Entendiendo la ciencia para acabar con el VIH en América Latina y el Caribe

Ciudad de México, México, 17 - 18 y 2 de Abril
IMPLEMENTATION OF PrEP AMONG KEY POPULATION IN MEXICO: CHALLENGES BARRIERS AND STRATEGIES

Sandra G. Sosa Rubí
Instituto Nacional de Salud Pública

Ciudad de México, México, 17 - 18 y 2 de Abril
An interview with a male sex worker

“Why sex work?”

“Because I make in one day what I would normally make in any regular job in two weeks”

“Are you aware about the risk of sexually transmitted diseases?”

“Yes!, but I need the money to pay for my torta”

1. MSW tend to be oriented towards the present and provide less importance to future consequences of sexual risk behaviors.

2. MSW in low socioeconomic settings have high economic necessity, and the use of health services was not part of their priorities

Sex Work in Mexico: Vulnerability of Male, Travesti, Transgender and Transsexual Sex Workers

Cesar Infante, Sandra G. Sosa-Rubi and Silvia Magali Cuadra

Culture, Health & Sexuality

Vol. 11, No. 2 (Feb., 2009), pp. 125-137
Description of MSW in Punto Seguro

<table>
<thead>
<tr>
<th>MSW Characteristics</th>
<th>Average/ %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>25</td>
</tr>
<tr>
<td>Schooling</td>
<td>9th to 12th</td>
</tr>
<tr>
<td>Single</td>
<td>79%</td>
</tr>
<tr>
<td>Rent room/appartment</td>
<td>55%</td>
</tr>
<tr>
<td>Health Insurance</td>
<td>50%</td>
</tr>
<tr>
<td>HIV positive</td>
<td>38%</td>
</tr>
<tr>
<td>Unaware of HIV status</td>
<td>14%</td>
</tr>
</tbody>
</table>

The disproportionate burden of HIV and STIs among male sex workers in Mexico City and the rationale for economic incentives to reduce risks


Corresponding author: Omar Galárraga, Department of Health Services Policy and Practice, Brown University School of Public Health, 121 South Main Street, Box G-1215-7, Providence, RI 02912, USA. (omar_galarraga@brown.edu)
• They start sex work at very young age
• Have a high socioeconomic vulnerability level
• High rates of HIV incidence and HIV prevalence
• They access high primes for unsafe sex
• They have limited contact with health services due to fear of incarceration
• There is lack of knowledge from health providers about how to approach them
Punto Seguro in Mexico

- **FORMATIVE RESEARCH**
  - Obliteration of risks
  - Imperative need to have access to HIV/STI prevention
  - Lack of information
  - Fear of rejection

- **PRESENT BIAS: Living from hand-to-mouth**

- An economic premium of 40% for having unprotected sex
Which type of tools could we use to incentivize the utilization of health services and protection among vulnerable Sex Workers?

WE NEED TO KNOW VERY WELL THE POPULATION

What are their necessities?
What are their priorities?
Do they know the benefits they could get from the health services?
What has been done to reorient conducts help to improve the access, use, adherence and change risk behaviors

OVEROPTIMISM

Reminders e.g. mobile messages and phone calls: access to information, motivation, linkage to care, clinical appointments, adherence to treatment

SALIENCE

how to best customize/deliver the messages
Prevention Campaigns targeting specific needs for specific groups of population
Making ends meet: How poverty influences decision making

Poverty Impedes Cognitive Function

Anandi Mani,¹ Sendhil Mullainathan,²* Eldar Shafir,³* Jiaying Zhao⁴

The poor often behave in less capable ways, which can further perpetuate poverty. We hypothesize that poverty directly impedes cognitive function and present two studies that test this hypothesis. First, we experimentally induced thoughts about finances and found that this reduces cognitive performance among poor but not in well-off participants. Second, we examined the cognitive function of farmers over the planting cycle. We found that the same farmer shows diminished cognitive performance before harvest, when poor, as compared with after harvest, when rich. This cannot be explained by differences in time available, nutrition, or work effort. Nor can it be explained with stress: Although farmers do show more stress before harvest, that does not account for diminished cognitive performance. Instead, it appears that poverty itself reduces cognitive capacity. We suggest that this is because poverty-related concerns consume mental resources, leaving less for other tasks. These data provide a previously unexamined perspective and help explain a spectrum of behaviors among the poor. We discuss some implications for poverty policy.

