



# Follow-Up Survey: HIV and Aids Prevention Belize, 2016



**USAID**  
FROM THE AMERICAN PEOPLE

Combination  
Prevention for HIV  
Central America and Mexico



**CAI**



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# Combination Prevention Program

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PASMO and its partner NGOs implement the Combination Prevention program with funds from the US Agency for International Development (USAID). This program includes three components:

1. Activities for behavior change.
2. References to perform HIV or sexual transmitted infections (STI) testing.
3. References to complimentary services (e.g., self-support workshops, combat stigma and discrimination, alcoholics anonymous, gender violence counseling).

# Background

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- In 2015-2016, the Combination Prevention Program conducted another round of the TRaC surveys in Central America.
- Follow up to the ones held in 2007, 2009, and 2012.
- Populations surveyed: female sex workers (FSW), men who have sex with men (MSM), men at risk (MR), and people living with HIV (PLH).
- Main issues explored: risk behaviors, determinants of condom use and HIV testing, violence, and attribution to the program.

# Objectives

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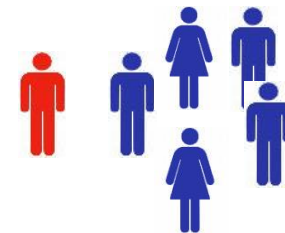
## Monitoring:

Variables and risk behaviors over time.



## Segmentation:

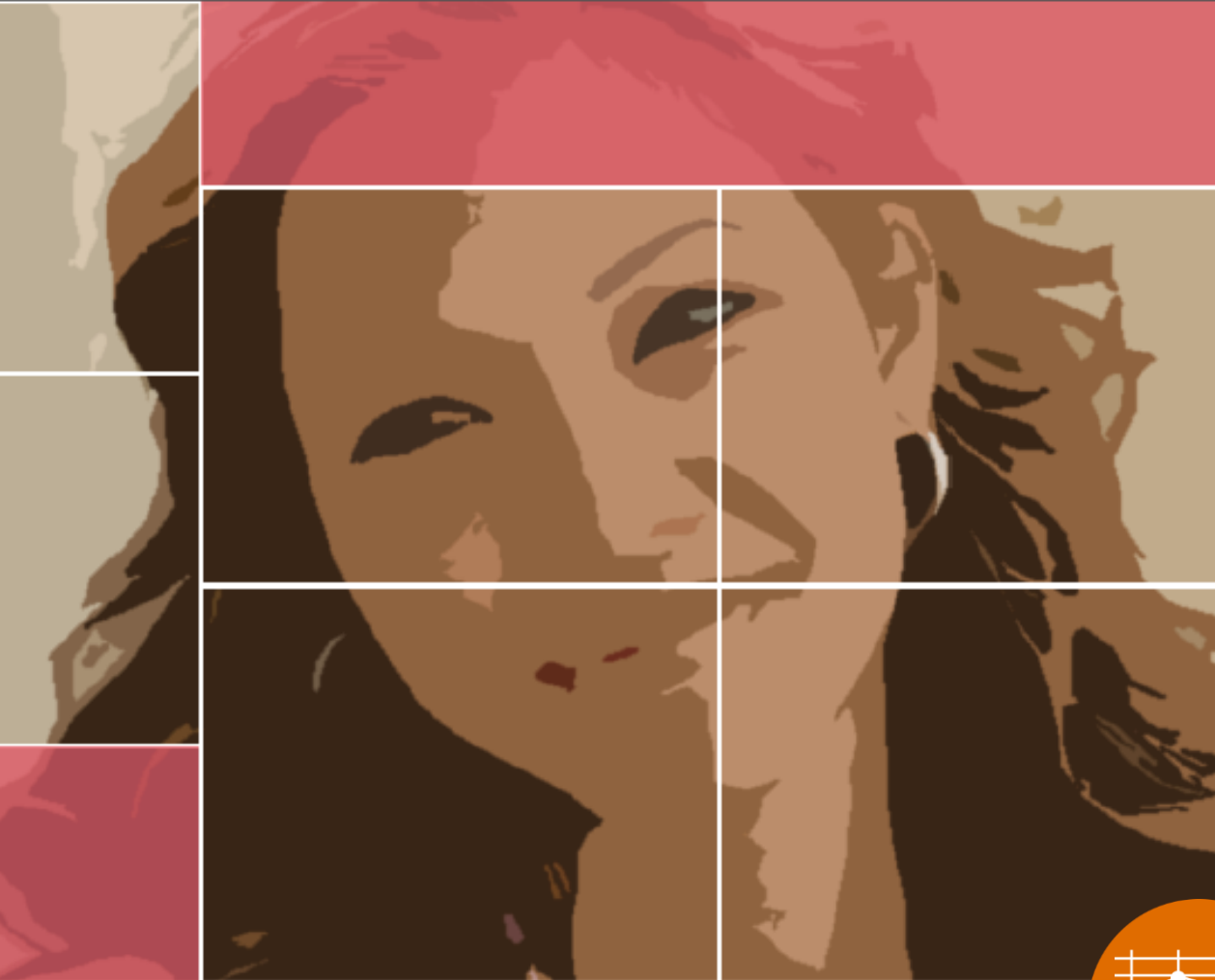
Determine the factors that are associated with healthy behaviors.



## Evaluation:

Determine the effectivity of the Combination Prevention Program.





# Female Sex Workers (FSW)

# General Information

Population: Female Sex Workers (TSF)  
18 – 49 years of age

Type of sampling: Proportional to population size

Sample: 297

Location: Belize, Cayo, Orange Walk, Corozal  
and Stann Creek

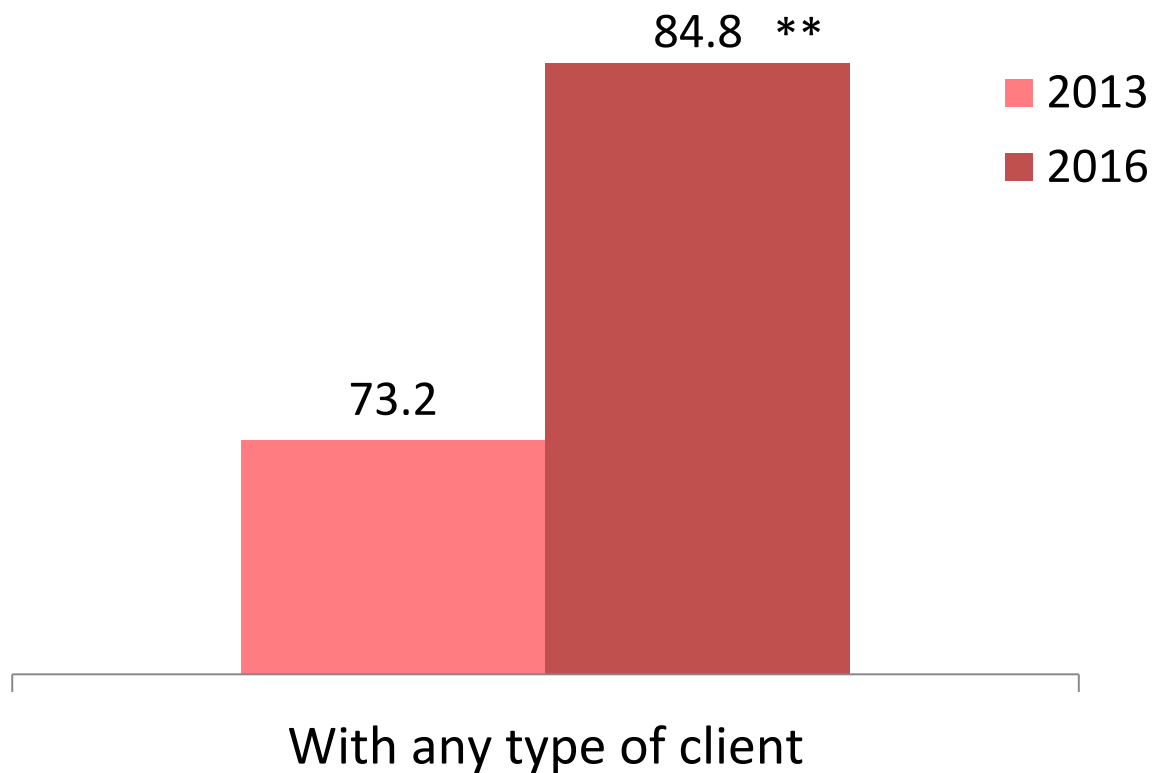
Type of analysis:

- Univariate analysis / SPSS
- Logistic regression / SPSS
- Coarsened Exact Matching / STATA



