

Implications of different rates of adversity in functional disorders

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Background and Objectives

- In preliminary data, we found a 2.7-fold range in prevalence of childhood adversity across four functional/somatic symptom disorders(1). This study investigated the hypothesis that adversity exerts varying effects on these diagnoses.
- This suggests that mechanistic relationships between adversity and other illness-related variables may not be identical among these disorders.
- That is, even if mechanisms are partially shared, there must be some differences in processes linking adversity to clinical outcomes.
- Therefore, we developed a study with two complementary parts:

- Present findings from our retrospective study which investigated potentially shared and unique relations between adversity and key illness-related variables in the four groups of patients with functional/somatic symptom disorders.
- Conduct a scoping review published literature of similar studies to see if the concept still valid.

Methods

Part (1)

- This comparative study assessed childhood adversity (physical, sexual, or emotional abuse or neglect) using semi-structured face-to-face interviews.
- Disorders studied, cohort sizes, and rates of adversity previously presented were:
 - Somatic symptom disorder with predominant pain (SSD-Pain).
 - Functional neurological seizures (FND-sz)
 - Functional gastrointestinal disorders (FGID).
 - Functional vestibular disorders (FVestD)
- We examined associations of adversity with demographics, self-rated depression (PHQ-9), anxiety (GAD-7), alcohol use (AUDIT), pain severity (0-10 scale), and handicap [Dizziness Handicap Inventory (DHI), FVestD group only].

Part (2)

- We searched APA, PsycINFO, MEDLINE, and Embase for systematic epidemiological investigations done in humans that studied the prevalence of adversity in four functional disorders mentioned above.
- We looked for studies included at least one comparison group.

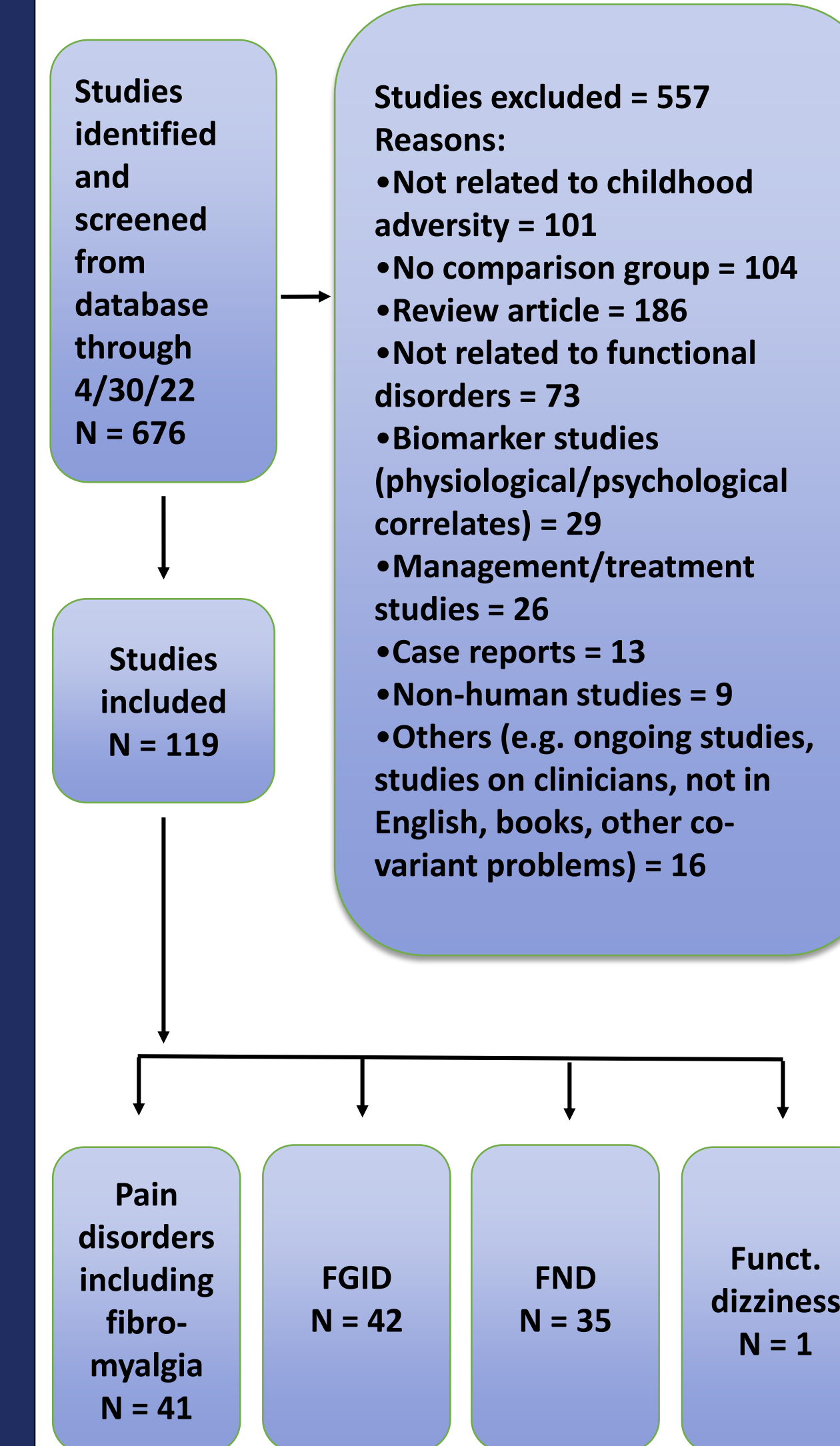
Table 1: Chart review cohort

Characteristics	Prevalence of any type of adversity	P-value
Total sample (N=199)		
Gender		
- Female	52/146 (35.6%)	<0.003
- Male	7/53 (13.2%)	
Marital status		
- Married	24/62 (38.7%)	<0.03
- Unmarried	31/131(23.7%)	
Depression (PHQ-9 >= 10)		
- History of adversity	29/65 (44.6%)	<0.0002
- No history of adversity	21/114(18.4%)	
- Adversity was unrelated to prevalence of anxiety (GAD-7>=10), problematic alcohol use [AUDIT-C>=4(men), >=3(women)] or pain severity overall or in any group		

Table 2: Adversity x Diagnostic Group

	SSD – Pain	FND – sz	FGID	FvestD	P - Value
Any type of childhood adversity (%)					
• Chart review cohort	N=51 43.1%	N=47 38.3%	N=51 21.6%	N=50 16.0%	<0.01
• Literature review	35-79%	7.6-65%	8.5-84%	22.0%	
Current stress (%)					
• Chart review cohort	39.2%	44.7%	25.5%	6.0%	<0.0001

Figure 1: PRISMA Flow Diagram



Discussion

- Adversity exerted common and divergent effects depending on its prevalence and prevalence of other variables.
- Adversity doubled the rate of depression in all groups, except SSD-Pain where pain prevalence was highest.
- Findings are consistent with literature showing that adversity increases risk for FND-Sz (2), worsens morbidity in fibromyalgia by increasing co-existing depression (3), and increases handicap in patients with vestibular disorders (4).
- No study compared adversity in 4 different functional disorders using the same method in the literature except ours.

Conclusions

- Adversity is not linked to functional disorders through a singular or generic mechanism.
- Increasingly sophisticated concepts of adversity are needed to understand its direct and interactive effects on morbidity of functional/somatic symptoms disorder

References

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