

Abstract 17: Generalized Anxiety Disorder (GAD), analysis in 193 patients, Chiren Therapy Centre, Limerick, Ireland, (September 2017 - September 2023).

Objectives:

1. To conduct a causal stratified assessment by sex and age groups using data from 193 patients, focusing solely on information gathered during their first visit.
2. To perform a trend analysis of treatment outcomes after completing five treatments in a subset of 73 patients with GAD.

Background:

Generalized Anxiety Disorder (GAD) manifests as persistent, excessive worry and anxiety lasting six months or more, accompanied by symptoms like restlessness, fatigue, and difficulty concentrating. The financial burden of GAD encompasses healthcare expenses and productivity losses due to impaired functioning. GAD's aetiology involves genetic predisposition, environmental stressors, and neurobiological factors, including neurotransmitter dysregulation. Recommended interventions include cognitive-behavioural therapy (CBT), pharmacotherapy with SSRIs or SNRIs, and lifestyle modifications. Combining therapy and medication yields the most favourable outcomes in managing GAD, addressing both its psychological and physiological components for comprehensive treatment. The role of trauma stress exposure in contributing to Generalized Anxiety Disorder (GAD) remains uncertain. Addressing the complexity of GAD is requiring the establishment of a standardized methodology for assessment. To meet this need, we introduced two novel indicators: the 'Patient Energy Scale' (PE) and the 'Stress Anxiety Spectrum' (SAS). While the PE was designed to quantify common complaints such as lack of energy, tiredness, or fatigue among patients, the SAS aims to measure the spectrum of symptoms commonly associated with stress and anxiety. Through the observation of the graphic evolution of hundreds of patients in our Trauma Stress Relief (TSR) software, we noticed a trend crossover between the declining SAS line and the increasing PE line after one or more treatments. This crossover, termed the LINQI indicator, blends the Chinese concept of "LI" for restoration, "N" for neurophysio-pathological, and "QI" representing ancestral Chinese energy.

All patients received treatment based on the "Chiren" protocols, with the primary protocol known as the "Ramirez Key," which involves a three-point combination. This combination includes points located on each hand in an area identified by Master Tung as Chong zi 22.01, and Yintang (EX-HN 3), known for its mentally stabilizing effect in Traditional Chinese Medicine (TCM). The selection of these points was based on observed outcomes following needle insertion, where patients frequently reported sensations of clarity, relaxation, and reduced pain levels, sometimes experiencing immediate relief. An immediate treatment response register was created as a result. Subsequently, the Ramirez Key protocol has become the standard protocol used in 100% of patients, regardless of their chief complaint.

Additional specific protocols may be incorporated based on individual chief complaints. It is essential to note that we do not offer localized treatment for specific body part pain.

Guided by the principle of the Neurophysio-pathological theory, our treatment aims to stimulate a complex parasympathetic reaction to restore the imbalance in the hypothalamic-pituitary-adrenal axis expressed by the SAS. Furthermore, this novel acupuncture model diverges from the Traditional Chinese Medicine concept of energy or Qi regulation, focusing instead on harnessing the neurophysiological power to induce relaxation and pain relief.

This study aims to comprehensively explore GAD assessment, treatment, and outcomes, employing various methods. This includes conducting a causal stratified assessment by sex and age groups using data from 193 patients, followed by a trend analysis after completing five treatments with a subset of 73 patients. The goal is to provide insights into GAD management and its demographic variations.

Methods:

