



Título artículo / Títol article:

HIV Prevention Interventions for Young Male Commercial Sex Workers

Autores / Autors

Rafael Ballester-Arnal , María Dolores Gil-Llario, Pedro Salmeron-Sánchez, Cristina Giménez-García

Revista:

Current HIV/AIDS Reports

Versión / Versió:

Pre-print del autor

Cita bibliográfica / Cita bibliogràfica (ISO 690):

BALLESTER-ARNAL, R., et al. HIV prevention interventions for young male commercial sex workers. *Current HIV/AIDS Reports*, 2014, vol. 11, no 1, p. 72-80.

url Repositori UJI:

<http://hdl.handle.net/10234/134245>

HIV prevention interventions for young male commercial sex workers

Ballester-Arnal, R. (PhD)

Dpto. Psicología Básica, Clínica y Psicobiología, Facultad de Ciencias de la Salud. Universitat Jaume I de Castelló, Spain

Phone number: 0034-964-728000. E-mail: rballest@uji.es

Address: Avda. Sos Baynat, s/n, 12071-Castellón (Spain)

Gil-LLario, M.D. (PhD)

Dpto. Psicología Evolutiva y de la Educación, Facultad de Psicología. Universitat de València, Estudi General, Spain

Phone number: 0034-96-3983157. E-mail: dolores.gil@uv.es

Avda. Blasco Ibáñez, 21, 46010-Valencia (Spain)

Salmeron-Sánchez, P. (PhD)

Dpto. Psicología Básica, Clínica y Psicobiología, Facultad de Ciencias de la Salud. Universitat Jaume I, Castelló, Spain

Phone number: 0034-964-728000. E-mail: psalmero@uji.es

Avda. Sos Baynat, s/n, 12071-Castellón (Spain)

Giménez-García, C. (PhD)

Dpto. Psicología Básica, Clínica y Psicobiología, Facultad de Ciencias de la Salud. Universitat Jaume I de Castelló, Spain

Phone number: 0034-964-728000. E-mail: gimenezc@uji.es

Avda. Sos Baynat, s/n, 12071-Castellón (Spain)

Corresponding author: Ballester-Arnal, R. (PhD)

Abstract

The sex industry, where men sell sexual services to other men or women, has grown in recent years. These men who offer sexual services are particularly vulnerable to HIV infection due to such factors as: frequency of risky sexual practices, number of sex partners, drug-taking, prevalence of sexually-transmitted infections (STI) and their specific situation of social exclusion which may hinder access shown by the health services. These multi-faceted realities faced by sex workers explain the burgeoning interest in new avenues of scientific research. There are too few preventive programs however aimed at this population group and the studies that

evaluate their effectiveness are fewer still. In this article we survey more recent studies on the difficulties of implementing programs for HIV prevention in male sex workers (MSW), as well as the studies that have gauged the impact of preventive programs in this group.

Key words: male sex workers, HIV prevention, effectiveness

Introduction

The prevalence of HIV infection among MSW has been shown to be high in studies conducted throughout the world and is significantly higher than that of the general population; this is also true for the population of men who have sex with other men (MSM). Notwithstanding this, there is considerable variation in the data between one region of the planet and another. In Bangkok (Thailand) the observed prevalence is 18.8% which takes into account a prevalence of 15.5% in the entertainment-based MSW, while reaching a prevalence of 23.2% for street-based MSW [1]. In contrast, there is a much lower prevalence in China at 3.3% [2*]. In Brazil, the prevalence climbs to 17% [3]. In Europe we have a study by Belza [4] conducted in Spain and reporting a prevalence 12%, while another study by Sethi et al. [5] conducted in London detected percentages ranging between 6% and 14%. Despite these high prevalence rates, there are too few preventive programs aimed at MSW and the studies that evaluate

effectiveness are fewer still. In this paper we survey recent studies on risk factors that increase MSW's vulnerability, difficulties of implementing programs for HIV prevention, suggested components that should be included in preventive programs as well as studies that have evaluated the effectiveness of these programs in MSW. In order to review published studies we used the database Web of Knowledge, introducing the terms "male sex workers" (162 items). Then we filtered these papers with the term "HIV" limiting them to 140 items. And later we filtered with the term "prevention" finding 76 items. Of these we selected 33 papers associated with the difficulties of prevention in this group and the effectiveness of programs, prioritizing papers published between 2010 and 2013 (20 items).

