

Introduction

- Children with epilepsy (cwE) are more likely to experience a multitude of severe and chronic mental health disorders such as depression, anxiety and disruptive behaviour disorders compared to children without epilepsy (Shafran et al, 2020).
- Psychiatric comorbidities can negatively impact cwE as it can lead to an inadequate response to treatment and reduce their quality of life (Patel et al 2017).
- Despite decades of international research and policy guidelines emphasising the importance of identifying and addressing the mental health needs of young people with epilepsy, their mental health needs continue to be undetected and undertreated (Shafran et al, 2020).
- Patient-Reported outcome measures (PROMs) are used to measure patients perceptions about how one's life is affected by a chronic health condition (Sadeghi et al, 2014).

Aim

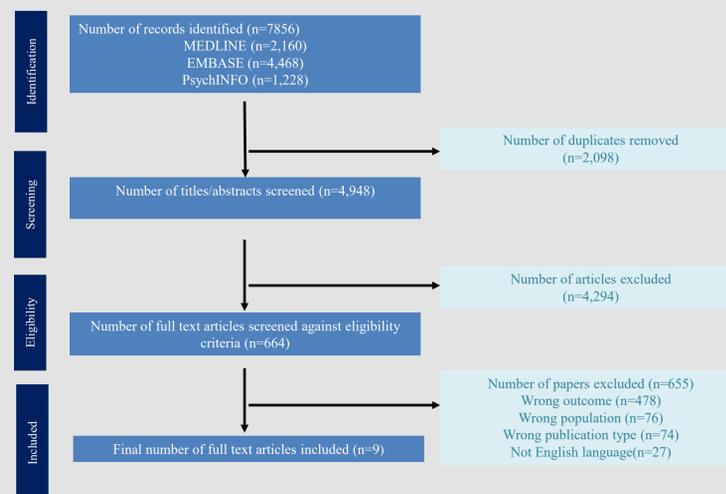
To identify child mental health PROMs that have been validated specifically in children and/or young people with epilepsy.

Methods

- We systematically searched MEDLINE, EMBASE and PsychINFO for validation studies of mental health PROMS in children and adolescents with epilepsy.
- Methodological quality of each paper was assessed using the Consensus-based Standards for the selection of health Measurement Instruments (COSMIN) guidance.

Results

- **A total of 10 mental health PROMs** were identified (2 epilepsy-specific and 8 generic) that have been validated in paediatric epilepsy (Table 1). The results of the search strategy are outlined below in the PRISMA flow diagram (Figure 1).
- **Internal consistency and convergent validity** were the more commonly assessed properties across studies.
- No PROM met standard criteria for all measurement properties.
- The strongest performing tool demonstrating the most evidence for methodological quality was the **Neurological Disorders Inventory Epilepsy for Youth (NDDI-Y-E)**.



Conclusion

- In conclusion there are a small number of validated mental health PROMs for paediatric epilepsy with enough evidence of robust measurement properties to recommend them.
- There remains a pressing need for further validation and evaluation of the included PROMs as well as other mental health PROMs before they can be considered and implemented by clinicians.

Results

Table: Methodological quality of studies validating mental health PROMs using the COSMIN Risk of Bias checklist

Instrument	Authors	PROM development	Internal structure		Reliability		Construct validity	Responsiveness	
			Structural validity	Internal consistency	Test retest	Criterion validity		Convergent validity	Construct approach: between groups
ADHD Rating Scale IV	Mercier et al (2016)			Very good				Doubtful	Very good
Conners Parent Rating Scale	Pal et al (1999)			Very good		Doubtful			
Aberrant Behaviour Checklist	Kaat et al (2021)		Adequate						
Behavioural Assessment Scale For Children	Bender et al (2008)						Very good		
Child Behavior Checklist	Bender et al (2008)						Very good		
Paediatric Symptom Checklist - 17	Wagner et al (2015)		Very good	Very good					
Screen For Children Anxiety Related Emotional Disorders Scale	Carrozzino et al (2016)			Very good					
Neurological Disorders Depression Inventory Epilepsy For Youth	Wagner et al (2016)	Doubtful		Very good		Very good		Adequate	
Neurological Disorders Depression Inventory Epilepsy For Youth	Viellard et al (2019)			Very good		Very good		Adequate	
Adolescent Psychosocial Seizure Inventory	Batzel et al (1991)	Doubtful		Very good		Inadequate			
The Symptom Questionnaire	Carrozzino et al (2016)			Very good					

Key: ● Very good ● Adequate ● Doubtful ● Inadequate

References

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- Sadeghi, S., Fayed, N., & Ronen, G.M. (2014). Patient-reported outcome measures in pediatric epilepsy: A content analysis using World Health Organization definitions. *Epilepsia*, 55(9), 1431-1437. doi: 10.1111/epi.12740