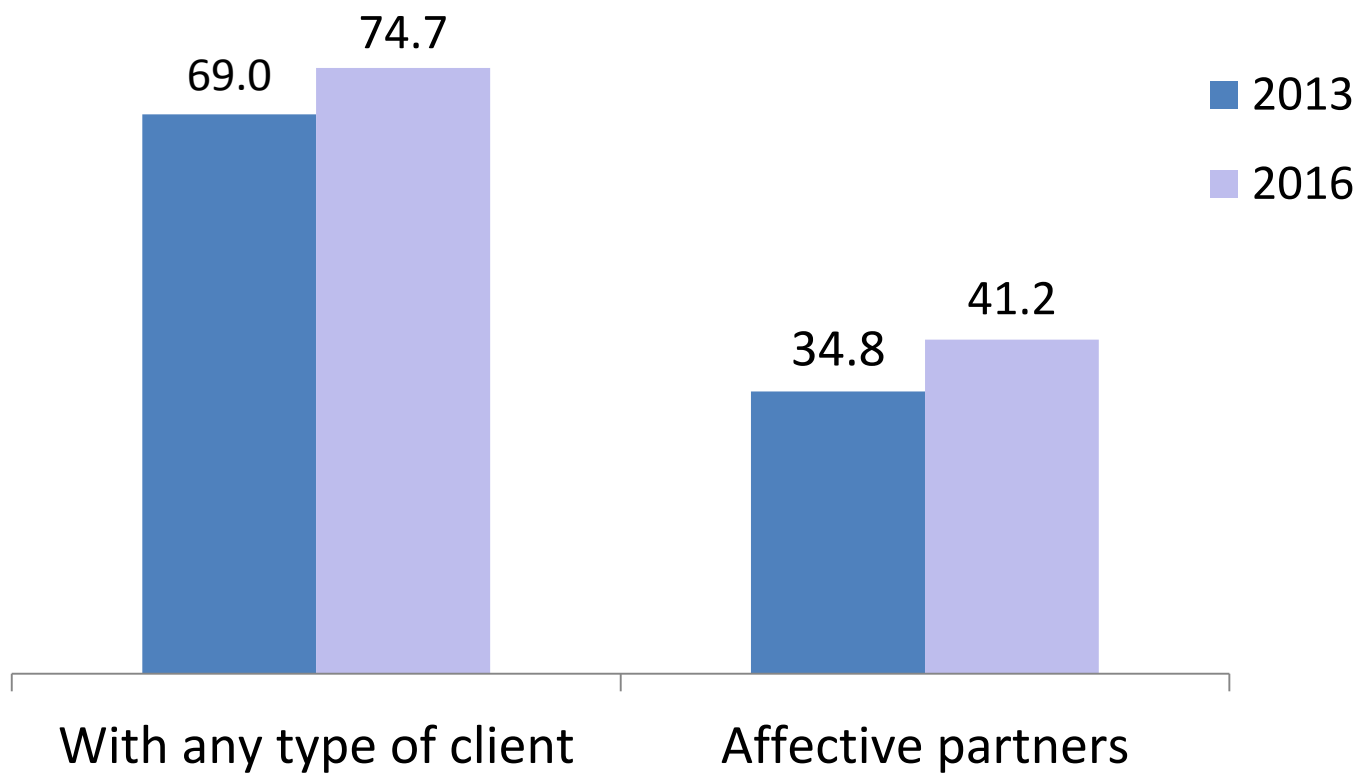
# MONITORING ANALYSIS: TRENDS IN BEHAVIOR

# Condom use in last sexual intercourse (%)

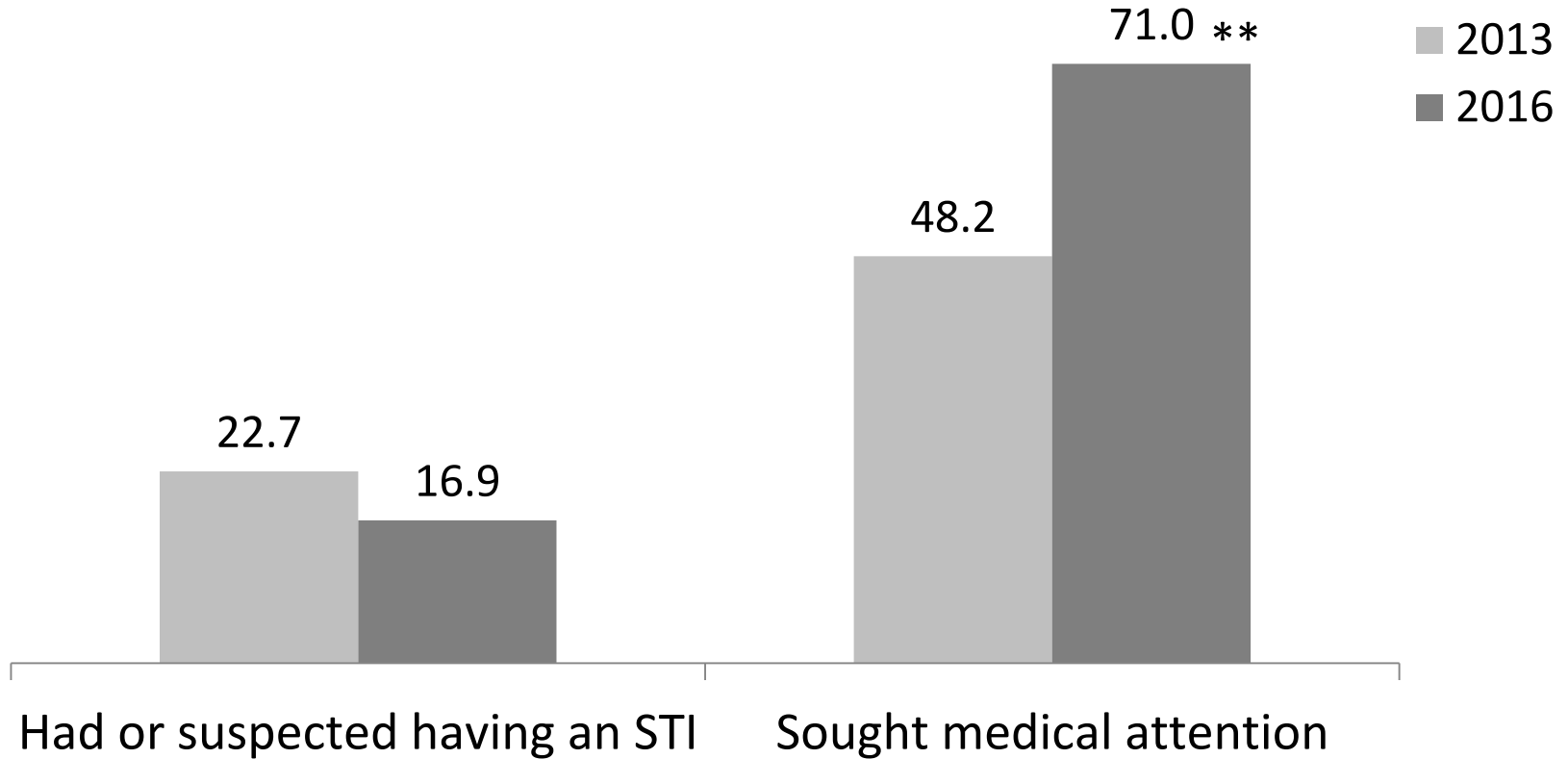




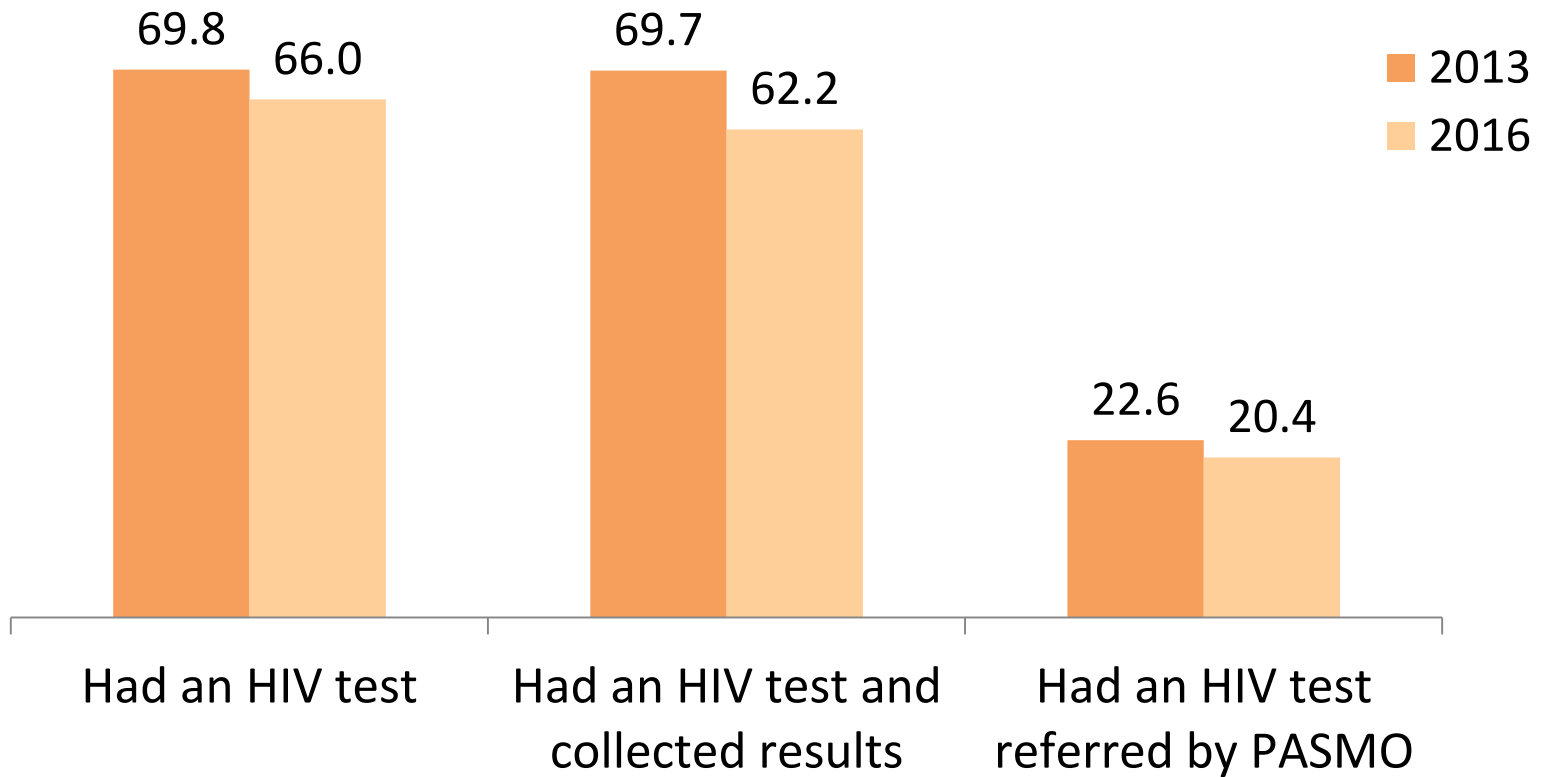
## Consistent condom use in the last 30 days (%)



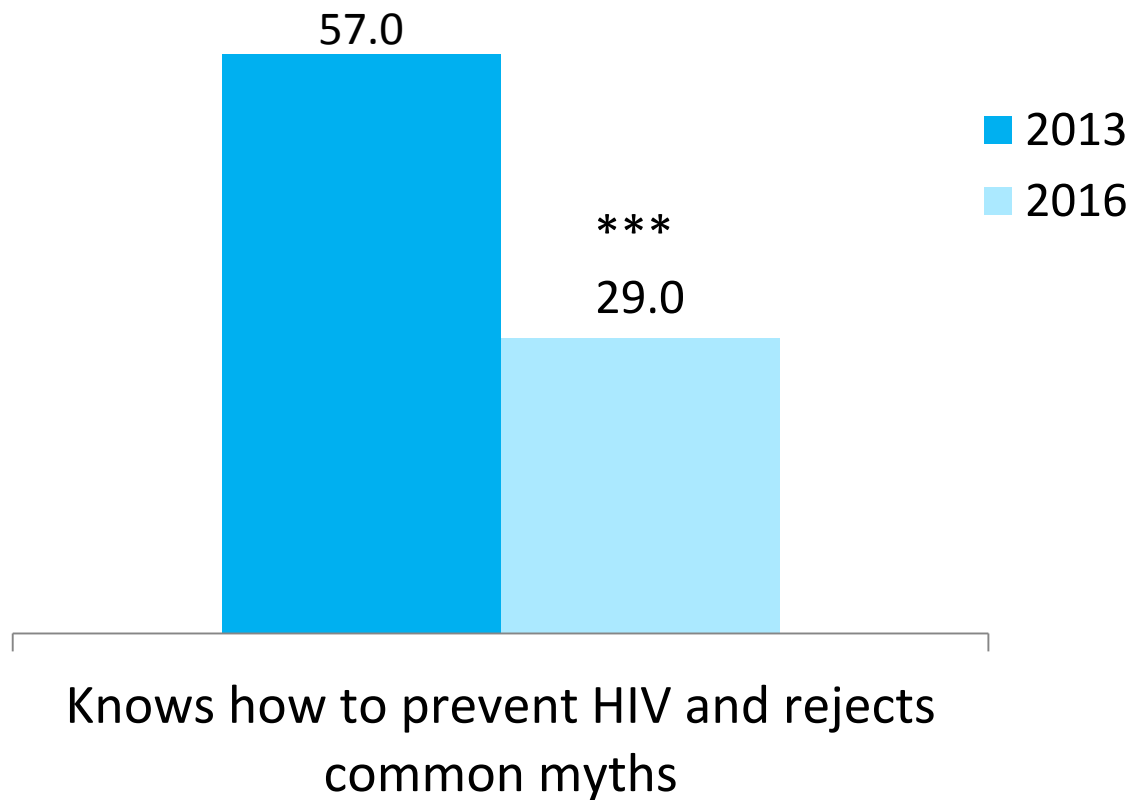
## STI in the last 12 months (%)



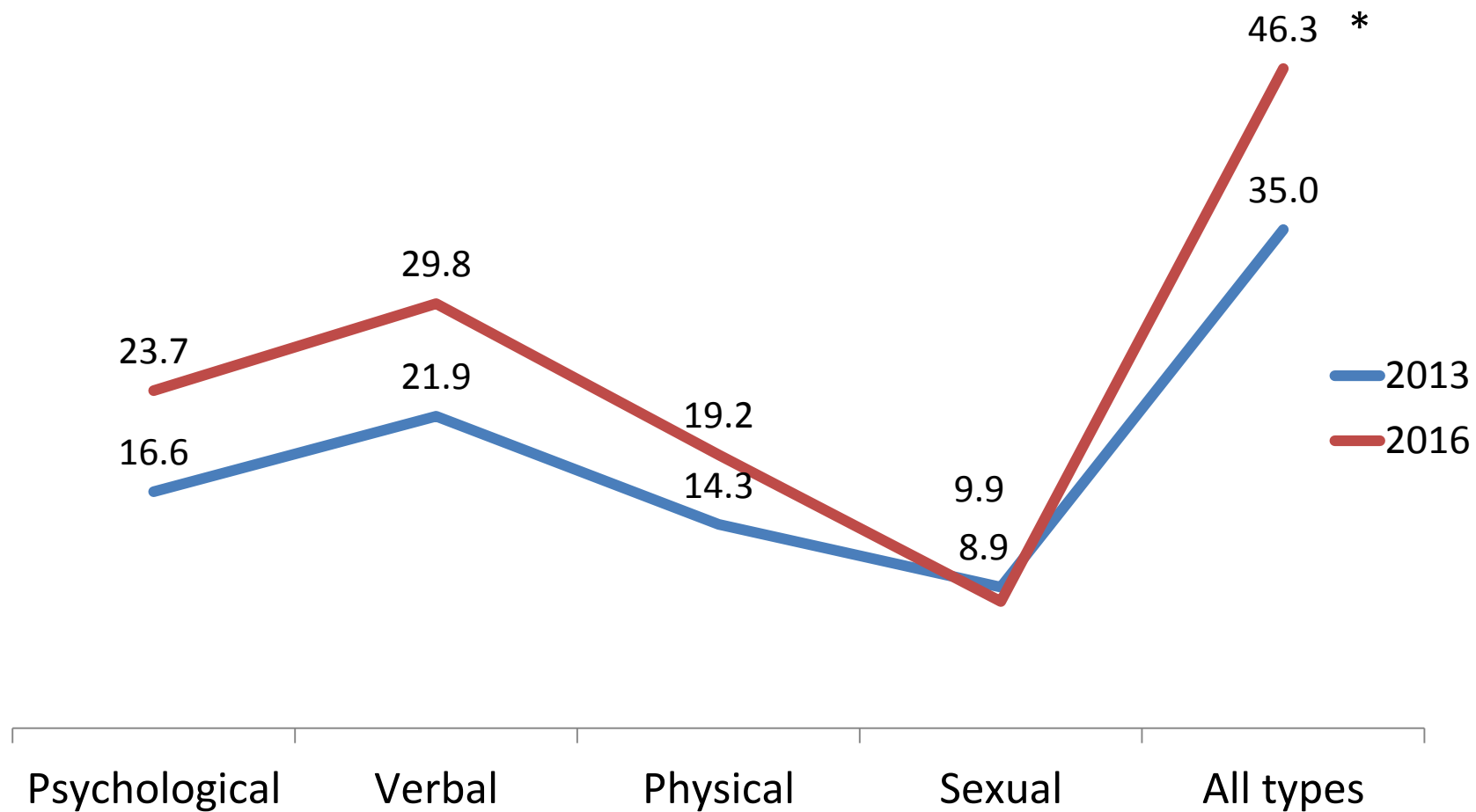
## HIV test in the last 12 months (%)



