and clients are handled by the taxi drivers and having a central location is not an issue. Such dispersed locations provide operators of elite houses maximum coverage of client space, ensuring that clients can be accessed efficiently. Paradoxically, such locations place them in uncomfortable proximity to the general population thereby, perhaps, creating the societal angst that seems to surround the issue of sex work in Tallinn.

"Pleasure flats," like elite brothels, are scattered throughout the city with more luxurious flats being located in upper middle class residential areas while the cheaper flats are to be found in lower middle class neighbourhoods and apartment blocks. Dispersed locations may be even more important for the spatial patterning of "pleasure flats." Operators of these flats can readily deploy their sex workers from the location closest to client demand. Apartment occupancy for "pleasure flats" is highly transient. Use of the internet and cellular telephones enable operators of such flats to be relatively independent of any specific address and they may change addresses several times a year.

Hotels are concentrated within the centre of the city where sex workers may be ordered directly from hotel staff or delivered from an elite house or "pleasure flat." Saunas, nightclubs, and bars also are located in the centre of this relatively small city in close proximity to one another. This affords clients and sex workers alike the ability to move easily among these venues in accordance with nightly supply and demand conditions.

Street sex workers, although they are relatively few in comparison with other cities,^{4, 5, 7} can be found in the central city and Old Town as well in more distal residential neighbourhoods, often near transportation routes and bus stops. Truck stop settings are on the periphery and outside the centre city at places where long haul trackers stop on their routes.

Settings for male sex workers and men who have sex with men also are concentrated in the central city with the exception of one more distal beach setting near Kopli Laht outside the city to the west.

DISCUSSION

We found that despite frequent mention of trafficking of women for sexual purposes in Tallinn, any empirical evidence to support this claim is lacking. Sex work takes place in elite brothels, pleasure flats, striptease/dance clubs, hotels, massage parlours, saunas, streets, bus stations, truck stops, and highways.

Provision of sexual services is highly dispersed and very spatially mobile as a result of the use of cell phones and the internet.

Our findings have several important implications for the dynamic interaction between sex work and society. Firstly, in Tallinn sex work, which traditionally used to be concentrated in space in areas known as red light districts, is now dispersed in space all over town in all classes of neighbourhoods. Secondly, sex work which traditionally was performed by women of particular, often poor, background now seems to include women from a wide range of backgrounds perhaps encompassing all strata in society. Expansion of part time and intermittent sex work is important in this context. As the proportion of part time and intermittent sex workers increases, the penetration of sex work into all strata of society deepens. Thirdly, the very rapid change in the forms and spatial location of sex work allows it to penetrate society further, socially. As "love flats" move from one address to another every 2–3 months, exposures between sex workers and members of the general population increase exponentially. Such exposure increases the acceptability of sex work in society. Following recurrent interpersonal contact sex workers are less likely to be experienced as the feared "other."

Our assessment had limitations. The assessment was rapid; data collection was completed in a short time, and both the number of interviewees and the review of existing data were not exhaustive. Two out of the three investigators who gathered data are not native Estonian speakers; thus their interpretations of information received during the interviews and naturalistic observations may have been less than adequate.

Despite these limitations, our findings may be indicative of changes in sex work that are taking place globally. Such change necessitates a re-examination of how sex work is conducted and studied, its implications for the spread and prevention of STD and HIV, and how interventions for harm reduction in the context of sex work can be developed and delivered. Future work should focus on contemporary changes in the social and spatial patterning of sex work and their implications for the epidemiology and prevention of STD and HIV.

Indications for future research identified from this rapid assessment would include the conduct of a behavioural epidemiological study assessing the incidence and prevalence of HIV/STD infections, drug and alcohol use patterns, healthcare seeking practices, preventive behaviours, sexual network patterns, relationship formation and dissolution, patterns of entry into and exit from sex work, geographic mobility, and movement across sex work categories by sex workers at all levels of the sex work hierarchy. A broader spectrum of risk behaviours that go beyond sex work to include drug users, truck drivers, homeless adults and children, orphans, and incarcerated populations would be useful in clarifying their different risk profiles and for identifying interventions that can be tailored to the risk profile of each group. Mathematical modelling of the potential impact of interventions, in light of limited economic and human resources, could potentially identify the population level impact that could be anticipated from different types of interventions.

With respect to programme delivery, we found almost no adaptation or delivery of evidence based risk reduction

interventions. Programmes can only be cost effective and scaled to a population level in the presence of adequate information regarding which interventions are efficacious, for what populations, what implementation barriers are present, and their cost benefit and cost effectiveness data to support sustaining the most effective programmes. STD/HIV prevention necessitates that programme delivery efforts focus on high acquisition and transmission risk sex workers, rather than on low risk sex workers. Currently, drug using, unaffiliated street sex workers and those in cheap "pleasure flats" appear to be at highest risk for both acquisition and transmission. Existing non-governmental organisations also should be encouraged to acquire evaluation skills for the services they deliver and to monitor coverage so that resource allocation decisions can be well informed.

At a policy level, the current campaign to close the elite brothels warrants reconsideration. This campaign focuses on closure of lower risk venues where women are screened for HIV/STDs before initiating sex work and periodically re-screened thereafter. Exclusive focus on these elite brothels wastes scarce resources and misleads prevention workers into believing that their efforts can alter the future trajectory of disease. In this regard, it may be useful to compute mathematical models assessing the impact of elite brothel closures before proceeding further with the closure of these houses.