Data for this study were collected from the Chiren Therapy Centre in Limerick, Ireland, spanning from September 2019 to September 2023. Two distinct population groups were selected. The first group comprised 193 patients suffering from GAD at their first visit; their chief complaints were recorded and classified based on the International Classification of Diseases version 11 (ICD-11). Exposure to trauma stress was determined by asking each patient if they recalled any physical or emotional trauma or stressful situations preceding or during symptom onset. Stress-Anxiety Spectrum (SAS) scores, derived from a list of 41 symptoms rated on a scale of 0 to 10, categorized patients as experiencing functional stress (≤ 40) or dysfunctional stress (> 40). Stratified analyses were conducted by gender and age groups. The second population group consisted of 73 GAD patients who completed six visits, with the first visit serving as the baseline assessment and subsequent visits occurring after each of five treatments. Patients recalling any physical or emotional trauma were categorized into four recall groups (No recall, ≤ 10 years, > 10 to 20 years, > 20 years). Pain intensity was assessed using the Visual Analogue Scale (VAS), adjusted for graphical comparability. Symptom intensity was compared between baseline and the sixth visit assessment. Patients also self-reported their experiences using the Patient Perceived Energy Scale (PE), ranging from 0 to 100. Additionally, patients completed the Hospital Anxiety and Depression Scale (HADS), adjusted to a scale of 0 to 100. Trends analysis of SAS, PE and VAS by gender, age group, recall groups, trauma, criterion A, and ongoing trauma stress. The LINQI indicator was observed at each stratification. Data analysis was performed using Oracle Analytics, Excel, and statistical tests, including the Kruskal–Wallis test in SPSS version 28, with writing support from ChatGPT.

Findings:

Not significant associations were found between exposure to traumatic stress events and SAS score (Chi-square = 1.986, $p < 0.1588$), age group (Chi-square = 5.001, $p = 0.4158$), and gender (Chi-square = 3.039, $p = 0.3857$) with full data are summarized in table 1.

Variations are observed in all recall trauma groups after five treatments, with an average reduction of 51% in SAS, 79% in VAS, and a 34% increase in PE. Specifically, the group with recall periods less than 10 years exposure shows a reduction of 58% in SAS, and the group with recall periods between 10 to 20 years exposure shows a 100% reduction in VAS. Moreover, the group with recall periods exceeding 20 years exhibits a 44% increase in PE, as illustrated in Table 2.

In the trends analysis depicted in Figure 1, Graph 1, we observe significant reductions in SAS and VAS trends alongside an increase in PE. The LINQI indicator is reported after one or two treatments. In the recall groups, the >20 years exposure category exhibits the highest SAS of 84 and with a reduction of 51% in almost different stratum.

The intensity of symptoms chart highlighted that worry (8.90), anxiety (8.72), Racing thoughts (8.64), stress (8.61), and irritability (6.39) were the most pronounced symptoms (Figure 2).

Interpretation:

