# INPLASY PROTOCOL

**Corresponding author:**
**Huali Xu**

xuhuali0575@126.com

**Author Affiliation:**
**Shaoxing People'sHospital.**

**Review Stage at time of this submission:** Piloting of the study selection process.

**Conflicts of interest:** None declared.

## Prevalence and risk factors of sexual dysfunction in females with type I diabetes: A systematic review and meta-analysis

Zhang, XL[1]; Zhu, ZR[2]; Tang, GL[3]; Xu, HL[4].

**Review question / Objective:** In this systematic review and meta-analysis, we aimed to estimate the prevalence of sexual dysfunction and its associated risk factors in females with type 1 diabetes mellitus.

**Eligibility criteria:** The criteria of inclusion is: i: the research object should be female; ii: the research should reported the prevalence of sexual dysfunction; iii: used a validated instrument for the diagnosis of sexual dysfunction; iv:the subjects should be diagnosed with type 1 diabetes mellitus. The exclusion criteria: i, studies were not conducted in human beings; ii data were duplicated in another article.; iii, there was no appropriate research data available.

## INTRODUCTION

**Review question / Objective:** In this systematic review and meta-analysis, we aimed to estimate the prevalence of sexual dysfunction and its associated risk factors in females with type 1 diabetes mellitus.

**Condition being studied:** The prevalence of sexual dysfunctions in females with type 1 diabetes is still debated. This study examines the prevalence of sexual dysfunction in women with type 1diabetes and the associations with clinical and psychological variables.

## METHODS

**Participant or population:** Females with type I diabetes.

**Intervention:** The prevalence of sexual dysfunctions in females with type 1 diabetes.

**Comparator:** None.

**Study designs to be included:** Systematic review and meta-analysis.

**Eligibility criteria:** The criteria of inclusion is: i: the research object should be female; ii: the research should reported the prevalence of sexual dysfunction; iii: used a validated instrument for the diagnosis of sexual dysfunction; iv:the subjects should be diagnosed with type 1 diabetes mellitus. The exclusion criteria: i, studies were not conducted in human beings; ii data were duplicated in another article.; iii, there was no appropriate research data available.

**Information sources:** We searched China national knowledge internet (CNKI), Wanfang database, Pubmed, and Embase database.

**Main outcome(s):** The prevalence of sexual dysfunctions.

**Quality assessment / Risk of bias analysis:** The quality of each included study was assessed using the quality assessment criteria for observational studies recommended by the Agency of Healthcare Research and Quality(AHRQ). Each item was graded as "yes", "no", and "unclear". A score ≥ 8 points was considered as high quality, 6-7 points was considered as medium quality, ≤ 5 points was considered as low quality.

**Strategy of data synthesis:** Statistical analyses were performed using software (Stata, Version 12.0; StataCorp, College Station, TX). The heterogeneity of all included studies was analyzed by using Q-test and I2 statistics test. The random model was performed when I2 > 50% (considered as heterogeneous), otherwise, the fixed model was performed. Pooled prevalence estimates are presented visually using forest plots. For analysis of relevant risk factors(such as age, diabetes mellitus duration), the fixed-effect model was used to combine these ORs to obtain an overall OR when there was no significant heterogeneity between studies. Otherwise, the random effects model was applied. A sensitivity analysis was also performed to eliminate each study at a time from the meta-analysis. Publication bias was depicted by the symmetrical distribution of funnel plot and estimated by Begg's and Egger's test.

**Subgroup analysis:** Subgroup analysis will be conducted according to different items, including study region, study year, patients' age, sample size, study quality, and population source.

**Sensitivity analysis:** To test the robustness of association and characterize possible sources of statistical heterogeneity, sensitivity analyses were carried out by excluding studies one-by-one and analyzing the homogeneity and effect size for all of the rest studies.

**Country(ies) involved:** China.

**Keywords:** prevalence, sexual dysfunction, type I diabetes: ,systematic review, meta-analysis.

**Contributions of each author:**
Author 1 - Xiaolong Zhang.
Email: hualong0914@126.com
Author 2 - Zhirong Zhu.
Email: zzr123urol@126.com
Author 3 - Guiliang Tang.
Author 4 - Huali Xu.