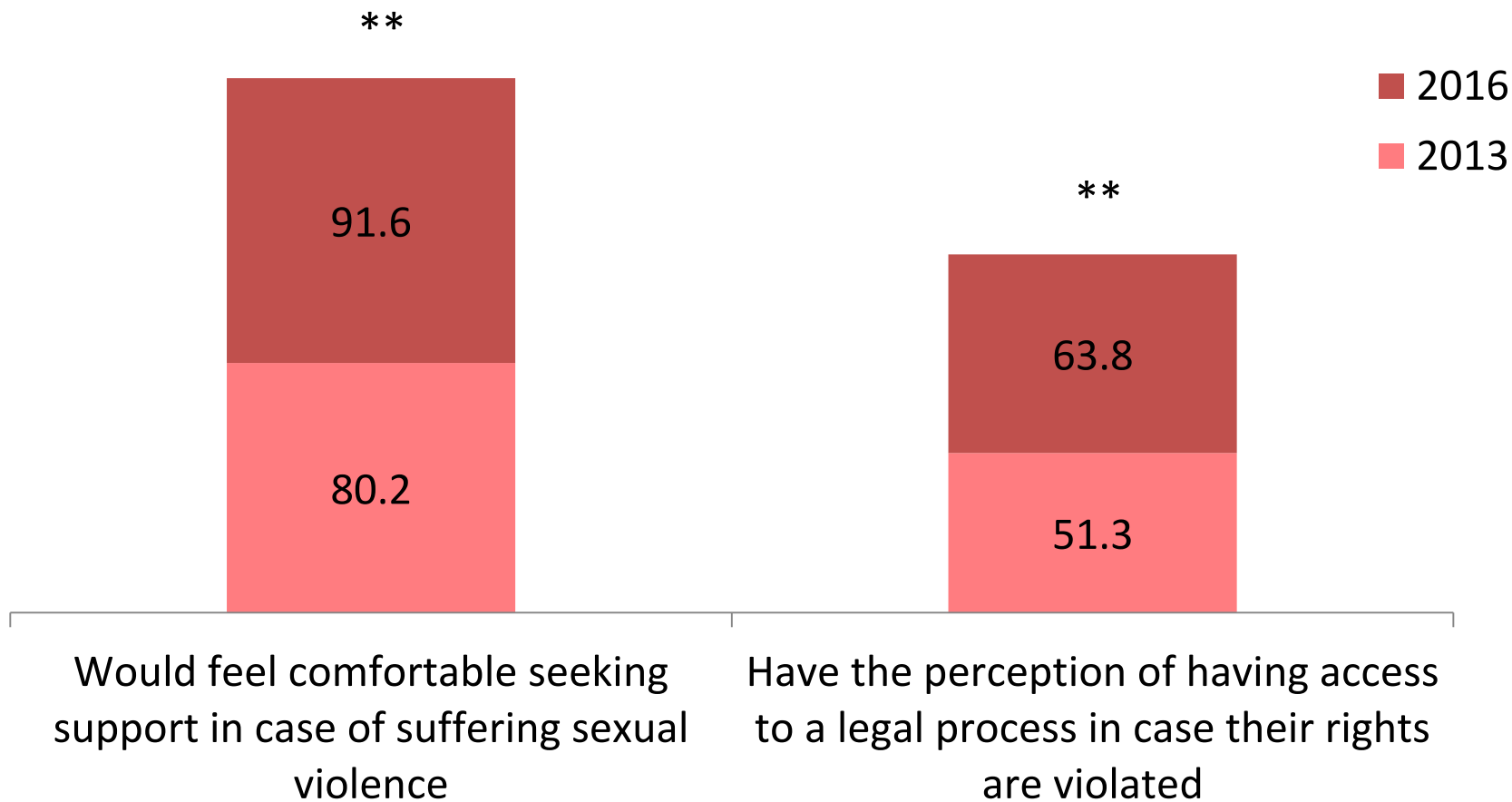
# Knowledge of HIV prevention (UNGASS 14) (%)



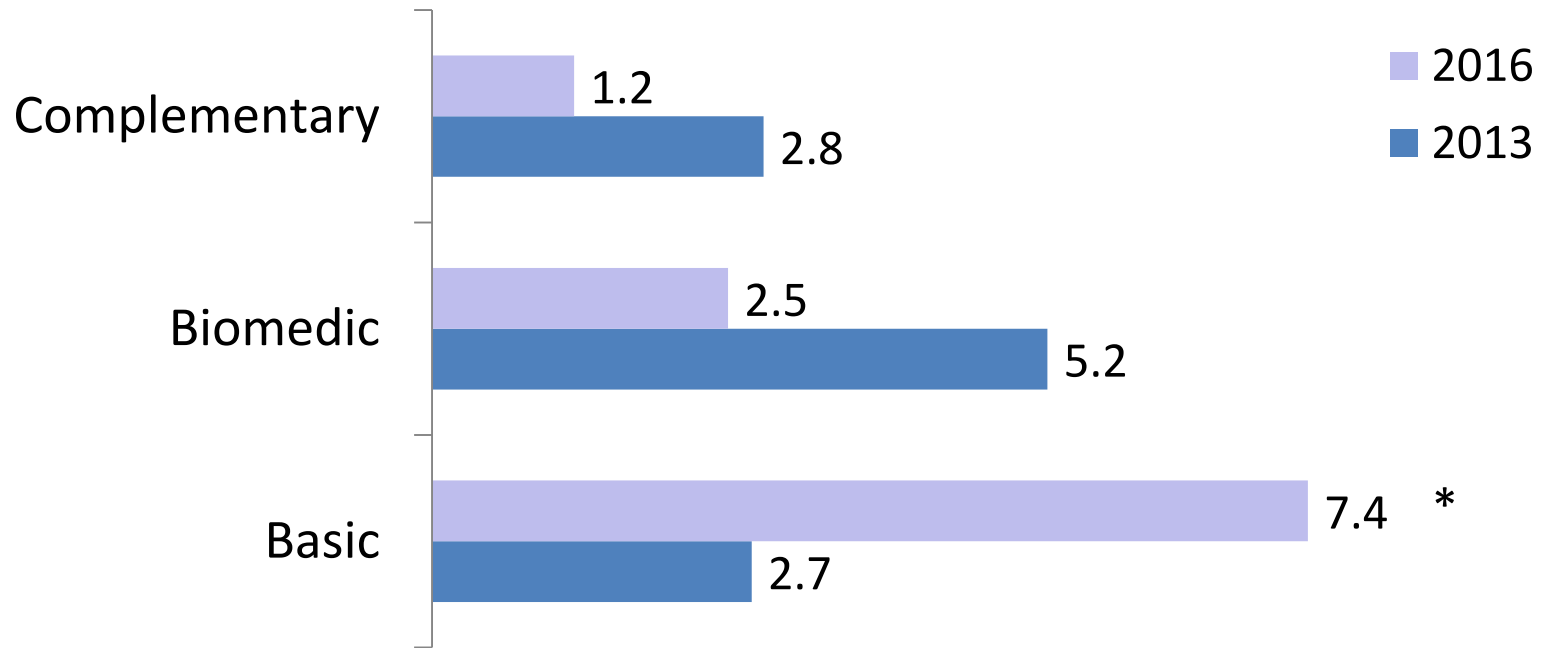
# Types of violence suffered in last 12 months (%)

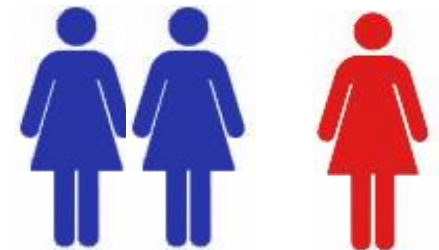


# Seeking support or accessing legal processes (%)



## Program exposure (%)





## **SEGMENTATION ANALYSIS: FACTORS ASSOCIATED**



# Correct and consistent condom use in the last 30 days

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The *probability increases* with:

**How many times more?**

<ul style="list-style-type: none"> <li>Agreeing that condoms should always be used when taking alcohol and drugs.</li> </ul>	<p><b>1.7</b></p>
<ul style="list-style-type: none"> <li>Agreeing that alcohol and drugs increase the risk of contracting HIV.</li> </ul>	<p><b>1.7</b></p>

# Correct and consistent condom use with affective partners

The *probability increases* with:

How many times more?

<ul style="list-style-type: none"> <li>Rejecting social discrimination norms (e.g., FSW are addicted to sex, FSW are bad mothers).</li> </ul>	<p><b>2.0</b></p>
<ul style="list-style-type: none"> <li>Agreeing that they have to use a condom when they take alcohol and drugs.</li> </ul>	<p><b>1.5</b></p>
<ul style="list-style-type: none"> <li>Agreeing that they are the ones to decide if a condom is used with clients.</li> </ul>	<p><b>1.8</b></p>

# **EVALUATION: ATTRIBUTION OF BEHAVIOR CHANGE TO THE PROGRAM**

# Association between the program and behavior

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There is an association between any of the program activities and:

**How many times more?**

<ul style="list-style-type: none"> <li>▪ Lubricant use during last sexual intercourse with a client.</li> </ul>	<p><b>2.3</b></p>
<ul style="list-style-type: none"> <li>▪ Condom and lubricant use during last sexual intercourse.</li> </ul>	<p><b>2.3</b></p>

# Conclusions

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1. The programs should work to increase the locus of control to increase the likelihood of using condoms correctly and consistently.
2. Condom use should also be promoted with affective partners, as only 27% of the FSW reported its condom use correctly.
3. Keep promoting the HIV test once a year. Only 66% of the FSW reported being tested in the last 12 months.
4. Organizations should design sustainable self-educational activities to teach how to prevent HIV. Their level of knowledge was low.



# Men who have Sex with Men (MSM)

# General Information

Population: Men who have sex with men (MSM) and women trans  
18 – 40 years of age

Type of sampling: Respondent Driven Sampling (RDS)

Sample: 300 **(14% self-defined as trans)**

Location: Belize, Cayo, Orange Walk, Corozal  
and Stann Creek

Type of analysis:

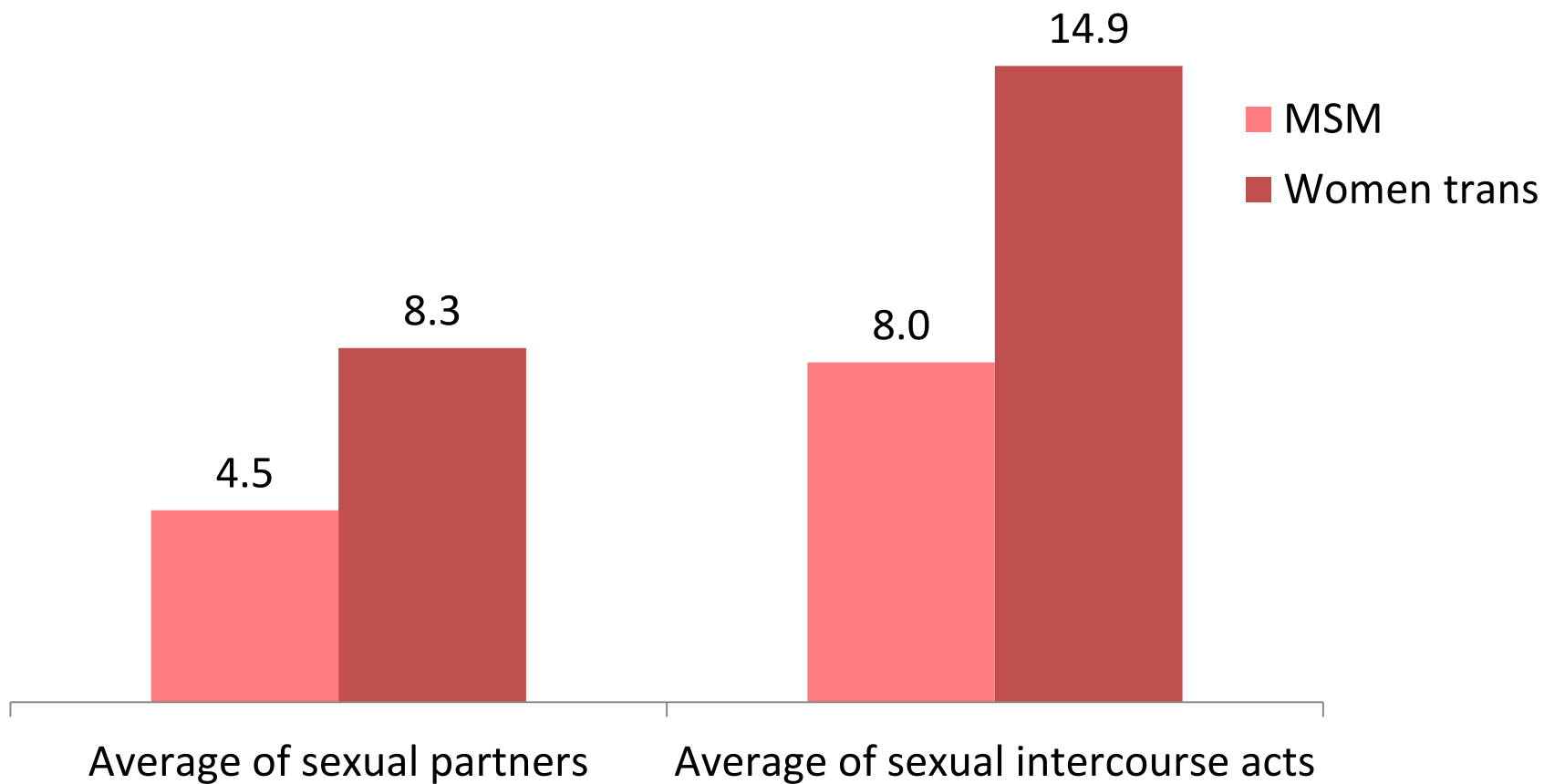
- Univariate analysis / SPSS
- Logistic regression / SPSS
- RDS analysis /RDSat
- Coarsened Exact Matching / STATA