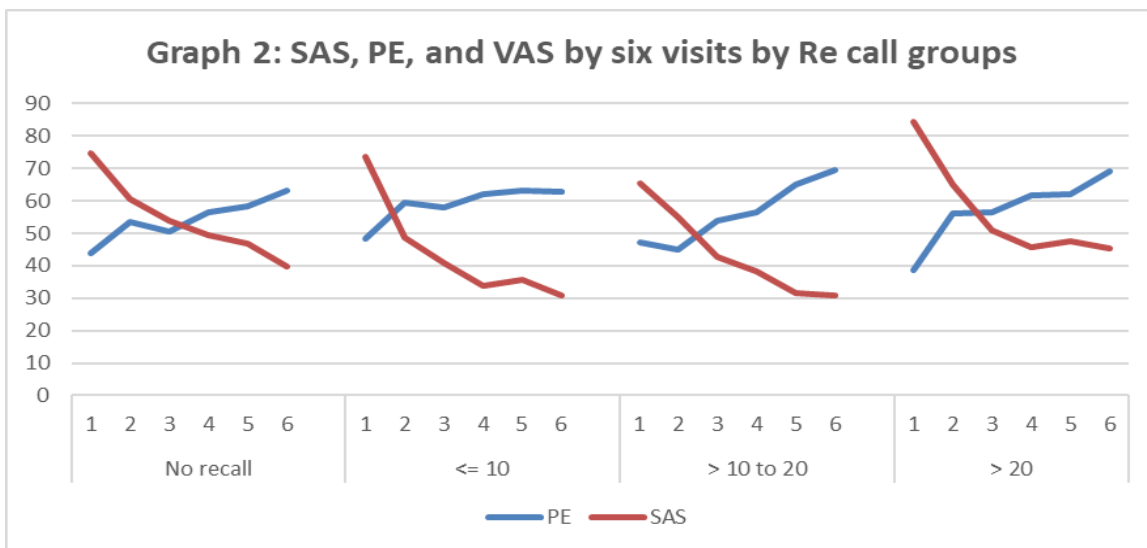
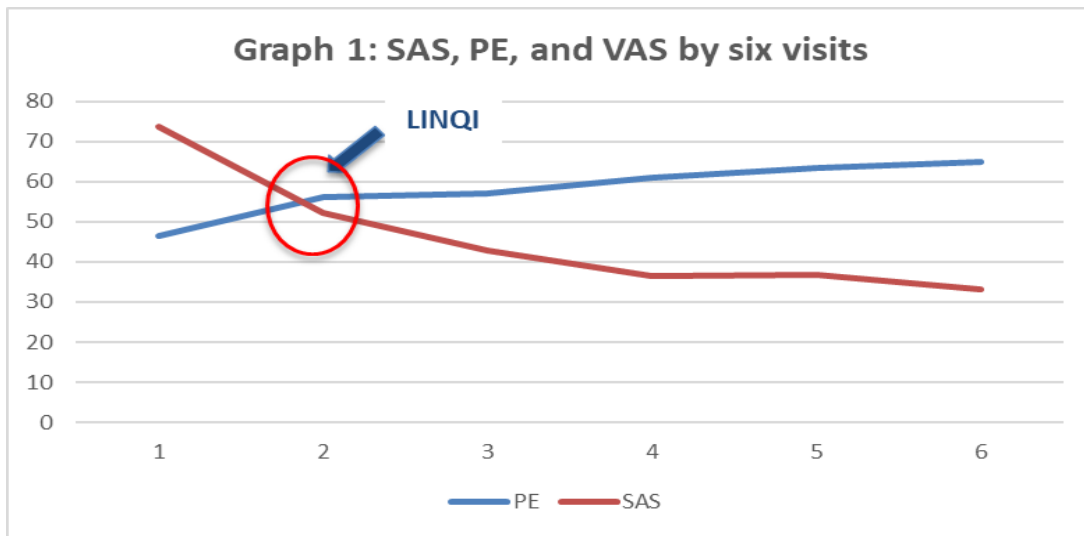
The study reveals insignificant associations between traumatic stress exposure and SAS score, age, and gender in Generalized Anxiety Disorder (GAD) patients. However, notable variations occur post-treatment, with an average 51% reduction in SAS, 79% in VAS, and a 34% increase in PE. Specifically, shorter recall periods show substantial SAS reduction, while longer periods exhibit increased PE. Trends analysis indicates consistent improvement in SAS and VAS with treatment, with the LINQI indicator emerging early. The most prominent symptoms include worry, anxiety, racing thoughts, stress, and irritability. These findings underscore treatment efficacy and highlight the multifaceted nature of GAD symptoms. The absence of significant associations may stem from similarities between the measuring tools, which predominantly assess stress and anxiety symptoms. Despite this, the indicators revealed positive responses to treatment, as evidenced by notable reductions in SAS and VAS scores, along with an increase in PE after therapy. This discrepancy suggests that while the initial assessment tools may share common features, the treatment intervention effectively targets underlying anxiety and stress-related symptoms, leading to clinically significant improvements. Thus, while the diagnostic tools may lack discriminatory power, the therapeutic outcomes provide evidence of treatment efficacy in addressing Generalized Anxiety Disorder symptoms. Further research is warranted to delve deeper into the mechanisms behind these findings and to refine treatment strategies for individuals affected by GAD. In conclusion, while our study offers promising evidence of the therapy's efficacy in alleviating trauma-related symptoms in GAD patients, addressing limitations through biomarker analysis, longitudinal assessments, and comparative effectiveness research is paramount.

