Persistent Sexual Function Problems in Women:

Evidence from NATSAL 2000

By Sujata Pal

Agenda

- **Introduction:**
    - **Objective**
    - **Data Source**
    - **Sexual Function Variables in NATSAL 2000**

- Research Questions and Methods
    - Prior Research: Finding
    - Questions

- Findings
    - Socio-demographic Variables
    - Recent Sexual Behavior
    - Early Sexual Behavior
    - Health
    - Lifestyle/Attitude
    - Regression Model for Persistent Lack of Interest and No Orgasm

- Conclusion

Objective 1.

To explore how specific types of long term female sexual dysfunctions (FSD) are associated with key socio-demographic, health, recent and early sexual behavior and lifestyle variables

Objective 2.

To develop predictive model of two types of FSD- lack of interest (LOI) in sex and absence of orgasm (No O) by using the above groups of variables

Data Source: NATSAL 2000

- Data from British national survey of sexual attitudes and lifestyles (NATSAL 2000) was used for analysis

- NATSAL 2000 is a national survey of British adult population aged 16-44 conducted every ten years

- It's a stratified probability sample of approx. 12000 respondents with oversampling of ethnic minorities and residents of London

- Data was collected on indicators of sexual health and lifestyle, early and recent sexual behavior, health including sexual and gynecological health and sexual problems

Sexual Function Variables in NATSAL 2000

- Respondents were asked if they had any of the following for 1 month in the past year-
  - Lack of interest in sex
  - Anxiety about sexual performance
  - No orgasm
  - Premature orgasm
  - Painful intercourse
  - Erectile difficulties
  - Trouble lubricating

- Those reporting any of the above were asked about the duration of their symptoms

- Other follow-up questions were number of problems, whether they avoided sex and sought medical help

Measures of Sexual Dysfunction

- ## Short term dysfunctions:
    - any symptom lasting for more than a month but less than six months in the year before interview

- ## Persistent dysfunctions:
    - any symptom lasting for more than six months in the year before interview

- ## The above time frames applied to each particular type of dysfunction

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Existing Research: Findings and Questions

- Mercer et al. reported the key findings on sexual dysfunction from NATSAL 2000*

- Identified factors associated with ANY type of short and long-term dysfunction for men and women

- High prevalence of short term dysfunctions but persistent problems are less common

- A major confounding factor was the high percentage of women reporting lack of interest in sex

- Given its high prevalence, they wondered if lack of interest in sex can be considered a dysfunction

Questions

- Are women who experience particular types of long term symptoms similar/dissimilar – demographically and in terms of behavior and attitude

- Are women who report lack of interest in sex unique in terms of sexual behavior, health and attitudes

Analytical Methods

- The population was limited to sexually active women age 16-44

- Independent variables:
    - <u>Sociodemographic</u>: age, marital status, presence of children, education, uraban, ethnicity, social class, hours of work
    - <u>Health:</u> opinion of own health, prior STI diagnosis, gynecological health
    - <u>Recent and early sexual partnerships</u>: partnerships last year, new partnerships last year, number of lifetime partners, unsafe sex last year, occasions of sex last month, sexual competence at first sex
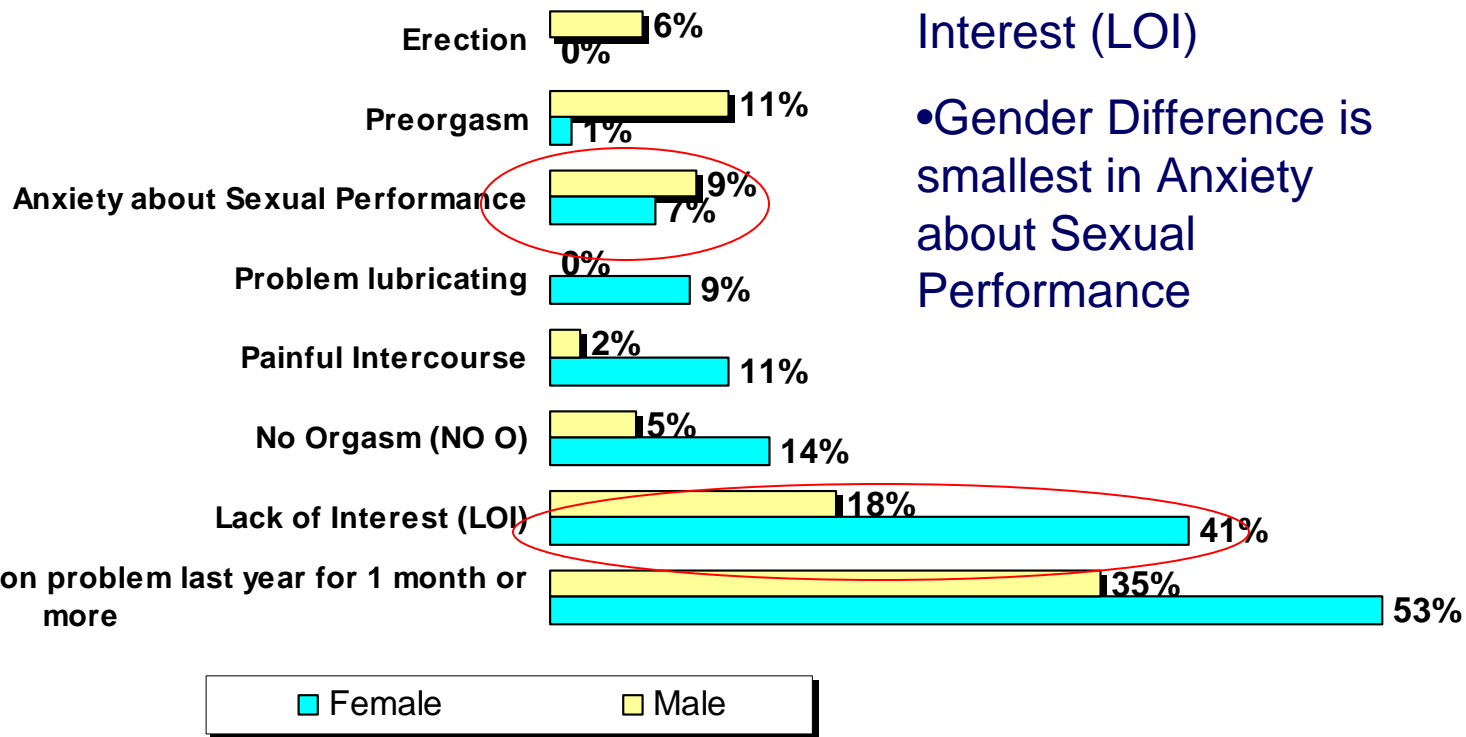   - <u>Attitude towards their sex life</u>

Analytical Methods (cont.)

- Data was weighted during analysis by the NATSAL weight variables to correct for sampling choices

- Crosstabs, comparison of means and logistic regression was conducted using appropriate statistical tests for significance – chi square, ttest

- The two forms of FSDs with highest freq- LOI and No O were selected for regression

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Short Term Dysfunction: Over half of women and a third of men report having some form of short term sexual dysfunction
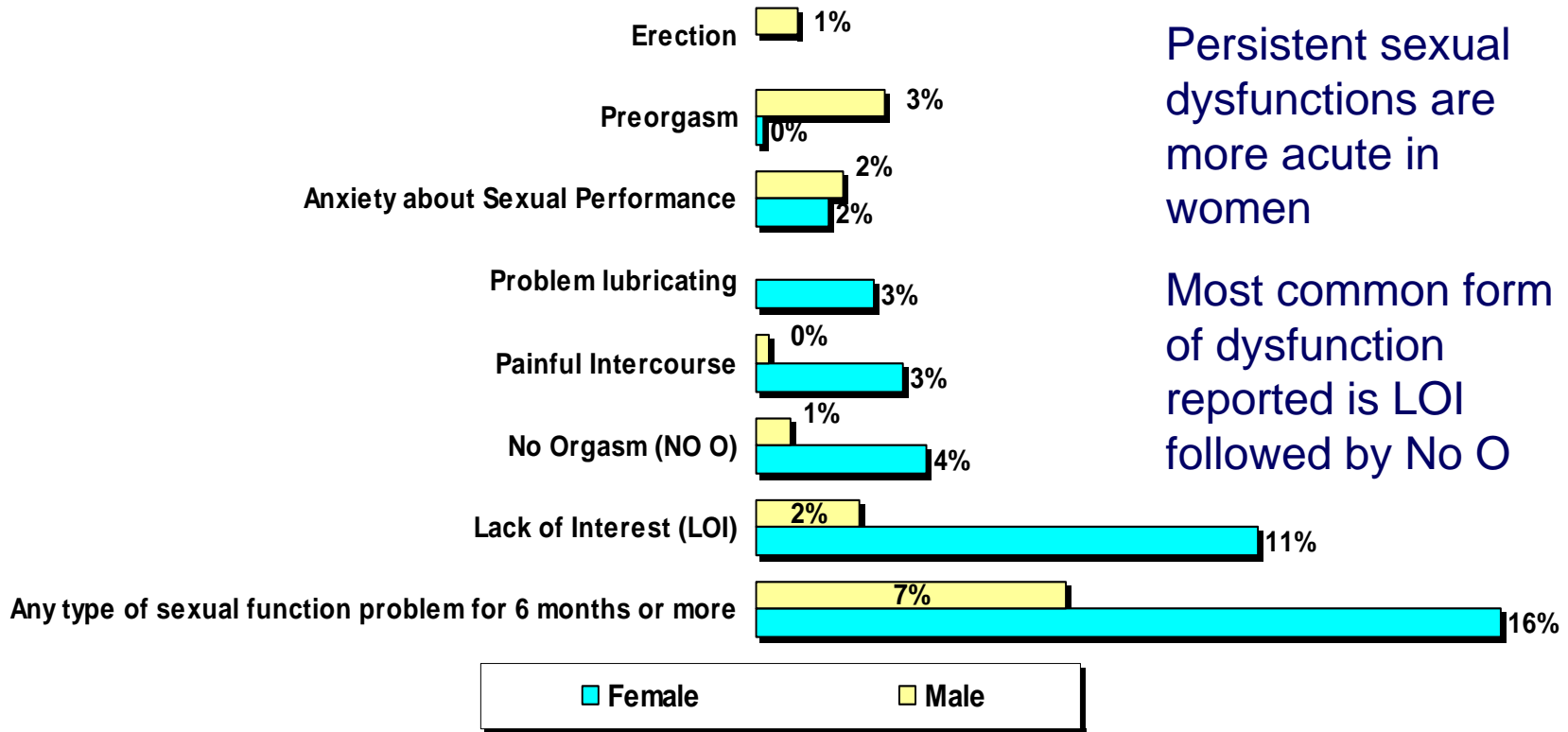
Erection
6%
0%