Science
Anandi Mani et al.
Science 341, 976 (2013);
DOI: 10.1126/science.1238041
Vulnerable Populations to the Infection in low-socioeconomic settings

• Decisions made under poverty conditions, could be influenced by PRESENT BIAS, focusing on immediate rewards rather than imminent future consequences.
• Poverty related-concern AND day-by-day stress, consume a higher level of mental resources, displacing other-relevant future-related tasks.
• IT IS CLEAR THAT FOR THIS SET OF POPULATION Day by day survival compromises their cognitive function, giving little importance to the consequences of unsafe sex.
FORMATIVE WORK 2006

QUALITATIVE WORK- INTERVIEWS TO MSW (SOCIAL, CULTURAL AND ECONOMIC ASPECTS OF MSW INFANTE, SOSA-RUBI, CULT HEALTH SEX, 2009)

1300 MSW SURVEY 2009

WILLINGNESS TO ACCEPT REDUCTIONS IN HIV RISKS: CONDITIONAL ECONOMIC INCENTIVES (GALARRAGA, SOSA-RUBI, EUR J HEALTH ECON et al., 2013)

RANDOMIZED PILOT STUDY WITH 300 MWS 2011-2013

FEASIBILITY OF THE USE OF ECONOMIC INCENTIVES TO IMPROVE LINKAGE TO CARE AND CHANGE RISK BEHAVIOR GALARRAGA, SOSA-RUBI, et al., J INT AIDS SOC 2014

PUNTO SEGURO PROGRAM 2014 – CURRENT MEXICO CITY

SETTING UP OF HIV PREVENTION PROGRAM WITH 900 MSW

PrEP SEGURO: RANDOMIZED PILOT ART-based HIV PREVENTION AMONG MEN AT HIGH RISK 2017 - CURRENT
Results: RCT Pilot in Mexico

- Economic Incentives
  - Feasible and acceptable among MSW in Mexico City
  - Increase retention to HIV services after one year of following-up for MSW
  - Reduce some risk sexual behaviors such as condomless sex

<table>
<thead>
<tr>
<th>Retention Model</th>
<th>Sexual Behavior Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable:</strong> $R_t=1$ if participant returned to the study visit, $R_t=0$ otherwise</td>
<td><strong>Effect of conditional economic incentives on condom use</strong></td>
</tr>
<tr>
<td></td>
<td><strong>ITT</strong></td>
</tr>
<tr>
<td>Medium Incentive for staying free of STIs (M)</td>
<td>0.132**</td>
</tr>
<tr>
<td></td>
<td>(0.054)</td>
</tr>
<tr>
<td>High Incentive for staying free of STIs (H)</td>
<td>0.120**</td>
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<tr>
<td></td>
<td>(0.059)</td>
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<tr>
<td>Medium Incentive for clinic visits only (Mv)</td>
<td>0.104*</td>
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<td>(0.061)</td>
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<tr>
<td>Medium incentive for staying free of STIs (M)</td>
<td>0.128***</td>
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<td>(0.049)</td>
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<tr>
<td>High incentive for staying free of STIs (H)</td>
<td>0.107*</td>
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<td></td>
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<td>Medium incentive for clinic visits only (Mv)</td>
<td>0.100*</td>
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**SETTING UP OF HIV PREVENTION PROGRAM WITH 900 MSW**

**PrEP SEGURO: RANDOMIZED PILOT ART-BASED HIV PREVENTION AMONG MEN AT HIGH RISK 2017 - CURRENT**
Effectiveness in low- and middle-income countries

Small incentives worked in low- and middle income countries among economically vulnerable population:
- retention, uptake visits, treatment adherence and reduction of risks

Complementation with other structural strategies
- Social context
  - Use of lotteries, changes of social norms, simplification
- Specific needs
  - Transportation support, food or credit support, income generation (burden of daily life)
- Type of population
PrEP: High risk of HIV acquisition and transmission

- Adherence is essential for the effectiveness of pre-exposure prophylaxis (PrEP) in reducing HIV transmission.
- MSWs can benefit from PrEP because they are at high risk of HIV acquisition and transmission.
- Difficulties adhering to a daily pill. They may have low awareness of their risk and limited knowledge of new prevention tools, face barriers to accessing prevention services, including high costs of medications.

Economic Incentives
Reminders
Social support
Simplification

An opportunity window among MSWs who are more intensively involved in sex work between 17 to 30 years old

Knowledge about their necessities to complement strategies
Major Challenge in Low Socioeconomic Settings

• It is important to increase access to effective HIV prevention among the most-at-risk populations.
• PrEP is a new and effective method for HIV prevention, but it requires taking a pill once daily
• difficult for populations challenged with basic day-to-day survival.
Design strategies to improve effectiveness of PrEP

- Conditional economic incentives, well-designed and user-centered, has the potential for improving adherence to antiretroviral-based HIV prevention among men at the highest risk of infection.
- Other strategies to reduce the burden of the daily life are also important to ensure linkage to care, adherence to treatment, reduction barriers to access prevention services and reduction of opportunity costs.
THANK YOU  !!!!

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Aknowledgements

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