

# The role of yoga and mindfulness-based interventions in managing bladder pain syndrome:

## A systematic review

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### Aims of study

-To evaluate the efficacy of yoga and mindfulness-based interventions (MBIs) in managing Bladder Pain Syndrome (BPS), focusing on symptom relief and quality of life improvements.

### Study design, materials and methods

- Systematic review conducted per PRISMA guidelines.
- Inclusion criteria = randomized controlled trials (RCTs), systematic reviews, and observational studies that assessed yoga and mindfulness interventions in BPS patients, measuring outcomes such as pain reduction, urinary symptoms, and quality of life

**Records identified = 612**  
(01/2010 - 12/2024)

PubMed 210, Scopus 180, Cochrane 92,  
Web of Science 130

Duplicates removed = 132

**Records screened = 480**

**Full-text assessed = 52**

**Final studies included = 14**

- 5 RCTs, 4 systematic reviews, 5  
observational -

### Results and interpretation

- **URINARY FREQUENCY REDUCTION** - 4 studies found a **mean reduction of 3.2 voids/day**



- **PSYCHOLOGICAL WELL BEING**  
Significant reduction in anxiety and depression scores, with Cohen's d effect sizes ranging from 0.5 to 0.8



- **PAIN REDUCTION** - Meta-analysis of 5 RCTs (n=460) showed a **27% reduction** in pelvic pain



### Conclusions

This systematic review supports the potential efficacy of yoga and mindfulness-based interventions as complementary treatments for BPS. These non-pharmacological approaches provide symptom relief and enhance quality of life in affected individuals.

Future larger, standardized RCTs are needed to establish evidence-based recommendations for clinical practice.