

# The evolution of sexual partnerships and condom use among newly arrived Latino migrant men



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## Background

- There was a three fold increase in the number of Latinos living in New Orleans (NO) after Hurricane Katrina in August 2005, mostly due to the migration of Latino workers.
- Many men migrated without wives or girlfriends and created new sexual partnerships with females including the patronage of female sex workers (FSW).
- Types of sexual partners and use of condoms with those partners change over time, affecting HIV/STI risk.

## Objectives

- To examine the patterns of sexual partnering and condom use with female partners over time among Latino migrant men in an new urban receiving community using a quasi-random sample.
- Outcomes of interest were partner types (steady partner, casual partner, sex worker) and condom use by partner type.

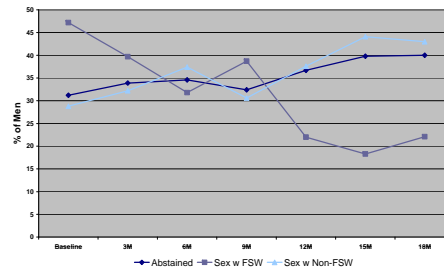
## Methods

- Respondent driven sampling (RDS) was used to recruit Latino workers from eight locations in New Orleans. Eligibility criteria:
  - native Spanish speaking
  - not born in United States
  - arrived in New Orleans post Hurricane Katrina
  - at least 18 years old
  - engaged in sex with women
- Demographics were collected at baseline, core measurements quarterly, and additional measures on a one-time basis.
- Annual biological testing was done for HIV, syphilis, Chlamydia (CT) and gonorrhea (GC) using OraQuick, IgG, and NAAT testing respectively.
- Bivariate, multivariate and GEE analyses were done using SPSS v15 and SAS v9.

## Results

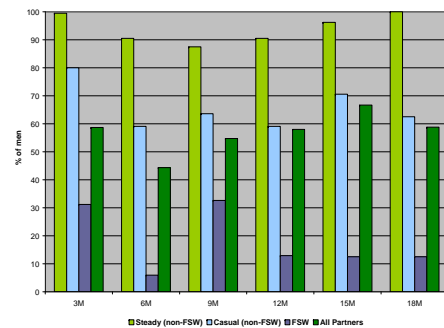
- 125 men were recruited and interviewed quarterly from October 2007 to October 2009. Quarterly follow up rates ranged from 96.8% to 72.0% over 18 months.
- The majority were born in Honduras (71.2%) and migrated from their home country (55.2%). Mean time in US and in New Orleans at baseline was 1.7 years (std 3.26) and 1.2 years (std 0.69) respectively.
- Baseline demographics: mean age 30 years (std 7.81); 98.4% could not speak/understand English very well; 59.2% had  $\leq 6$  years of education; 44% were married and 72% had children with 4.8% and 5.6% living with their spouse or children respectively. Median weekly salary was \$420 (0-2400), with majority working in construction (74.4%).
- At baseline, 47.2% reported having sex with FSW in past month, 28.8% had sex with non-FSWs, and 31.2% reported no sex with women.
- During the 18 month study period there was a significant change in partnerships with fewer men having sex with FSW and more men having sex with non-FSW over time (GEE p value=.0003). There was no significant change in the number of men who were abstinent. [Figure 1]

Figure 1: Type of sexual partnerships over time (N=125)



- During the study period, inconsistent condom use with FSW was low (0%- 32.6%) and varied with non-FSW partners depending on whether they were steady or casual partners; more inconsistency with steady partners (84.6%- 95.6%) and midrange with casual partners (59.1%-80%).
- Although there was a significant increase in inconsistent condom use over time with all partners (OR 1.05, (CI 1.02-1.08) P=0.0036), there was no significant changes in inconsistent use by partner type. [Figure 2]

Figure 2: Inconsistent condom use by partner type (N=125)



- Time in New Orleans, higher weekly income, no wife or long term partner in home country and a household that included family members, women and/or children was significantly associated with having a non-FSW partner. While men who are substance users, have multiple partners and who live in crowded housing were less likely to have non-FSW partners. [Table 1]

Table 1: Factors associated with having non-FSW compared to FSW only partners using GEE, 487 observations (N=114)

	unadjusted OR	CI	P value
Age	0.99	(.95-1.02)	0.5353
Binge drinks	0.44	(.22-.88)	0.0201*
Uses crack and/or cocaine	0.50	(.28-.86)	0.0132*
Weekly income >\$420	1.47	(1.06-2.05)	0.0213*
Time in New Orleans	1.05	(1.02-.08)	0.0003*
No wife or long term partner in home country	1.28	(1.28-4.05)	0.0049*
Family member lives in home	2.01	(1.26-3.20)	0.0031*
Woman >17 years old lives in home	1.71	(1.10-2.66)	0.0168*
Child <18 years old lives in home	8.01	(3.51-18.32)	0.0001*
Lives with $\geq 6$ people	0.72	(.55-.94)	0.0144*
Changed residence in past month	0.86	(.63-1.17)	0.3222
Inter/intrastate travel in past month	1.10	(.83-1.45)	0.5188
Works in construction	0.62	(.34-1.13)	0.1188
Does not belong to social/sports club	0.58	(.31-1.08)	0.0855
Has multiple partners	0.44	(.29-.65)	0.0001*