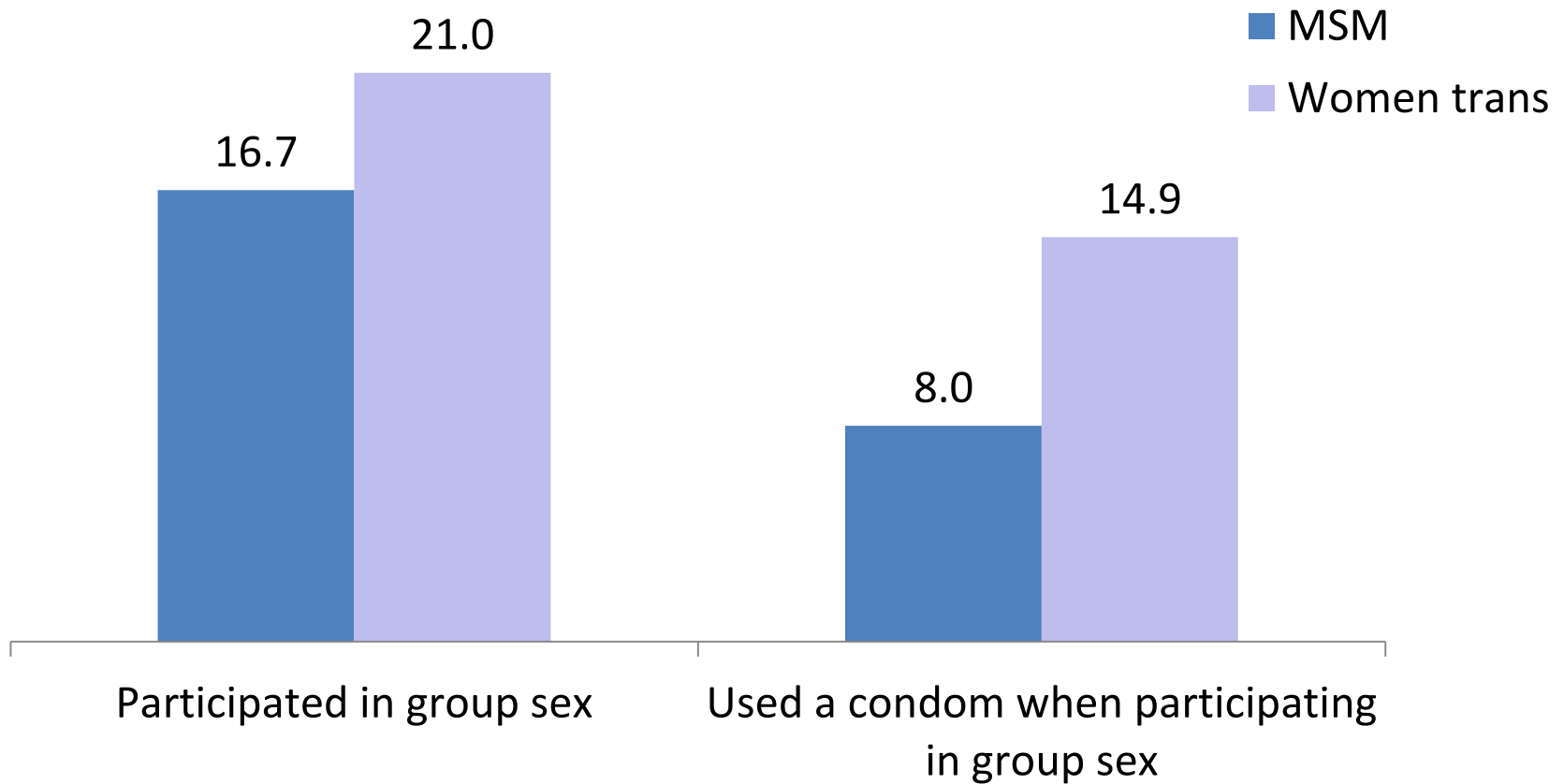
# MONITORING ANALYSIS: TRENDS IN BEHAVIOR



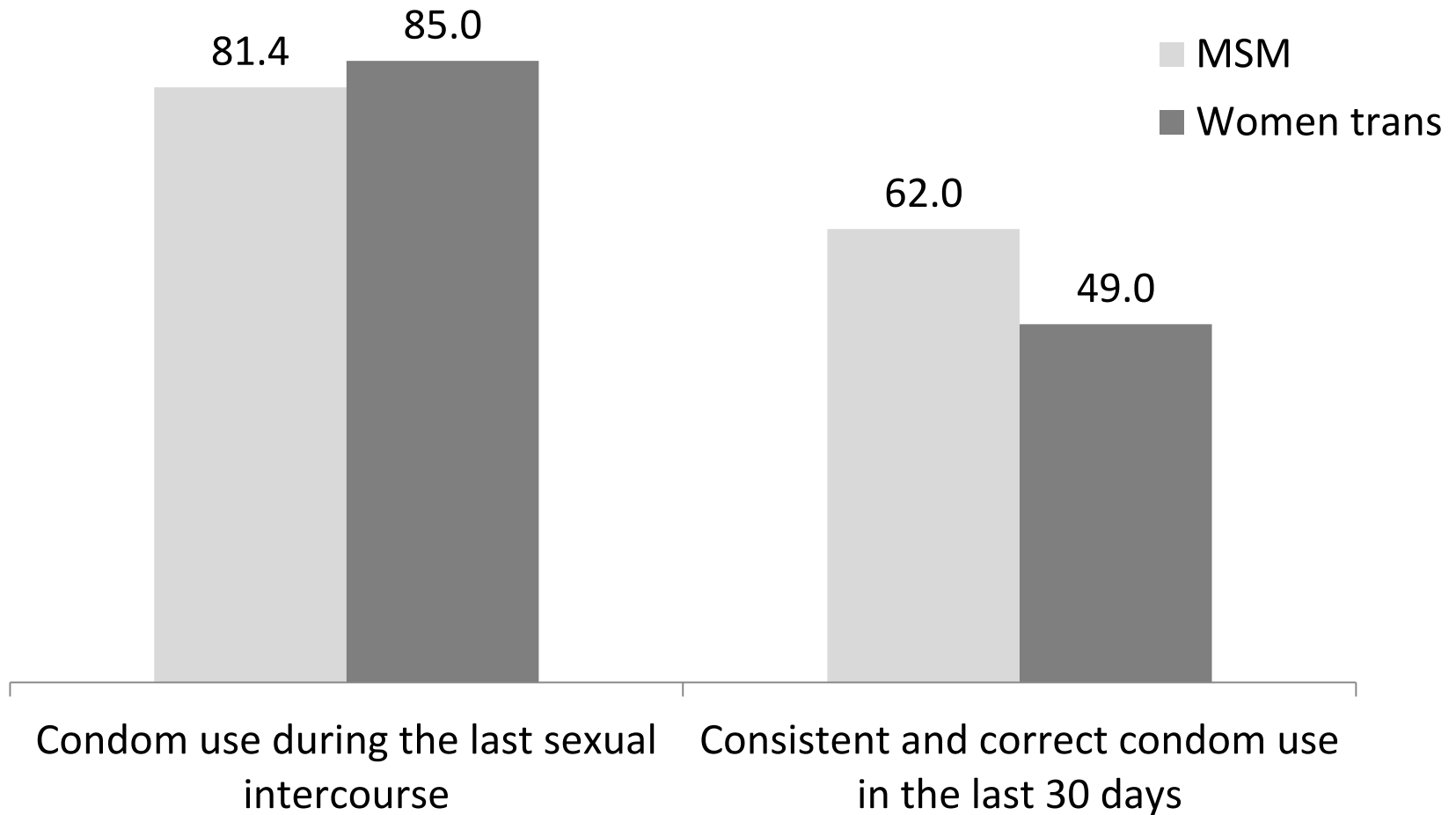
## Sexual practices in the last 30 days (n)



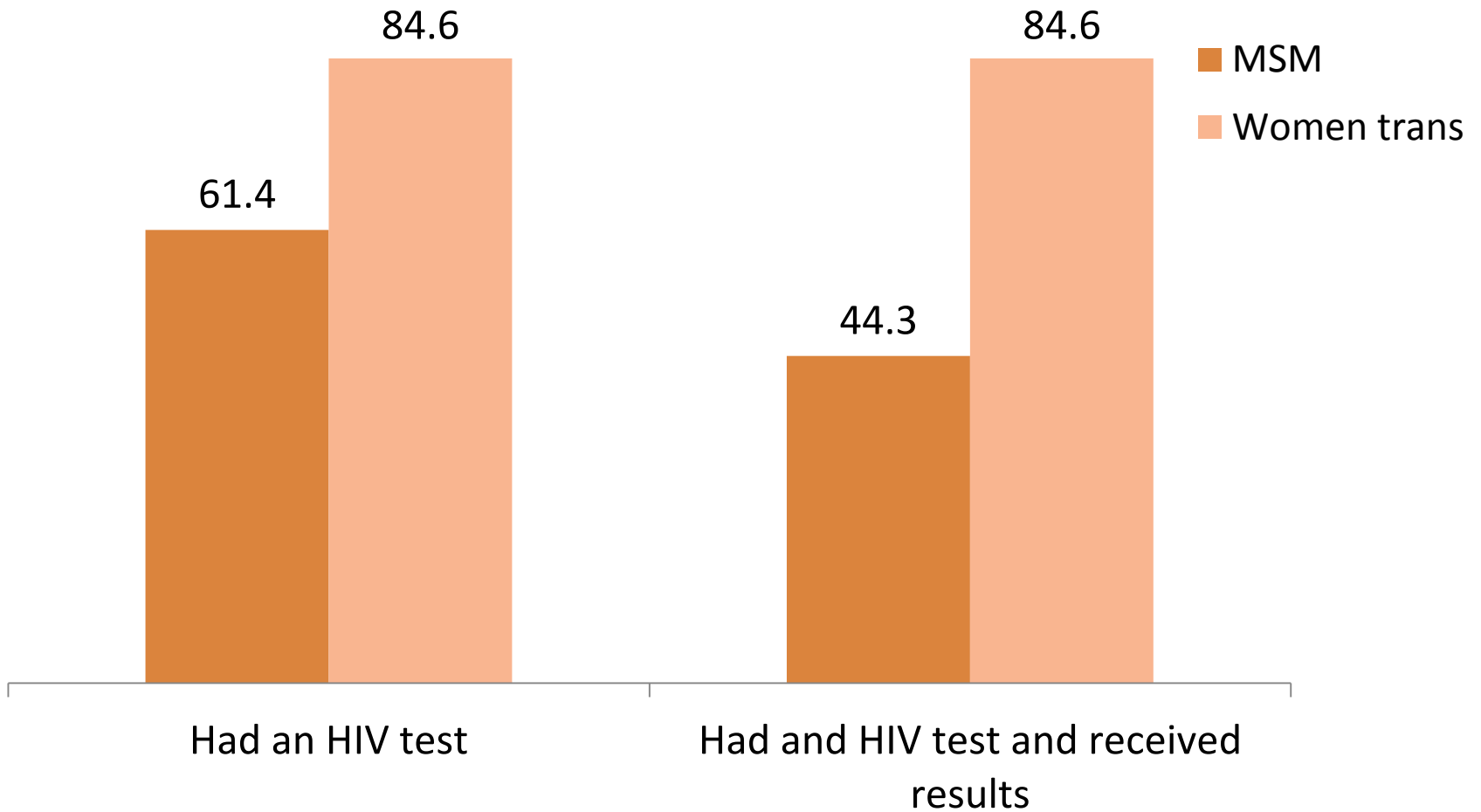
## Group sex in the last 12 months (%)



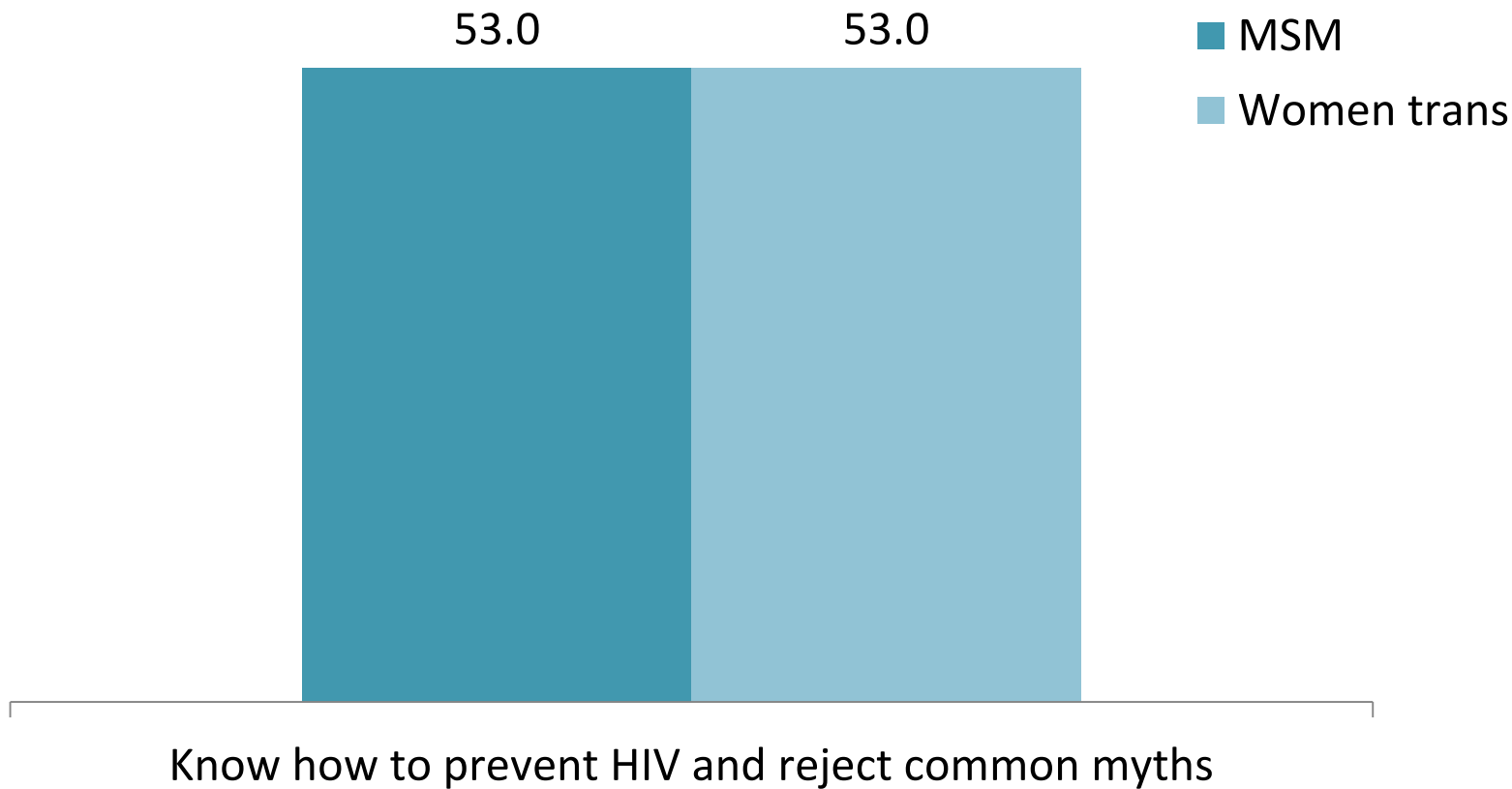
## Condom use with male partners (%)



