Panic disorder at cardiology outpatient clinic at a teaching hospital in Baghdad

Submitted to Department of medicine

College of medicine Al-Nahrain University

As a part of M.B.Ch.B graduation requirement.

Done by:

Ghadeer Abdul-Kareem Jaafar

Supervised by:

Dr. Uday Khalid Abdul Jabbar

بسم الله الرحمن الرحيم

وَأَنَّ الْفَضْلَ بِيَدِ اللَّهِ يُؤْتِيهِ مَن يَشَاءُ ۚ وَاللَّهُ ذُو الْفَضْلِ الْعَظِيمِ

صدق الله العظيم

سورة الحديد, ألأية 29

Acknowledgement

I would like to express my gratitude to Dr. Uday Khalid Abdul Jabbar for his guidance and patience, also to all patients of Al-Emmammain Al-Kadhumain cardiology outpatient clinic for their assistance in cases collection.

Abstract

Background

Panic disorder is an anxiety disorder characterized by reoccurring unexpected panic attacks.

The prevalence of panic disorder at cardiology outpatient clinic was high it about 9.2%.

Objective

Estimate the rate of panic disorder among patients at cardiology outpatient clinic, and to examine socio-demographic characteristics of these patients.

Subjects and methods

This is a cross-sectional study of 100 patients randomly selected. The cases were collected for three months it's conducted from 1st of October, 2018 to 30th of December, 2018 in Emmammain kadhimain cardiology outpatient clinic For each case the following parameters were recorded: the age, gender, residency, marital status, occupation, education and DSM-V criteria.

The results

6% of patients collected from cardiology outpatient clinic where suffering from panic disorder.

Conclusion

Rate of panic disorder was low in this study so it need further confirmation by other studies; larger scale studies with proper diagnostic tools and methods.

Recommendation

Cardiologist need to be aware of symptoms suggesting panic disorder so can managed with less investigations and medical treatment, also further larger scales studies are needed to confirm or disconfirm the results of this study.

Key words

Panic disorder, Heart disease, Cardiologists

Abbreviations

PD Panic disorder

DSM-V Diagnostic and Statistical Manual of Mental Disorders

List of contents

List of tables & figures

1. *Introduction*

Panic disorder is an anxiety disorder characterized by reoccurring unexpected panic attacks.[1]

Panic attacks are sudden periods of intense fear that may include palpitation, sweating, shaking, shortness of breath, numbness, chest pain, dizziness, or a feeling that something terrible is going to happen.[1, 2] *At least 4 of these symptoms are present. In addition to these attacks, the patient experiences persistent worry or fear of having a panic attack and often changes behaviors and routines to avoid panic attacks. These symptoms are not related to substance use(e.g., withdrawal, medications side effect), other medical conditions (e.g., hyperthyroidism), or other psychiatric disorders (e.g., specific phobias, obsessive compulsive disorder).*[3]

PD is associated with several psychiatric conditions, such as depression and other anxiety disorders.[4]

These attacks are recurrent and unanticipated by the patient. PD can cause a variety of interpersonal and occupational problems. Individuals with recurrent panic may avoid social situation or going out in public altogether. These patients try to avoid a potentially embarrassing attack. This can lead to withdrawal from friends and family; and absence from work and school.

PD, with or without agoraphobia, is one of the most common and important anxiety disorders in the general population in western world with a prevalence in one year of 2-3% in Europe.[5] While prevalence of panic disorder among U.S. adults aged 18 or older found that 2.7% of U.S. adults had panic disorder and prevalence of panic disorder among adults was higher for females (3.8%) than for males (1.6%).[6]

PD usually begins during adolescence or early adulthood but any age can be affected.[7] It is less common in children and older people.[2]

Researchers have already begun to attempt to investigate the incidence of missed diagnoses of PD. In one study of patients with atypical chest pain and no arteriographic evidence of coronary artery disease, nearly 60% met criteria for diagnosis of PD. The estimated prevalence of PD in cardiac outpatients was 9.2%. Barsky and others screened 145 consecutive patients referred for ambulatory electrocardiographic evaluation of palpitations for PD. Palpitations are recognized as the most common somatic symptom of panic attacks in patients presenting in medical settings, occurring in about two-thirds of attacks.

PD may often mimic various cardiovascular and cardiorespiratory conditions. As a result, diagnosis of PD is often missed in search of organic disease, and time and money are wasted on fruitless medical evaluation.

Panic disorder can be effectively treated with a variety of interventions, including psychological therapies and medication.[7]

With the strongest and most consistent evidence indicating that cognitive behavioral therapy has the most complete and longest duration of effect, followed by specific selective serotonin reuptake inhibitors.[8] A 2009 review found positive result from therapy and medication and a much better result when the two were combined.[9]

2. Aim of the study

1. Estimate the rate of panic disorder among patients at cardiology outpatient clinic.
2. To examine socio-demographic characteristics of these patients.