Preorgasm
11%
1%

Anxiety about Sexual Performance
9%
7%

Problem lubricating
0%
9%

Painful Intercourse
2%
11%

No Orgasm (NO O)
5%
14%

Lack of Interest (LOI)
18%
41%

Any type of sexual function problem last year for 1 month or more
35%
53%

☐ Female   ☐ Male

- Gender difference is widest in Lack of Interest (LOI)

- Gender Difference is smallest in Anxiety about Sexual Performance

Persistent Dysfunctions:
11% of women and 7% of men report dysfunctions lasting for 6 months or more

Erection 1%

Preorgasm 3% / 0%

Anxiety about Sexual Performance 2% / 2%

Problem lubricating 3%

Painful Intercourse 0% / 3%

No Orgasm (NO O) 1% / 4%

Lack of Interest (LOI) 2% / 11%

Any type of sexual function problem for 6 months or more 7% / 16%

Legend: ■ Female □ Male

Persistent sexual dysfunctions are more acute in women

Most common form of dysfunction reported is LOI followed by No O

Findings:

- **Socio-demographic Variables**
- Recent Sexual Behavior
- Early Sexual Behavior
- Health
- Lifestyle/Attitude
- Regression Model for Persistent Lack of Interest and No Orgasm
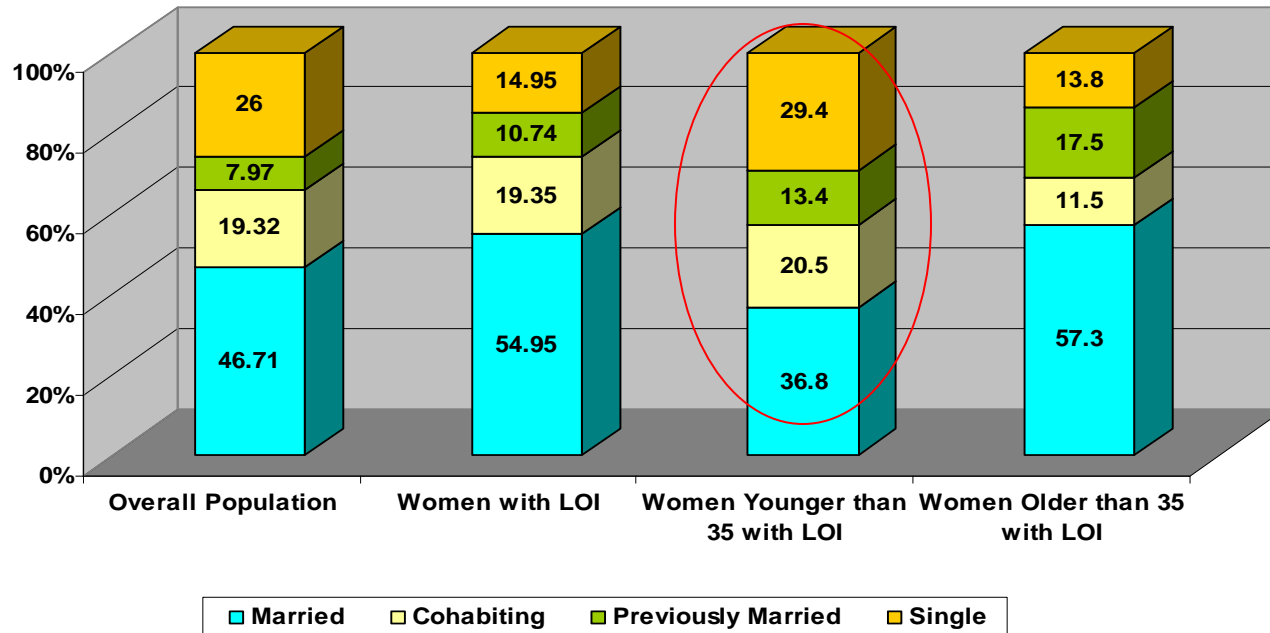
Most Common FSDs by Marital Status

Percent of Women in Overall Population and Marital Status Categories with Specific FSDs: Sorted High to Low									
Overall Population		**Married**		**Cohabiting**		**Previously Married**		**Single**	
Lacked Interes	11.0	Lacked Interest	13.0	Lacked Interest	11.9	Lacked Interest	15.8	Lacked Interest	6.3
No Orgasm	3.7	Painful Intercourse	3.5	Painful Intercourse	4.1	No Orgasm	3.7	No Orgasm	5.5
Painful Intercou	3.2	No Orgasm	2.9	No Orgasm	3.3	Anxiety	2.3	Painful Intercourse	2.3
Trouble Lubrica	2.6	Trouble Lubrication	3.1	Trouble Lubrication	3.0	Painful Intercourse	2.1	Trouble Lubrication	1.5
Anxiety	1.6	Anxiety	1.1	Anxiety	1.8	Trouble Lubrication	2.5	Anxiety	2.0
		n=2615		n=1018		n=740		n=1958	

Frequency	
Lack of Interest	742
Anxiety	105
No O	241
Painful Intercourse	198
Trouble Lubricating	159

*Includes divorced, separated and widowed women

Persistent LOI in women is highly associated with marital status overall and when controlled by age
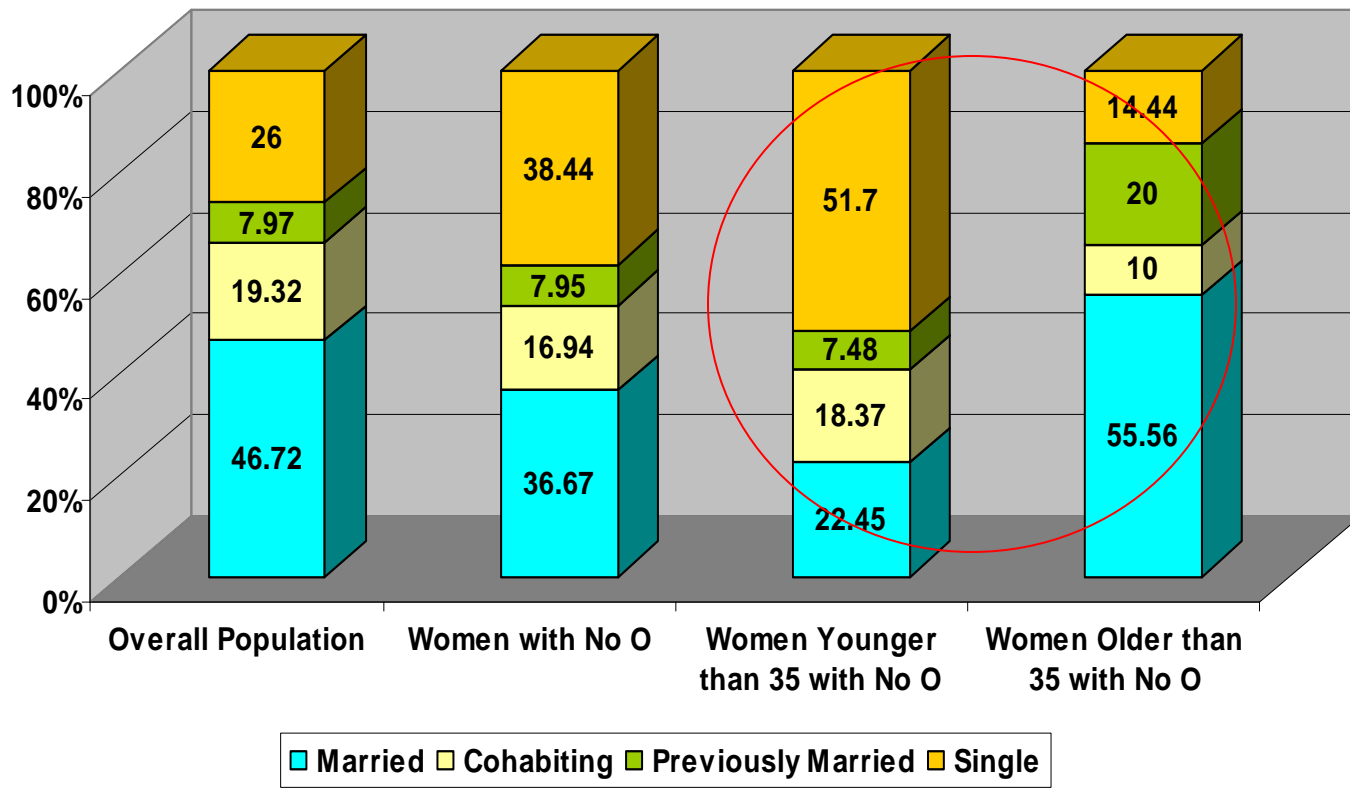
- More than half of women with LOI and those over 35 are married
- The difference between married and single women is much smaller for women under 35

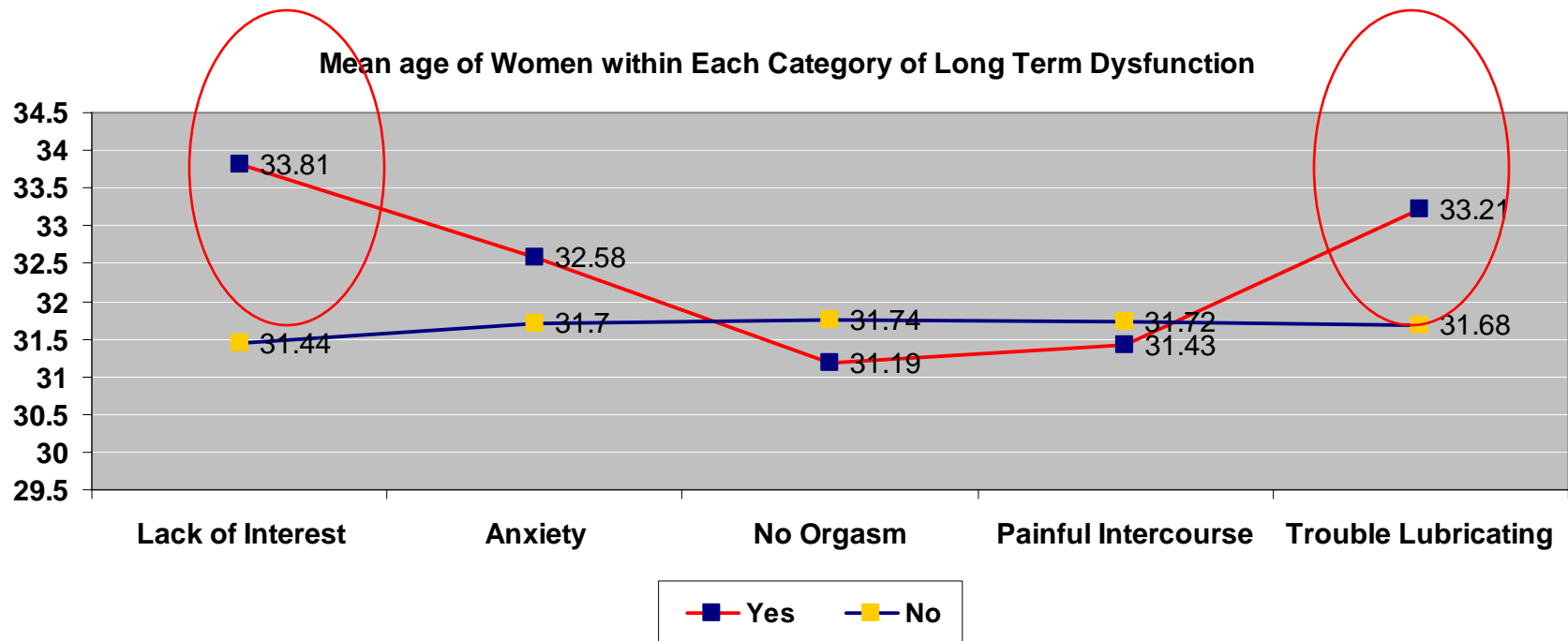N: Population(6355) Women with LOI(741) women, LOI<35(383) Women, LOI,>35 (349)

