

Abstract 5: Longitudinal analysis of symptom variations following traumatic and stressful events: implications for chronic degenerative conditions, in 1465 patients, Chiren Therapy Centre, Limerick, Ireland.

Objectives: To investigate the longitudinal variations in symptoms associated with traumatic and stressful events over time, with a focus on understanding potential correlations with chronic degenerative conditions.

Background:

In clinical practice, a wide range of symptoms is often observed in individuals who have experienced traumatic or stressful events. Understanding how these symptoms may vary over the years following such events is crucial. This exploration may also serve as an initial step in identifying symptoms associated with chronic degenerative conditions. By studying the evolution of symptoms over time, we can gain valuable insights into the long-term effects of trauma and stress on individuals' health and well-being. This approach not only helps in providing better care and support to those affected but also contributes to the broader understanding of the impact of trauma and stress on chronic health conditions.

Methods:


Data was collected from the Chiren Therapy Centre in Limerick, Ireland, spanning from September 2019 to September 2023. 1465 Patients were asked whether they recalled any physical or emotional trauma or stressful situations before or during the onset of symptoms. If affirmative, they were asked to provide an estimated date, categorized into four recall periods (No recall, ≤ 10 years, >10 to 20 years, >20 years). A comprehensive list of 40 symptoms associated with anxiety and stress was compiled, with each symptom's intensity rated on a scale of 0 to 10. Percentage increases in symptom intensity were calculated for patients with no recall of trauma and those with more than 20 years since the occurrence of trauma. Data organization and analysis were performed using Oracle Analytics.

Findings:

Our analysis of symptom intensity and percentage increases reveals significant findings, particularly after more than 20 years of trauma and stress exposure. Table 1 illustrates notable increases in symptoms such as tiredness (8.28; 19%), racing thoughts (7.98; 20%), stress (8.00; 21%), and worry (7.87; 22%). Conversely, when analyzing symptoms with the highest increases over the same period, Table 2 highlights pronounced changes in prolonged grief (5.5; 65%), constipation (3.65; 64%), pain during light touch on the skin (3.71; 56%), feeling unfairly treated by others (4.96; 54%), tremors (2.48; 51%), and dry eyes (3.86; 48%).

Interpretation:


The study's findings shed light on the lasting consequences of extended exposure to trauma and stress on both the physical and emotional well-being of individuals. The significant increases in symptom intensity observed over more



than 20 years emphasise the persistent burden of psychological distress. Symptoms like tiredness, racing thoughts, stress, and worry, commonly associated with chronic stress and anxiety, highlight the pervasive influence of these conditions, potentially compromising individuals' quality of life and daily functioning.

Furthermore, identifying symptoms with the most substantial increases over the same period offers insight into the potential long-term consequences on chronic conditions. For example, feelings of being treated unfairly by others may exacerbate psychiatric conditions such as depression, anxiety, or PTSD, perpetuating a cycle of emotional distress. Tremors could be indicative of underlying neurological disorders like Parkinson's disease, essential tremor, or dystonia. Dry eyes may result from disruptions in tear production heightened by prolonged exposure to stress hormones, leading to symptoms of dry eye syndrome. Experiencing pain during light touch on the skin may signal neurosensory abnormalities and central sensitization processes, potentially contributing to chronic pain conditions such as fibromyalgia or neuropathic pain disorders. Additionally, prolonged grief may signify unresolved emotional trauma and ongoing mourning processes, while physical symptoms like constipation and tremors may reflect the impact of chronic stress on the autonomic nervous system and gastrointestinal motility. These findings underscore the complex interplay between psychological and physiological factors in the manifestation and progression of chronic conditions associated with prolonged trauma and stress exposure.

While these new findings cannot conclusively establish a direct link between chronic stress and chronic degenerative conditions, they do provide valuable insights that may inform further research. Specifically, they highlight the need to investigate the natural progression from traumatic events to chronic stress and subsequent chronic degenerative conditions. By exploring the pathways through which traumatic experiences lead to prolonged stress and eventually contribute to the development or exacerbation of chronic degenerative conditions, researchers can gain a deeper understanding of the underlying mechanisms involved. This, in turn, may pave the way for the development of more targeted interventions aimed at preventing or mitigating the long-term impact of trauma and stress on individuals' health outcomes. Therefore, while these findings may not offer definitive answers, they serve as a springboard for future investigations into this complex and multifaceted relationship.






References

Weber S, Bühler J, Vanini G, Loukas S, Bruckmaier R, Aybek S. Identification of biopsychological trait markers in functional neurological disorders. *Brain*. 2023 Jun 1;146(6):2627-2641. doi: 10.1093/brain/awac442. PMID: 36417451; PMCID: PMC10232283.



Table 1. Distribution of stress anxiety symptoms intensity averages across recall traumas categories at Chiren Therapy Centre, Limerick, Ireland, September 2019 – September 2023.