- Predictors of inconsistent condom use depended on types of partnerships: with FSW partners, substance use, and inter/intrastate travel were predictive; with non-FSW, a woman or child in the household was predictive; and with all partners time, having a woman or child in the household and inter/intrastate travel were predictive. [Table 2]

Table 2: Predictors of inconsistent condom use by partner type using GEE (N=125)

	OR	CI	P-value
<b>FSW partner</b>			
Uses cocaine and/or crack	2.18	(1.03-4.59)	<.0414*
Lives w family member	0.33	(.15-.71)	<.0046*
Inter/intrastate travel in past month	2.02	(1.10-3.71)	0.0238*
<b>Non-FSW partner</b>			
Has wife or long term partner in home country	0.39	(.15-.95)	0.0378*
Woman >17years old lives in home	2.18	(1.07-4.46)	0.0323*
Child <18years old lives in home	8.57	(1.73-42.57)	0.0085*
<b>All female partners</b>			
Time in New Orleans	1.05	(1.02-1.08)	0.0036*
Has wife or long term partner in home country	0.39	(.21-.71)	0.0023*
Woman >17years old lives in home	1.58	(1.08-2.30)	0.0176*
Child <18years old lives in home	4.54	(2.12-9.73)	<.0001*
Inter/intrastate travel in past month	1.34	(1.00-1.78)	0.0474*

- Partner level analyses for non-FSW partners indicate that inconsistent condom use was more likely with steady partners, Latinas, live-in partners, and those that live outside the New Orleans metropolitan area. [Table 3]
- Reasons given by participants for not using condoms with non-FSW partners were: he knew the partner for a certain amount of time (32.6%), he trusted her (29.3%), she was on contraception (11.0%), and his perception of her physical appearance was that she was safe (9.4%).
- Participants were asked about past month use of antibiotics prior to STI screening at month 12; 17 men (15.6%) reported antibiotic use obtained at *tendras* or through home country networks for self-treatment of symptoms.
- At baseline and 12 month, no HIV, GC or syphilis was detected. CT rate was 3.2% and 1.2% respectively.

Table 3. Partner level predictors of inconsistent condom use with non-FSW partners (N=267)<sup>a</sup>

Partner type	n	%	OR (95% CI)
<b>Partner type</b>			
Steady/main partner	131	63.9	9.01 (4.33-18.87)*
Casual partner	74	36.1	1.00
<b>Partner characteristics</b>			
Latina	122	89.7	4.87 (2.07-11.49)*
Non-Latina	14	10.3	1.00
<b>Partner history</b>			
New partner	105	51.5	0.60 (.33-1.08)
Had sex with partner in past	122	45.9	1.00
<b>Behavioral</b>			
Lives with index	111	54.7	13.5 (5.21-35.71)*
Lives outside of metro New Orleans	50	24.6	0.47 (.26-.86)*
Uses alcohol when having sex w/ index	60	29.6	1.00 (.54-1.88)
Uses drugs when having sex w/ index	3	2.8	N/A
Uses surgical or hormonal contraception	89	45.6	15.87 (4.82-52.63)*

<sup>a</sup> P<0.05

<sup>a</sup> not all partner characteristics were not collected for each partner

## Discussion/Conclusion

- There was a transition from FSW partners to non-FSW partners.
  - Condom use is partner specific; there was high consistent use of condoms with female sex workers but inconsistent use with steady and casual non-sex worker female partnerships.
  - Among Latino migrant men, sex with FSW (who may demand condom use) and abstinence may have prevented them from becoming HIV/STI infected.
  - Use of over the counter antibiotics to treat bacterial STIs may also contribute to the low morbidity in the cohort.
  - Having non-FSW partners is more likely in households that are less crowded and have women, children and family present.
  - Over time, men are having less sex with FSWs and more sexual relationships with non-FSWs; the replacement of transactional partnerships with non-transactional partnerships may explain why there is a significant increase in inconsistent condom use over time when considering all partners and no significant change in condom use when considering partner type.
  - The increase in the number of non-FSW partners will likely increase infection rates of HIV and STIs.
- ### Public Health Implications
- The greater risk for HIV/STI transmission is not when men are in sexual partnerships with female sex workers, rather, when they are in casual or steady partnerships with non-sex workers.
  - This transition from consistent condom use with FSW to inconsistent condom use with non-FSW should be considered to design appropriate HIV/STI prevention strategies.

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