

# 17<sup>th</sup> EuGMS CONGRESS

OCTOBER 11/13, 2021 > LIVE FROM ATHENS & ONLINE

Perrine Evrard, PhD student, UCLouvain Belgium

Barriers And Enablers For Benzodiazepine Receptor Agonists Deprescribing In Older Adults: A Systematic Mixed-methods Review Using the Theoretical Domains Framework as an Analysis Guide

# CONFLICT OF INTEREST DISCLOSURE

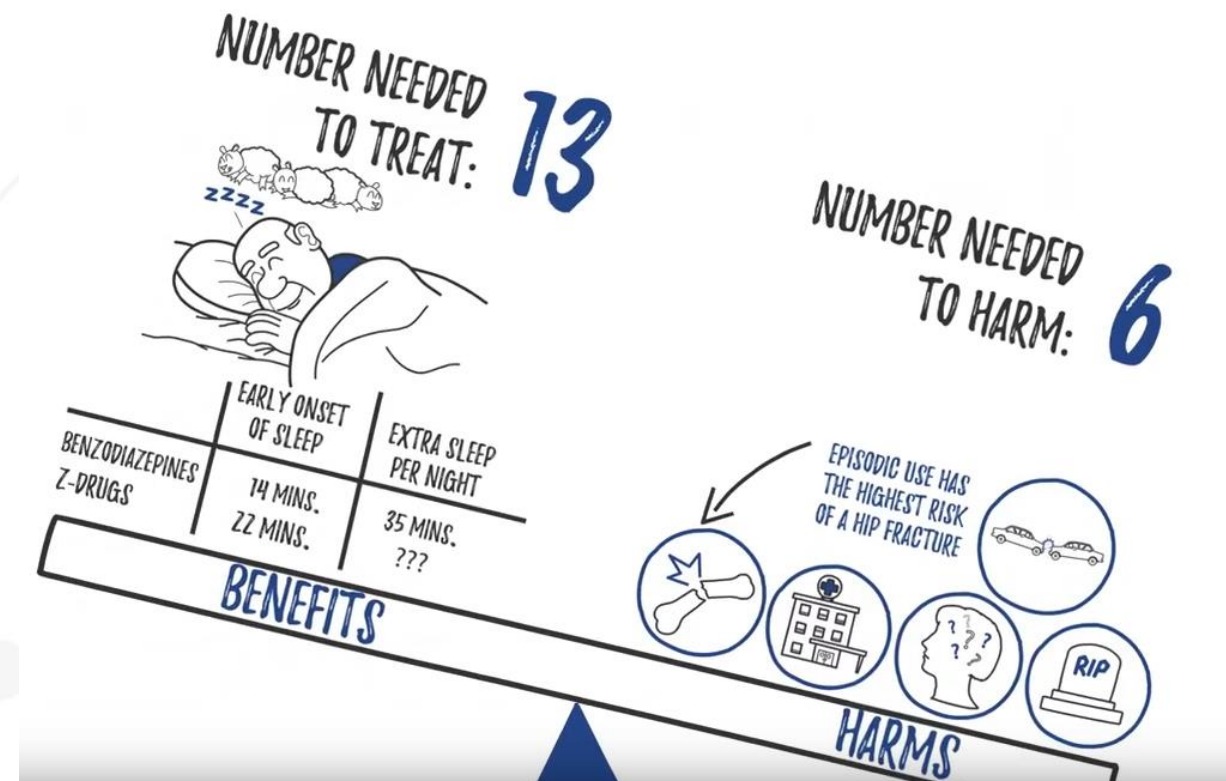
I have no potential conflict of  
interest to report

# Introduction: Benzodiazepines (BZRA) use in older people

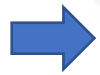
- Indications :
  - Primary insomnia
  - Anxiety

- Risks > Benefits

➔ Not recommended for more than a **4 weeks** period



## Introduction: BZRA use in older people



Recommandation to deprescribe for chronic users

**Deprescribing:** To discontinue medications which are no longer needed or which may put the patient at risk, under supervision of a Healthcare Professional, with the goals of managing polypharmacy and improving outcomes. (Reeve, 2017, Eur J Clin Pharmacol)