Risk factors that increase this population's vulnerability

MSW presented considerable vulnerability to HIV infection as well as to others STI due to different factors: high frequency of sexual relations, a high number of sex partners, drug use, risk-prone practices, low level of condom use, use of oil-based lubricants, high prevalence of STI and their own social situation, rooted in the stigma attached to their kind of work and resulting in more difficult access to healthcare services [6**].

In addition, one of the factors that characterize this group as a potential propagator of HIV within the general population is that many of them have

sex with both men and women which means that STI may be transmitted not just to the homosexual population but to bisexuals and heterosexuals as well. For example in a study cited by Ballester et al. [6**] carried out in Spain, 20% of agency-based MSW considered themselves bisexual and 13% heterosexual, results which are almost identical to those reported by Smith & Seal [7] in the United States, where 20% of MSW declared themselves to be bisexual and 17% heterosexual. These figures are less than those reported in China where 33.5% saw themselves as bisexual and 25% as heterosexual [2*]. As for Thailand, declared bisexuals ranged from 14% (entertainment-based MSW) and 24% (street-based MSW); declared heterosexuals, ranged from 30% (entertainment-based MSW) and 45% (street-based MSW) [1].

The low level of condom use

In Thailand the percentage of consistent condom use was found to be 65% [8], while in Brazil, recent studies have reported 68% [3]. In China consistent condom use was 70-80% [2*]. In some studies the percentages were greater. In the study conducted in Spain by Ballester et al. [6**] 99.6% of MSW who offered commercial sex in apartments stated that they used a condom in anal intercourse, compared with 76.8% who stated they used one when performing oral sex. A range of different factors influence

its use. Apparently, with steady clients, the use of condoms in sexual acts decreased to 58%; furthermore, 9% conceded that if the client is attractive they may decide to have sex without a condom; the same percentage stated that they would not use a condom if the client offered more money to have unprotected sex. Only 37% stated that they used condoms with their stable partner. These findings are in line with other authors such as Smith & Seal [7] in the USA that emphasize that risky practices by MSW are the result of a decision-making process where the need to make money is a major consideration but notwithstanding this, there may be other factors such as the attraction felt for a client [9**] or the degree of concern about their own health. These factors interact with others such as the place where the commercial sex takes place, in such a way that the relative weighting of the money question in the decision to have risk-prone unprotected sex may not be the same for the street-based MSW as for an agency-based MSW.

It is worth mentioning that some percentage differences between different countries not only reflect cultural differences but also the fact that different types of MSW have been evaluated. Thus, condom use tends to be higher in MSW working in apartments and it tends to be less in those engaged in street-based sex work [10].

Lastly, a behavior that is repeated in all countries is that there is much lower condom use in the relations that MSW have with their own stable partners [2*].

Injected drug and use of other drugs

Injected drug users (IDU) can resort to sex work either on an ongoing or temporary basis as a means of paying for their drug-taking habits [11]. This explains the certain degree of overlap between both situations. In this way, IDU sex workers, which have a greater HIV prevalence than non-IDU sex workers in all of the studies carried out, would in effect pose a greater threat for their clients [12]. Such workers however can more easily be victims of their clients as their often prolonged need to obtain money entails a lower refusal rate when requested to perform unprotected sex [13].

Other frequently used drugs include those that quickly enhance the sexual response such as cocaine, and those that relax the anal sphincter such as “popper”; other drugs have an uninhibiting effect, as occurs with alcohol and which make sexual acts perceived as unpleasant more manageable for the MSW [14, 15].

In the study by Ballester, Salmerón, Gil & Giménez [16] in Spain, 57% self-identified as drug consumers. The most common substances were “soft drugs” (39% took marijuana and 29% hashish) and other substances were

ecstasy (11%), speed (11%), ketamine (5%) and popper (3%). Most participants (75%) consumed cocaine and most of the times they consumed it while performing commercial sex with clients. MSW who were drug consumers reported a lower percentage of condom use with clients than non-consumers, particularly in oral sex. Very similar data were obtained in other countries such as China [17].

Prevalence of sexually transmitted infections (STI)

In the Spanish study by Ballester et al. [6**], 33% of respondents had had an STI at some time in the past. In contrast a Chinese study reported an overall prevalence of 20% with syphilis present in 10.5% of cases, HSV-II in 11% of cases as well as lower percentages of other diseases [2*].