ICD11 Code	Symptoms	No recall	> 20
MB22.7	Tiredness	6.73	8.28
MB21.B	Racing thoughts	6.37	7.98
6B4Z	Stress, unspecified	6.29	8.00
MB24.H	Worry	6.16	7.87
MG41	Sleep disturbance	6.07	7.63
MB24.3	Anxiety	5.69	7.43
MB24.C	Irritability	5.64	7.35
MB24.F	Restlessness	5.40	7.00
MG22	Fatigue	5.30	7.45
MB21.A	Poor concentration	4.85	6.69
MB20.2	Brain fog or Fibro-fogginess	4.83	6.90
ME85	Stiffness of joint	4.65	6.64
MB22.1	Decreased libido	4.55	7.14
MB28.9	Low self-esteem	4.54	7.08
MB24.5	Depressed mood	4.48	6.84
MG30.1	Pain head to toes	4.14	6.50
QD83.1	Problem associated with stressful work	3.96	5.59
8A8Z	Headache disorders	3.65	5.58
MD11.9	Nasal congestion	3.60	5.77
MB24.A	Fear	3.32	6.09
ME86.3	Symptom or complaint of the chest	2.95	4.88
DD90.3	Stomach upset, indigestion, heartburn	2.94	4.82
7A0Z	Insomnia disorders	2.65	4.83
MC81.2	Palpitations	2.60	4.51
DA02.1	Dry mouth	2.31	4.11
DD91.0Z	Irritable bowel syndrome	2.29	3.86
MB26.7	Feeling unfairly treated by others	2.28	4.96
MG25	Feeling ill	2.17	4.22
EE00.Z	Excessive sweating	2.16	3.99
MB23.H	Panic attack	2.09	4.13
MB48.Z	Dizziness	2.03	3.56
9A10.Z	Dry eyes	2.02	3.86
MD11.5	Shortness of breath	2.00	3.13
MC40	Plugged feeling of the ear	1.99	3.32
6B42	Prolonged grief	1.95	5.55



MB40.1	Pain during light touch on the skin	1.63	3.71
MF50.2Y	Irritable bladder and/or bedwetting	1.63	3.48
MD36.Y	Dry throat	1.50	3.14
ME05.0	Constipation	1.32	3.65
8A04.Z	Tremors	1.22	2.48

Table 2. Distribution of percentages increases in stress anxiety symptoms intensity averages across recall traumas categories at Chiren Therapy Centre, Limerick, Ireland, September 2019 – September 2023.

ICD 11 Codes	Symptoms	No recall	> 20	% increases
6B42	Prolonged grief	1.95	5.55	65
ME05.0	Constipation	1.32	3.65	64
MB40.1	Pain during light touch on the skin	1.63	3.71	56
MB26.7	Feeling unfairly treated by others	2.28	4.96	54
MF50.2Y	Irritable bladder and/or bedw etting	1.63	3.48	53
MD36.Y	Dry throat	1.50	3.14	52
8A04.Z	Tremors	1.22	2.48	51
MB23.H	Panic attack	2.09	4.13	49
MG25	Feeling ill	2.17	4.22	49
9A10.Z	Dry eyes	2.02	3.86	48
EE00.Z	Excessive sw eating	2.16	3.99	46
MB24.A	Fear	3.32	6.09	45
7A0Z	Insomnia disorders	2.65	4.83	45
DA02.1	Dry mouth	2.31	4.11	44
MB48.Z	Dizziness	2.03	3.56	43
MC81.2	Palpitations	2.60	4.51	42
DD91.0Z	Irritable bow el syndrome	2.29	3.86	41
MC40	Plugged feeling of the ear	1.99	3.32	40
ME86.3	Symptom or complaint of the chest	2.95	4.88	39
DD90.3	Stomach upset, indigestion, heartburn	2.94	4.82	39
MD11.9	Nasal congestion	3.60	5.77	38
MG30.1	Pain head to toes	4.14	6.50	36
MB22.1	Decreased libido	4.55	7.14	36
MD11.5	Shortness of breath	2.00	3.13	36
MB28.9	Low self-esteem	4.54	7.08	36
8A8Z	Headache disorders	3.65	5.58	35
MB24.5	Depressed mood	4.48	6.84	35
ME85	Stiffness of joint	4.65	6.64	30
MB20.2	Brain fog or Fibro-fogginess	4.83	6.90	30
QD83.1	Problem associated w ith stressful w ork schedule	3.96	5.59	29
MG22	Fatigue	5.30	7.45	29
MB21.A	Poor concentration	4.85	6.69	28
MB24.3	Anxiety	5.69	7.43	23
MB24.C	Irritability	5.64	7.35	23
MB24.F	Restlessness	5.40	7.00	23
MB24.H	Worry	6.16	7.87	22
6B4Z	Stress, unspecified	6.29	8.00	21
MG41	Sleep disturbance	6.07	7.63	20
MB21.B	Racing thoughts	6.37	7.98	20
MB22.7	Tiredness	6.73	8.28	19