

# Profile of Panic Disorder with and without Agoraphobia patients in City of Mosul

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## ABSTRACT

**Aim:** To measure the severity of the disorder with and without Agoraphobia in P.D. patients and determine the relation of comorbid psychological symptoms and conditions in these two groups.

**Methods:** The study is a cross-sectional observational study done in a tertiary psychiatry care center from October 2019 to August 2020. The Patients age between (17–54) Y with Panic Disorder (P.D.) were separated into two groups Panic Disorder without Agoraphobia P.D and Panic Disorder with Agoraphobia (PDAG), which were associated with alteration in the severity of anxiety by {Panic Disorder Severity Scale (PDSS), the incidence of comorbidity and their effect on the severity of signs and symptoms. All statistical investigations were carried by SPSS V. 25.0. the statistical test is a p-value of less than 0.05 has been taken to indicate a significant difference.

**Results:** The present study included (118) patients (95) subjects were panic disorder, and 23 subjects were Panic Agoraphobia disorder. The finding shows that the demographical characteristic of P.D. and PAD. Diagnosis of the two groups based on DSM5 and the Cymbalta was given to the PDA group 12 (20.33%), while Sertraline was given to the P.D. group 11 (18.96%).

**Conclusion:** The magnitude of signs as calculated on the consistent scale for P.D. (PDSS score 21.3 in P.D. group, PDAG, 13.5;  $p=0.035$ ), the occurrence of comorbidity (60/100 in P.D. group 83.3 percentage in PDAG group,) were substantially different in both groups. The prevalence of Agoraphobia was related to further severe disease, the expanded incidence of fear, and additional symptoms of anxiety, comorbid psychological disorders,

**Keywords:** Panic , Agoraphobia, Iraq

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## INTRODUCTION

Panic Disorder term has two overlappings, even slightly confusing, meanings. Originally termed Agoraphobia with panic attacks and subsequently renamed panic disorder (P.D.) with or without Agoraphobia, P.D. is one of the most investigated anxiety disorders due to its high-level rate of lifetime incidence accounts for approximately 5.1% of the adult population in the USA<sup>1-5</sup>. The Panic disorder is frequently accompanied by Agoraphobia, which implies anxiety about, or avoidance of, situations in which it might not be easy to dodge or receive support in the event of facing panic symptoms<sup>6,7</sup>. Two assumptions have been suggested the relationship between Agoraphobia and P.D. The first one was presented by Grant et al<sup>8</sup>. Agoraphobia is a sub-type of P.D. It, along with Agoraphobia, might be a dangerous complication of P.D.<sup>9</sup>, and chronic panic attacks seemed to come from Agoraphobia<sup>1</sup>. On the other hand, the second assumption assumed that Agoraphobia might be a separate disease autonomous of P.A. The inclusion of many factors, such as comorbidities, stress, etc., including P.D. in one study, makes this study unique. Specifically, we aim to investigate and compare severity in P.D. patients suffering from and without Agoraphobia; on the other hand, we are interested in examining the association, if any, with comorbid to the severity of symptoms in these two groups confirm and mental illnesses.

## METHODS

This was a double-blind, randomized controlled trial performed in the City of Mosul. The subjects were at an average age of 46.2 years old (range 18–75 years old). They were recruited from Ibn Sina Teaching Hospital's out-

patient clinic at the City of Mosul, Iraq. These are chosen according to DSM-IV diagnosis of panic disorder with or without Agoraphobia. Members were communicated to establish an interview for obtaining data and consent. The procedures were set in place to confirm the privacy of the participants. The study protocols, procedures, and consent form were approved by the?> Information sheets were filled with the initial interview. The interviews and study data were systematically documented.

