

Measures of Sexual Desire and Distress among Premenopausal Women in the *HSDD Registry for Women* at Baseline: Preliminary Findings from 209 Participants

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INTRODUCTION

Decreased sexual desire and personal distress are essential elements for the diagnosis of **hypoactive sexual desire disorder (HSDD)** in women.

According to current clinical definitions of HSDD, a diagnosis requires deficient or absent sexual fantasies and desire for sexual activity and sexually-related personal distress, which cannot be better accounted for by another non-sexual Axis I disorder and is not entirely due to the direct physiological effects of a substance or medical condition.

METHODS

Study Design

- Interim cross-sectional analysis of the first 209 premenopausal women enrolled in a longitudinal registry study of women with HSDD, the *HSDD Registry for Women*.
- The Registry will continue to recruit women from 40 clinical sites across the U.S. over 18 months, to total 1000 women with a new diagnosis of HSDD.

Participants

- Premenopausal women aged 18 years or older with a confirmed diagnosis of HSDD by a qualified clinician within 3 months of enrollment, enrolled as of February 12, 2009 from 15 clinical sites.
- Confirmation of the diagnosis was determined by a validated instrument, the Decreased Sexual Desire Screener (DSDS), administered by a qualified clinician.
- As per DSM-IV criteria, the HSDD could not be better accounted for by another Axis I disorder (except another sexual dysfunction) or due solely to a medical condition or substance.

Measures

- Participants completed a self-administered questionnaire at baseline consisting of validated measures of distress (Female Sexual Function Index-FSFI), sexual function and desire (Female Sexual Dysfunction Scale-FSDS Revised: Question 13) and a patient-based global impression of HSDD severity (PGI-S).

Statistical Analysis

- We conducted interim analyses to preliminarily address these larger *Registry* aims:
- (1) To identify the degree to which the two key components of HSDD (inhibited desire and personal distress) are associated with each other.
 - (2) To investigate the relationship of other domains of sexual dysfunction (orgasm dysfunction, overall dissatisfaction with sex life, arousal difficulties, lack of lubrication and pain) with sexual distress among women with HSDD.
 - (3) To examine possible correlates of distress related to decreased sexual desire, controlling for age and other potential covariates using ordinal logistic regression.

PRELIMINARY RESULTS

Women reporting frequent or always distress had worse sexual function, as assessed by the FSFI scores, compared to women reporting occasional distress (**Table 1**).

Table 1: FSFI Scores by Frequency of Sexual Desire Related Distress as Assessed by the FSDS-R Question 13, among the first 209 Premenopausal Women Enrolled in the *HSDD Registry for Women*

	Sexual Desire-Related Distress			
	Total	Occasionally	Frequent	Always
N	209	49	124	36
FSFI Score (range)	(mean ± SD)	(mean ± SD)	(mean ± SD)	(mean ± SD)
Desire (1-5)	2.0 ± 0.8	2.4 ± 0.8	1.9 ± 0.8	1.8 ± 0.8
Arousal (0-5)	2.3 ± 1.2	2.8 ± 1.4	2.2 ± 1.0	2.0 ± 1.0
Lubrication (0-5)	3.1 ± 1.7	3.3 ± 1.7	3.1 ± 1.7	2.5 ± 1.7
Orgasm (0-5)	2.7 ± 1.7	3.2 ± 2.0	2.6 ± 1.6	2.3 ± 1.7
Satisfaction* (1-5)	2.6 ± 1.2	3.0 ± 1.1	2.6 ± 1.2	2.4 ± 1.2
Pain (0-5)	4.0 ± 2.2	4.1 ± 2.2	3.9 ± 2.2	4.0 ± 2.1
Total* (2-36)	16.9 ± 6.0	19.0 ± 6.5	16.5 ± 5.8	15.3 ± 5.5

*Information for the satisfaction domain was not available for three women.

Using these preliminary data in a multivariate model, results showed that for each one point increase in FSFI desire domain score (indicating improved sexual function), women were half as likely to report frequent distress over decreased desire (**Table 3**). Also, older premenopausal women were less likely to report higher levels of distress. Interestingly, women who reported that stress or fatigue was contributing to their decreased desire were less likely to report frequent distress over their decreased desire. Lastly, women who felt that their partner's level of sexual desire was greater now than in the past were more likely to report increased frequency of distress due to low desire. These findings are preliminary and the multivariate model will be revisited when the complete Registry sample is available.

Table 3: Preliminary Multivariate Model Results of Factors Associated with Personal Distress over Decreased Sexual Desire among the First 209 Premenopausal Women in the *HSDD Registry for Women*

Variable	Odds Ratio (95% CI)	P-value
FSFI desire score	0.50 (0.35, 0.72)	<0.001
Age	0.97 (0.94, 1.00)	0.03
Stress or fatigue	0.41 (0.22, 0.78)	0.007
Perceived partner desire	1.37 (1.06, 1.77)	0.02

Sexual desire and sexual distress showed moderate correlations with the patient-reported HSDD severity (PGI-S) (**Table 2**). The correlations indicate that lower desire or more distress were correlated with greater severity of HSDD. All components of sexual function (i.e. orgasmic function, overall sexual satisfaction) were positively correlated with each other and showed modest, inverse correlations with sexual distress.

Table 2: Correlations between Distress (FSDS-R Question 13), FSFI and HSDD Severity (PGI-S) among the first 209 Premenopausal Women Enrolled in the *HSDD Registry for Women*

	Distress	FSFI							PGI-S
		Desire	Arousal	Lubrication	Orgasm	Satisfaction	Pain	Total	
Distress	1.00	-0.24	-0.24	-0.14	-0.16	-0.20	0.00*	-0.20	0.56
FSFI Domain									
Desire		1.00	0.51	0.33	0.32	0.41	0.12*	0.50	-0.34
Arousal			1.00	0.64	0.73	0.47	0.35	0.82	-0.29
Lubrication				1.00	0.54	0.40	0.49	0.81	-0.31
Orgasm					1.00	0.43	0.29	0.76	-0.20
Satisfaction						1.00	0.21	0.64	-0.30
Pain							1.00	0.66	-0.13
Total								1.00	-0.32
PGI-S									1.00

*All correlations were statistically significant ($p < 0.05$) except for the correlations between distress (FSDS-R-Question 13) and Pain ($p = 0.95$); and between Desire and Pain ($p = 0.09$).

CONCLUSIONS

These preliminary findings among the first 209 premenopausal women in the *HSDD Registry for Women* showed that a higher FSFI desire score (indicating improved sexual function) was predictive of having less frequent distress, and that both desire and distress also had moderate correlations with the patient global impression of HSDD severity. Sexual function domains of arousal, lubrication, orgasm and satisfaction are also related to desire-related distress and HSDD severity. Results support the use of these measures of sexual distress and desire here and in other large scale studies of sexual dysfunction in women. These preliminary results should be confirmed when data from the complete *HSDD Registry* cohort of 1000 women are available.

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