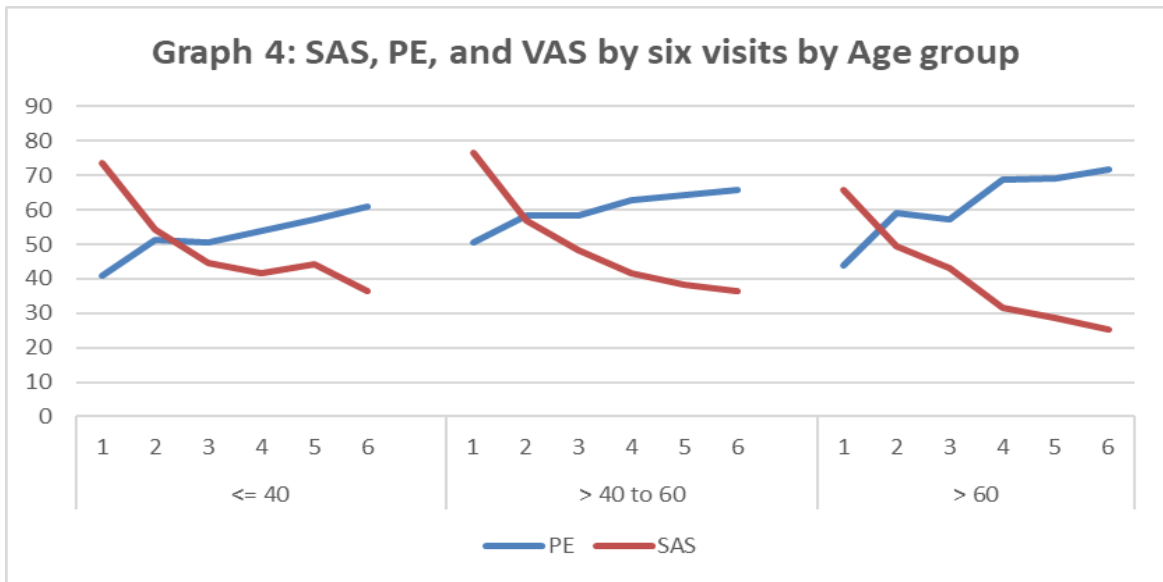
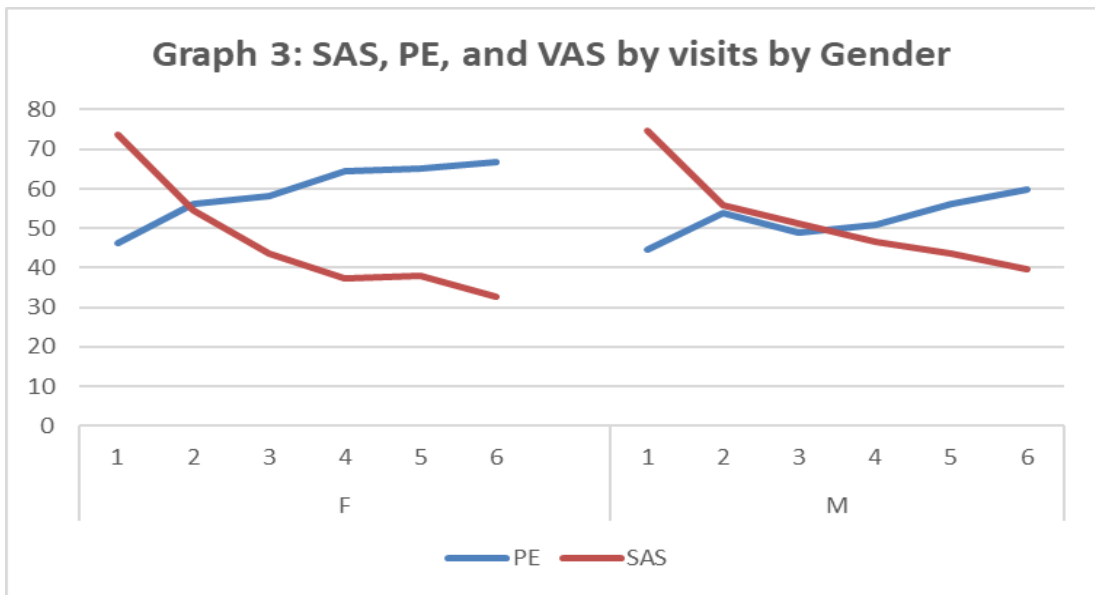
References