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Persistent No O in women is also associated with marital status overall and when controlled by age

Most women with persistent No O, especially under 35 are single
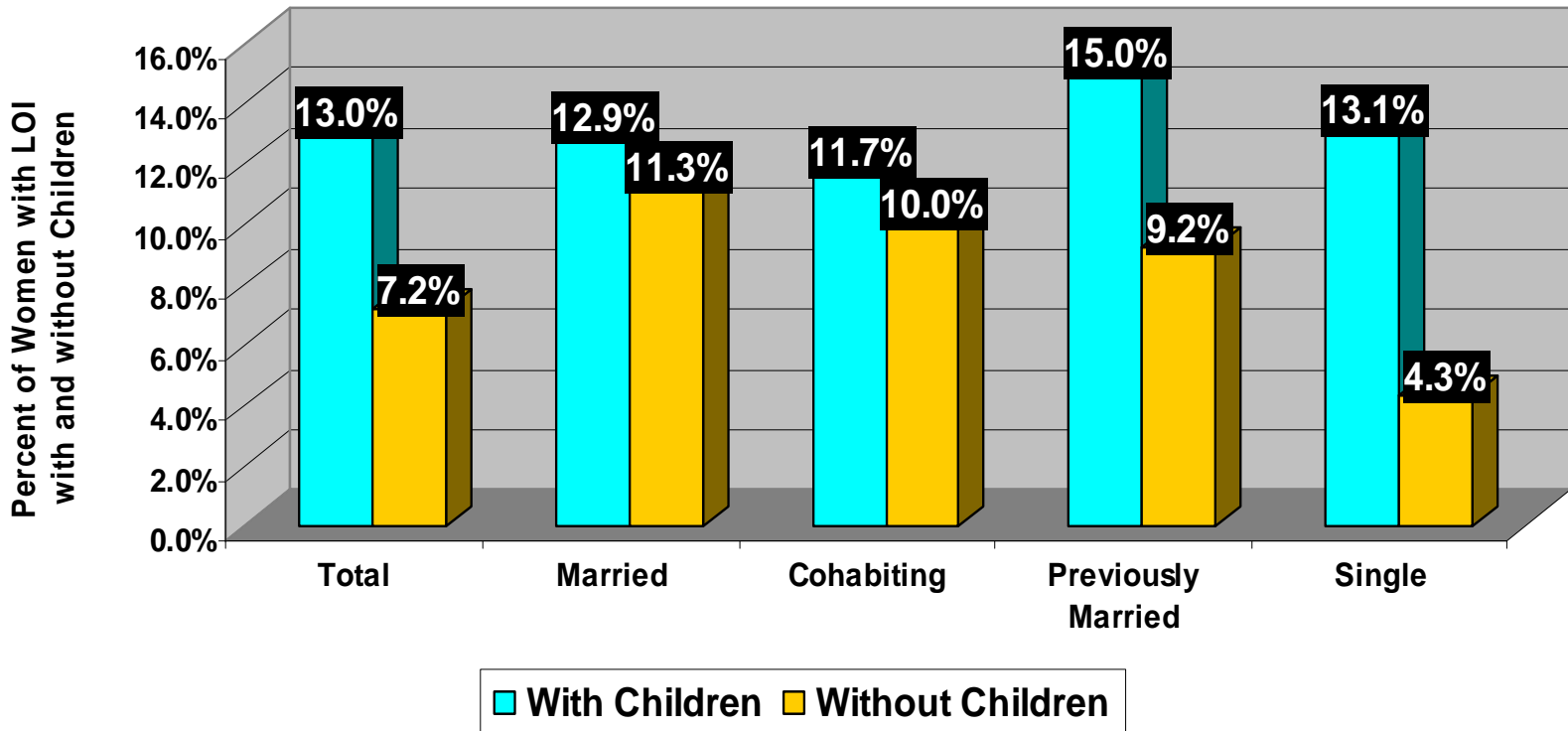
The relationship is reversed for women older than 35

Legend: Married, Cohabiting, Previously Married, Single

N: Population(6355) Women with LOI(241) women, LOI<35(148) Women, LOI,>35 (90)

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Women with long term LOI and trouble lubricating are significantly older
Age is not significantly related to the other dysfunctions

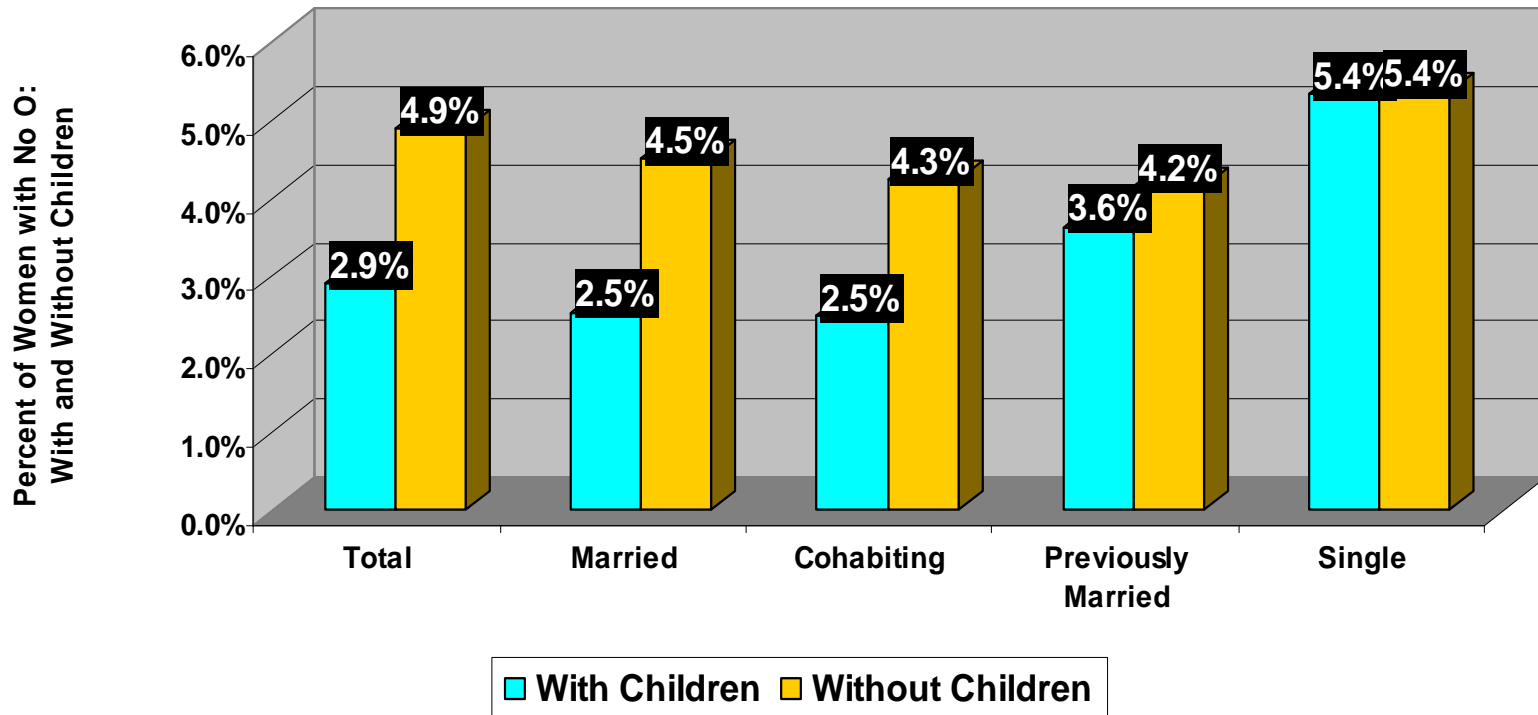Mean age of Women within Each Category of Long Term Dysfunction

Women with children are more likely to report LOI
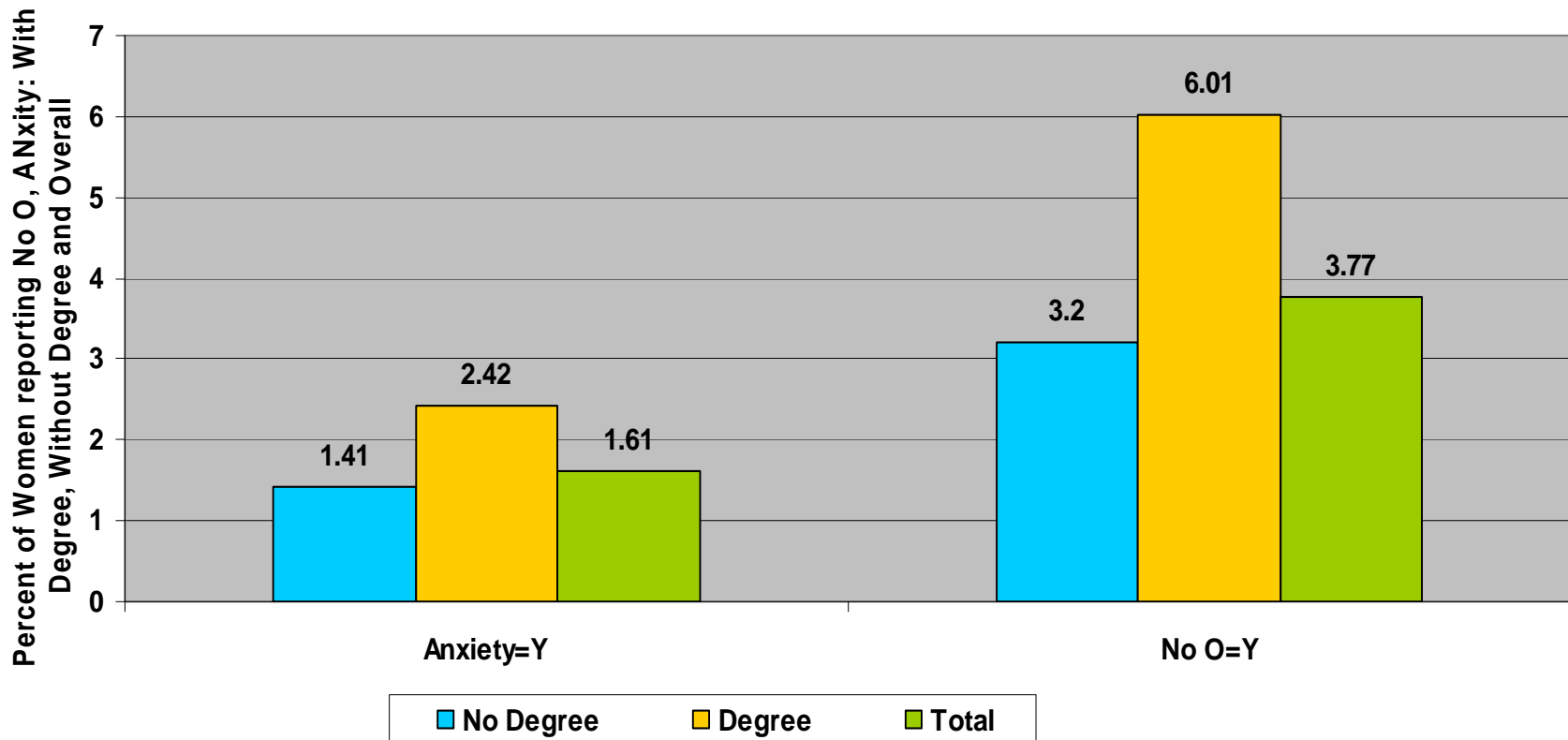# Single women with children are as likely to report LOI as all others

