

The Prevalence and Particularities of Psychiatric Comorbidity

H. Rharbaoui^{1*}, N. Kissa¹, L. Achour¹, A. Ouanass¹

¹Ar-Razi University Psychiatric Hospital in Salé, Faculty of Medicine and Pharmacy, Mohamed V University, Rabat, Morocco

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*Corresponding author: H. Rharbaoui

Ar-Razi University Psychiatric Hospital in Salé, Faculty of Medicine and Pharmacy, Mohamed V University, Rabat, Morocco

Abstract

Original Research Article

Among the most widespread resistance factors of psychiatric disorders, psychiatric comorbidities occupy an important place, they represent a major problem in the field of mental health. It is the coexistence, in the same individual, of at least two mental disorders. 56% of patients who suffer from a mental health problem have been affected at least once in their life by another problem of this nature. These problems can appear at different times or at the same time. Some people sometimes suffer from three or more comorbid disorders. The clinical picture motivating the consultation, can hide other disorders less visible at first glance. Whether it is anxiety disorders comorbid with depression, personality disorders that are the bed of decompensations of different types, or addictive disorders interfering with the psychiatric picture, these situations often pose a problem for the practitioner, and deserve special attention from the first consultation, in order to adapt the treatment by taking into consideration these comorbidities, both clinically and therapeutically. In this work, we will evaluate the comorbidities in patients consulting at the Arrazi hospital in Salé, trying to establish a profile of the most comorbid disorders, in order to raise awareness among practitioners about the simultaneous detection and management of these disorders.

Keywords: psychiatric comorbidities, coexistence, dual pathologies, anxiety disorders, depressive disorders, psychotic disorders, bipolar disorders, substance use disorder, post-traumatic stress disorder, obsessive compulsive disorders.

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INTRODUCTION

Comorbidity remains a critical issue in mental health, characterized by the presence of two or more mental disorders in the same individual. In other words, it refers to the coexistence of two or more mental disorders, each with its own distinct etiopathogenesis or, when the etiology is unclear, with separate organ or system pathophysiology, within a specific period of time.

The appearance of numerous synergistic processes between the two contemporaneous conditions will lead to a modification of symptoms, a reduction in the efficacy of treatments, and to aggravation and chronicization during their evolution. This approach, which tends to put into perspective the interactive, dynamic and evolutionary aspect of the coexistence of the two disorders, is increasingly appealing to professionals. Indeed, the emergence of a new type of pathology at the end of this evolution could be a key to understanding the frequent therapeutic failures and poor prognosis of mental illness.

56% of mental health patients have suffered from a condition of this nature at least once in their lives.

These may occur simultaneously or at any given time. Some people even suffer from three or more comorbid disorders.

A number of epidemiological studies and research initiatives have found high rates of comorbidity within psychiatric disorders, with effects on physical and psychological health, as well as on social status that are more acute in comparison to those in the general population.

The various forms of comorbidity can be very heterogeneous in their clinical presentation. The longer the course of the disorders, the greater the risk that the two pathologies will interpenetrate, making treatment and care more difficult.

Psychiatric comorbidity therefore occupies an important place and deserves special attention. By guiding practitioners from the first consultation and ensuring simultaneous attention to these disorders, we can effectively combat the emergence or evolution of comorbid disorders, which are particularly difficult to treat.

Furthermore, this paper will present a study of patients with psychiatric comorbidity at our clinic, in order to highlight the existence of these particular situations, which often pose a problem for the practitioner. The aim of this work will be to evaluate comorbidity in patients being treated at the Arrazi Hospital in Salé, and to establish a profile of the highly comorbid disorders.

MATERIAL AND METHOD

This study is a descriptive cross-sectional study of a series of patients over a period of two months between May 1, 2024, and June 1, 2024. 95 patients with psychiatric comorbidity were included in the sample, who were seen at the Arrazi Hospital in Salé, based on

the criteria of the Diagnostic and Statistical Manual of Mental Disorders, fifth version (DSM5). Analysis was performed using SPSS software.

➤ Inclusion Criteria:

- Patients with psychiatric comorbidity treated during this period.
- Age between 18 and 70.
- Informed consent from patient and guardian.

➤ Exclusion Criteria:

- Age < 18 or > 70
- Pathologies altering the capacity for discernment or profound cognitive impairment.
- Intellectual disability.