The stigma associated with sex work

Many MSW have faced many difficulties in their lives. Some had been thrown out of home at an early age and had to fend for themselves by resorting to a cash-earning activity [11]. In the study by Cortez et al. [3] in Brazil, 22% of male hustlers had been in that precarious situation. A certain percentage comes from broken homes. Some MSW had also suffered maltreatment or had been sexually abused in their infancy or adolescence as is shown in a Russian study by Maximov & Kholmogorova [18], with a

prevalence of 80%, while in other countries such as Brazil the figures are much lower, at 17% [3]. Some MSW have had to migrate to another country where job prospects are not so good, while others are in an illegal situation and need money to simply subsist or even to send money to their families in their country of origin. Certain MSW may fall prey to rackets trafficking in sexual services. They receive physical threats or are threatened with being reported as illegal immigrants in a country where they may not even know the language or have no access to healthcare services [19].

The combination of all of these factors - all of which are inherently stigmatizing - may lead a youth onto the risk-prone path of sex work. But this activity would only make the stigma more acute which would in turn increase the risks to the health of MSW. This stigma is in reality based upon a broad continuum that takes in the prejudice associated with their activity through to the legal sanctions applied to sex work in countries where it is a crime. Often, the result is that sex work is either hidden or simply denied; as a consequence, access to the MSW population is difficult as it is far-removed from the social welfare and healthcare service available to the general community. In contrast to female prostitution, the case of MSW bears the added stigma of being men who have sex with other men. In fact, in a study conducted in Spain by Belza [4] MSW tended to not

reveal their activity and use less healthcare services in comparison with female sex workers.

Furthermore, the social vulnerability of MSW may facilitate the attitude among some clients that they deserve to be treated as criminals, that they should not be paid or that they are to be ill-treated and humiliated and even to the extreme of being assaulted, raped or killed, particularly in the case of street-based workers [15]. The perceived sexual orientation of male sex workers may be sufficient to result in a client engaging in homophobic violence. A study from England [20] established that when sexual violence occurred, the cause was a disagreement over “barebacking” (intentional unprotected anal intercourse). In Brazil, 34% of male hustlers reported that they had suffered physical abuse from their clients [3].

In a desperate attempt to escape their plight as soon as possible, some MSW may decide to accept demands for unprotected sex from their clients in exchange for extra cash.

Further still, all of these factors may influence the higher prevalence of mental health problems reported in some studies, including lower levels of self-esteem, higher depression rates and suicidal ideation [11].

Geographic mobility

The potential clients of a MSW are not so many if we take into account that very few women solicit their services and that the main demand is from homosexual or bisexual men. Given that some clients seek new boys, a common strategy for MSW to avoid the so-called “burnt-out face” effect — is that these young MSW advertise under a different name or after a period of time move to a completely new city. These factors hamper a reliable socio-sanitary follow up of MSW [6**].

The effectiveness of preventive interventions

Even though some studies exist for female sex workers in terms of the effectiveness of preventive interventions, the same cannot be said for the case of MSW due to the scant research available. Paradoxically, the numerous studies focusing on street-based MSW as well as MSW working as escorts showed up high levels of risk. Some reasons explaining the scant research include the difficulties of gaining access to this population, its high degree of mobility and the fact that most preventive interventions are carried out by NGOs which often have limited funding, are weakly sustainable and do not have an inherent research tradition.

The first preventive program [21] where effectiveness was compared and analyzed was a peer-led intervention implemented at three hustler’s bars in New York. Its objective was to decrease unprotected anal sex during sexual

encounters with clients. It was implemented at the bars to change attitudes to condom use among peers. Participants were both street-based MSW as well as the bar owners. After the intervention there was a small but significant decrease in unprotected anal sex. It was not possible to conclude however that the reason for the improvement was the change in peer norms and further still the change was not the same at the three bars.

The second intervention evaluated [22] took place in London and was directed at MSW who worked at three male escort agencies. It was envisaged as a peer education STI prevention program run by the Working Men Project, a specialist sexual health service for male sex workers. Five male sex workers participated in a 2 day peer education training program. Then they returned to their agencies to disseminate information and condoms in an attempt to influence norms of behavior. Ten weeks after, a questionnaire was administered in the same agencies. Because of an unsatisfactory adherence rate by the MSW, no conclusions were made in terms of intervention and evaluation. Only 13 participants filled out the baseline as well as the follow-up and they did not change their behavior significantly. The explanation given by the authors was that given their transient lifestyle, it was probably very difficult to apply preventive programs in the street-based MSW population.