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All authors participated in the conduct of this rapid assessment, analysis of the findings, and preparation of the manuscript.

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REFERENCES

- 1 **Rekart JL**. Sex-work harm reduction. *Lancet* 2005;**366**:2123–34.
- 2 **Lowndes CM**, Alary M, Platt I. Injection drug use, commercial sex work, and the HIV/STI epidemic in the Russian Federation. *Sex Transm Dis* 2003;**30**:46–8.
- 3 **Vanwesenbeeck I**. Another decade of social scientific work on sex work: a review of research 1990–2000. *Ann Rev Sex Res* 2001;**12**:242–89.
- 4 **Aral SO**, St. Lawrence JS, Tikhonova L, et al. The social organization of commercial sex work in Moscow, Russia. *Sex Transm Dis* 2003;**30**:39–45.
- 5 **Aral SO**, St. Lawrence JS. The ecology of sex work and drug use in Saratov Oblast, Russia. *Sex Transm Dis* 2002;**29**:798–805.
- 6 **Aitani L**, Carael M, Brunet JB, et al. Social change and HIV in the former USSR: the making of a new epidemic. *Soc Sci Med* 2000;**50**:1547–56.
- 7 **Aral SO**, St. Lawrence JS, Dyatlov R, et al. Commercial sex work, drug use, and sexually transmitted infections in St Petersburg, Russia. *Soc Sci Med* 2005;**60**:2181–90.
- 8 **Aral SO**, Ward H. Modern day influences on sexual behavior. In: Zenilman JM, Moellering RC Jr, eds. *Infectious disease clinics of North America: sexually transmitted infections* 2005;**19**:297–309.
- 9 **Statistical Office of Estonia**. http://pub.stat.ee/px-web.2001/L_Databas/Population/Population.asp.
- 10 **Office of Estonia**. http://pub.stat.ee/pxweb.2001/L_Databas/Economy/Economy.asp.
- 11 **Saar J**, Annist A, Ahven A. Trafficking in women in Estonia: social aspects. In: *Trafficking in women and prostitution in the Baltic States: social and legal aspects*. Helsinki: IOM, 2001:156–97.
- 12 **Uusküla A**, Silm H, Vessin T. Sexually transmitted diseases in Estonia: past and present. *Int J STD AIDS* 1997;**8**:1–5.
- 13 **Wilson TE**, Uusküla A, Feldman J, et al. A case control study of beliefs and behaviors associated with STD occurrence in Estonia. *Sex Transm Dis* 2001;**28**:624–9.

- 14 **Uusküla A**, Plank T, Lassus A, *et al*. Sexually transmitted infections in Estonia—syndromic management of urethritis in a European country? *Int J STD AIDS* 2001;**12**:493–8.
- 15 **Uusküla A**, Nygard JF, Kibur-Nygar M. Syphilis as a social disease: experience from the post-communist transition period in Estonia. *Int J STD AIDS* 2004;**15**:662–8.
- 16 **Uusküla A**, Dehovitz J, McNutt LA. Treatment of the sexually transmitted diseases in Estonia: consistency with the evidence based medicine principles. *Sex Transm Dis* 2004;**10**:631–5.
- 17 **Uusküla A**, Nygard-Kibur M, Cowan FM, *et al*. The burden of infection with herpes simplex virus type 1 and type 2: seroprevalence study in Estonia. *Scand J Infect Dis* 2004;**36**:727–32.
- 18 **Uusküla A**, Kalikova N, Zilmer K, *et al*. The role of injecting drug use in the emergence of HIV in Estonia. *Int J Infect Dis* 2002;**6**:23–7.
- 19 **Pettai I**, Kase H. Prostitution and trafficking in women as an unsolved problem in Estonia. The ability of the Estonia State to suppress and prevent prostitution and trafficking in women. (Unpublished report on 5 studies). Tallinn, 2002.
- 20 **Pajumets M**. Prostitutsioon—kas hiskandlik probleem? Tallinn: unpublished report, 2004.

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- Updating the text every 12 months using any new, sound evidence that becomes available. The *Clinical Evidence* in-house team will conduct the searches for contributors; your task is simply to filter out high quality studies and incorporate them in the existing text.

If you would like to become a contributor for *Clinical Evidence* or require more information about what this involves please send your contact details and a copy of your CV, clearly stating the clinical area you are interested in, to CECommissioning@bmjgroup.com.

Call for peer reviewers

Clinical Evidence also needs to recruit a number of new peer reviewers specifically with an interest in the clinical areas stated above, and also others related to general practice. Peer reviewers are healthcare professionals or epidemiologists with experience in evidence-based medicine. As a peer reviewer you would be asked for your views on the clinical relevance, validity, and accessibility of specific topics within the journal, and their usefulness to the intended audience (international generalists and healthcare professionals, possibly with limited statistical knowledge). Topics are usually 1500-3000 words in length and we would ask you to review between 2-5 topics per year. The peer review process takes place throughout the year, and out turnaround time for each review is ideally 10-14 days.

If you are interested in becoming a peer reviewer for *Clinical Evidence*, please complete the peer review questionnaire at www.clinicalevidence.com/ceweb/contribute/peerreviewer.jsp