**Measurements:** The measurements were performed as described previously in [ref]. Similar to previous studies, P.D. was estimated by the "Panic disorders severity scale (PDSS)" scale. "The PDSS involves (7) items, each rated on a 5-point scale, ranging from 0 to 4. The items assess the panic frequency, distress during the panic, panic-focused anticipatory anxiety, phobic avoidance of situations, phobic avoidance of physical sensations, weakening in work performance, and decreased social performance. The overall evaluation is made by an entire score, which is calculated by summing the scores for all seven items. The whole scores range from 0 to 28." The research used the PDSS Arabic edition, which demonstrated good quality test-retest the inter-rater reliability was ( $r=0.83$ ) while reliability ( $r=0.89$ ).

**Data analysis:** The statistical software program SPSS was used to perform statistical analysis. Data are reported as mean (S.D.). For all statistical tests, the level of significance was set at  $P = 0.05$ .

## RESULTS

The presented study included (118) patients (95) subjects were panic disorder, and 23 subjects were Panic

Agoraphobia disorder table 1 shows the demographical characteristic of P.D. and PAD. Diagnosis of the two groups based on DSM5 and the Cymbalta was given to the PDA group 12(20.33%), while Sertraline was given to the P.D. group 11(18.96%). Side effects of treatment are

shown in Table 3. No statistically significant differences between the two treatment groups during the eight weeks. finally, Scoring the PDSS and After eight weeks later treatment for both treatment group illustration in table 4

Table 1: Demographical characteristic of an individual with Panic Agoraphobia disorder and panic disorder

Viabale	Panic Agoraphobia disorder	Panic disorder	t-test	P-Value
Total Number	23	95		
Main Age	(45.2±9) Y	(32.4±9.5) Y	0.5026	
Age at onset of PAD/ PD	(26 ± 9) Y	(29 ± 8) Y		0.6651
Residency			X <sup>2</sup>	P-Value
urban	14 (60.9%)	68 (71.5%)	0.4054	816517
Suburban	7 (30.4%)	23 (24.2%)		
Rural	2(8.7%)	6 (6.31)		
Gender			X <sup>2</sup>	P-Value
Male	12 (49.1%)	43(45.2)	0.3554	551089
Female	11 (50.9%)	52 (54.8)		
Marital state			X <sup>2</sup>	P-Value
Married	18 (78.2%)	59 (62.1%)	2.4412	48601
Single	3 (13%)	21 (22.1%)		
Divorce	1 (4.4%)	4 (4.2%)		
Widow	1 (4.4%)	11 (11.6%)		
Number of Children			X <sup>2</sup>	P-Value
Nothing	3 (11.8)	37 (39%)	5.6229	0.60119
1-3	9 (37.3)	28 (29.5%)		
<3	11 (50.9)	30 (31.5%)		
Educational levels			X <sup>2</sup>	P-Value
Illiterate	13 (56.5%)	23 (24.2%)	10.3749	0.34565.
Primary school	3 (13%)	24 (25.2%)		
Secondary school	5 (21.7%)	25 (26.4%)		
College	1 (4.4)	19 (20%)		
postgraduate	1 (4.4%)	4 (4.2%)		
Occupation			X <sup>2</sup>	P-Value
Employer	13 (56.6%)	30 (31.5%)	2.492.	476735
Unemployed	8 (34.7%)	50 (52.7%)		
Retired	0	11 (11.6%)		
Disabled	2 (8.7%)	4 (4.2%)		

Table:2 Diagnosis of the tow group based on DSM5

Diagnosis	Cymbalta Group	Sertraline Group	X <sup>2</sup>	p-value
panic Agoraphobia	12 (20.33%)	11 (18.96%)	0.0201	.887225
Panic	47 (79.77%)	48 (81.04%)		

Table: 3 Adverse Events within two Treatment Group

Side Effect	Cymbalta Group	Sertraline Group	X <sup>2</sup>	p-value
Nausea	4 (6.7%)	6 (10.3%)	0.2404.	993331
Somnolence	3 (5%)	4 (6.9%)		
Insomnia	2 (3.3%)	3 (5.1%)		
Dizziness	2 (3.3%)	3 (5.1%)		
Dry mouth	4 (6.7%)	2 (3.4%)		
Headache	2 (3.3%)	2 (3.4%)		
Diarrhea	0	5 (8.6%)		
Total	17 (28.8%)	25 (43.1%)		