The third and last study that we have found in terms of an evaluation of a preventive intervention is the one by Williams et al. [23] in Houston (Texas). This study was aimed at evaluating the acceptability of brief HIV risk reduction interventions directed at street-based MSW (participating in the program) and its effectiveness (increase in condom use during anal sex). All of the participants were users of some kind of drug and a small gratuity was paid for interviews and intervention sessions. The study aimed to assess the added benefit of a brief theory-based “standard-plus” intervention over that which might be achieved with a brief informational “standard” intervention. Both interventions were conducted in small groups facilitated by a moderator and were completed in two 1-hour sessions. In the standard intervention, the first session provided general information about HIV and specific information on sexual and needle use transmission and the second session, 1 week after, provided information on sexual and needle use risk avoidance and demonstrations of needle cleaning and condom use techniques. In the standard-plus intervention, further elements were added; these were designed to increase condom use intentions based on Fishbein’s theory of reasoned action and Bandura’s social cognitive theory. Its aim was to indirectly influence intentions to use condoms by addressing its attitudinal precursors, namely condom use outcome expectations, self-efficacy belief and normative expectations. Adherence was good, particularly in the older MSW who self-identified as homosexual

or bisexual. Disappointingly however, far fewer MSW filled out the post-intervention evaluation questionnaire, which reinforces the opinion that intervention activities targeting street-based MSW must be brief. The second interesting result was the lack of differences between the interventions and the author concluded that this lack of differences may be due to the power of the standard intervention, or because all brief interventions regardless of theoretical content produce similar benefits as the result of focusing the attention of the participant on a problem behavior and providing minimal skills for reducing the consequences [23].

Suggested components that may be included in preventive programs for MSW

In spite of the low number of studies on the effectiveness of preventive interventions in MSW, we have put forward some suggestions that may be considered in future preventive programs.

First, we need to speak of the heterogeneity of the MSW phenomenon. The reality of the young man who decides to prostitute himself to feed his family in his country of origin and who is in an illegal situation, making him vulnerable to rackets as well as to ill-treatment by clients has little to do with the MSW drug-addict who engages in prostitution to pay for his addiction. It must be stressed that street-based prostitution is quite different

to that kind taking place in an apartment. For example, escorts perceive they are less stigmatized and are more willing to reveal their identities than their street-based counterparts. The perception is that their work is more open to choice, prestigious and empowered [20]. Escorts usually suffer less physical abuse by their clients, make more money and their less acute economic need allows them to be more selective with their clients as well as to negotiate sexual interaction conditions with their client. These reasons put escorts on a different standing compared with their street-based colleagues and may explain why there is a lesser HIV prevalence among escorts than among street-based sex workers [7, 10].

The professional reality of a gigolo is also clearly different to that of a sex worker who has sex with other men and neither do MSW who self-identify as homosexuals, bisexuals or heterosexuals behave the same [16].

We must bear in mind that there is enormous diversity of modes of prostitution that are characteristic in certain cultures. In Peru, for example, the profiles and activities are different among “fletes” (young men with diverse sex identities), “mototaxistas”, “anfitriones” (hosts) at bars or the so-called “gay travelers” [24]. A different reality is that of the “money-boys” of China [2*]. Research in Istanbul has described “exaggerated masculine” behavior in the “varos-rent boys” to resolve the conflict between their sexual behavior with other men and hegemonic ideals of

masculinity [25]. Furthermore, in countries where sexual tourism is common such as in the Dominican Republic, there are quite different profiles as in the case of the “sanky panky” (well-built Dominican men who make a modest living by hustling foreign men and women in tourist-oriented beach areas) and the case of the “bugarrón” (a man who engages in insertive anal sex with other men for money or other instrumental benefits but who in other domains of life may not be noticeably different from “normal men” [26]. In both cases we have examples of men who cope with severe economic situation and avoid marginalization associated to homosexuality through the marketing of a masculine, exclusively penetrative identity.

This means that preventive approaches should consider the circumstances in which the commercial sex work takes place and it is therefore difficult to speak of an optimal program that may be always applicable.

Second, prevention needs to take place at different levels, starting at the individual and reaching the macrosystem. In the individual system, prevention and care function better if they are linked. This is why programs that have been directed at women have combined risk reduction, promotion of condom use and improved access to STI treatment; such programs have shown the greatest effectiveness [27]. Apart from these aspects, other program elements that may be worth including are: HIV counseling, HIV

testing in the MSW, support for infected persons, the role of primary care and social services [12]. These programs should be carried out both by healthcare professionals as well as peer-educators who are familiar with the setting and offer leadership in MSW circles. The programs should include, apart from the free provision of readily available condoms and water-based lubricants, information on: the risk associated with certain practices, skills for the correct and consistent use of the condom, negotiation abilities for safe sex, particularly for regular clients and stable partners and the encouragement to obtain medical assistance in STI cases. Some programs use materials such as recordings of other MSW in audio, video or other educational formats such as theatre or film [9**]. Monthly testing to determine the serological status of the MSW is advised and should there be a diagnosis of seropositivity, it should be insisted that subsequent re-infections can be avoided through condom use. Furthermore, it would be highly desirable not to disregard emotional the emotional problems and the social isolation faced by many MSW through psychological assistance [9**]. All interventions should take place in apartments or bars or places where prostitution takes place or is solicited, at times when there are fewer clients and also with relative frequency due to the great mobility of these young MSW [9**].

