

Abstract 4: Causal study of the link between traumatic events and 40 stress anxiety symptoms in 1465 patients, Chiren Therapy Centre, Limerick, Ireland. (September 2019 -September 2023)

Objectives:

To investigate the causal link between traumatic events and 40 stress anxiety symptoms in 1465 clinically assessed during patients first visit.

Background:

This study is motivated by the extensive range of symptoms commonly associated with exposure to trauma stress. We have quantified the prevalence and intensity of 40 symptoms correlated with trauma stress exposure, drawing from literature sources including the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5). The study seeks to elucidate the causal pathways, examining the impact of exposure to traumatic events on the onset of these 40 stress and anxiety symptoms. Our null hypothesis posits no causal relationship between recalled traumatic or stressful events and the 41 stress anxiety symptoms under investigation.

Methods:


Drawing from data collected at the Chiren Therapy Centre in Limerick, Ireland, spanning from September 2019 to September 2023, this study initially assessed patients' exposure to traumatic events through inquiries about recollection of physical or emotional trauma or stressful situations preceding or coinciding with symptom onset. The practitioner scored a comprehensive list of 40 symptoms, with intensities measured on a scale of 0 to 10. Symptom scores were then categorized as "Yes" if any intensity was reported or "No" if not. Statistical analyses, encompassing descriptive and multivariate techniques, were conducted using Oracle Analytics, alongside Chi-square and P-value tests in SPSS version 28.

Findings:

Significant associations were observed between exposure to traumatic stress events and 31 specific anxiety symptoms. Notably, Poor concentration exhibited the highest association (Chi-square = 95.569, $P < 0.0000$), followed by Fatigue (Chi-square = 81.979, $P < 0.0000$) and Low self-esteem (Chi-square = 74.696, $P = 0.0000$). Among the symptoms with the lowest level of significance were sleep disturbances (Chi-square = 6.052, $P < 0.0139$), Tremor (Chi-square = 5.126, $P < 0.0236$), and Dizziness (Chi-square = 4.173, $P < 0.0411$), see Table 1.

Interpretation:

The significant associations between exposure to traumatic stress events and specific anxiety symptoms provide valuable insights into the wide range of psychological effects stemming from trauma. This finding confirms our causal suspicions; however, we still believe that symptoms that did not show association at the first visit may become relevant in a later stage of trauma stress exposure. This understanding is crucial for clinicians and researchers, equipping them to recognize and address the diverse symptoms individuals may exhibit post-trauma. Additionally, trauma's emotional toll can profoundly impact self-esteem, fostering feelings of inadequacy or worthlessness. Recognizing these



interconnected dynamics aids in developing more targeted interventions and support systems for individuals grappling with the aftermath of traumatic events.




References

Wang, Y.-R., Ford, M. T., Credé, M., Harms, P. D., & Lester, P. B. (2023). A meta-analysis on the crossover of workplace traumatic stress symptoms between partners. *Journal of Applied Psychology*, *108*(7), 1157–1189. <https://doi.org/10.1037/apl0001069>

Miori, S.; Sanna, A.; Lassola, S.; Cicolini, E.; Zanella, R.; Magnoni, S.; De Rosa, S.; Bellani, G.; Umbrello, M. Incidence, Risk Factors, and Consequences of Post-Traumatic Stress Disorder Symptoms in Survivors of COVID-19-Related ARDS. *Int. J. Environ. Res. Public Health* **2023**, *20*, 5504. <https://doi.org/10.3390/ijerph20085504>

Table 1. Causal link between exposure of traumatic events and stress anxiety spectrum symptoms in 1465 patients. Chiren Therapy Centre, Limerick, Ireland, September (2019 to September 2023).

ICD 11	Symptoms	Chi-square	P-value
MB21.A	Poor concentration	95.569	0.0000
MG22	Fatigue	81.979	0.0000
MB28.9	Low self esteem	74.696	0.0000
MB24.5	Depression	74.534	0.0000
MB21.B	Racing though	69.084	0.0000
MB22.1	Decrease Libido	64.504	0.0000
MB23.H	Panic attacks	63.905	0.0000
MB24.3	Anxiety	63.521	0.0000
MB24.H	Worry	59.491	0.0000
MB24.F	Restlessness	53.812	0.0000
MC81.2	Palpitation	52.34	0.0000
MB22.7	Tiredness	49.524	0.0000
ME86.3	Symptom or complaint of the chest	46.324	0.0000
MF50.2Y	Irritability	42.881	0.0000
MD11.9	Nasal Congestion	33.567	0.0000
8A8Z	Headache	32.703	0.0000
MB40.1	Pain during light touch on the skin	28.497	0.0000
MB20.2	Brain Fogginess	27.401	0.0000
6B42	Prolong Grief	25.566	0.0000
MB24.C	Insomnia	25.402	0.0000
MG30.1	Pain head to toes	22.924	0.0000
6B4Z	Stress	13.723	0.0002
MB26.7	Feeling unfairly treated	11.151	0.0008
ME05.0	Constipation	10.817	0.0010
ME85	Stiffness of join	10.163	0.0014
MB26.A	Self-harming	8.341	0.0039
MG25	Feeling Ill	6.562	0.0104
MG41	Sleep Disturbance	6.053	0.0139
8A04.Z	Tremor	5.126	0.0236
MB48.Z	Dizziness	4.173	0.0411
MD11.5	Shortness of breath	3.439	0.0637
MD36.Y	Dry Throat	3.288	0.0698
MB24.A	Fear	3.156	0.0756
9A10.Z	Dry eyes	2.92	0.0875
DD91.OZ	Irritable Bladder	2.639	0.1043
EE00.Z	Excessive sweating	1.539	0.2148



DD90.3	Stomach upset, indigestion, heart burn	0.835	0.3608
MC40	Plugged feeling of the ear	0.561	0.4539
7A0Z	Irritable bowel syndrome	0.444	0.5052
DA02.1	Dry Mouth	0.038	0.8454