Table 4: Scoring the PDSS and After eight weeks later treatment for both treatment group

Scoring the PDSS	Cymbalta Group	After eight weeks later, treatment	Sertraline Group	After eight weeks later, treatment
Normal	1 (1.7%)	26 (44%)	0	33 (56.8%)
Slight	1 (1.7%)	16 (27.1%)	0	11 (19%)
Borderline	1(1.7%)	14 (23.7%)	0	9 (15.5%)
Marked	29 (50.8%)	1(1.7%)	29 (50%)	1 (1.7%)
Moderate	27 (49.2%)	1 (1.8%)	29 (50%)	4 (7%)
Missed	1(1.7%)	2 (3.4)	0	0
Total	59 (100%)	56 (94.9%)	58 (100%)	58 (100%)

## DISCUSSION

This research wanted to evaluate demographic profiles, the severity of the symptom, comorbid effects, and panic disorder treatment approach between patients with and without Agoraphobia. In this sample, the age means of PD patients without agoraphobias (45.2±9) years, and the mean age of PD patients without agoraphobia were (32.4±9.5) years, comparable to the study by Battaglia et al. (31.9 years). And nearly identical to the study by Fleet et al. (36.5 years). The age of patients was between (17-54) years. There were only 5 cases between (45-54) years, and not any cases above that range were reported. These results are like previous studies. This may represent a propensity for Panic disorders to decrease throughout time and increase mortality with age in PD. The incidence is higher among females as compared to males. The ratio between female-to-male was 12/11 panic agoraphobia disorder while PD 43/52; this result is not consistent with Fleet et al study (1.7/1) and Felicia et al study (1.99/1). There seems to be a striking variation in females' mental conditions relative to males, and this analysis reflects this result (M: F=1:1.7)<sup>10</sup>. Most patients were married in PD patients with and without agoraphobia 18(78.2%), 59(62.1%) away from Andrade et al. study 30(41.7%), closer to Felicia and al's study (72.2%). Previous studies reported certain P.D. risk factors such as female gender, low income, unmarried, separate or divorced persons, and low education levels<sup>11</sup>. The results were directly compared with the previously reported findings on people who unemployed, like homemakers, who suffered from P.D. Stress and daily activities are other contributing factors for P.D. development<sup>12-14</sup>. Likewise, patients with Agoraphobia had higher overall "PDSS" scores than patients without the agoraphobia group, indicating that patients by Agoraphobia had additional serious panic symptoms than patients without Agoraphobia. Previous results also found that Agoraphobia is strongly associated with panic attacks, anxiety, and low practical effects, and the results indicate that Agoraphobia may be a symptom of a significant worsening of panic disorder<sup>15</sup>. In this study, we report that the magnitude of agoraphobic symptoms is statistically consistent with the severity of panic symptoms, suggesting that they are closely linked with panic and agoraphobic symptoms. Nevertheless, the causal relationship between the two signs is also not well known. The chronological relationship between panic symptoms and Agoraphobia has provided conflicting studies. In general, agoraphobic avoidance began just a few months after the first panic attack, according to Garvey. Clum et al. have indicated that Agoraphobia was liable for panic attacks<sup>16</sup>. Conversely, some reports have found that Agoraphobia exacerbates panic disorder<sup>17</sup>. We were unable to analyze the progressive relationship between panic disorder and agoraphobic symptoms in the present research, so it is challenging to conclude the issue. The PDA patients were more stressed during the present analysis, and higher BDI, stress, and social introversion MMPI scale ratings were demonstrated relative to those of the P.D. patients. The relations between PD, Agoraphobia have been investigated in many previous research types. Compared to people with P.D. alone, panic disorder patients with Agoraphobia are