Individual interventions should be complemented by other structural ones which in the case of women, have proven to be effective [28, 12]. First, it is essential that the MSW community be mobilized through organizations representing sexual workers in such a way that they become involved in the defense of their rights, the promotion of legal reform, welfare services, the creation of self-help groups in the implementation of HIV prevention programs and last but not least, collaboration with social and healthcare services. This greater MSW activism may help in overcoming low levels of self-esteem, stigma, and social isolation and hence give empowerment to these young men. Second, it would be also highly desirable to implicate all collectives that are somehow linked to MSW activity: clients (access to the population is usually difficult), boyfriends and the owners of bars and other businesses where prostitution takes place; such owners have great access to MSW and are the first people interested in ensuring that their boys do not have any diseases that might scare off their clients [9**]. Third, given that it is vital to create sustainable strategies that can be prolonged over time, greater work and collaboration is desirable between the healthcare and social services that depend on the government and non-government organizations (NGO). Finally, legislative changes are needed, as well as a policy change to reduce the stigma and discrimination faced by MSW. It is precisely the effect of the stigma which explains certain risk behaviors such as the MSW not taking diagnostic tests. A study done in China found that

28.5% of “money boys” had never tested for HIV and factors associated included: not knowing of a testing site, concern about HIV testing confidentiality, being a closeted gay, and having a small social network [29].

Table 1 summarizes studies on effectiveness of HIV prevention programs and findings of the most recent research in this population.

Future challenges

Many aspects are changing in the sex work industry. One significant change is the growth of the industry through the internet [30]. In fact prostitution was among the first markets to develop online [31]. The great importance of the visual appearance in this phenomenon and the need for privacy among clients has led to a big growth of online demands for sexual services and that many new web sites now offer information – photos, health habits, services offered and their price- about the MSW before seeing him in real life [32]. Some authors sustain that due to technological progress (the Internet) and the increasing social acceptance of homosexuality, prior research about male sex workers who work the street may be out of date [33**]. Given that the internet is becoming a key tool in the male sex work setting, we should be able to use it effectively in the implementation of preventive programs directed at MSW. It would be

highly productive if the agents of healthcare service collaborated with gay web sites and included specific information directed at this population [9**].

Second, the scope of sex work performed by males provides a privileged and fertile scenario in which new avenues of study can be pursued regarding gender, masculinity and sexuality [33**]. Both the MSW and the client are men who have sex with others men (MSM) but regardless of their behavior, they may feel or see themselves as homosexual, heterosexual or bisexual. In the design and implementation of preventive programs we need to have a full understanding of the specific experiential dimension of sexuality and of sex work because of their implications in risky sexual behaviors. Messages that target “gay-identified” MSW may not reach sex workers who identify as heterosexual, despite the fact that they may be engaging in risky sexual behavior with male clients [1].

Third, due to the cultural ramifications of the phenomenon of male prostitution, it is patently clear that preventive interventions should be primarily designed on an ethnographic basis that embraces such idiosyncrasies.

Conclusion

Although many studies sustain that MSW present a higher risk of HIV infection which is shaped by many factors, there are surprisingly few

studies that have examined the effectiveness of preventive programs in MSW. This may be explained by the low visibility of male prostitution together with the high mobility of those who practice it. Existing studies are still far from affirming anything. By and large, they conclude that there is a need for brief interventions that should include the collaboration of brothel supervisors, apartment managers and the owners of bars. However, based on the knowledge we have attained on MSW, it is desirable to include certain aspects in preventive programs; in particular, there is a need for these programs to be adapted to the specific characteristics of a commercial sex activity as well as to the greatly heterogeneous profile of the sexual worker. Internet has changed how male prostitution takes place and should therefore be seen as a powerful prevention tool for a group that is socially isolated. Notwithstanding this, giving greater priority to research on the effectiveness of preventive interventions is urged.