## Introduction: BZRA use in older people

➔ Recommendation to deprescribe for chronic users

**Deprescribing:** To discontinue medications which are no longer needed or which may put the patient at risk, under supervision of a Healthcare Professional, with the goals of managing polypharmacy and improving outcomes. (Reeve, 2017, Eur J Clin Pharmacol)

Still, high prevalence of BZRA use among older adults:

Belgium : 18 % (Pétein, 2021, Ther Adv Psychopharmacol)

Germany : 16,5% of long-term (>6mo) users (Jacob, 2017, Ther Adv Psychopharmacol)

Even higher in nursing homes: 52,4% of users in Belgium (Evrard, 2020, JAGS)

➔ Suggests substantial overuse, and room for deprescribing opportunities.



## Introduction: BZRA use in older people

➔ Recommendation to deprescribe for chronic users

**Deprescribing:** To discontinue medications which are no longer needed or which may put the patient at risk, under supervision of a Healthcare Professional, with the goals of managing polypharmacy and improving outcomes. (Reeve, 2017, Eur J Clin Pharmacol)

Still, high prevalence of BZRA use among older adults:

Belgium : 18 % (Pétein, 2021, Ther Adv Psychopharmacol)

Germany : 16,5% of long-term (>6mo) users (Jacob, 2017, Ther Adv Psychopharmacol)

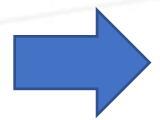
Even higher in nursing homes: 52,4% of users in Belgium (Evrard, 2020, JAGS)

➔ Suggests substantial overuse, and room for deprescribing opportunities.

How to increase BZRA deprescribing uptake ?

➔ Need to evaluate barriers and enablers, to design specific interventions.

## Objectives



**Systematically review barriers and enablers for BZRA deprescribing** in older adults identified in the literature and map them into a theoretical framework

## Methods

Search strategy	5 electronic databases (Medline, Embase, PsycINFO, Cochrane, CINALH) Grey literature on Google scholar Citation searching: Snowballing-backward and forward
Study selection	2 Independant reviewers <ul style="list-style-type: none"> <li>- Qualitative, quantitative or mixed-methods studies, published in english</li> <li>- 75 % of study population aged 65 or older</li> <li>- Exclusion: palliative care, end of life, specific psychiatric disorder</li> </ul>
Quality assessment	2 Independant reviewers Mixed Methods Apraisal Tool (MMAT) <a href="#">Hong QN, Education for information, 2018</a>
Data extraction	Pilot-tested data extraction form <ul style="list-style-type: none"> <li>- Participants' quotations from qualitative studies and identified themes</li> <li>- Quantitative findings from surveys or questionnaires</li> <li>- Authors' conclusions</li> </ul>
Analysis	Data-based convergent design Qualitative deductive coding into a theoretical framework : The Theoretical domains framework 2 independant coders