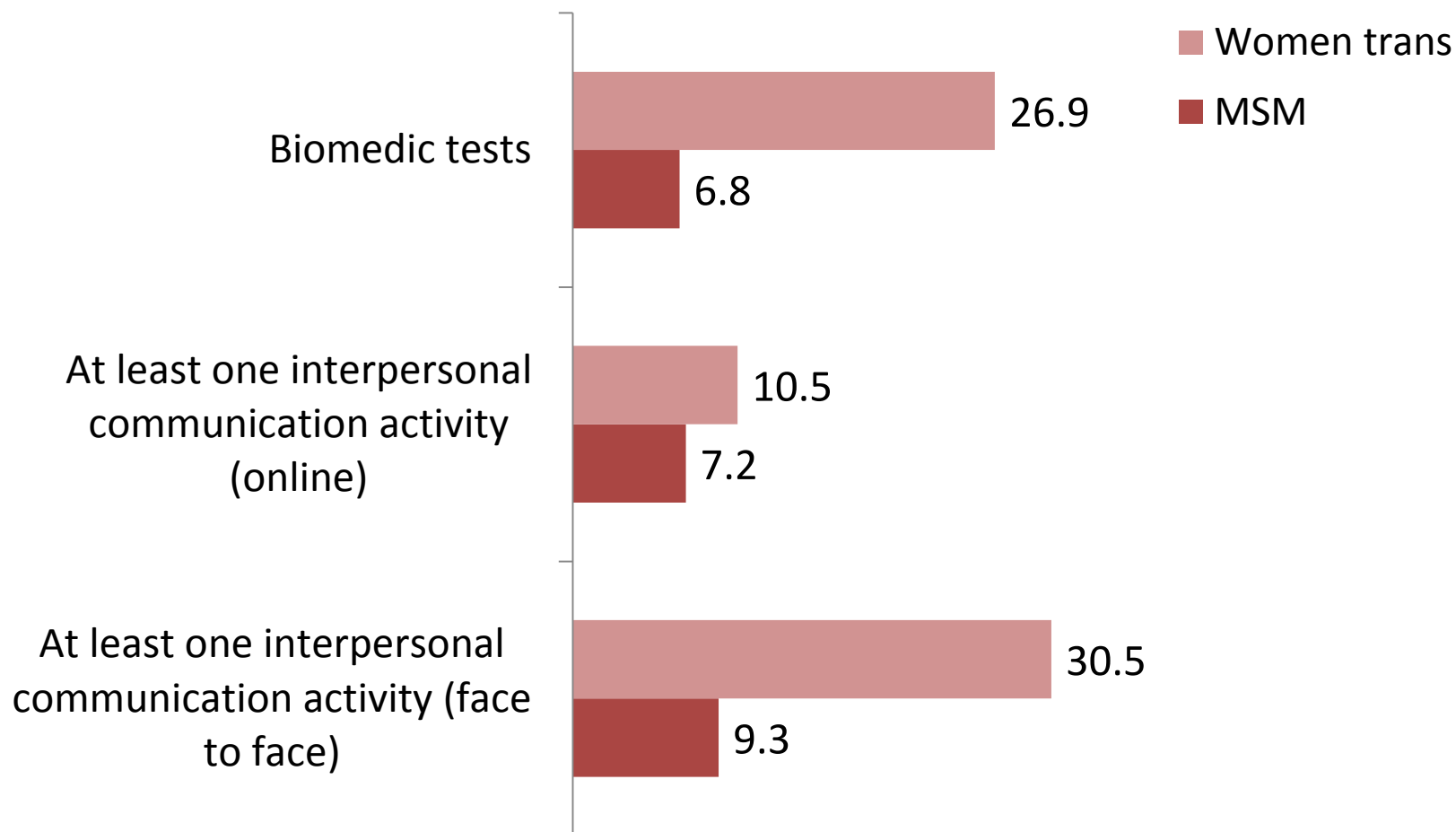
# HIV test in the last 12 months (%)



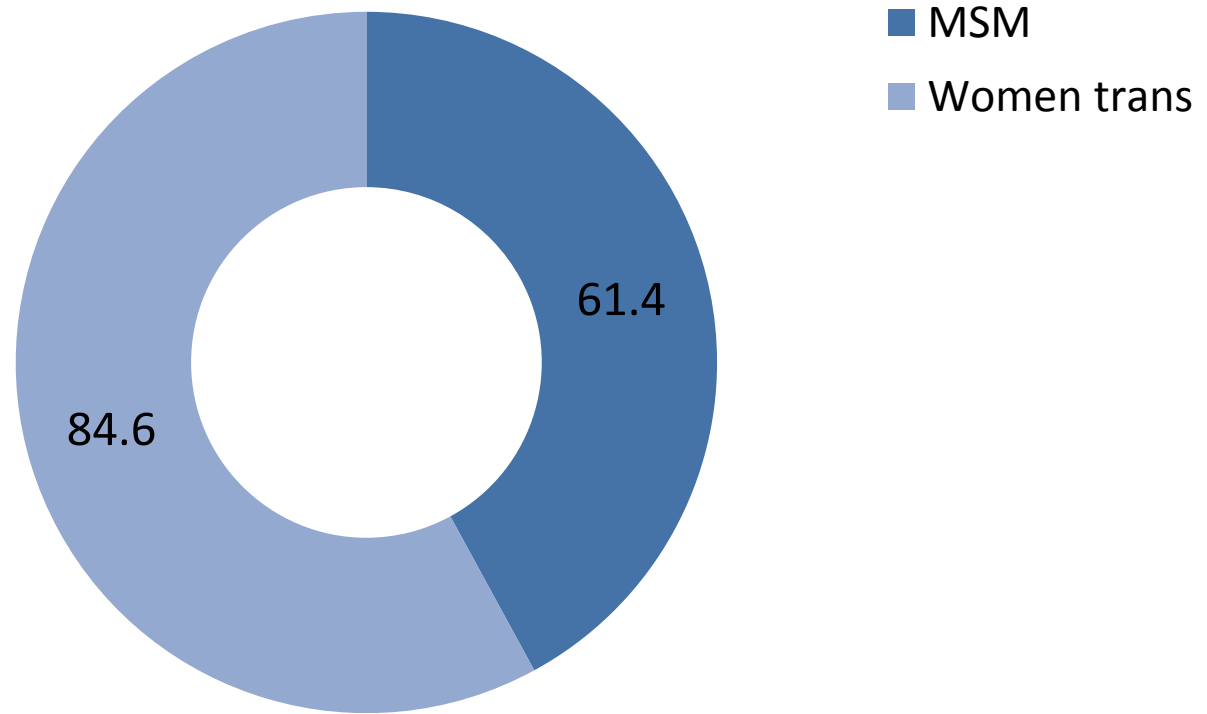
# Knowledge of HIV prevention (UNGASS 14)(%)

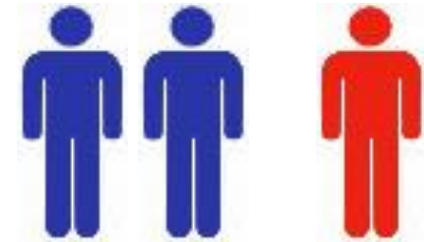


# Program exposure: coupon use in the last 12 months (%)



# Have accessed online media developed by PASMO (%)





## **SEGMENTATION ANALYSIS: FACTORS ASSOCIATED**



# Correct and consistent condom use in the last 30 days

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The *probability increases* with:

**How many times more?**

<ul style="list-style-type: none"> <li>▪ Ease of finding a store where they find condoms.</li> </ul>	<p><b>3.0</b></p>
<ul style="list-style-type: none"> <li>▪ Feeling that there is much of being proud as a person.</li> </ul>	<p><b>2.8</b></p>
<ul style="list-style-type: none"> <li>▪ Not taking too much time after things don't go well.</li> </ul>	<p><b>2.5</b></p>

# HIV test in the last 12 months

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The *probability increases* with:

**How many times more?**

<ul style="list-style-type: none"> <li>▪ Knowing a place where he/she can have an HIV test.</li> </ul>	<p><b>8.1</b></p>
<ul style="list-style-type: none"> <li>▪ Thinking that people reject a person when they know he/she is MSM.</li> </ul>	<p><b>2.0</b></p>

# **EVALUATION: ATTRIBUTION OF BEHAVIOR CHANGE TO THE PROGRAM**

# Association between the program and behavior

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There is an association between any of the program activities and:

**How many times more?**

<ul style="list-style-type: none"> <li>Having an HIV test in the last 12 months.</li> </ul>	<p><b>6.2</b></p>
<ul style="list-style-type: none"> <li>Having an HIV test and receiving results in the last 12 months.</li> </ul>	<p><b>3.6</b></p>

# Conclusions

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1. Approximately one-fifth of respondents participated in group sex in the last year. Programs should promote condom use during these activities.
2. Having positive levels of resilience was associated with using condoms consistently with all partners during the last 30 days. Programs must strengthen these individual characteristics.
3. MSM and transgender women who know where an HIV test is performed are 8 times more likely to have this test. Therefore, we must continue informing about the different locations.



# Men at Risk (MR)

# General Information

Population:

Men at Risk  
Older than 18 years of age

Type of sampling:

Time-place

Sample:

Regional: 2594  
Belize: 250

Location:

Belize, Guatemala, El Salvador,  
Nicaragua, Costa Rica and Panama

Type of analysis:

- Univariate analysis / SPSS
- Logistic regression / SPSS
- Coarsened Exact Matching / STATA

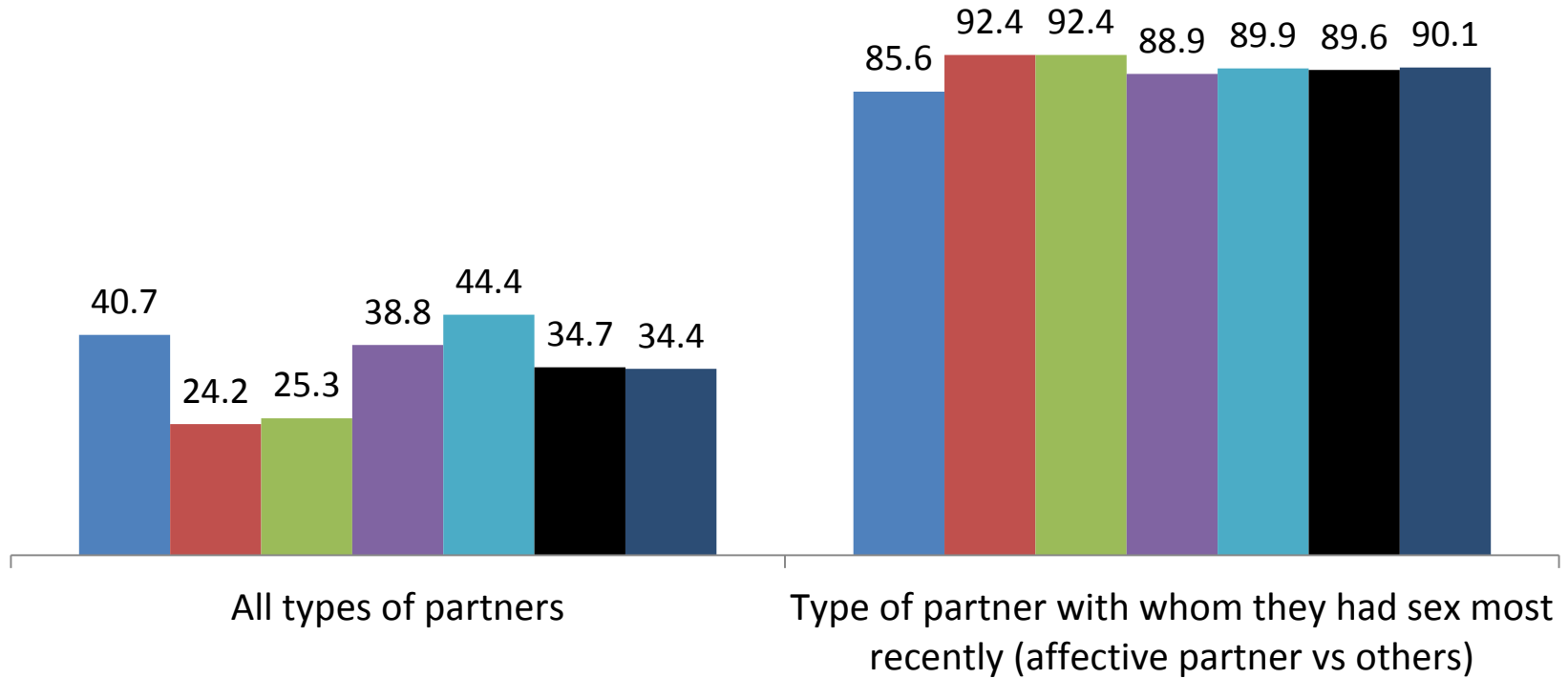


# **MONITORING ANALYSIS: TRENDS IN BEHAVIOR**



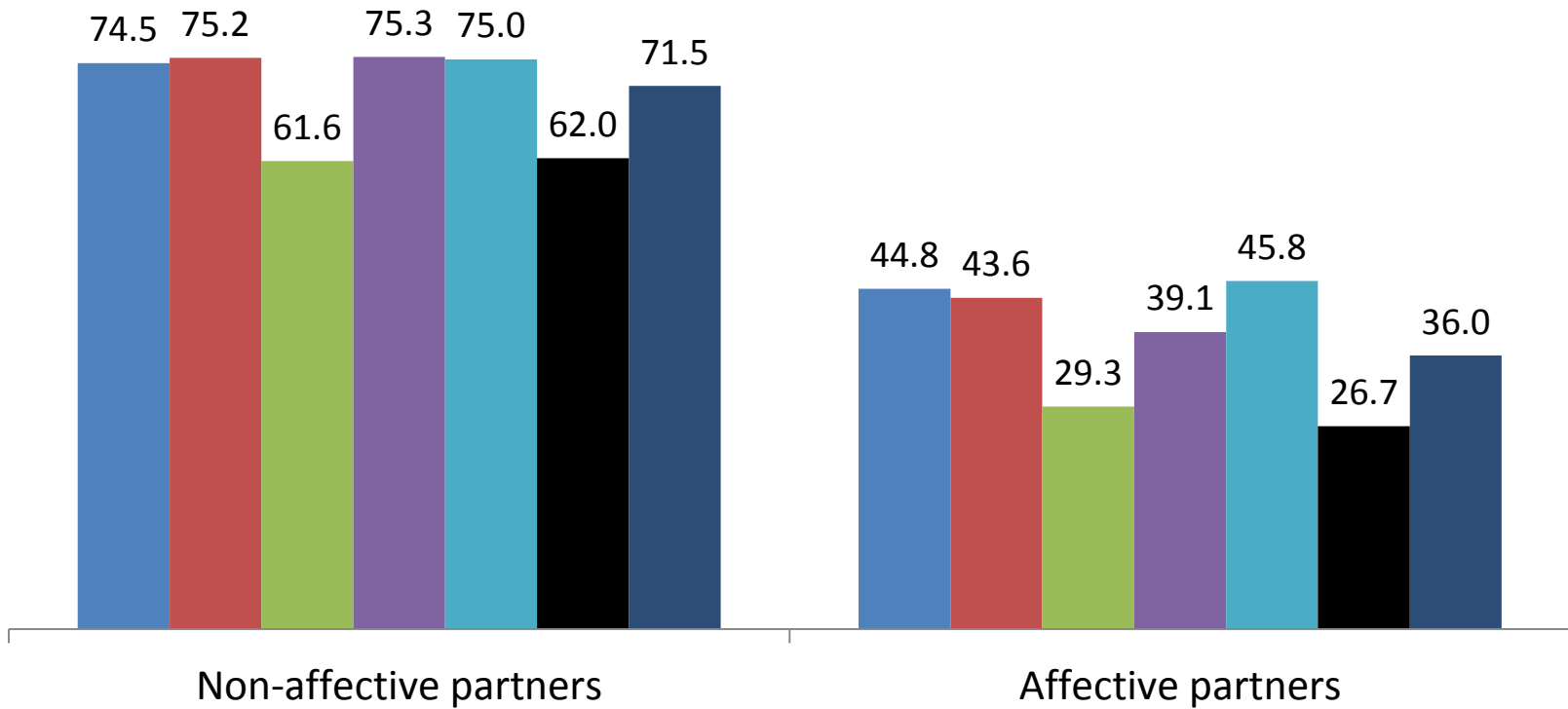
# Condom use and type of partner in the last sexual intercourse (%)

