

# BODY-FOCUSED REPETITIVE BEHAVIORS IN PATIENTS WITH TIC DISORDERS – RESULTS OF A SCOPING REVIEW

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## INTRODUCTION AND AIM

- Overlap and comparable underlying pathophysiology in patients with **primary tic disorders (TD)** and **body-focused repetitive behaviors (BFRB)**.
- Similar treatment strategies might be effective.
- The aim of this **scoping review** is to examine the existing literature on the co-existence of BFRB in patients with TD.

## RESULTS

### Selection of articles

- Primary search led to the identification of 22,307 articles (Figure 1)
- Of these, 13 were included in the final analysis

### Types of BFRB in TD

- Trichotillomania
- Dermatillomania
- Onychotillomania
- Onychophagia

### Prevalence of BFRB in TD

- Ranging between 2.4% to 56.6%
- Other characteristics of BFRB in TS
- BFRB usually occurs prior to tics
- BFRB associated with tic severity and OCD and ADHD

### Similarities between tics and BFRB

- Suggestibility
- Precipitating premonitory urges
- Relief after BFRB/tic execution
- Possible similar underlying mechanisms?
- BFRBs co-existing with tics are more related to tic phenomenology than to OCD

### Pathophysiology

- Similar neuronal pathways
- Mainly: insula, basal ganglia (putamen), and posterior cingulate cortex

### Treatment

- Preliminary data for habit reversal training
- Self-training modalities such as decoupling

## METHODS

- A scoping review methodology in accordance with the **JBIM** methodology.
- Questions: **comorbidity, underlying mechanisms and predictors of BFRB and TD**
- Protocol and search strategy: OSF | Body-focused repetitive behaviors in patients with tic disorders - underlying mechanisms and clinical phenomenology.
- Standardized searches in **Scopus** and **PubMed** databases using a predefined search strategy.
- Three reviewers (KR, KS, and NS) searched the electronic databases using predefined inclusion and exclusion criteria.
- Primarily original papers in humans such as **prospective studies, retrospective studies, and case series**.
- Search strategy to articles in English.

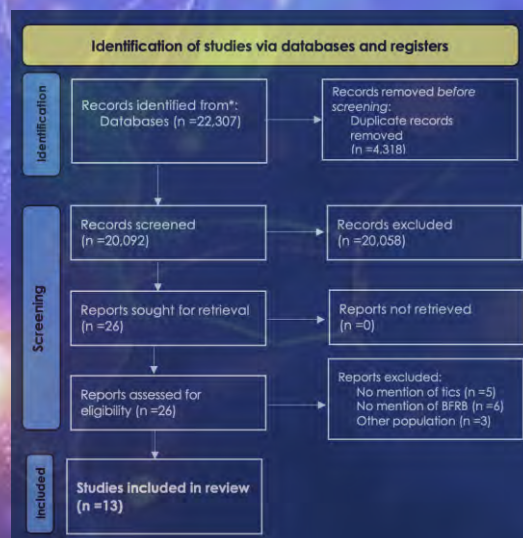


Figure 1. PRISMA Diagram presenting process of study selection for the final analysis.

## SUMMARY

- BFRBs and tics frequently co-exist and share common pathophysiological mechanisms
- Most frequent types of BFRB in patients with tics are: trichotillomania, dermatillomania, onychotillomania, onychophagia
- BFRB especially frequent in patients with more severe tics, comorbid ADHD and OCD
- HRT could be beneficial both for tics and BFRB