Effect on children is opposite on reporting of No O
Percent of women reporting NO O is lower in women with children in most categories (other than Single)

Women with college degree are significantly more likely to report persistent anxiety and No O

College Degree is not related to the other kinds of dysfunctions

Other Findings:

- Other socio demographic variables explored
    - Ethnicity
    - Social Class
    - Geography (Urban)
    - Hours Worked

- Women who live in greater London were somewhat more likely to report anxiety and No O

- Ethnicity an social class were not related to any long term dysfunctions
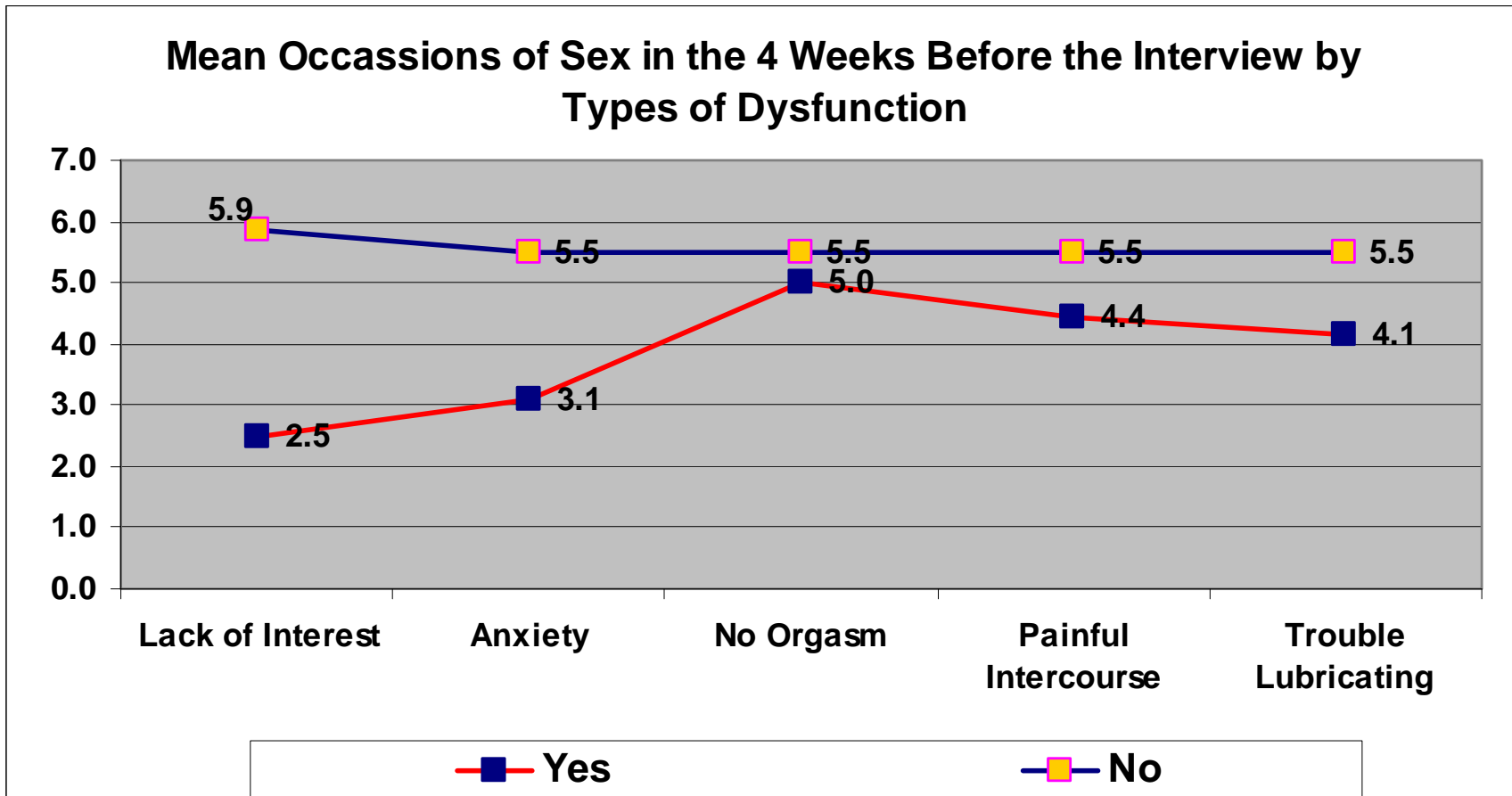
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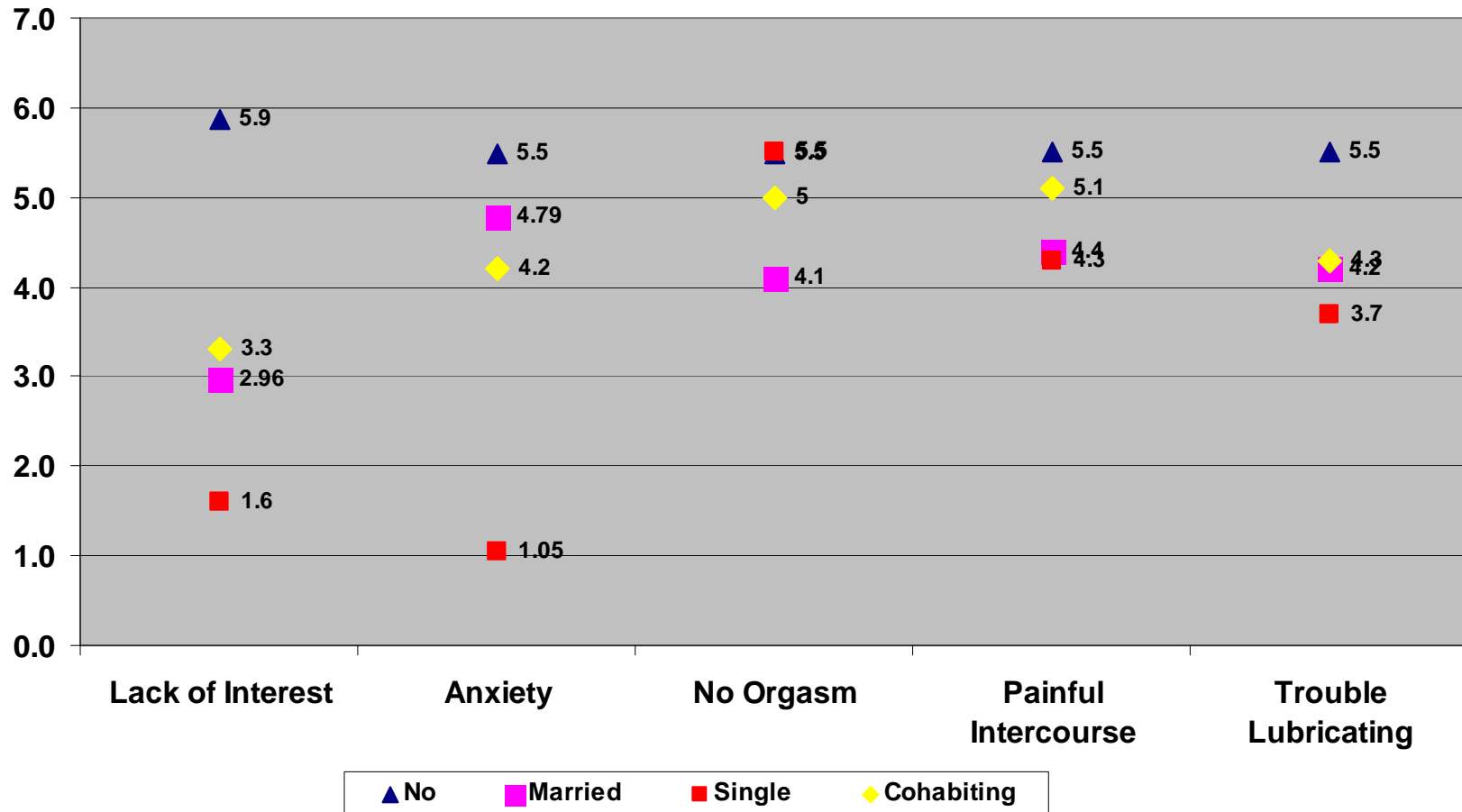
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Women with long term FSDs report having sex less often than those without
The gap is widest in women with LOI

Mean Occassions of Sex in the 4 Weeks Before the Interview by Types of Dysfunction

Categories (x-axis): Lack of Interest, Anxiety, No Orgasm, Painful Intercourse, Trouble Lubricating