■ Guatemala 
 ■ El Salvador 
 ■ Nicaragua 
 ■ Costa Rica 
 ■ Panama 
 ■ Belize 
 ■ Regional



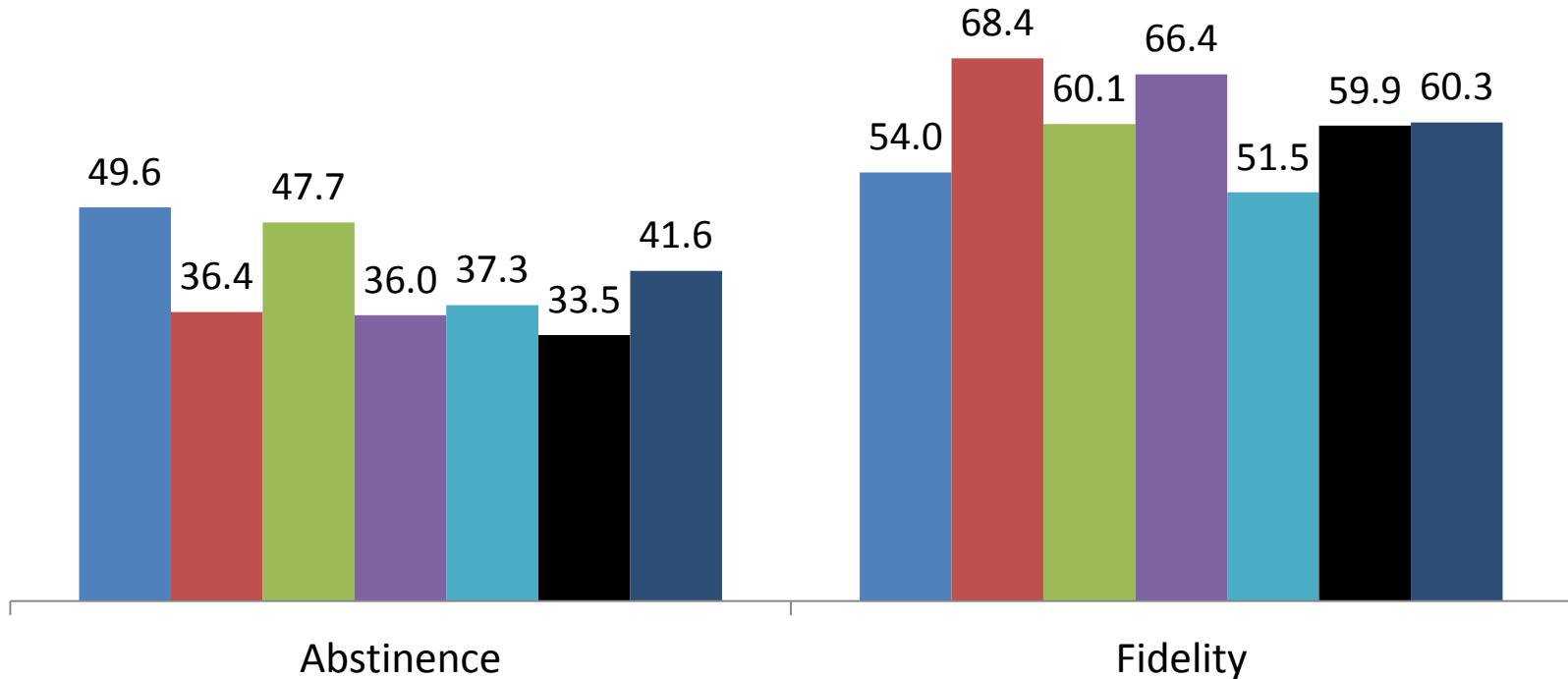
# Consistent condom use in the last 30 days (%)

■ Guatemala 
 ■ El Salvador 
 ■ Nicaragua 
 ■ Costa Rica 
 ■ Panama 
 ■ Belize 
 ■ Regional



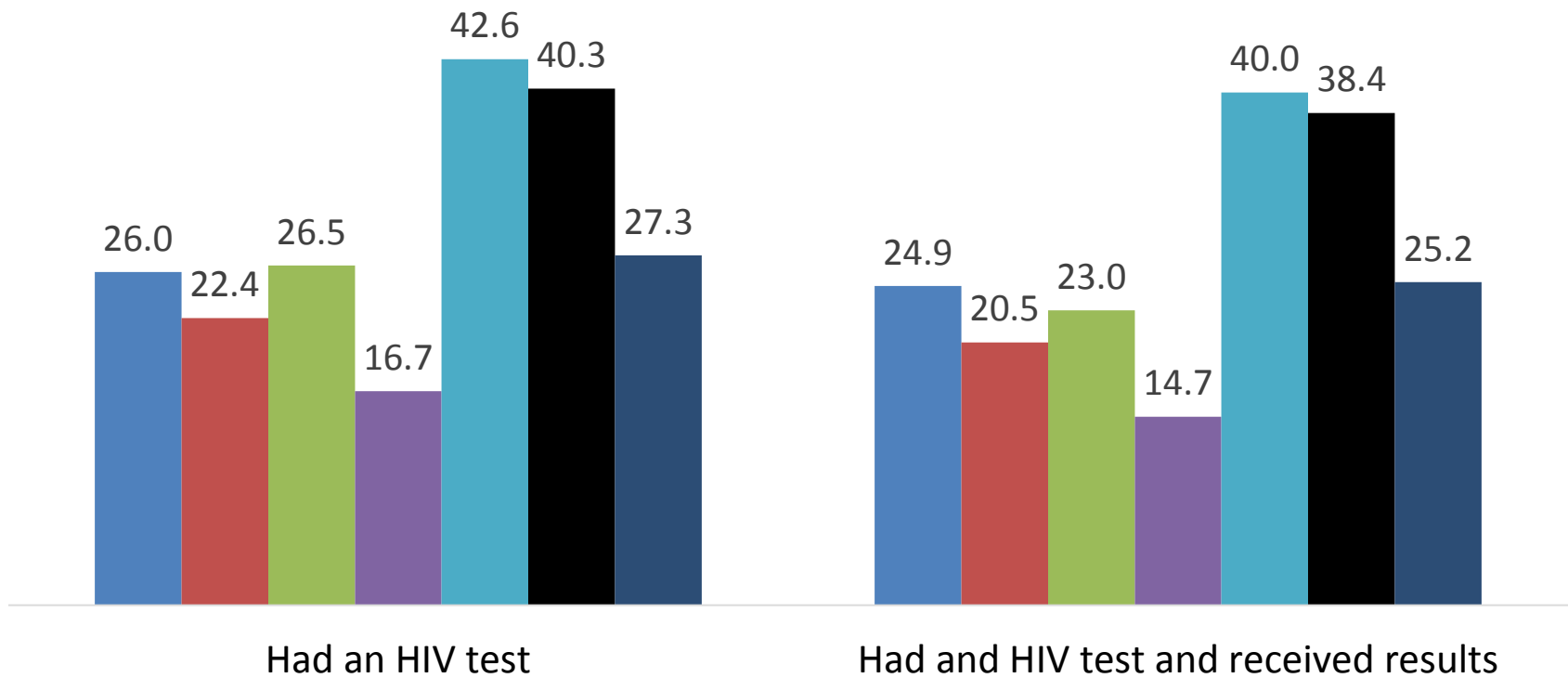
# Healthy sexual behaviors in the last 30 days (%)

■ Guatemala ■ El Salvador ■ Nicaragua ■ Costa Rica ■ Panama ■ Belize ■ Regional



# HIV test in the last 12 months (%)

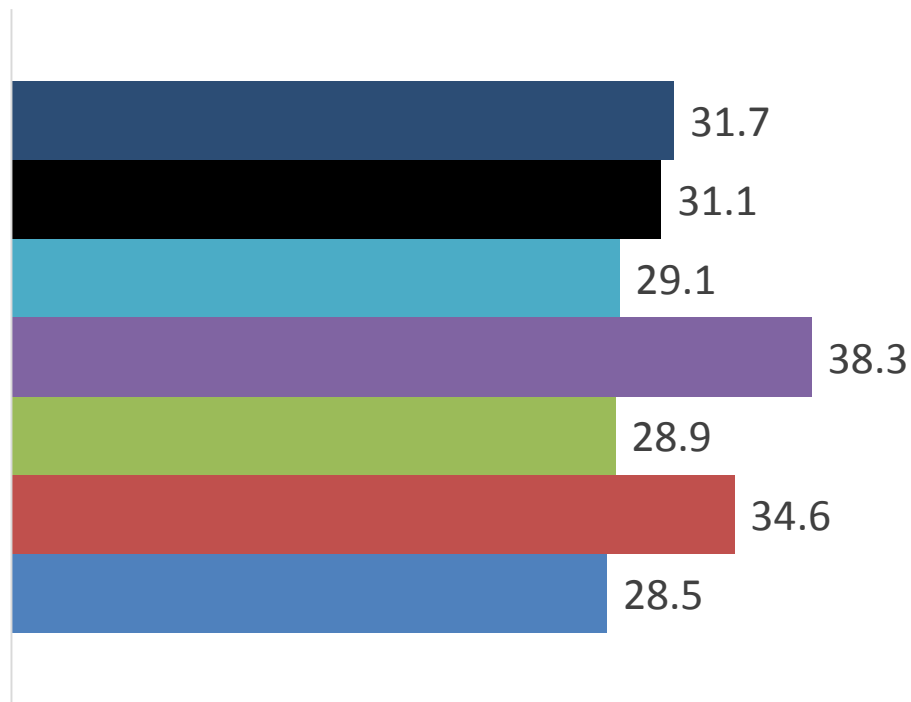
■ Guatemala ■ El Salvador ■ Nicaragua ■ Costa Rica ■ Panama ■ Belize ■ Regional



# Knowledge of HIV prevention (UNGASS 14) (%)

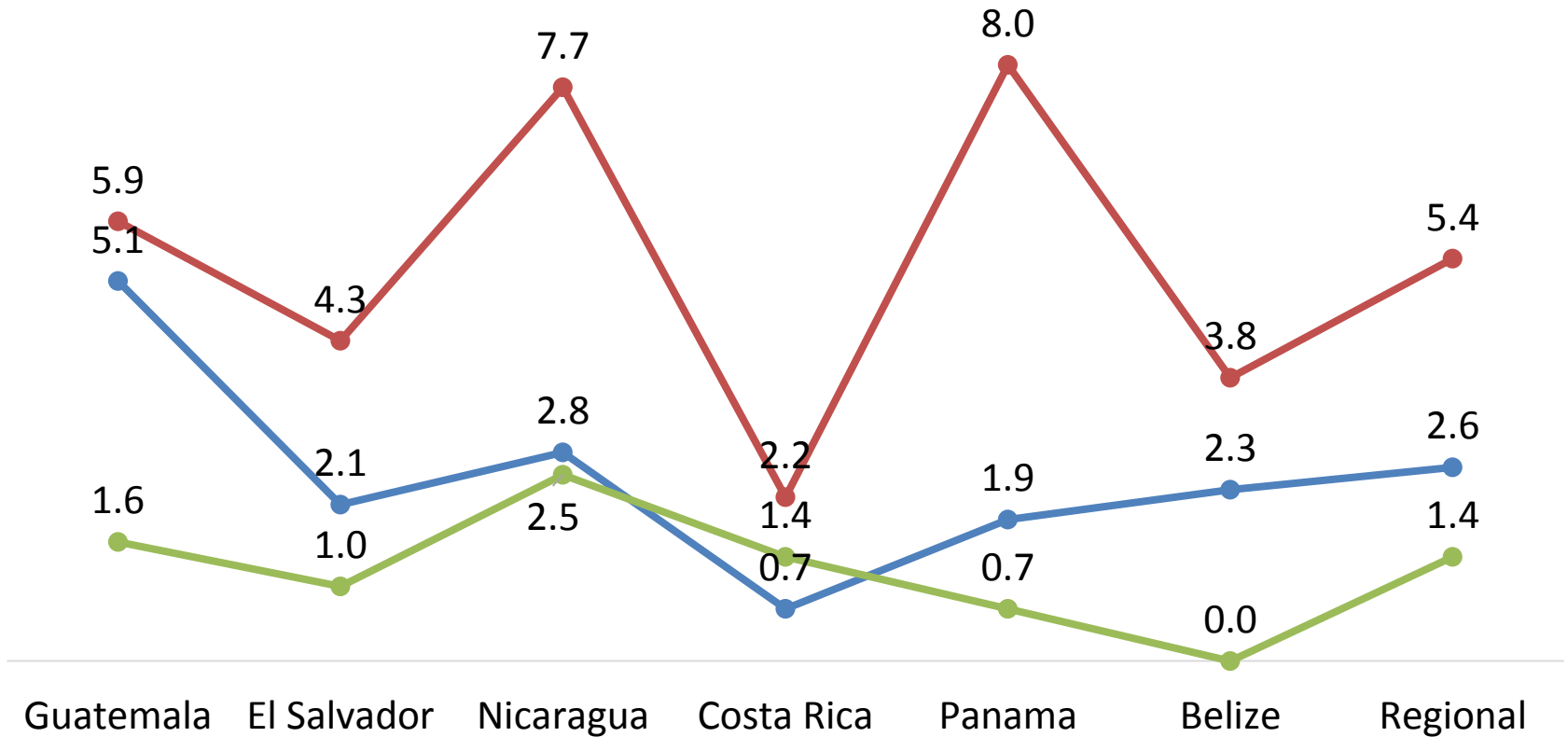
■ Regional 
 ■ Belize 
 ■ Panama 
 ■ Costa Rica 
 ■ Nicaragua 
 ■ El Salvador 
 ■ Guatemala