3. Subjects and methods

3.1 Design

A cross sectional survey

3.2 Setting

The patients were seen at cardiology outpatient clinic at Al-Emmammain Al-kadhumain medical city from 1st October , 2018, to 30th December , 2018, samples were taken by random visits one day in a week over this period of time.

3.3 Patients

3.3.1 Inclusion criteria

Patients who were considered by the cardiologist as suffer from functionally unexplained symptoms were interviewed for purpose of detecting possible panic disorder.

3.3.2 Exclusion criteria

- Many patients have medical diseases.
- Age below 18 years.
- Refused to be interviewed.

3.4 Data collection

A questionnaires were prepared for purpose of this study that includes demographic criteria and interviewed according to DSM-V criteria of panic disorder.

3.5 Statistics

Data were summarized by descriptive statistics (means, standard deviations, and ranges).

4. Results

The total number of patients in cardiology outpatient clinic enrolled in this study was 100.

The gender distribution of patients among the 100 cases studied showed a male predominance of 58 males (58%) compared to 42 females (42%) as seen in table (1).

The mean age of patients in this study was 50 ± 13.09 SD, the study showed that from 41 to 60 years old were 63 patients which is the largest group as seen in table (1).

On studying the residency of patients we found that 61 (61%) of them living in urban area and 39 (39%) of them living in rural area as seen in table (1).

Regarding the marital status of patients we found that 75 (75%) of them were married, 15 (15%) were unmarried, 7 (7%) were widowed, and 3 (3%) were divorced as seen in table (1).

The occupation distribution of patients showed that 45 (45%) were free workers, 47 (47%) were employee, and 8 (8%) were not working as seen in table (1).

The education distribution of patients showed that 10 (10%) were illiterate, 35 (35%) were of primary school education, 30 (30%) were of secondary school education, 20 (20%) were of collage, and 5 (5%) were of higher education as seen in table (1).

While the total number of patients with panic disorder enrolled in this study was 6.

The gender distribution of patients with panic disorder among the 6 cases studied showed a female predominance of 4 females (66.66%) compared to 2 males (33.33%) as seen in table (1).

The mean age of these patients in this study was 38 ± 14.54 SD, the study showed that from 41 to 60 years old were 4 patients which is the largest group as seen in table (1).

On studying the residency of patients we found that 5 (83.33%) of them living in urban area and 1 (16.66%) of them living in rural area as seen in table (1).

Regarding the marital status of patients 3 (50%) of them were married, 2 (33.33%) were unmarried, 1 (16.66%) was divorced, and 0 (0%) was widowed as seen in table (1).

The occupation distribution of patients showed that 3 (50%) were employee, 2 (33.33%) were not working, and1 (16.66%) was free worker as seen in table (1).

The education distribution of patients showed that 3 (50%) were of primary school education, 2 (33.33%) were of secondary school education, 1 (16.66%) was of collage, 0 (0%) was illiterate, and 0 (0%) was of higher education as seen in table (1).

Table (1): demographic data at cardiology outpatient clinic.

	Total patients		Patients with PD	
	No.	%	No.	%
Gender				
Male	58	58	2	33.33
Female	42	42	4	66.66
Total	100	100	6	100
Age				
Less than 20	2	2	1	16.66
20-40 years old	20	20	1	16.66
41-60 years old	63	63	4	66.66
Above 60 years	15	15	0	0
Total	100	100	6	100
Residency				
Urban	61	61	5	83.33
Rural	39	39	1	16.66
Total	100	100	6	100
Marital status				
Married	75	75	3	50
Unmarried	15	15	2	33.33
Widowed	7	7	0	0
Divorced	3	3	1	16.66
Total	100	100	6	100
Occupation				
Free workers	45	45	1	16.66
Employee	47	47	3	50
Not working	8	8	2	33.33
Total	100	100	6	100
Education				
Illiterate	10	10	0	0
Primary	35	35	3	50
Secondary	30	30	2	33.33
Collage	20	20	1	16.66
Higher	5	5	0	0
Total	100	100	6	100

Regarding the symptoms in patients who were recognized to have panic attack showed that palpitation was the most common presenting symptom as seen in table (2).

Table (2): physical symptoms in panic attack.

Symptom	%
Palpitation	83.33
Shortness of breath	83.33
Chest pain	50
Chocking sensation	33.33
Sweating	50
Dizziness	33.33
Nausea	16.66
Derealization	16.66
Numbness	33.33
Hot flashes	33.33
Chills	16.66
Trembling	16.66
Fear of losing control	16.66

5. Discussion

The prevalence of panic disorder in cardiac outpatients identified in this study (6%) is low as compared to values observed in previous study conducted at Toronto Hospital in 1997, that found the percentage of panic disorder in patients admitted to Toronto Hospital, cardiology outpatient clinic to be 12.5%.[10] This may be explained by limited numbers of cases and short duration of cases collection.