Yes (red): 2.5, 3.1, 5.0, 4.4, 4.1
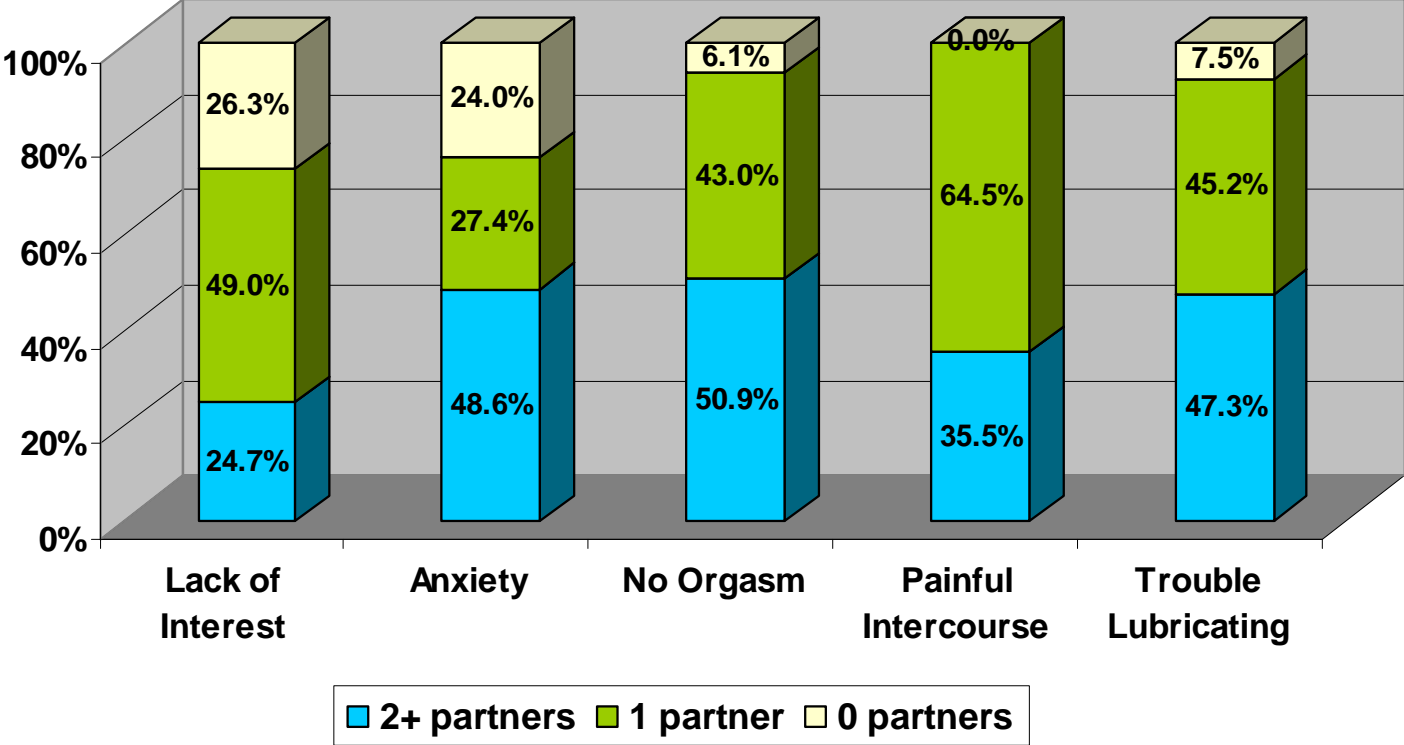No (yellow/blue): 5.9, 5.5, 5.5, 5.5, 5.5

Single women with LOI and anxiety have sex less often than those who are married or living together

Mean Occasions of Sex in the 4 Weeks before Interview: By Marital Status

Legend: ▲ No | ■ Married | ■ Single | ◆ Cohabiting

Lack of Interest: No 5.9, Cohabiting 3.3, Married 2.96, Single 1.6

Anxiety: No 5.5, Married 4.79, Cohabiting 4.2, Single 1.05

No Orgasm: Single 5.5, No 5.5, Cohabiting 5, Married 4.1

Painful Intercourse: No 5.5, Cohabiting 5.1, Married 4.4, Single 4.3

Trouble Lubricating: No 5.5, Cohabiting 4.3, Married 4.2, Single 3.7
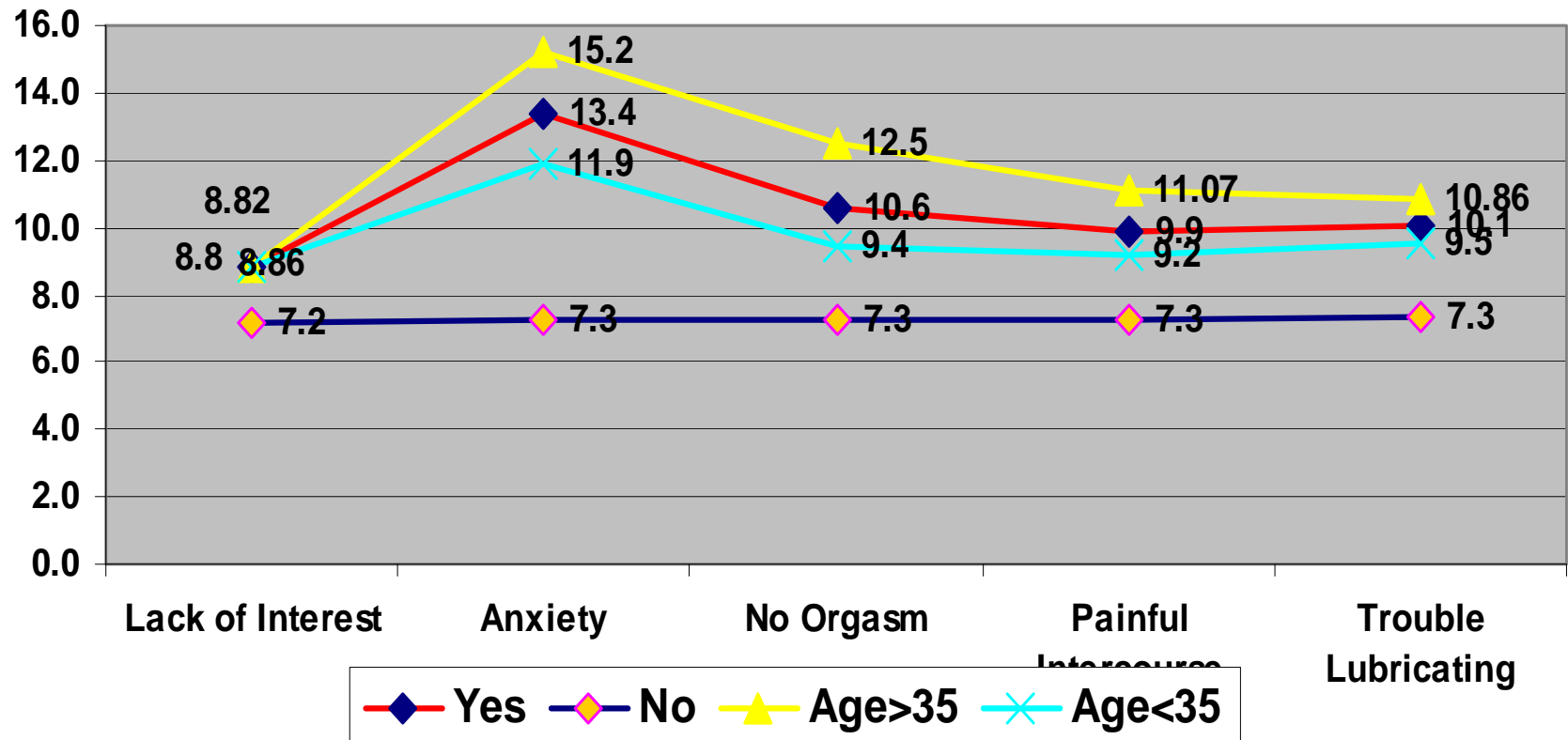
Single Women who report anxiety, No O and trouble lubricating are more likely to have 2+ sexual partners

Percent Distribution of Number of Sexual Partners for Single Women in the Year Before Interview

	Lack of Interest	Anxiety	No Orgasm	Painful Intercourse	Trouble Lubricating
0 partners	26.3%	24.0%	6.1%	0.0%	7.5%
1 partner	49.0%	27.4%	43.0%	64.5%	45.2%
2+ partners	24.7%	48.6%	50.9%	35.5%	47.3%

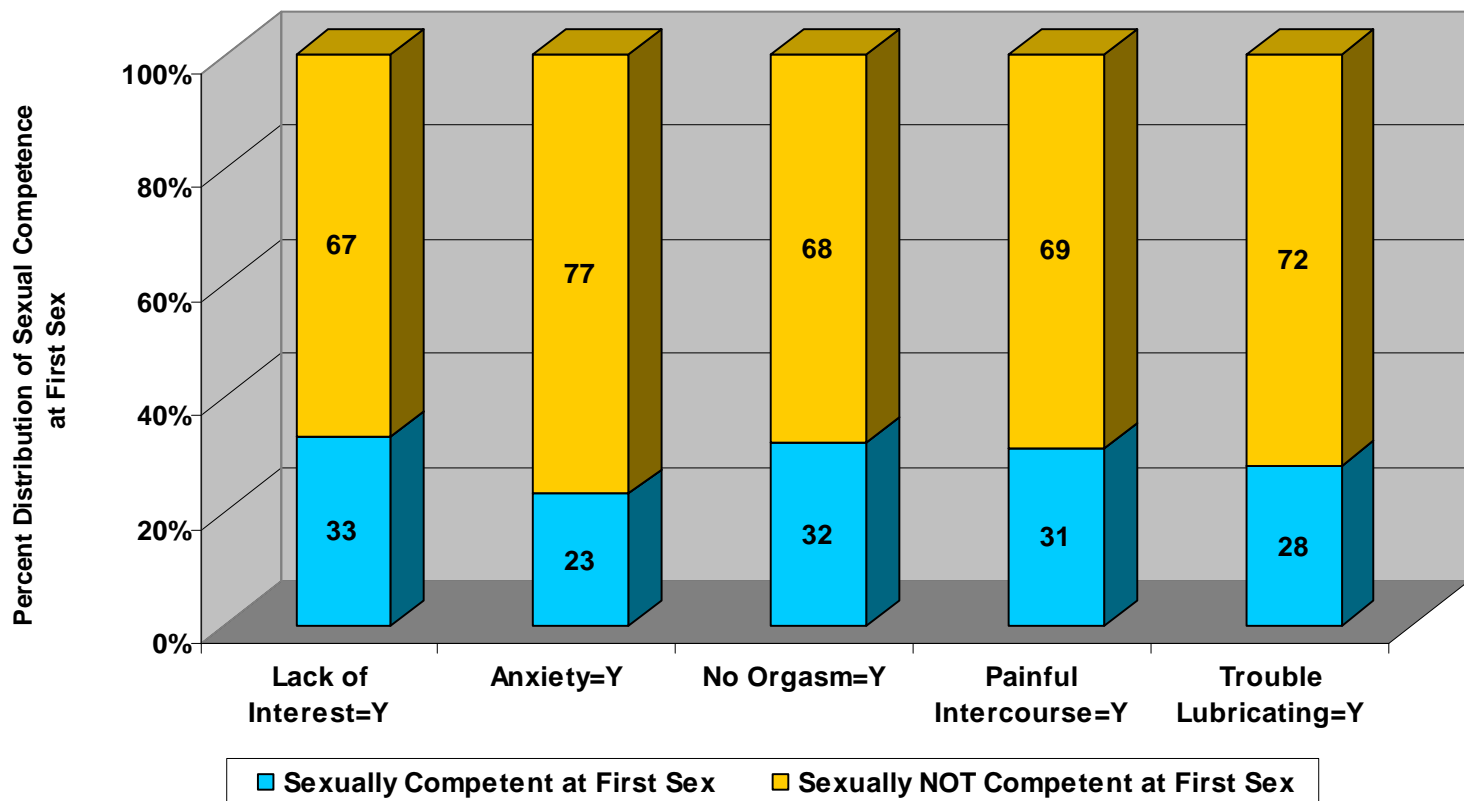Legend: 2+ partners, 1 partner, 0 partners