likely to face more significant limitations in their job or social life, and this could trigger distress<sup>18</sup>. Clum et al. have indicated that patients with PDA displayed "learned helplessness" in the condition of lack of power since they assumed that there were no effective coping mechanisms. Choi et al. claimed that patients with PDA exhibited greater self-criticism and fatalism than people with P.D. alone<sup>19</sup>. In this study, the rate with or without agoraphobia (Normal 1(1.7%), Slight 1(1.7%) Borderline 1(1.7%) Marked 29(50.8%) Moderate 29(50%) Missed 1(1.7%) After eight weeks later, treatment with Cymbalta the rate and score of the diseases became Normal 26(44%), Slight 16 (27.1%) Borderline 14(23.7%) Marked 1(1.7%) Moderate 1(1.8%). While the rate with or without agoraphobia was Normal 0, Slight 0, Borderline 0, Marked 29(50%), Moderate 27(49.2%) Missed 1(1.7%) After eight weeks later, treatment with Cymbalta, the rate and score of the diseases became Normal 33(56.8%), Slight 11(19%) Borderline 9(15.5%) Marked 1(1.7%) Moderate 4(7%). This comorbidity rate (61 percent) is consistent with Felicia et al. (38.29%) in 2003, Kessler et al (43.4%) in 1998 (43.4%) 14 and Rief et al (47.4%) in 2004 (34 and Miriam et al examined, respectively) that this comorbidity may reach up to 65 percent<sup>20</sup>. Furthermore, even though they did not have a panic disorder, we observed that patients with PDA showed more extreme anxiety and had a higher STAI score, ASI-R score, and MMPI psychasthenia scale than patients with P.D. Panic disorder patients with elevated exposure to distress and signature anxiety were more prone to identify agoraphobic apprehension, according to Ken et al. easily<sup>21</sup>. Regarding anxiety response, Chambless observed that while Agoraphobia followed panic disorder, the intensity of apprehension of bodily sensation rises<sup>22</sup>. Sensitivity to fear may lead to causing panic symptoms, which could directly amplify Agoraphobia in patients with P.D. and increase avoidance<sup>23</sup>. Agoraphobia in panic disorder patients. One analysis showed that PDA patients' psychasthenia score was higher than those with P.D.<sup>24</sup>, which is compatible with the present data. Overall, similar to those with P.D., PDA patients are vulnerable to more affective reactions. In our research, the initiation of disease was earlier in PDA patients than in P.D., and this result is compatible with previous observations<sup>25</sup>. Panic disorder patients of early diagnosis have a greater developmental tendency and are more likely than people with the late-onset illness to develop Agoraphobia and other comorbidities<sup>26</sup>. In comparison, higher family pressure has been correlated with older PDA age of onset<sup>27</sup>. While panic disorder and Agoraphobia are listed as different conditions by the DSM-5, the genetic link between panic disorder and Agoraphobia suggests that the two illnesses may have a close pathophysiological connection<sup>28</sup>. In the PDA group, combination antidepressant therapy and antipsychotic augmentation are more likely to be recommended than in the P.D. category. All these observations indicate that, as prior reports have indicated, PDA is more challenging to manage than P.D.<sup>29,30</sup>.

## CONCLUSION

Panic disorder and panic disorder with agoraphobia is a widespread and can be treated successfully. The magnitude

of symptoms as calculated on the corresponding scale for P.D. (PDSS score 21.3 in PDAG, 13.5 in P.D.), the presence of comorbidity (83.3% in PDAG group, 60% in P.D. group) and stress {all in PDAG group (n=30) registered moderate to high-stress levels} were substantially different in both groups. The prevalence of Agoraphobia was associated with more severe disease, increased incidence of fear, and other symptoms of anxiety, comorbid psychological disorders, and stress. Patients with PDA may show a weaker prognosis than patients with P.D. because of more extreme symptoms and worse care responses. For patients with PDA, more comprehensive pharmacological and psychiatric care can be implemented. After eight weeks of pharmacological treatment, Cymbalta and Sertraline's was a beneficial technique in managing PDA since it has been established that psychiatric comorbidities successfully relieve panic disorder symptoms.

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