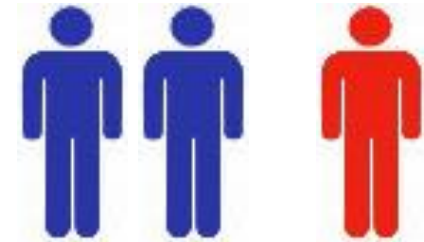
Know how to prevent HIV and reject common myths



# Program exposure: coupon use in the last 12 months

● Basic component   
 ● Biomedic component   
 ● Complementary component





## SEGMENTATION ANALYSIS: FACTORS ASSOCIATED

# Condom use in the last sexual intercourse

The *probability increases* with:

How many times more?

<ul style="list-style-type: none"> <li>Agreeing with positive social norms (e.g., couples should talk about their HIV status, everyone should have an HIV test each year).</li> </ul>	<p><b>1.3</b></p>
<ul style="list-style-type: none"> <li>Having positive attitudes towards condoms (i.e., attractive, fun, exciting, sexy).</li> </ul>	<p><b>1.3</b></p>
<ul style="list-style-type: none"> <li>Having a positive locus of control where they are the ones who suggest the condom use.</li> </ul>	<p><b>1.6</b></p>



# Consistent condom use with non-affective partners

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The *probability increases* with:

How many times more?

<ul style="list-style-type: none"> <li>Rejecting common myths of HIV risk infection (e.g., oral sex is safe, cleaning of genitals prevent STIs).</li> </ul>	<p><b>1.3</b></p>
<ul style="list-style-type: none"> <li>Having positive locus of control by suggesting the use of the condom use.</li> </ul>	<p><b>2.8</b></p>
<ul style="list-style-type: none"> <li>Thinking that condoms don't limit intimacy.</li> </ul>	<p><b>1.5</b></p>

# **EVALUATION: ATTRIBUTION OF BEHAVIOR CHANGE TO THE PROGRAM**

# Association between the program and behavior

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There is an association between any of the program activities and:

**How many times more?**

<ul style="list-style-type: none"> <li>Condom use during last sexual intercourse.</li> </ul>	<b>1.9</b>
<ul style="list-style-type: none"> <li>Condom and lubricant use during last sexual intercourse.</li> </ul>	<b>4.0</b>
<ul style="list-style-type: none"> <li>Having an HIV test in the last 12 months.</li> </ul>	<b>4.0</b>
<ul style="list-style-type: none"> <li>Having an HIV test in the last 12 months and received results.</li> </ul>	<b>3.7</b>

# Conclusions

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1. Programs should work to increase positive attitudes towards condoms. Key messages and condom product innovation are essential.
2. Continue emphasizing and strengthening the locus of control because it is associated with increased condom use.
3. Work to change social norms often requires mass communication messages. It is recommended that the importance of HIV testing, carrying a condom, and condom use with all types of partners.



# People Living with HIV (PLH)

# General Information

Population: People living with HIV  
Older than 18 years of age

Type of sampling: Consecutive recruitment

Sample: Regional: 2585

Location: Guatemala, El Salvador, Nicaragua,  
Costa Rica and Panama

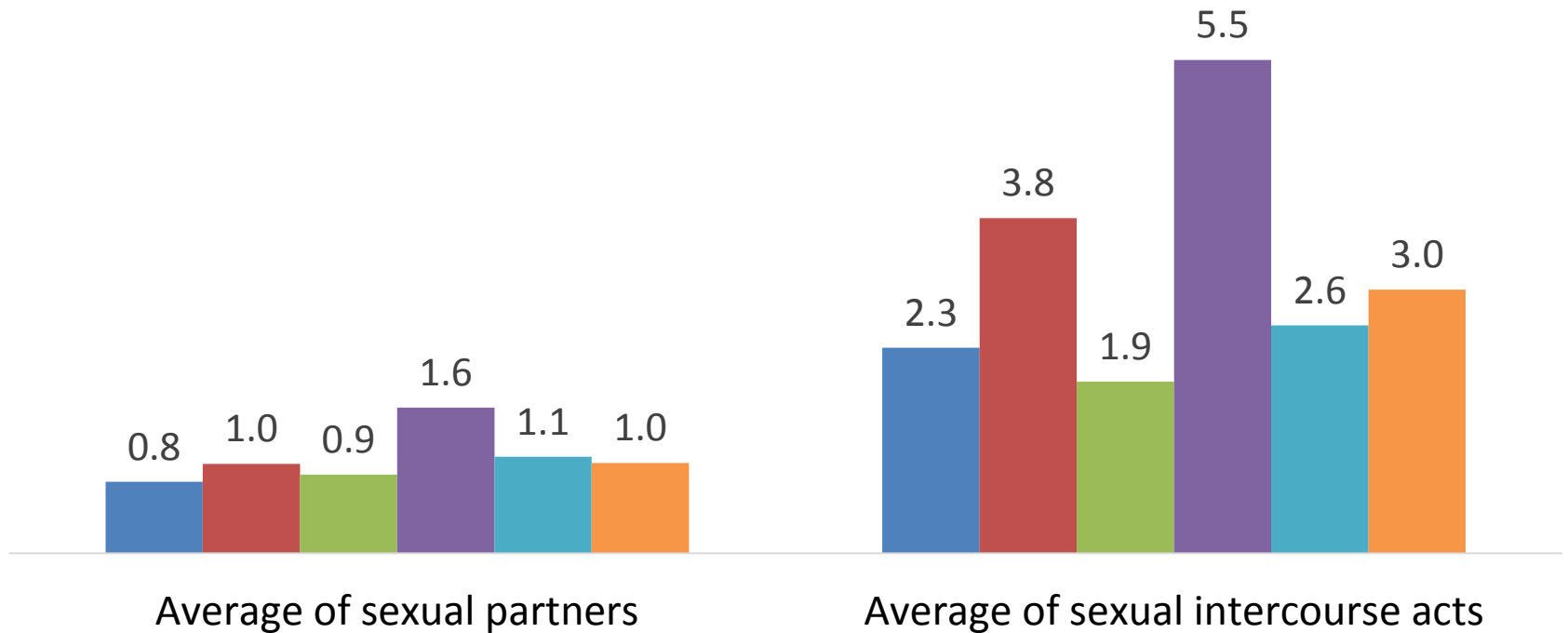
Type of analysis:

- Univariate analysis / SPSS
- Logistic regression / SPSS
- Coarsened Exact Matching / STATA

# MONITORING ANALYSIS: TRENDS IN BEHAVIOR

# Sexual practices in the last 30 days (n)

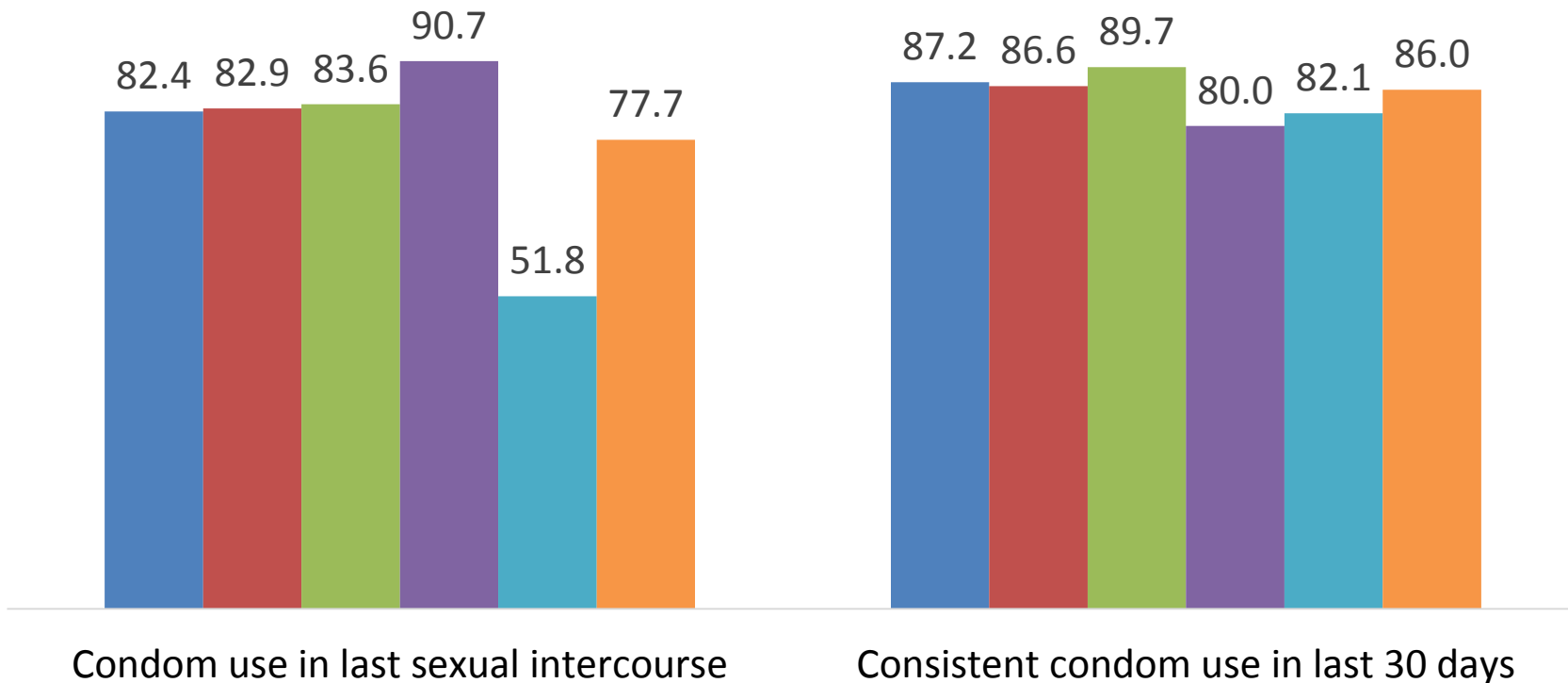
■ Guatemala ■ El Salvador ■ Nicaragua ■ Costa Rica ■ Panama ■ Regional





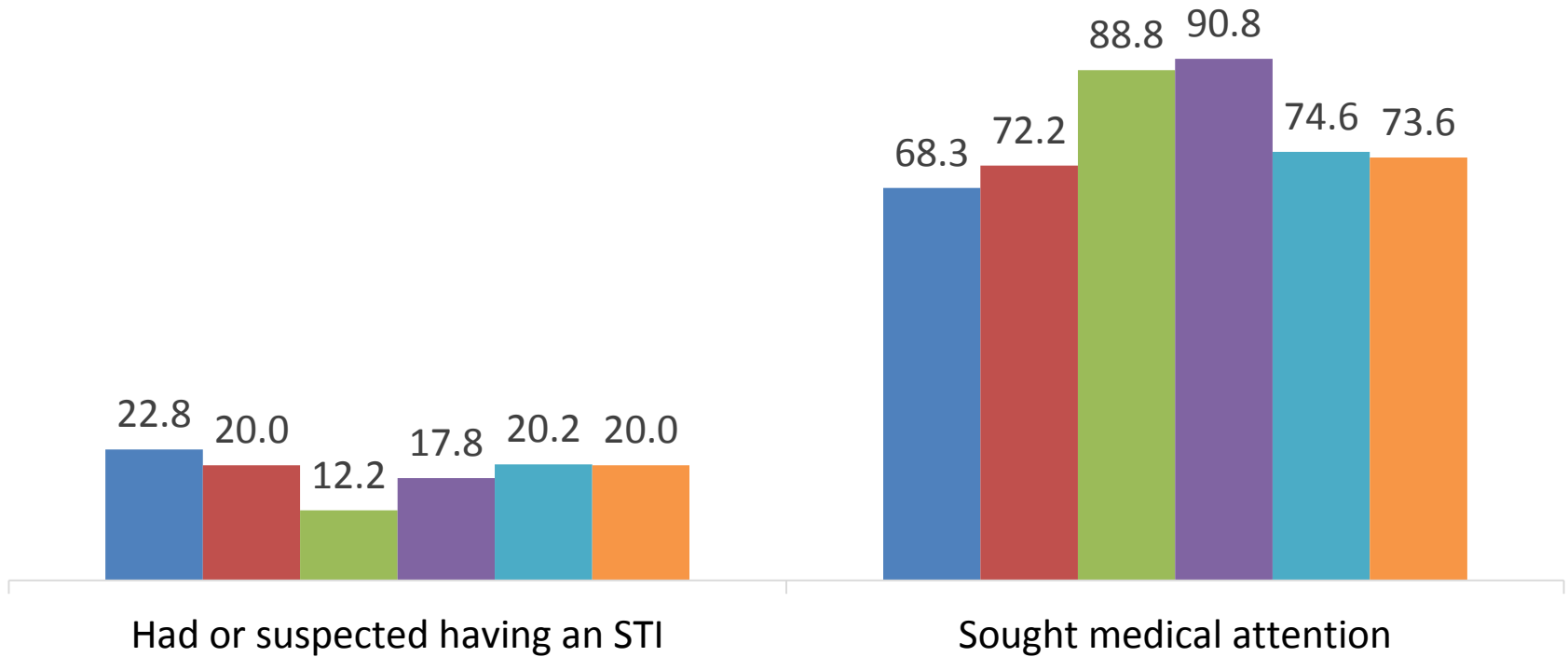
# Condom use (%)

