

# CANVAS syndrome: Interventions to improve the quality of life

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## INTRODUCTION

- **CANVAS syndrome** is a rare neurodegenerative disorder causing progressive ataxia due to impairment of sensory neurons, the vestibular system, and the cerebellum.
- Patients face physical and psychological challenges compounded by perceived lack of support (1).
- Symptoms include: sensory impairments, gait issues, abnormal eye movements, autonomic dysfunction, and chronic cough. Neuropathy affects both large and small sensory fibers. Cerebellar dysfunction leads to ataxia, dysarthria, and dysphagia, with cerebellar atrophy
- Early diagnosis and comprehensive interventions to improve quality of life and functional independence are crucial for mitigating disease progression and preventing depression and anxiety.
- Ongoing research is needed to further understand CANVAS and develop targeted treatments (2).

## OBJECTIVE

Describe the most efficient pharmacological and non-pharmacological interventions to improve the quality of life in patients with CANVAS syndrome in the community.

## METHODOLOGY

Data bases:   

**Research Question:** "What interventions could be implemented to improve quality of life in patients with CANVAS syndrome in the community?"

**Key words:** Key Words: CANVAS Syndrome, Cerebellar ataxia, quality of life.

### Elegibility Criteria:

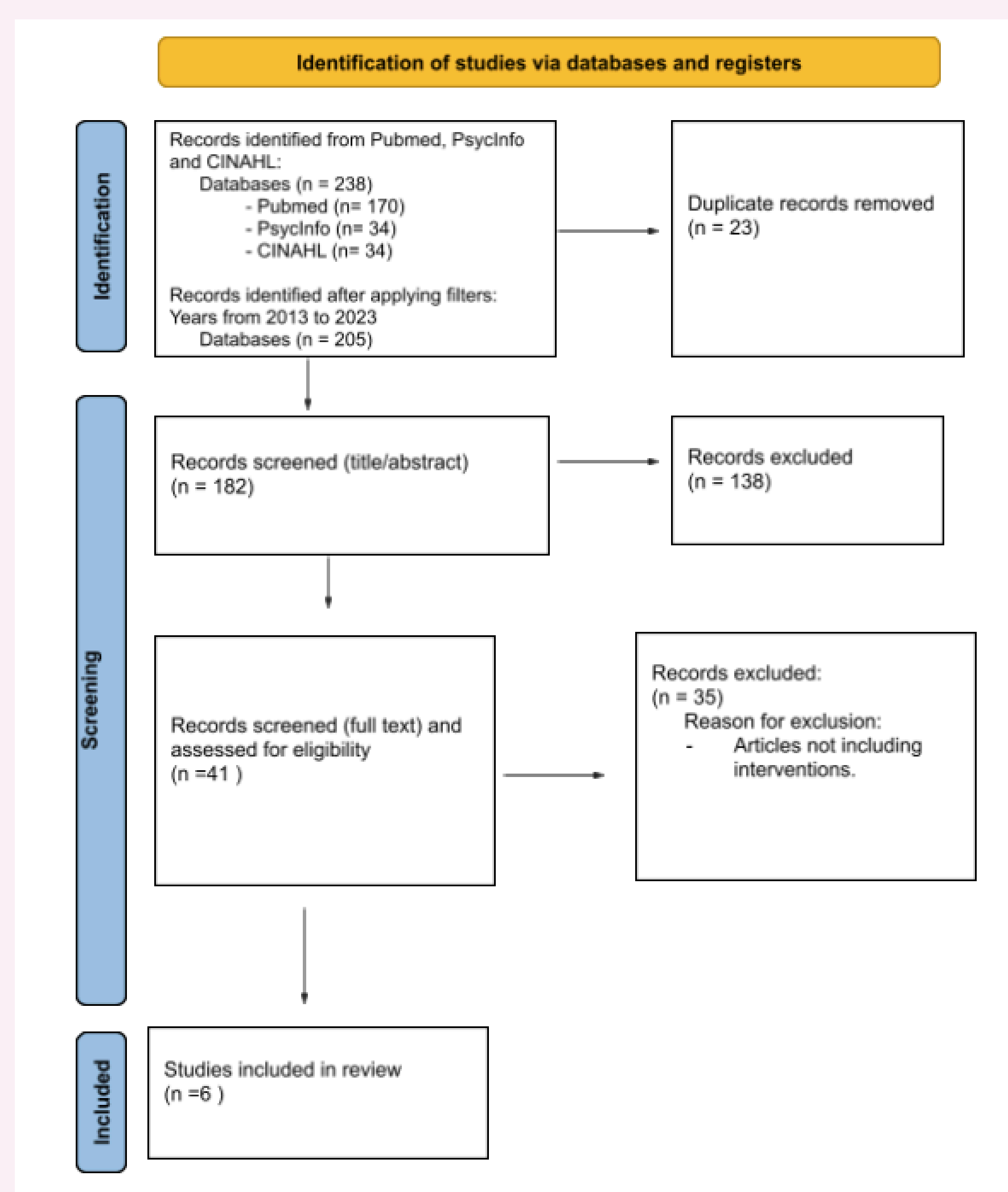
#### Inclusion:

- Articles published in English and Spanish.
- Articles published from 2013.
- Articles on patients with cerebellar ataxia.
- Articles addressing patient experiences.
- Articles on patients with rare long-term neurological conditions.

#### Exclusion:

- Articles that consider the costs of interventions.
- Articles on hospital care.
- Articles addressing pediatric patients.
- Grey literature (letters to the editor, editorials) and doctoral theses.

### Flowchart diagram:



## RESULTS

### Pharmacological Treatment:



- Pharmacological treatments include medications targeting movement disorders like dystonia and tremor. Addressing symptoms such as neuropathic pain. From vitamin supplementation to medications for symptom relief (3).

### Physical Therapy:



- Physiotherapy interventions show promise in alleviating symptoms, improving quality of life, and promoting independence in individuals with cerebellar ataxia (3),(4).
- A multidisciplinary approach, including physical therapy, speech-language therapy, dysphagia management, occupational therapy, and technology-assisted interventions, is crucial for optimizing outcomes and enhancing quality of life in individuals with cerebellar ataxias (3), (5), (6).

### Psychological Therapy:



- Depression is common in cerebellar ataxia, particularly in advanced stages (4).
- Early detection of psychiatric symptoms is crucial in ataxia management. Treatment options may include SSRIs and therapy for severe cases (3).
- Palliative care focusing on improving quality of life by addressing physical, emotional, and spiritual needs. (3).

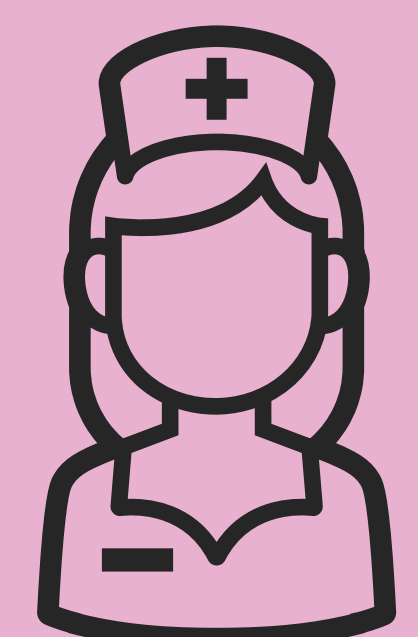
### Supportive Care:



- Patients with rare long-term neurological conditions (rLTNCs) often face delays in accessing information, support, and rehabilitation services, highlighting the need for integrated and high-quality social and healthcare services to improve clinical outcomes and health-related quality of life (HRQL) (7).
- Coordinated care, including behavioral and therapeutic interventions, adaptive technologies, and rehabilitation programs, could be beneficial for individuals with rLTNCs. Additionally, considering the impact on caregiver well-being is essential when implementing alterations in service provision (7).

## CONCLUSION

Managing CANVAS disease necessitates a multi-disciplinary approach and early diagnosis. Treatment targeting diverse symptoms enhances quality of life. Holistic patient care, including addressing psychiatric symptoms, is crucial. Research affirms the positive impact of motor and psychological rehabilitation in cerebellar ataxia.



- **Education:** there's a need for increased awareness about the disease.
- **Research:** further investigation is crucial given the absence of definitive treatments and formulate research questions to advance knowledge in CANVAS.
- **Clinical practice:** a multidisciplinary approach is advocated to address disease complexities and optimize patient care.

## BIBLIOGRAPHY