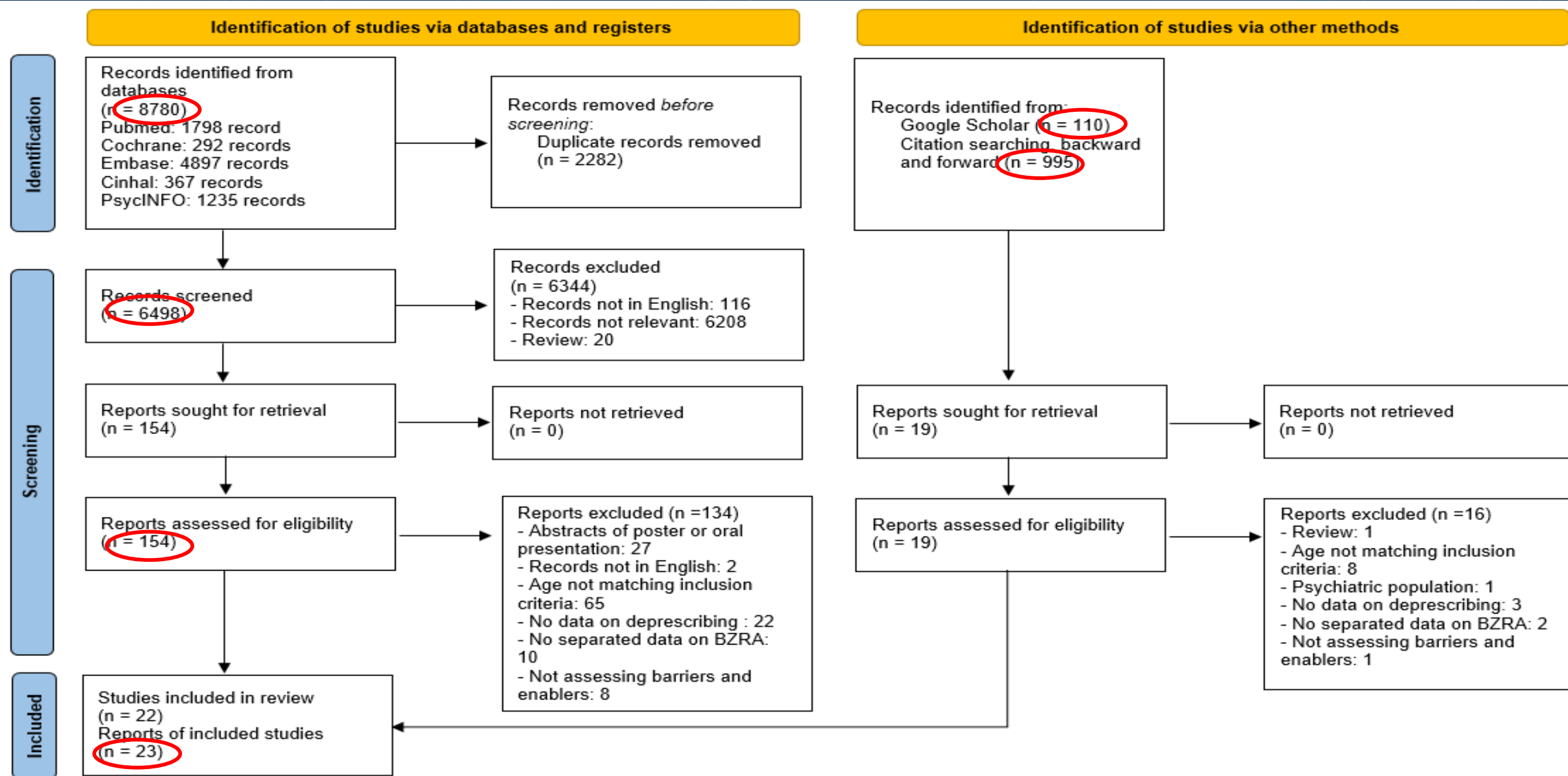
# Methods

## Framework for analysis : Theoretical Domains Framework – TDF

- Developed for the identification of barriers and enablers of a specific behavior
- Regroup 33 theories containing 128 constructs
- Distinction in 12 separated domains (TDF v2 : 14 domains)
- Each domain : possible explanation for health-related behavior change

### **TDF-v2 domains**

Knowledge	Intention
Skills	Goals
Social, professional role and identity	Memory, Attention and Decision processes
Beliefs about capabilities	Environmental context and resources
Optimism	Social influences
Beliefs about consequences	Emotion
Reinforcement	Behavioural Regulation



Adapted From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71. For more information, visit: <http://www.prisma-statement.org/>

# Results

## 23 included reports

### Design:

- Quantitative: 13
- Qualitative: 8
- Mixed-methods: 2

### Setting:

- Ambulatory: 14
- Nursing home: 8
- Hospital: 1

### Countries:

- Australia: 2
- Belgium: 4
- Canada: 4
- Finland: 1
- France: 2
- Netherlands: 1
- South Africa: 1
- United Kingdom: 2
- USA: 6

**Figure :** Reported relevant analysis domain, identified as barrier and/or enabler per setting and per stakeholders.

Analysis domains	Beliefs about capabilities	Beliefs about consequences	Environmental context and resources	Intention	Goals	Social influences	Memory, attention and decision process	Knowledge	Skills	Social, professional role and identity	Reinforcement	Emotion	Patients' characteristics	BZRA prescribing patterns
Nursing home setting														
GPs	Red	Green	Green	Red	Red	Red	White	White	White	White	Red	White	White	White
NHRs	Red	Red	Green	Red	White	Red	White	White	White	White	Red	White	Green	Green
Nurses	Red	Green	Green	Red	White	Red	Red	Red	Red	Red	Red	White	White	White
Ambulatory setting														
GPs	Red	Green	Green	Red	Red	Green	Red	White	Red	Red	Red	Red	White	White
Patients	Green	Green	Green	Green	Green	Green	Red	Red	White	White	Red	Green	Green	Green