References

Papers of particular interest, published recently, have been highlighted as:

*Of importance

** Of major importance

1. Toledo CA, Varangrat A, Wimolsate W, et al.: Examining HIV infection among male sex workers in Bangkok, Thailand: a comparison of

participants recruited at entertainment and street venues. *AIDS Educ Prev* 2010, 22(4):299-311.

2. * Liu S, Zhao J, Rou K, et al.: A survey of condom use behaviors and HIV/STI prevalence among venue-based money boys in Shenzhen, China. *Aids Behav* 2012a, 16(4):835-846. *A study with a broad sampling base which examines more variables in the analysis of male sex work; particular emphasis is given to the perceived sexual orientation of MSWs and how this may influence the kind of sexual practices they perform.*

3. Cortez FCP, Boer D P & Baltieri DA: A Psychosocial Study of Male-to-Female Transgendered and Male Hustler Sex Workers in São Paulo, Brazil. *Arch Sex Behav* 2011, 40(6):1223-1231.

4. Belza MJ: Risk of HIV infection among male sex workers in Spain. *Sex Transm Infect* 2005, 81(1):85-88.

5. Sethi G, Holden BM, Gaffney J, et al.: HIV, sexually transmitted infections, and risk behaviours in male sex workers in London over a 10-years period. *Sex Transm Infect* 2006, 82:359-363

6. ** Ballester R, Salmerón P, Gil MD, Gómez S: Sexual risk behaviors for HIV infection in Spanish male sex workers: differences according to educational level, country of origin and sexual orientation. *Aids Behav* 2012, 16:960-968. *One of the most comprehensive European works on the phenomenon of male sex work. By using a broad sampling base, not only are background characteristics of Spanish MSW explored but also the*

quality of information they have on ways of HIV transmission, condom use with different kinds of partners, STI history and HIV status and how these variables are influenced by the educational level, country of origin and sexual orientation de los MSW.

7. Smith MD, & Seal DW: Motivational influences on the safer sex behavior of agency-based male sex workers. Arch Sex Behav 2008, 37(5):845-853.

8. Chemnasiri T, Netwong T, Visarutratana S, et al: Inconsistent condom use among young men who have sex with men, male sex workers, and transgenders in Thailand. AIDS Educ Prev 2010, 22(2):100-109.

9. ** Liu S, Chen L, Li L, et al: Condom use with various types of sex partners by money boys in China. AIDS Educ Prev 2012b, 24(2):163-178.

One of the most interesting papers that examines the major differences in risky sexual practices in different types of MSW in China; furthermore, interesting suggestions are given for preventive programs aimed at this population.

10. Zhao J, Cai WD, Chen L, et al.: A comparison of HIV infection and related risks among male sex workers in different venues in Shenzhen, China. Aids Behav 2011, 15(3):635-642.

11. McCabe I, Acree M, O'Mahony F, et al.: Male Street Prostitution in Dublin: A Psychological Analysis. J Homosex 2011, 58(8):998-1021.

12. Vuylsteke B, Das A, Dallabetta G & Laga M: Preventing HIV among sex workers. In *HIV Prevention: a comprehensive approach*. Edited by Mayer KH & Pizer HF. London: Academic Press; 2009:376-406.
13. Ngoc-Vu B, Mulvey KP, Baldwin S & Thanh-Nguyen S: HIV risk among drug-using men who have sex with men, men selling sex, and transgender individuals in Vietnam. *Cult Health Sex* 2012, 14(2):167-180.
14. Blackwell CW & Dziegielewski SF: Risk for a Price: Sexual Activity Solicitations in Online Male Sex Worker Profiles. *J Soc Serv Res* 2013, 39(2):159-170.
15. Niccolai LM, King EJ, Eritsyan KU, et al: 'In different situations, in different ways': male sex work in St. Petersburg, Russia. *Cult Health Sex* 2013, 15(4):480-93
16. Ballester R, Salmerón P, Gil MD, Giménez C: The Influence of Drug Consumption on Condom Use and Other Aspects Related to HIV Infection Among Male Sex Workers in Spain. *Aids Behav* 2012, 17:536-542.
17. Lau JT, Cai WD, Tsui HY, Chen L & Cheng JQ: Psychosocial factors in association with condom use during commercial sex among migrant male sex workers living in Shenzhen, mainland China who serve cross-border Hong Kong male clients. *Aids Behav* 2009, 13(5):939-948.
18. Maximov AM, Kholmogorova AB: Social and psychological aspects of the phenomenon of male prostitution in the modern culture. *Cultural-historical psychology* 2011, 1:80-89.