This study showed a female predominance of 4 females (66.66%) compared to only 2 males (33.33%) and those results correspond to the results in a study done in USA in 2002, the sample included 609 respondents who met DSM-III-R criteria for panic disorder where analyzed to test for gender differences which found the female was predominant.[11]

Regarding the mean age of patients with panic disorder in our study was 38 ± 14.54 SD, which is a proximate to the mean age in the study done in a university medical centers in USA in 2012.[13]

The age of the DSM-V groups, however, when compared with their corresponding non-PD groups, we found that the age is comparable between two groups (M = 38 years, M = 50 years) This fact agrees with values observed in previous study conducted at Toronto Hospital in 1997.[10]

Regarding the residency of PD we found that 5 (83.33%) of them came from urban area and only 1 (16.66%) of them from rural area and this can be explained by Al-kadhumia teaching hospital being located in urban area.

Regarding the marital state of PD patients we found that 3 (50%) of them was married, 2 (33.33%) of them was unmarried and 1(16.66) was divorced,

and those results correspond to the results in a study done in USA in 2012 which found the patients with PD was predominantly married.[12]

Regarding the occupation of patients with panic disorder we found that 3 (50%) of them were employee, 2 (33.33%) of them were not working, and 1 (16.66) of them was free worker, this may be explained by the largest age group in our study was from 41 to 60 years old and in this age group there is raised number of employers in our society.

Regarding the education of these patients we found that 3 (50%) were of primary school education, 2 (33.33%) were of secondary school education, and 1 (16.66) was of collage this can be explained by regarding our society most people are low education.

It was noted that 5 of the 6 patients whom were screened positive for DSM-V panic disorder were complaining from palpitation. Since PD cases made up 6% of the outpatients, this higher value appears to reinforce the notion of palpitations as the most common somatic symptom of panic attacks in patients presenting in medical settings. There is a report of palpitations by 21.2% of panic attack patients in Toronto.[10] There are methodological differences between the above mentioned study and the current study but still the figure is high. So cardiologist should put in his mind that not all palpitation mean there is a cardiac cause.

There are several important points that must be considered when regarding the results of this study. First, the sample was small in number.

In addition, the diagnoses of PD in this study were determined by semi-structure and not substantiated by a structured interview as has been done in other studies, which structure interview more specific and sensitive in diagnosis of PD. It is probable that semi-structure interview would reduce the number of people deemed to be PD patients.

6. Conclusion

Rate of panic disorder was low in this study so it need further confirmation by other studies; larger scale studies with proper diagnostic tools and methods.

7. Recommendation

1. Cardiologist need to be aware of symptoms suggesting panic disorder so can managed with less investigations and medical treatment.
2. Further larger scales studies are needed to confirm or disconfirm the results of this study.

References

1- NIMH. March 2016. Archived from the original on 29 September 2016. Retrieved 1 October 2016.

2- American Psychiatric Association (2013), Diagnostic and Statistical Manual of Mental Disorders (5th ed.), Arlington: American Psychiatric Publishing, pp. 208–217, 938,

3- American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed., (DSM-5). Washington, DC: American Psychiatric Publishing; 2013.

4- Kaufman J, Charney D. Comorbidity of mood and anxiety disorders. Depress Anxiety. 2000;12(suppl 1): 69-76.

5- Goodwin RD, Faravelli C, Rosi S, et al. The epidemiology of panic disorder and agoraphobia in Europe. Eur Neuropsychopharmacol. 2005;15: 435-43.

6- Harvard Medical School, 2007. National Comorbidity Survey (NCS). (2017, August 21). Retrieved from https://www.hcp.med.harvard.edu/ncs/index.php. Data Table 2: 12-month prevalence DSM-IV/WMH-CIDI disorders by sex and cohort.

7- Panic Disorder: When Fear Overwhelms. NIMH. 2013. Archived from the original on 4 October 2016. Retrieved 1 October 2016.

8- management of anxiety (panic disorder, with or without agoraphobia, and generalized anxiety disorder) in adults in primary, secondary and community care. National Institute for Health and Clinical Excellence. Clinical Guideline 22. Issue date: April 2007

9- Bandelow B, Seidler-Brandler U, Becker A, et al. Meta-analysis of randomized controlled comparisons of psychopharmacological and psychological treatments for anxiety disorders. The World Journal of Biological Psychiatry. 2009;8 (3): 175–187.

10- Morris A, Baker B, Davins GM, et al. Thornlea Secondary school, Thornhill, Ontario. Can J Psychiatry. 1997 Mar;42(2):185-90.

11- Sheikh JI, Leskin GA, Klein DF. VA Palo Alto Health Care System, Menlo Park, CA 94025, USA. Am J Psychiatry. 2002 Jan;159(1): 55-8.

12- Am J Geriatr Psychiatry. Author manuscript; available in PMC 2012 Mar 16; 18(5): 404-412.