**Legend:** Red: Barrier, Green: Enabler, BZRA: Benzodiazepine Receptor Agonists, GPs: General Practitioners, NHRs: Nursing home residents

**Figure :** Reported relevant analysis domain, identified as barrier and/or enabler per setting and per stakeholders.

Analysis domains	Beliefs about capabilities	Beliefs about consequences	Environmental context and resources	Intention	Goals	Social influences	Memory, attention and decision process		Knowledge		Skills	Social, professional role and identity	Reinforcement	Emotion	Patients' characteristics	BZRA prescribing patterns
Nursing home setting																
GPs	Red	Green	Green	Red	Red	Red							Red			
NHRs	Red	Red	Green	Red		Red							Red		Green	Green
Nurses	Red	Green	Green	Red		Red	Red	Red	Red	Red	Red	Red	Red			
Ambulatory setting																
GPs	Red	Green	Green	Red	Red	Green	Red		Red	Red	Red	Red	Red			
Patients	Green	Green	Green	Green	Green	Green	Red	Red			Red	Red	Green	Green	Green	Green

**Legend:** Red: Barrier, Green: Enabler, BZRA: Benzodiazepine Receptor Agonists, GPs: General Practitioners, NHRs: Nursing home residents



# Beliefs about capabilities

- Patient's self-efficacy

Enabler

“Individuals who decided to deprescribe exhibited higher capacity for tapering, with enhanced self-efficacy compared with those in whom the intervention did not trigger motivation (risk difference, 56.90% (95% CI 45.41% to 65.77%))” **(Martin, 2017)**

- Deprescribing is challenging for GPs and nurses

Barrier

“It can be a tough sell to get patients off of these meds.” Interview of a GP **(Kuntz, 2018)**

- Perceived efficacy or lack of efficacy of the BZRA

Barrier

Enabler

“*[Zolpidem] works, and that's what I want to stay on*” Interview of an older **(Kuntz, 2018)**

“*I don't get a full night's sleep with them*”. – Female, 86 years of age **(Williams, 2016)**

# Environmental context and resources

- Lack of resources and importance given by the healthcare system

Barrier

*“Nobody cares how many patients I have tapered off medication.” (Kuntz – 2018)*

- Heavy workload

Barrier

- Difficulty of alternatives

Barrier

- Nursing home requirements

Barrier

*“The need to have all the residents in bed before the night shift starts and to have the medication round completed enhances BZD use.” (Anthierens, 2009)*

# Social influences

Strong reciprocal influence between GP and patient

Expected patient's resistance



*"Of all eight resident-specific barriers, most common among the GPs were the fear of resistance from the resident (median 9 on 10 point Likert scale)" (Bourgeois, 2014)*

Perceived pressure for continuous prescribing

*"Pressure by patients to initiate or renew prescription of anxiolytics/hypnotics had previously been felt by 97.1% of GPs (67.4% often, 29.7% sometimes, 2.9% never)." (Lasserre, 2010)*



Barriers

Belief that GPs prescription equal safety and approval for continuous use

*"I don't think (the doctor) is against it . . . (the doctor) has never queried it." (Barter, 1996)*

Enabler

Barriers

*'If you take all your pills as prescribed, you'll never have problems in your life [...] When my doctor prescribes something for me, I know it's not junk, I know it's good for me. And I don't question it'. (Martin, 2017)*

## Conclusion and perspectives

- Using the TDF as an analysis guide, we were able to :
  - Review barriers and enablers identified in the literature
  - Identify most relevant TDF domains regarding BZRA deprescribing in older adults
- Recommendations for **future research**:
  - Evaluate the point of view of informal caregivers, psychologists, pharmacists
  - Address the hospital setting
  - Develop future intervention studies based on most relevant TDF domains
  - Involve stakeholders in interventions development : A one size fits all model is not appropriate !