19. Cwikel JG, Lazer T, Press F & Lazer S: Sexually transmissible infections among illegal female sex workers in Israel. *Sex health* 2006, 3(4):301-303.
20. Jamel J: An investigation of the incidence of client-perpetrated sexual violence against male sex workers. *Int J Sex Health* 2011, 23(1): 63-78.
21. Miller R, Klotz D & Eckholdt H: HIV prevention with male prostitutes and patrons of hustler bars: replication of an HIV prevention intervention. *Am J Community Psychol* 1998, 26:97-131.
22. Ziersch A, Gaffney J & Tomlinson D: STI prevention and the male sex industry in London: evaluating a pilot peer education programme. *Sex Transm Infect* 2000, 76:447-453.
23. Williams ML, Bowen AM, Timpson SC, et al.: HIV prevention and street-based male sex workers: an evaluation of brief interventions. *AIDS Educ Prev* 2006, 18(3):204-215.
24. Nureña CR, Zúñiga M, Zunt J: Diversity of commercial sex among men and male-born trans people in three Peruvian cities. *Cult Health Sex* 2011, 13(10):1207-1221.
25. Özbay C: "Nocturnal Queers: Rent Boys' Masculinity in Istanbul." *Sexualities* 2010, 13:645-663.
26. Padilla MB: The embodiment of tourism among bisexually-behaving Dominican male sex workers. *Arch Sex Behav* 2008, 37(5):783-793.

27. Wi T, Ramos ER, Steen R, et al.: STI declines among sex workers and clients following outreach, one time preemptive treatment, and regular screening of sex workers in the Philippines. *Sex Transm Infect* 2006, 82:386-391.
28. Kerrigan D, Moreno L, Rosario S, et al.: Environmental-structural interventions to reduce HIV/STI risk among female sex workers in the Dominican Republic. *Am J Public Health* 2006, 96(1):120-125.
29. Huang ZJ, He N, Nehl EJ, et al.: Social network and other correlates of HIV testing: findings from male sex workers and other MSM in Shanghai, China. *Aids Behav* 2012, 16(4):858-871.
30. Minichiello V, Scott J & Callander D: New pleasures and old dangers: reinventing male sex work. *J Sex Res* 2013, 50(3-4):263-275.
31. Cunningham S & Kendall TD: Prostitution 2.0: The changing face of sex work. *J Urban Econ* 2011, 69(3):273-287.
32. Lee-Gonyea JA, Castle T & Gonyea NE: Laid to order: Male escorts advertising on the Internet. *Deviant Behav* 2009, 30(4): 21-348.
33. ** Logan TD: Personal Characteristics, Sexual Behaviors, and Male Sex Work a Quantitative Approach. *Am Sociol Rev* 2010, 75(5):679-704.
A sociological analysis of the male prostitution phenomenon in the United States which offers a very interesting gender-based perspective. It offers greater understanding of the activity in analyzing the constructs of

hegemonic masculinity and how it effects the various expressions of sexual work in different cultures.

Table 1. Studies on effectiveness of HIV prevention programs and findings of the most recent research in Male Sex Workers

Authors	Year	City (Country)	Sample	Evaluate Prevention Program	Findings
Miller, Klotz & Eckholdt	1998	New York (USA)	1741 street-based MSW and bar patrons	Yes	Peer-led intervention implemented at three hustler's bars. There was a small but significant decrease in unprotected anal sex.
Ziersch, Gaffney & Tomlinson	2000	London (England)	13 street-based MSW working at three male escort agencies	Yes	Because of unsatisfactory adherence by MSW, no conclusions were made in terms of intervention and evaluation. MSW did not change their behavior significantly.
Williams et al.	2006	Houston (Texas, USA)	399 street-based MSW	Yes (only 112 MSW)	Study aimed to assess the added benefit of a brief theory-based "standard-plus" intervention over that which might be achieved with a brief informational "standard" intervention. Adherence was good. Lack of differences between the interventions.
Smith and Seal	2008	Atlantic city of USA	30 agency MSW	No	MSW reported little risk behavior with clients. Five motivational themes related to safer sex on the job emerged: health concerns, emotional intimacy, client attractiveness, relationships and structural work factors. Participants engaged in rational-decision making relative to sex with clients, facilitated by reduced economic incentive for riskier behavior and a supportive social context.
Lau et al.	2009	Shenzhen (China)	199 MSW	No	About 29% had had unprotected anal intercourse (UAI) with male clients in the last month. UAI behavior was associated with exposure to HIV prevention service and poor social support being bothered by the sex work substance use and type of sex work venue
Özbay	2010	Istanbul (Turkey)	20 rent boys in three gay bars	No	Exaggerated masculinity repairs and masks the subverting effects of compensated sex for rent boys' heterosexual subjectivities and makes them closer to the hegemonic ideals of masculinity
Toledo et al.	2010	Bangkok (Thailand)	414 entertainment and street MSW	No	HIV prevalence was 19% overall but differences were found between MSW recruited in entertainment and street venues. Street-based sex workers and not having a friend to talk to about personal problems were associated with HIV.
Prado Cortez, Boer & Baltieri	2011	Sao Paulo (Brazil)	45 male-to-female transgender sex workers and 41 male hustlers	No	Transgender sex workers reported fewer conventional job opportunities, and higher harm avoidance and depression levels than male hustlers. MSW are very heterogeneous population.