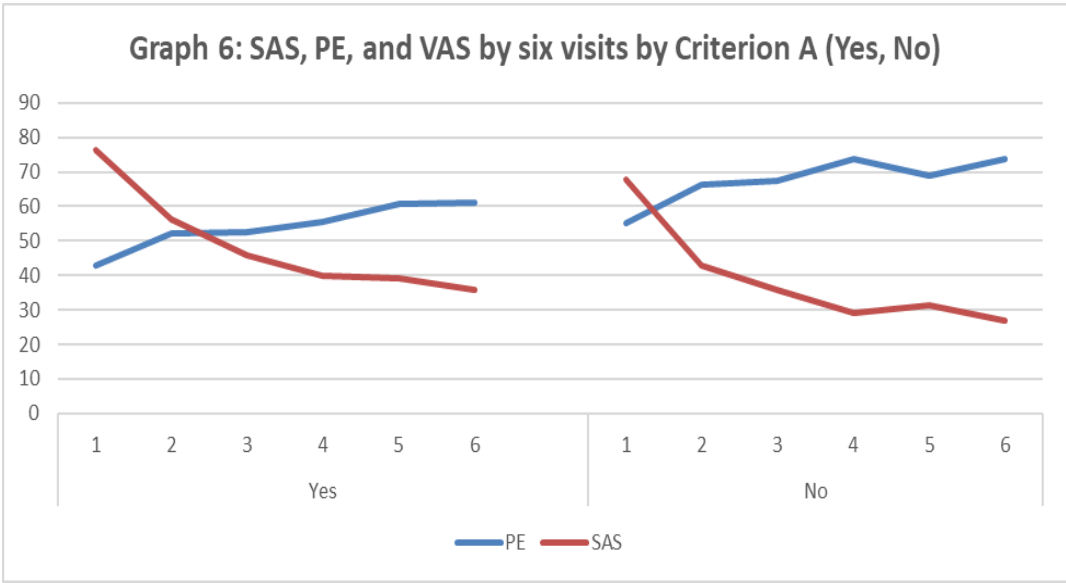
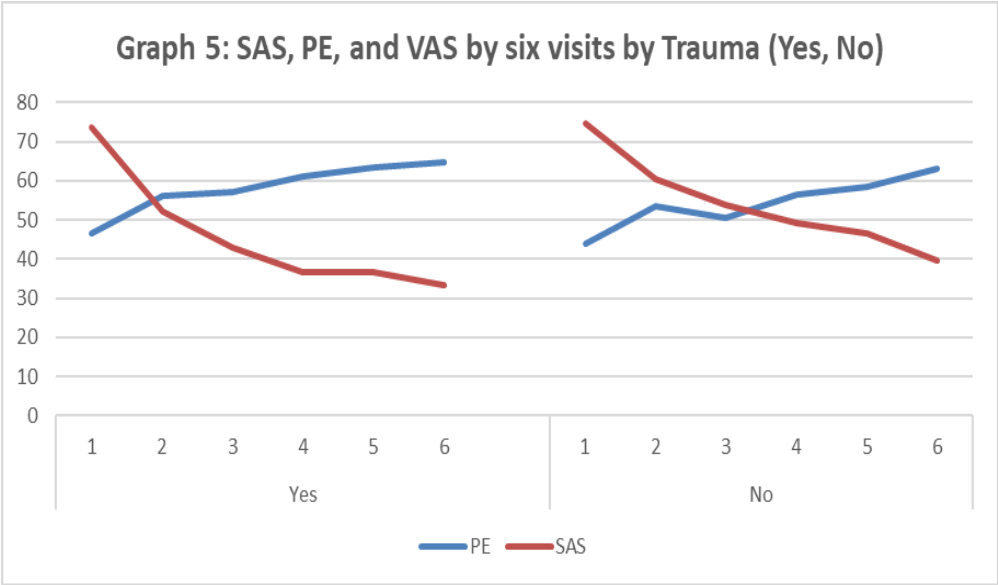
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Figure 1: Treatment impact measured by Stress anxiety spectrum (SAS), Visual analogue scale (VAS) and perceived energy (PE) by six visits by different stratifications in Generalized Anxiety Disorder patients, Chiren Therapy Centre, Limerick, Ireland, September 2019 – September 2023.