In all FSD categories, women with long term symptoms have higher mean number of lifetime partners

Mean Total Lifetime Sexual Partners- by Types of Dysfunction

Women with long term dysfunctions have a negative perception of their first sexual experience*

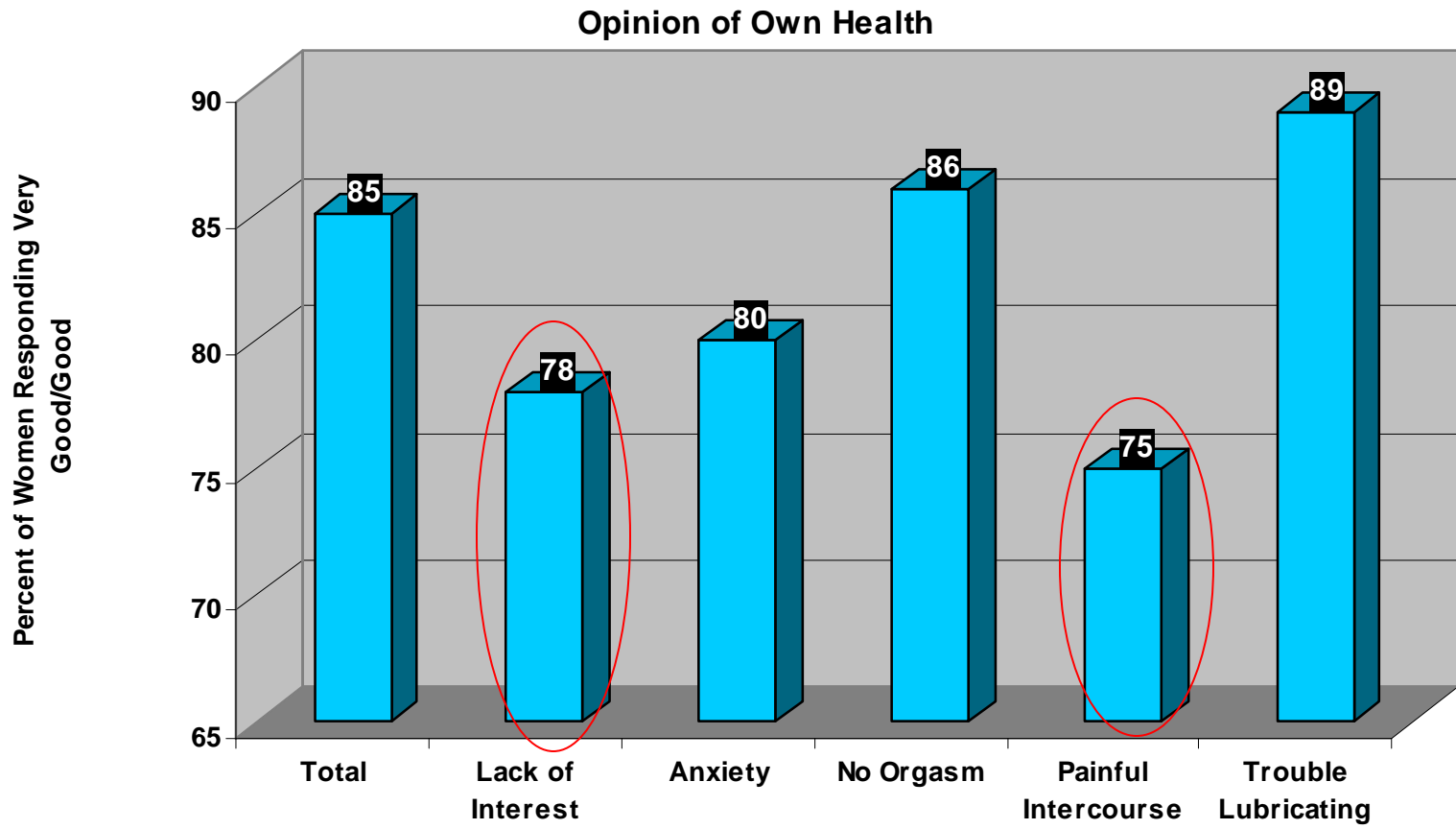**Percent Distribution of Sexual Competence at First Sex within Each Type of Dysfunction**

*Sexual Competence is a composite variable that combines willingness to have sex, reasons for first sex, contraceptive use at first sex, timing of first sex etc.

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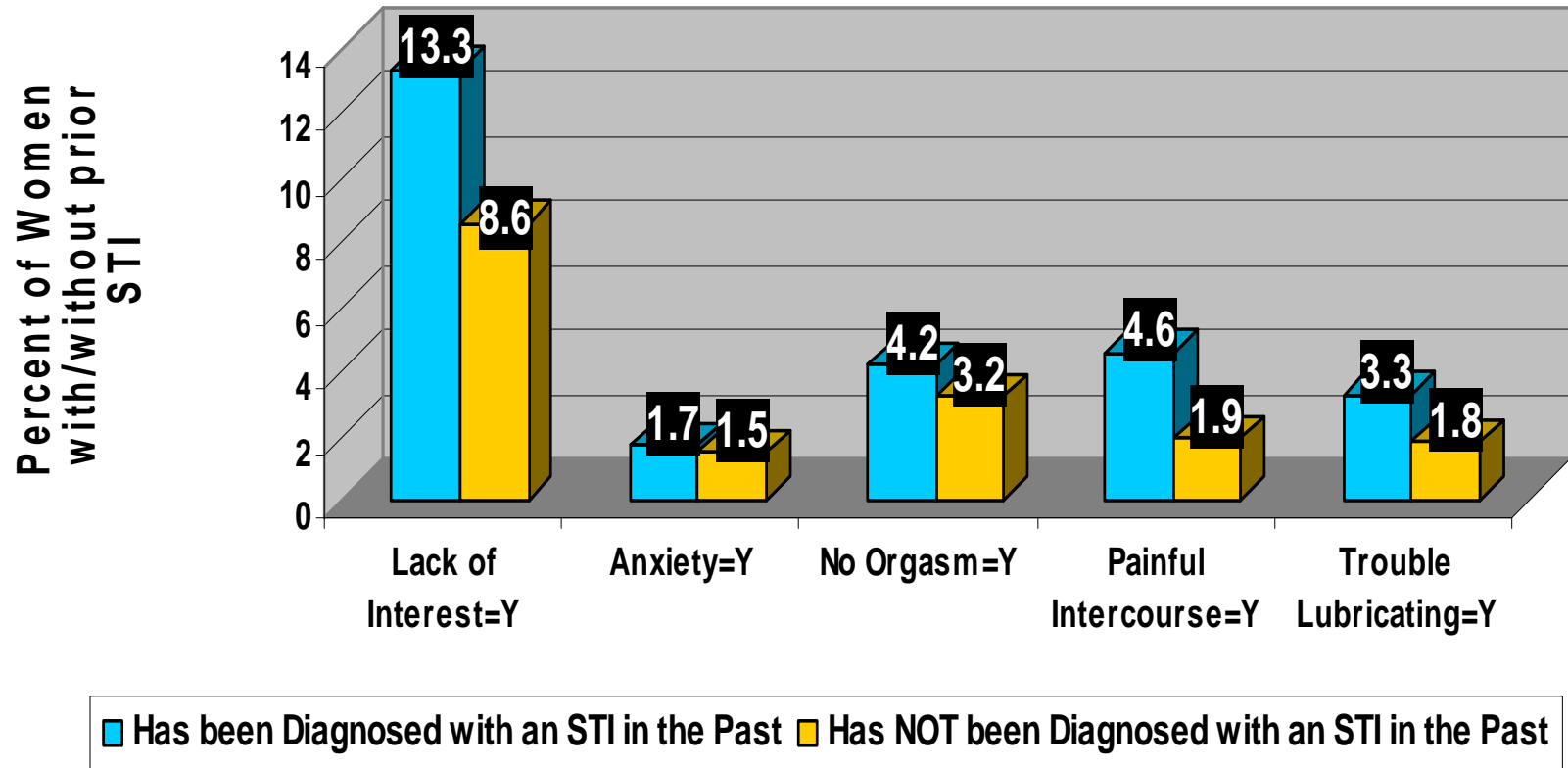
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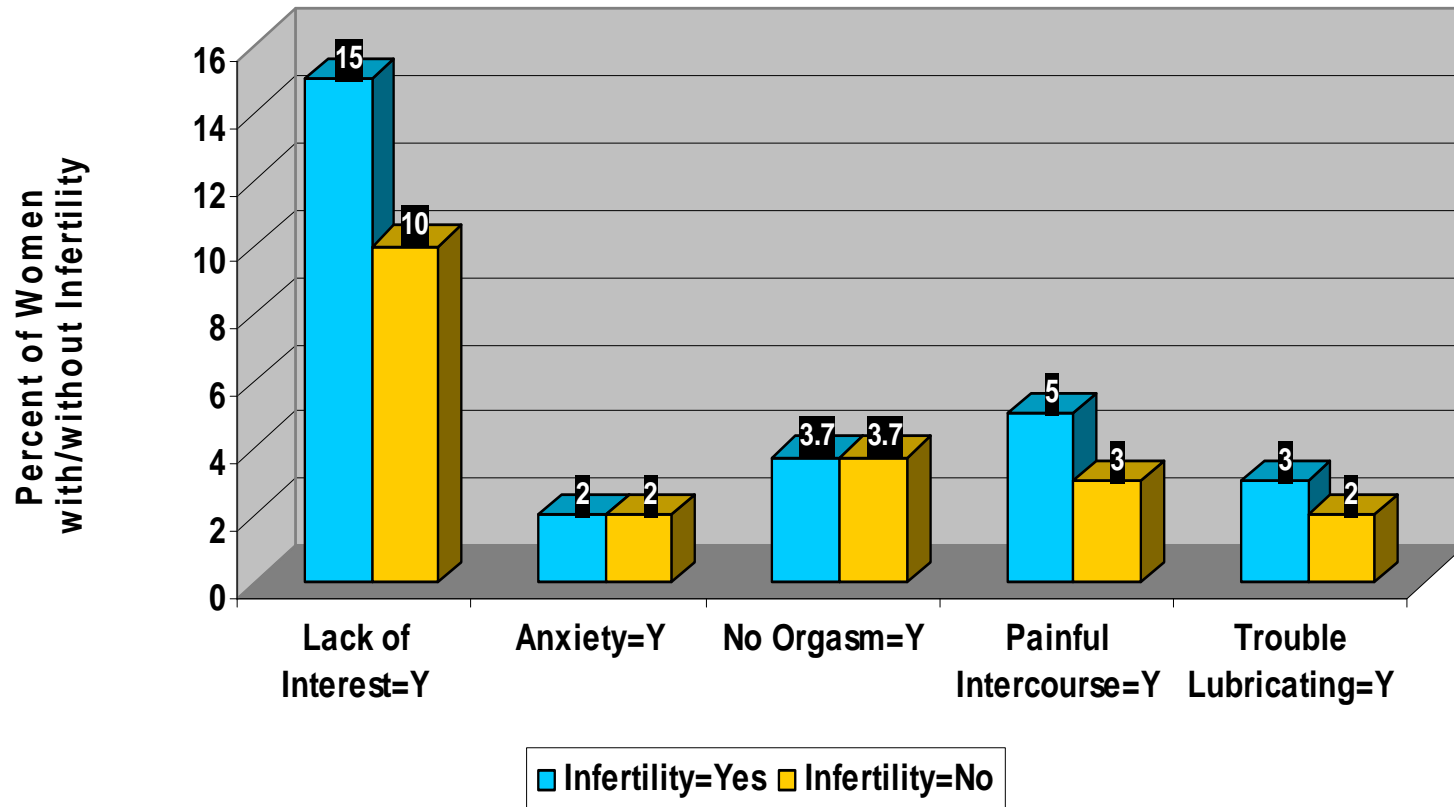# Women experiencing long term LOI and painful intercourse are less likely to view themselves as healthy

