

# The prevalence and predictors of female sexual dysfunction

## A systematic review and meta-analysis

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## Objective

To assess the prevalence and predictors of female sexual dysfunction (FSD) among general populations of reproductive age women

**PROTOCOL**
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# Prevalence and predictors of female sexual dysfunction: a protocol for a systematic review

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**Abstract**

**Background:** Sexual function is an essential component of life. For this reason, sexual dysfunction can have a negative impact on the wellbeing of men and women alike. Since the turn of the 21st century, research on female sexual dysfunction (FSD) has gained momentum. While FSD is often assessed in people with ill health, sexual dysfunction is an illness of its own entity and is also prevalent in non-patient populations. A critical review of current literature on female sexual dysfunction in general populations will shed light on possible determinants as well as at-risk groups. Thus, the aim of this systematic review is to assess the prevalence and the predictors of female sexual dysfunction in general populations.

**Methods/Design:** A systematic review of current literature on FSD will be performed. Studies will be considered for review if they report quantitative data on the prevalence of female sexual dysfunction. Outcome measures will include the prevalence of FSD, the time period assessed, and significant predictors for each domain of FSD. The scientific databases MEDLINE, EMBASE, PsycINFO, and Web of Science will be systematically searched in cooperation with a medical research librarian. Hand searches for further relevant publications will also be undertaken. Screening of search results and extraction of data from included studies will be conducted cooperatively by two authors. The quality of the studies will be appraised and documented. Results will be compiled and presented in evidence tables.

**Discussion:** In the past decade, population-based studies on female sexual dysfunction have increased in number and grown more varied in their cultural settings. This review aims to provide a current overview of the prevalence of female sexual dysfunction in populations from various countries, cultures, and age groups in order to provide a better understanding of its effect on women's lives today.

**Keywords:** Systematic review, Female sexual dysfunction, Sexual disorder, Prevalence, Predictors, General population

**Background**
**Introduction**

Sexual function is an essential component of life. For this reason, sexual dysfunction can have a negative impact on the wellbeing of an individual. According to the Diagnostic and Statistical Manual of Mental Diseases (DSM), sexual dysfunction is characterized by a disturbance in the processes that characterize the sexual response cycle or by pain associated with sexual intercourse [1]. Among women, sexual dysfunction generally falls into four categories: hypoactive sexual desire disorder, female

sexual arousal disorder, female orgasm disorder, and pain disorders [2].

Female sexual dysfunction (FSD) has attracted more interest in the past few decades [2]. At the turn of the 21st century, FSD was identified as a significant yet largely uninvestigated public health problem [3]. At the time, there was little population-based data available concerning the prevalence, predictors, and consequences of this disorder [3].

In 2004, West et al. performed a systematic review of global literature on the prevalence and predictors of FSD in general populations, starting with studies from 1966 to 2004 [4]. The review identified 40 studies on FSD in general populations. She examined sexual dysfunction overall and differentiated it into the four major domains:

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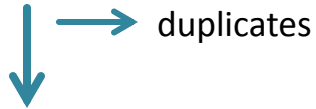
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## Methods

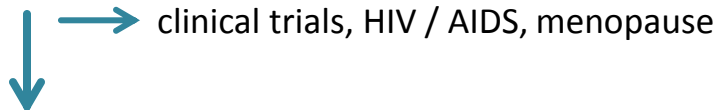
- Systematic review of literature (Jan 2000 – July 2014), English only
- Primary outcome: prevalence of sexual dysfunction in general (non-clinical) populations of women age 49 and below
- Publications must report the prevalence of at least one sexual disorder (DSM IV) to be included
- Secondary outcome: significant predictors of FSD

## Results of search with medical librarian

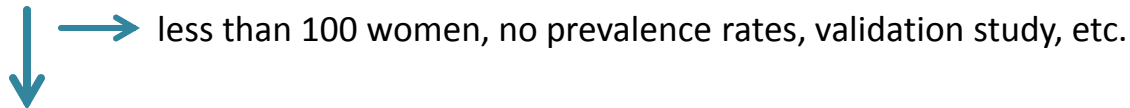
19442 results (multiple databases)



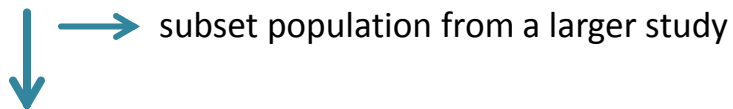
9292 titles and abstracts screened



440 full texts screened



183 publications fulfilled inclusion criteria



135 publications included and assessed

## Study characteristics

134 cross-sectional studies

1 cohort study

### Regions

Europe 45 (33%)

Non Europe West 31 (23%)

Asia 23 (17%)

Central & South America 12 (9%)

Africa 11 (8%)

Middle East 10 (7%)

Global 3 (2%)

### Size of female populations

Range: 100 to 84644 women

Mean: 2420 women

Median: 853 women

## Prevalence rates of FSD in 135 international studies

**Desire disorder** 7.4 to 65.0%

**Arousal disorder** 5.1 to 55.8%

**Orgasm disorder** 7.7 to 71.9%

**Aversion disorder** 3.0 to 24.2%

**Pain disorder(s)** 2.8 to 67.0%

**FSD\*** 3.8 to 76.2%

\*at least 1 disorder or below cut-off



## Pooled prevalence rates of FSD

		[95% CI]
Desire disorder	26%	[20-33%]
Arousal disorder	15%	[10-22%]
Orgasm disorder	21%	[16-26%]
Aversion disorder	5%	[0-16%]
Pain disorder(s)	14%	[7-23%]
<b>FSD overall</b>	<b>24%</b>	<b>[12-38%]</b>

## What's significant about this data?

An estimate for the **prevalence of FSD**

- NHLS (Laumann et al. 1999) with 43%, cited over 4000x
- Single study in the USA with 1749 women
- First systematic, quality-based estimate encompassing 135 studies

An estimate for the prevalence of FSD **worldwide**

- GSSAB (Moreira/Nicolosi et al.), 14,000 women from 29 countries
- Over 220,000 women from 43 countries

An estimate for the prevalence of FSD **among premenopausal women**

- FSD is not only pertaining to menopausal women
- general populations, not clinical
- One in four premenopausal women reports FSD

## Outlook

- Continue our efforts and research on FSD
- Longitudinal studies to determine possible causes of FSD
- Populations of homosexual and bisexual women, as well as adolescents



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**Many thanks!**

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