Maximov & Kholmogorova	2011	Russia	36 MSW	No	65% of respondents suffered from the borderline personality disorder and all had severe traumatic histories; 80% reported facts of physical or sexual violence in childhood or adolescence
McCabe et al.	2011	Dublin (Ireland)	12 street MSW	No	All of the participants had above average levels of depression and suicidal ideation and low levels of self-esteem. High frequency of childhood sexual or physical abuse, leaving school early, running away from home and dependence on heroine
Jamel	2011	London (England)	50 male escorts	No	Client-perpetrated sexual violence within male sex work was uncommon. When sexual violence did occur the cause was a disagreement over barebacking
Nureña et al.	2011	Lima, Iquitos & Pucallpa (Peru)	42 sex workers	No	Sex work in Peru takes many forms and is practiced in different places by people from various socioeconomic levels. The increasing use of the Internet and mobile phones has changed patterns of sex work
Zhao et al.	2011	Shenzhen (China)	394 different venues MSW	No	MSW in small venues and parks were comparatively at higher risk of being infected than other MSW in family clubs and entertainment venues
Ngoc-Vu, Mulvey, Baldwin & Thanh-Nguyen	2012	Hanoi and Ho Chi Minh (Vietnam)	93 drug users, 15 non drug users and 9 community stakeholders (MSM, men selling sex and transgenders).	No	Men selling sex were particularly at elevated risk because of using drugs as a tool for sex work and trading sex for drugs
Huang et al.	2012	Shanghai (China)	397 MSM and money boys	No	28% of money boys and 50% of general MSM have never tested for HIV despite high rates of reported HIV risk behaviors. Factors associated with not testing for HIV included: not knowing of a testing site, limited knowledge, lower perceived risk, concern about HIV testing confidentiality and having a small social network.
Ballester et al.	2012	Valencia & Castellón (Spain)	100 agency MSW	No	99.6% of MSW used a condom in anal intercourse, compared with 76.8% when performing oral sex. With steady clients, the use of condoms decreased to 58%; furthermore, 9% conceded that if the client is attractive they may decide to have sex without a condom; the same percentage stated that they would not use a condom if the client offered more money to have unprotected sex. Only 37% used condoms with their stable partner.
Liu et al.	2012a	Shenzhen	28 venue-based money	No	The longer a relationship with a partner, the less frequent was condom use. A

		(China)	boys		major reason for not using condoms was that they or their partners did not like the loss of sensation due to condom use. Attractiveness of partners and support of brothel supervisors were important factors
Liu et al.	2012b	Shenzhen (China)	418 money boys	No	Consistent condom use was 70-80% with commercial sex partners and 60-70% with other non-commercial partners. HIV prevalence was 3.3%
Blackwell & Dziegielewski	2013	Florida (USA)	163 MSW advertising on Internet	No	Some MSW did not consistently maintain safer-sex behaviors and some of these men were engaging in sexual activity while under the influence of drugs.
Ballester et al.	2013	Valencia & Castellón (Spain)	100 agency MSW	No	Most MSW were drug users and the most common substances were “soft drugs” and cocaine. Drug consumers indicated a higher HIV risk perceived and low perceived influence of substance use on condom negotiation. Drug influence on condom use is not clear
Chemnasiri et al.	2013	Bangkok, Chiang Mai & Phuket (Thailand)	827 men who have sex with men (37,7% were MSW)	No	34.9% of MSW reported recent inconsistent condom use. Receptive and insertive anal intercourse, living alone and a history of sexual coercion were associated with inconsistent condom use.

Note: MSM=male who have sex with men; MSW= male sex workers