■ Guatemala ■ El Salvador ■ Nicaragua ■ Costa Rica ■ Panama ■ Regional



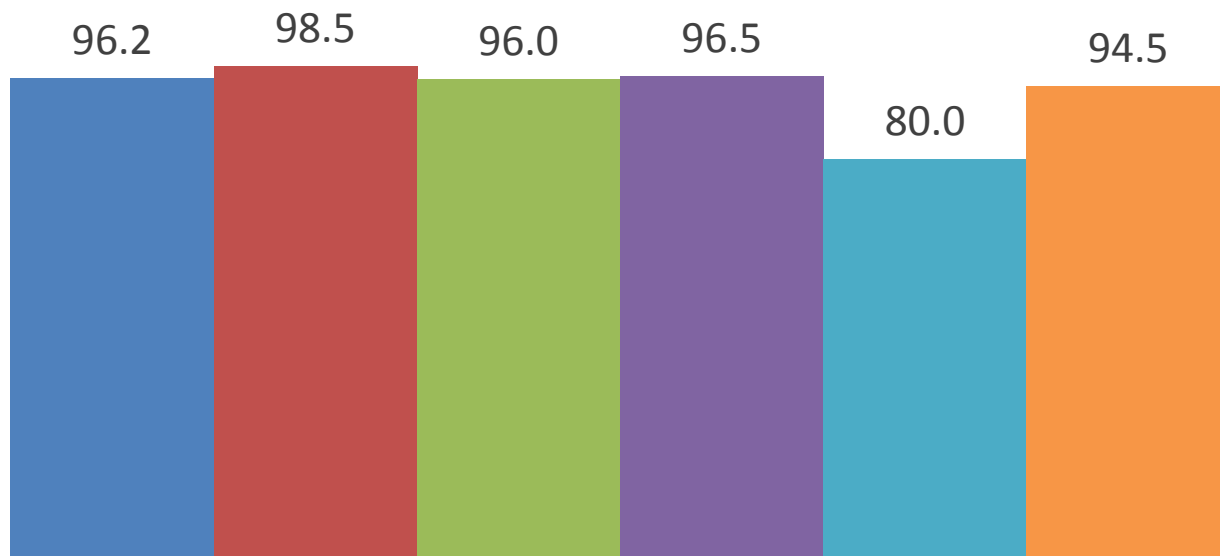
# STI in the last 12 months

■ Guatemala 
 ■ El Salvador 
 ■ Nicaragua 
 ■ Costa Rica 
 ■ Panama 
 ■ Regional



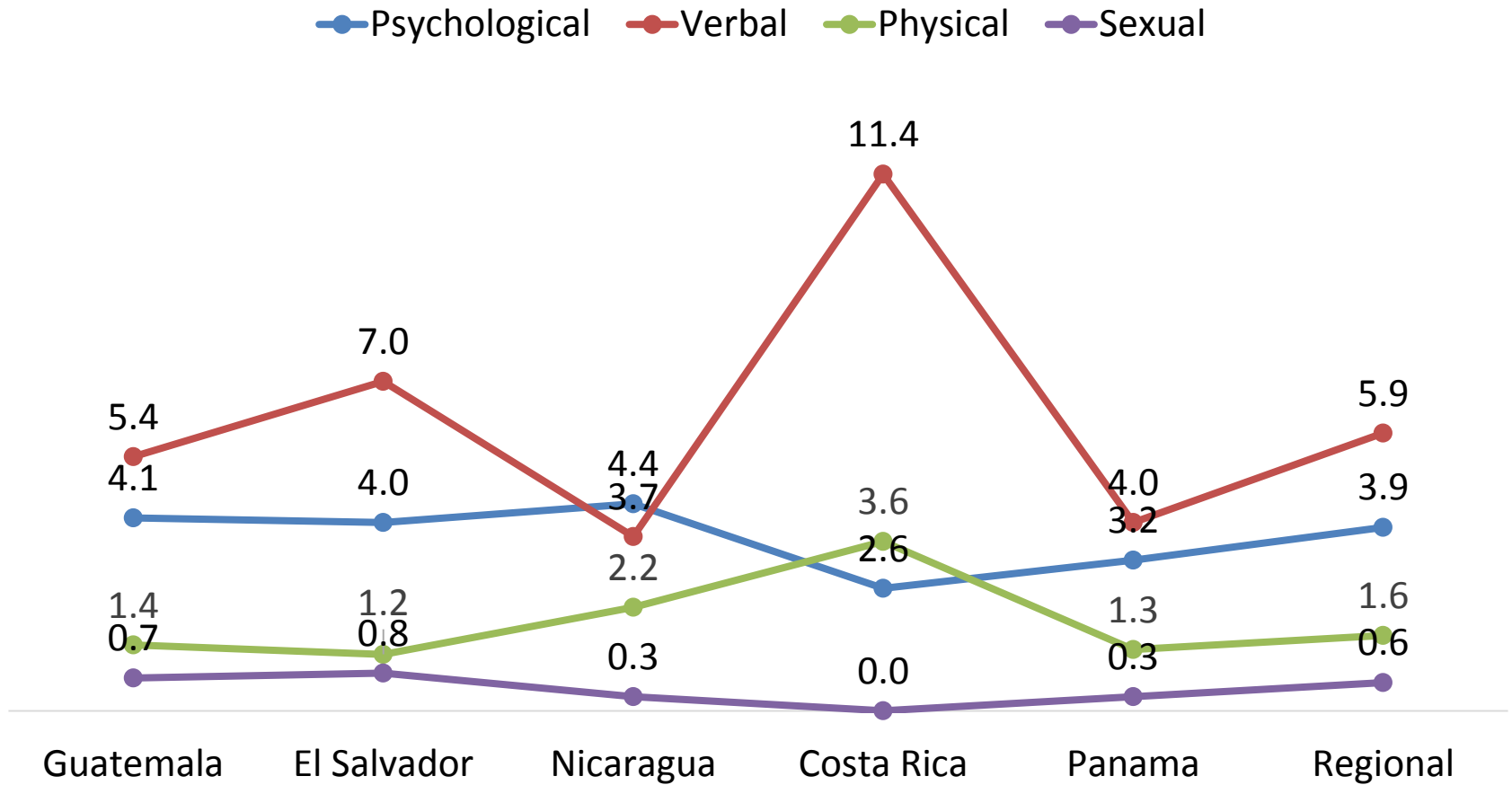
# Antiretroviral use (%)

■ Guatemala ■ El Salvador ■ Nicaragua ■ Costa Rica ■ Panama ■ Regional



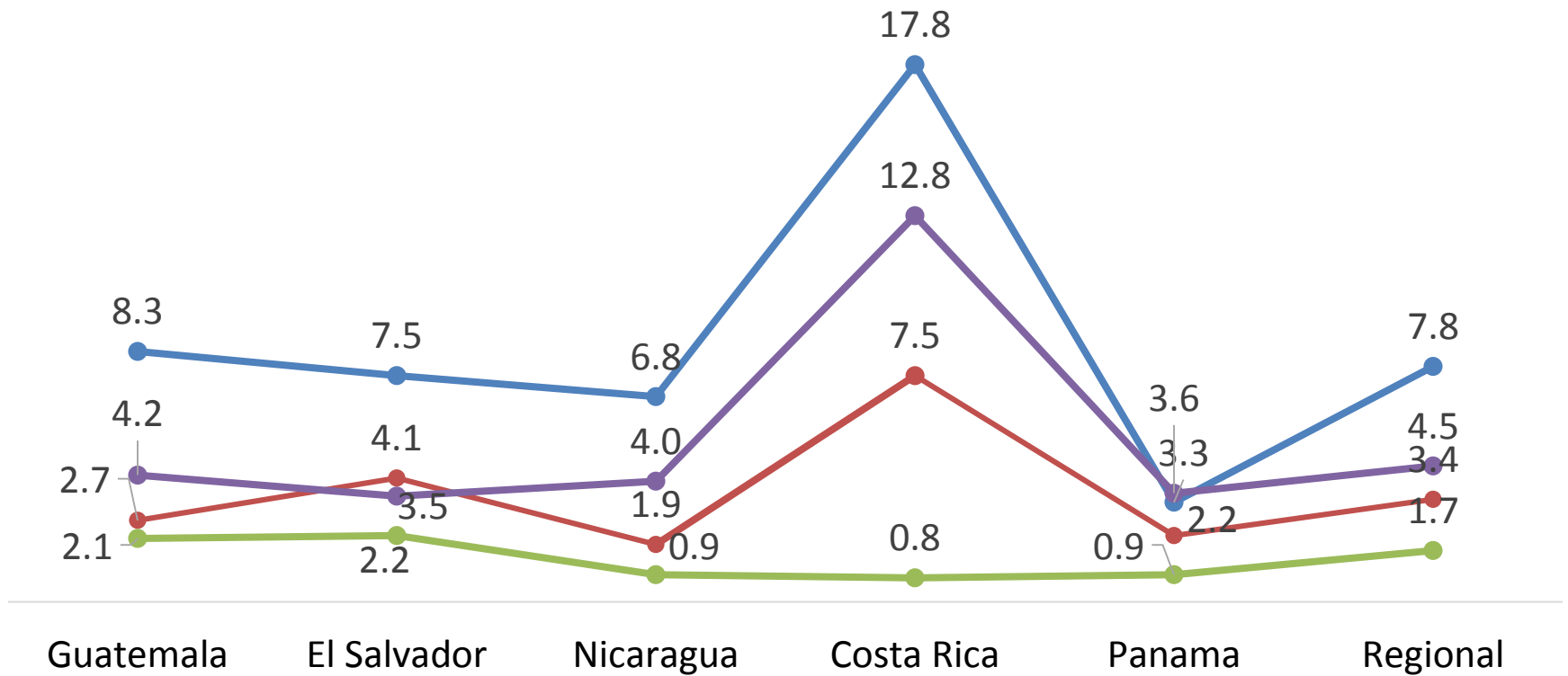
Taking antiretrovirals during the time of the interview

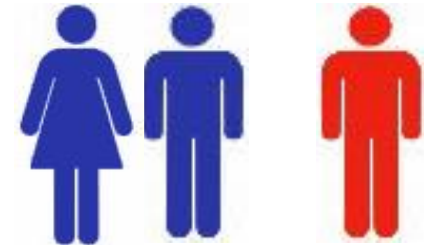
# Types of violence suffered in the last 12 months (%)



# Discrimination for being a person living with HIV (%)

● Family   
 ● Friends   
 ● Co-workers   
 ● Health providers





## SEGMENTATION ANALYSIS: FACTORS ASSOCIATED

# Condom use in the last sexual intercourse

The *probability increases* with:

How many times more?

<ul style="list-style-type: none"> <li>Having recent sex with a non-affective partner.</li> </ul>	1.8
<ul style="list-style-type: none"> <li>Carrying a condom during the interview.</li> </ul>	1.4
<ul style="list-style-type: none"> <li>Having a partner promote the use of the condom.</li> </ul>	2.3
<ul style="list-style-type: none"> <li>Feeling capable of using the condom correctly.</li> </ul>	2.7
<ul style="list-style-type: none"> <li>Having positive attitudes towards condoms.</li> </ul>	1.3
<ul style="list-style-type: none"> <li>Having access to free condoms.</li> </ul>	1.8

# Consistent condom use with all partners in the last 30 days

The *probability increases* with:

How many times more?

<ul style="list-style-type: none"> <li>Feeling capable of denying having sex without a condom.</li> </ul>	<b>1.4</b>
<ul style="list-style-type: none"> <li>Carrying a condom during the interview.</li> </ul>	<b>1.9</b>
<ul style="list-style-type: none"> <li>Having a partner promote the use of the condom.</li> </ul>	<b>1.9</b>
<ul style="list-style-type: none"> <li>Agreeing that having sex without a condom is not a trust test.</li> </ul>	<b>1.5</b>
<ul style="list-style-type: none"> <li>Having a positive locus of control (i.e., you would never have sex without a condom).</li> </ul>	<b>1.9</b>



# **EVALUATION: ATTRIBUTION OF BEHAVIOR CHANGE TO THE PROGRAM**

# Association between the program and behavior

---

There is an association between any of the program activities and:

**How many times more?**

<ul style="list-style-type: none"> <li>▪ Lubricant during last sexual intercourse.</li> </ul>	<b>2.0</b>
<ul style="list-style-type: none"> <li>▪ Condom and lubricant use during last sexual intercourse.</li> </ul>	<b>1.9</b>
<ul style="list-style-type: none"> <li>▪ Effective adherence to antiretroviral treatment during the last 14 days.</li> </ul>	<b>1.4</b>

# Conclusions

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1. Programs should work to increase positive attitudes towards condoms. Key messages and condom product innovation are essential.
2. The support of the partner was associated with condom use. Therefore, it is advisable to approach partners of people living with HIV and engage them in promotion activities.
3. Reduce the rates of violence and discrimination towards people living with HIV, as well as continue demystify the ways of infection and increase awareness in the general population.



# Thank you

For additional information, please visit:

[www.asociacionpasmo.org](http://www.asociacionpasmo.org)



**USAID**  
FROM THE AMERICAN PEOPLE

Combination  
Prevention for HIV  
Central America and Mexico



**CAI**



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