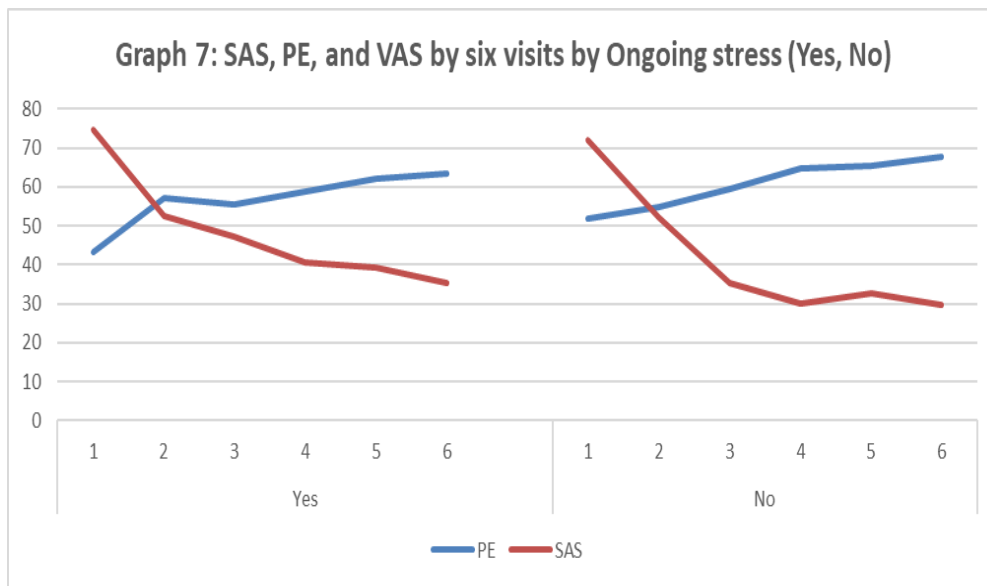


Figure 2: Comparison of Intensity of top 15 Stress Anxiety Symptoms at Visits 1 and 6: Analysis of 73 Generalized Anxiety Disorder (GAD) Patients at Chiren Therapy Centre, Limerick, Ireland (September 2019 – September 2023).