Opinion of Own Health

Bar chart with y-axis labeled "Percent of Women Responding Very Good/Good" ranging from 65 to 90, and categories along the x-axis:

- Total: 85
- Lack of Interest: 78 (circled in red)
- Anxiety: 80
- No Orgasm: 86
- Painful Intercourse: 75 (circled in red)
- Trouble Lubricating: 89

Prevalence of persistent dysfunctions is also higher in women with prior diagnosis of STI

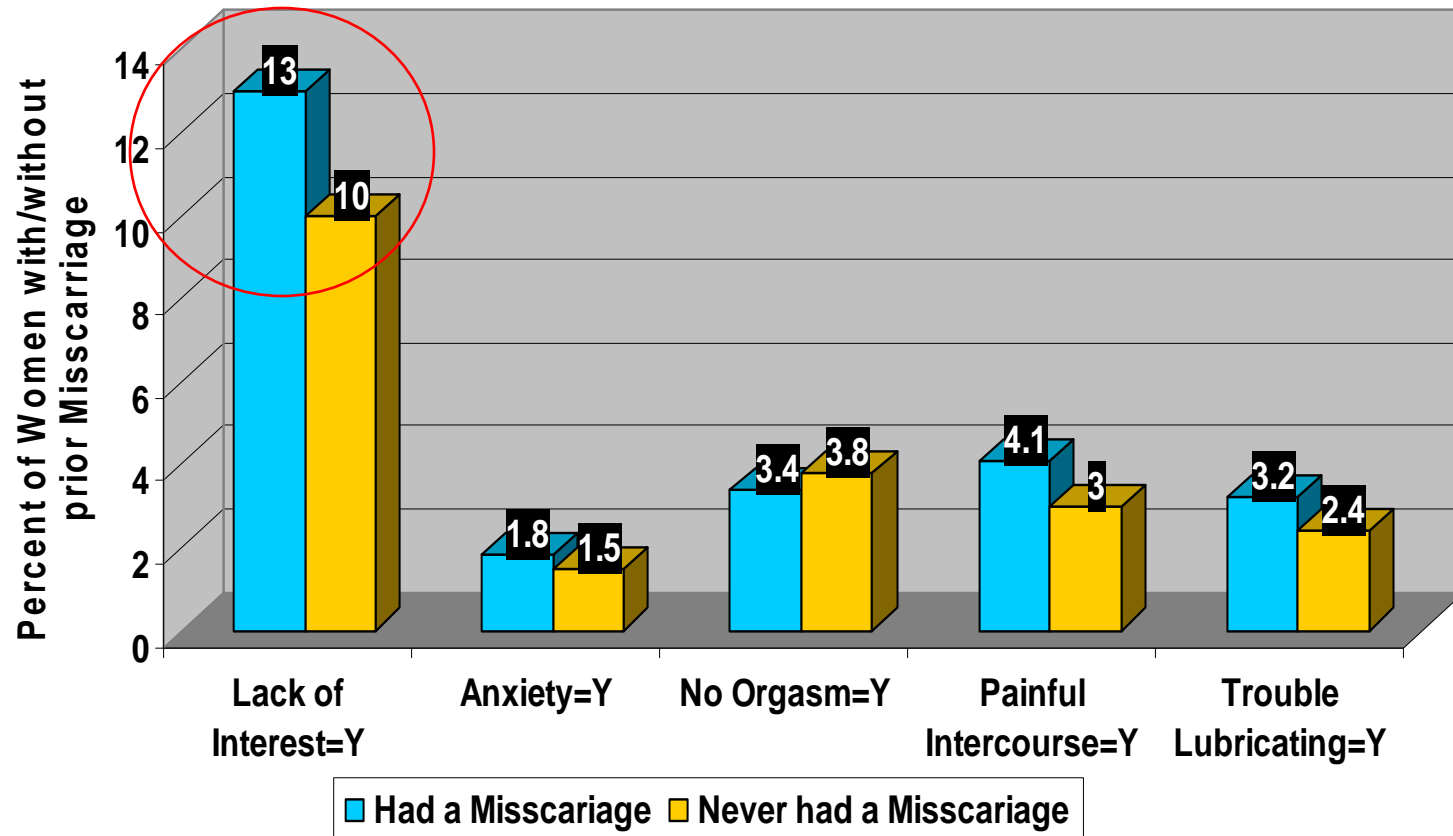**Effect of STI Ever on Prevalence of Sexual Dysfunctions by Type**

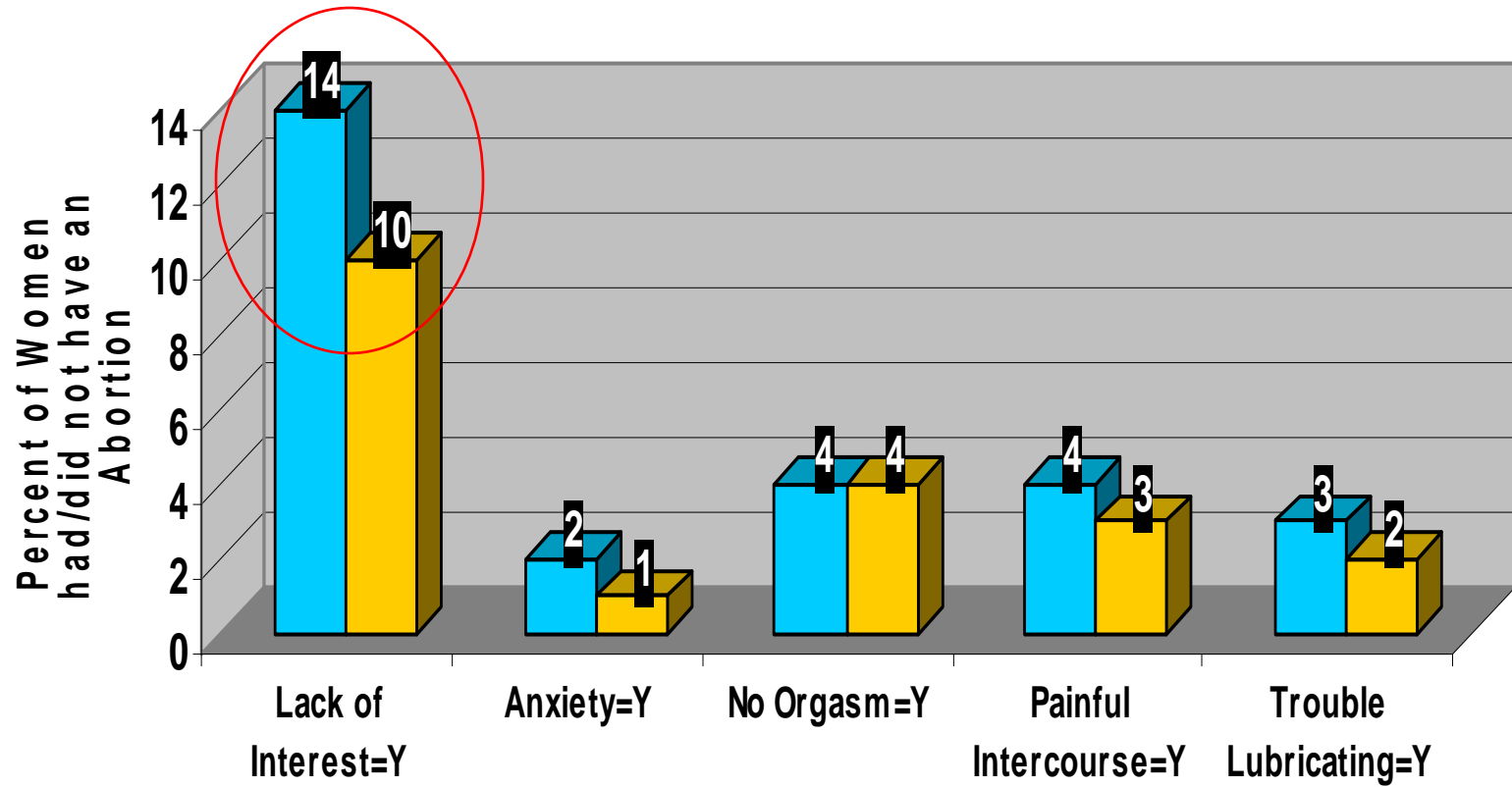# Prevalence of persistent LOI is significantly higher in women with infertility

Effect of Infertility on Prevalence of SExual Dysfunctions by Types

Effect of Misscarriage on Prevalence of Sexual Dysfunctions by Types

Effect of Abortion on Prevalence of Sexual Dysfunctions of Specific Types

Other Variables:

In addition the following lifestyle variables were explored:

- » Sexual Satisfaction
- » Desired Sexual Frequency
- » Whether finds it easy to talk about sex
- » Ideal sex life now

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Regression Model: LOI and No O

- The above analysis was used to develop predictive models for LOI and NO O

- Dependent variables were:
  - Whether experienced LOI for 6+ months (Yes/No)
  - Whether experienced No O for 6+ months (Yes/NO)

- Independent variables found significant in the descriptive analysis were entered in sequence

- Likelihood ratio test was used at to assess significance of each independent variable
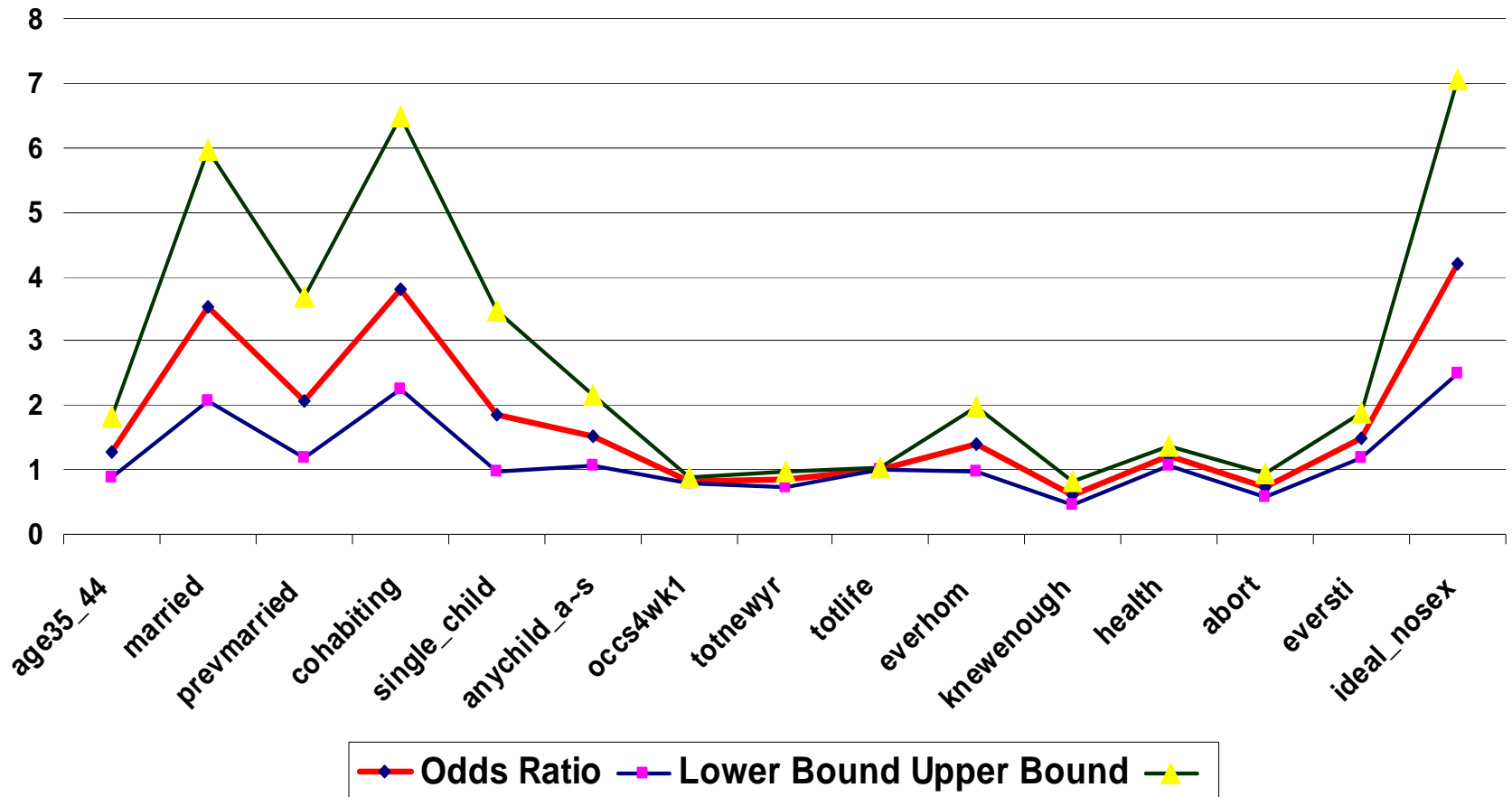
Regression Model: LOI
Predictors and Odds Ratios

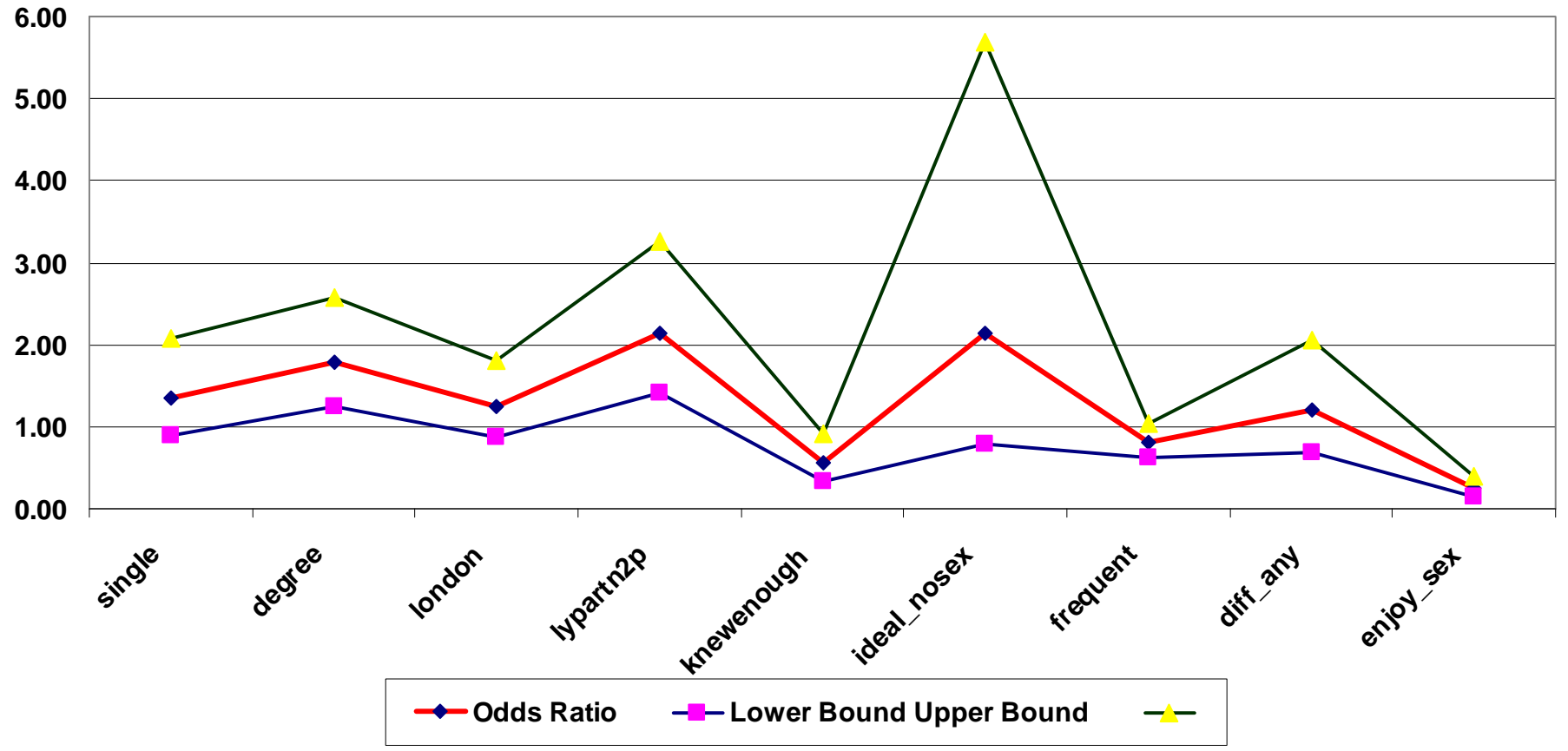| Dependent: Persistent LOI	Odds Ratio	P>t	[95% Conf. Interval	
age35+	1.27	0.19	0.89	1.83
married	3.52	0	2.08	5.96
Previously married	2.08	0.012	1.17	3.68
Cohabiting	3.82	0	2.24	6.49
Single with Children	1.84	0.056	0.98	3.45
Children_less than 35	1.51	0.024	1.05	2.16
Occasions of sex last 4 Weeks	0.83	0	0.80	0.87
Total # new partners/last year	0.84	0.028	0.72	0.98
Total # of lifetime partners	1.01	0.025	1.00	1.02
Ever had homosexual contact	1.39	0.065	0.98	1.99
Knew enough about sex at frst intercourse	0.61	0.001	0.45	0.81
Opinion of own health	1.22	0.002	1.07	1.38
Ever had abortion	0.73	0.012	0.57	0.93
Ever been diagnosed with STI	1.49	0.001	1.19	1.87
Ideal sex life now=No Sex	4.19	0	2.49	7.04

F 15.92 / P 0.000

Regression Model: LOI

Regression Model: No O Predictors and Odds Ratios

Dependent: No O for 6+ months	Odds Ratio	P>t	[95% Conf. Interval	
single	1.36	0.1550	0.89	2.07
college degree	1.79	0.0020	1.24	2.58
resident of greater London	1.25	0.2350	0.87	1.80
2+ partners/ last year	2.14	0.0000	1.41	3.26
knew enough about sex at first intercourse	0.55	0.0230	0.33	0.92
Ideal sex life now=No Sex	2.13	0.1320	0.80	5.69
Frequency of sex now	0.80	0.0920	0.62	1.04
Difficult to talk about sex with any partner	1.19	0.5220	0.69	2.06
Enjoys sex most of the time	0.25	0.0000	0.15	0.40

F 14.29 / P 0.000

Regression Model: No O Predictors and Odds Ratios

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- **Conclusion**

Not all persistent FSDs are alike

- Women experiencing some conditions are more demographically unique than others.

- Marital Status and presence of children have some association with all types of FSDs

- Age in itself is significant only for long term LOI and trouble lubricating

- Other social variables, such as education and geographic location are associated with anxiety and No O

Persistent FSDs are significantly associated with women's recent sex life as well as their early sexual experience

- Certain forms of FSDs (ex LOI) have a much stronger association with recent occasions of sex

- However, the strength and nature of the relationship differs demographically

- Long term FSDs are also associated with number of recent and lifetime sexual partners

- Some dysfunctions, such as anxiety and No O are associated with a higher number of recent sexual partnerships in single women

- Prevalence of FSDs is also highly correlated with early sexual incompetence

Persistent LOI in women is associated with sexual and gynecological health

- Prevalence of LOI is significantly related to women's sexual and gynecological health

- They are less likely to report being in good health

- They are significantly more likely to prefer no sexual activity