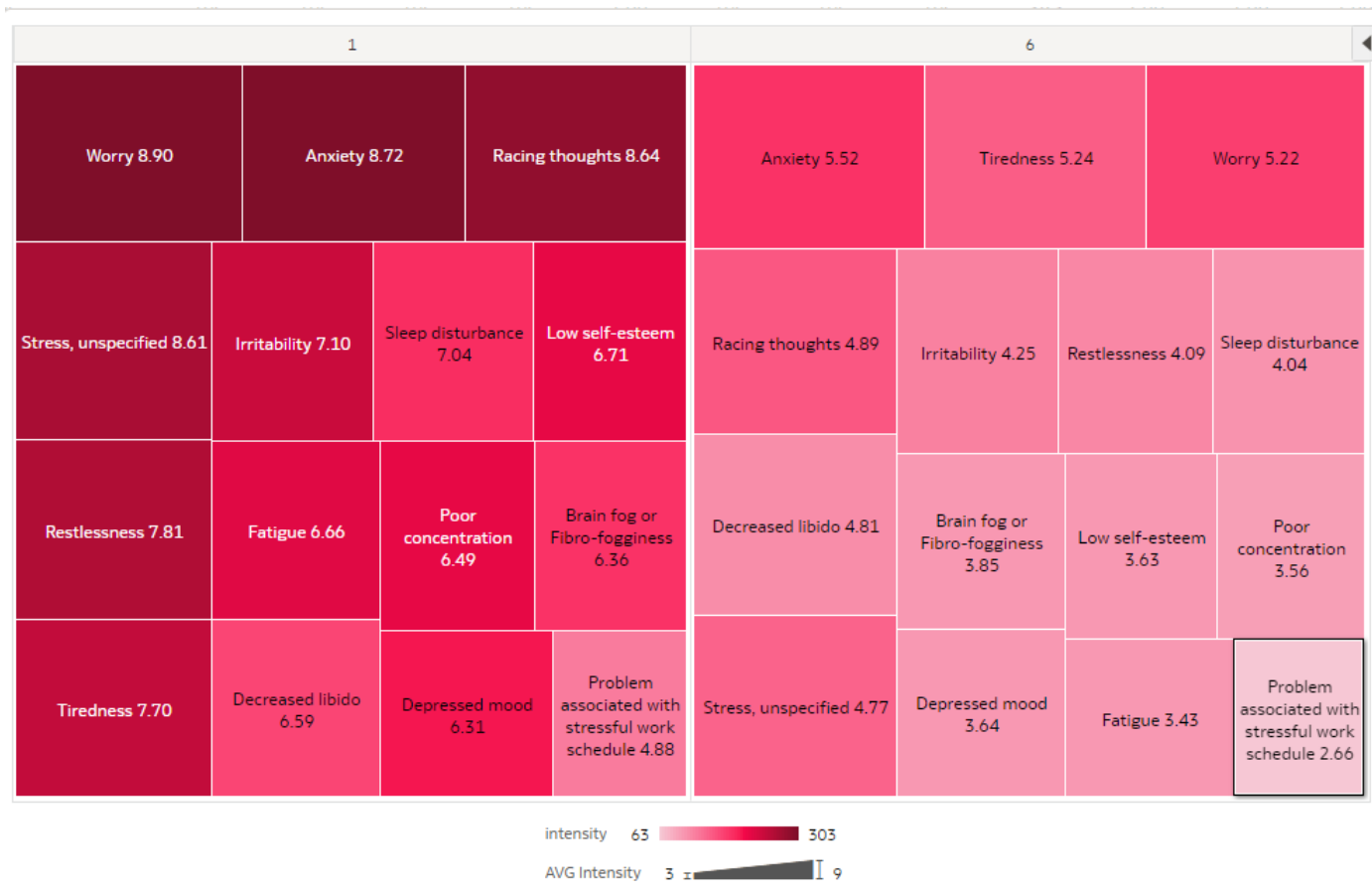


Table 1. Causal link between traumatic events and stress anxiety spectrum symptoms in 193 Generalized Anxiety Disorder patients, stratified by Age group and gender. Chiren Therapy Centre, Limerick, Ireland, September (2019 to September 2023).

		SAS		Chi-Square	P-value
		> 40	<= 40		
	Trauma exposure				
	Yes	116	13		
	No	53	11		
	Grand Total	169	24	1.986	0.1588
The p-value is 0.0001. significant at $p < 0.05$.					
Age group	Trauma exposure	> 40	<= 40	Chi-Square	P-value
<= 40	Yes	46	5		
	No	28	8		
> 40 to 60	Yes	61	6		
	No	22	3		
> 60	Yes	9	2		
	No	3	0		
	Grand Total	169	24	5.001	0.4158
The p-value is 0.0000. significant at $p < 0.05$.					
Gender	Trauma exposure	> 40	<= 40	Chi-Square	P-value
F	Yes	83	9		
	No	36	8		
M	Yes	33	4		
	No	17	3		
	Grand Total	169	24	3.039	0.3857
The p-value is 0.0000. significant at $p < 0.05$.					

Table 1. Percentage of variation by indicator, stratified by Trauma Recall groups, after five treatments in 73 Generalized Anxiety Disorders (GAD) patients. Chiren Therapy Centre, Limerick, Ireland, September (2019 to September 2023).

	PE % increases	SAS % Reduction	VAS % Reduction	HADS Anxiety Reduction	% Depression Reduction	%
No recall	30	47	47	26	32	
<= 10	30	58	69	34	31	
> 10 to 20	32	53	100	24	38	
> 20	44	46	100	25	27	
Overall	34	51	79	28	32	