RESULTS

1-Sociodemographic profile of patients with psychiatric comorbidity:

Table 1: Sociodemographic characteristics of the study population

Variable	N=95
Age in years*	40,73±13
Consultant's age in years**	42
Gender***	
- Male	46 (48,4)
- Female	49 (51,6)
Marital status***	
- Single	26 (27,4)
- Married	66 (69,5)
- Divorced	3 (3,1)
Number of children***	
- No children	33 (34,1)
- One child	4 (4,2)
- Two or more children	58 (61,1)
Level of education***	
- No schooling	27 (28,4)
- Primary	20 (21,1)
- Secondary	36 (37,9)
- Higher	12 (12,6)
Occupation***	
- No	52 (54,7)
- Yes	30 (31,6)
- Retired	13 (13,7)
Place of residence***	
- Rural	5 (5,3)
- Urban	90 (94,7)
	* : expressed as mean ± standard deviation
	** : expressed as median
	*** : expressed as headcount (percentage)

2-Reason for Consultation:

A high percentage of patients consulted for anxiety disorders, with a rate of 27.4% (N=26) in this

series, and 22.1% for depressive disorders (N=21), followed by psychotic disorders at 14.7% (N=14).

Table 2: Consultants' diagnoses

Depression	21 (22,1)
Bipolar disorder	8 (8,5)
Psychosis	14 (14,7)
Anxiety disorder	26 (27,4)
Obsessive-compulsive disorder (OCD)*	11 (11,5)
Personality disorder* (PPD)	7 (7,4)
PTSD*	8 (8,4)
	*: expressed as headcount (percentage)

3- Previous personal and family history and use of psychoactive substances:**Table 3: History of the study population**

Variable	N=95
Personal history *	
Medical	
Yes	33(34,7)
No	62(65,3)
Psychiatric	
Yes	29(30,5)
No	66(69,5)
Family history *	
Psychiatric	
Yes	16(16,9)
No	79(83,1)
History of use of psychoactive substances *	
No SPA use	62(65,3)
Alcohol	2(2,1)
Tobacco	4(4,2)
Psychotropic	1(1,05)
Cannabis and Alcohol	1(1,05)
Cannabis and Tobacco	12(12,6)
Tobacco and Alcohol	3(3,1)
Cannabis, Tobacco and alcohol	7(7,45)
Cannabis, Tobacco and psychotropic	2(2,1)
Cannabis, Tobacco, alcohol and psychotropic drugs	1(1,05)
	*: expressed as headcount (percentage)

4-Frequency (N, %) of psychiatric comorbidity in the study population:**Table 4: Frequency (N, %) of psychiatric comorbidity in the study population:**

Variable	N, %
<i>Depression*</i>	21(22,1)
Anxiety Disorder	6(28,6)
Personality Disorder	
PTSD	3(14,3)
USPA	4(19,1)
Psychosis	3(14,3)
OCD	1(4,7)
Bipolar disorder	2(9,6)
CAT	1(4,7)
	1(4,7)
<i>Anxious patients *</i>	26(27,4)
Depression	12(46,2)
Personality Disorder	1(3,8)
PTSD	3(11,6)
USPA	4(15,1)
OCD	4(15,1)

Bipolar disorder	1(3,8)
CAT	1(3,8)
Bipolar disorder I *	8(8,45)
USPA	4(50)
OCD	1(12,5)
Anxiety Disorder	1(12,5)
CAT	2(25)
Psychotic Disorder *	14(14,7)
OCD	2(14,3)
USPA	4(28,6)
Depression	2(14,3)
Anxiety Disorder	2(14,3)
Personality Disorder	2(14,3)
PTSD	1(7,1)
CAT	1(7,1)
Personality	
Pathological *	7(7,4)
PTSD	1(14,3)
Bipolar disorder	1(14,3)
Depressive Disorder	2(28,6)
USPA	3(42,8)
OCD*	11(11,5)
Depressive disorder	6(54,5)
Anxiety disorder	3(27,3)
USPA	2(18,2)
PTSD*	8(8,4)
Depressive disorder	2(28,6)
Anxiety disorder	2(28,6)
USPA	1(14,2)
Personality Disorder	2(28,6)
	*: expressed as headcount (percentage)

Among depressed patients (33.33%), generalized anxiety disorder is also present. The highest level of comorbidity was also observed in patients with

histrionic and borderline personality disorders. Among depressed patients, 2 have histrionic personality (66.7%) and (33.3%) borderline personality (Table 5).

Table 5: Frequency (N, %) of various anxiety and personality disorders in depressed patients

Depression*	21(22,1)
Anxiety Disorder	6(28,6)
Agoraphobia	2(33,3)
Social phobia	1(16,7)
GAD	2(33,3)
Panic disorder	1(16,7)
Personality disorder	3(14,3)
Histrionic	2(66,7)
Borderline	1(33,3)

The following tables summarize the prevalence of comorbidity by type of psychoactive substance in bipolar and psychotic patients. The alcohol-TB I

association was the most frequently encountered type of comorbidity (in 100% of patients). The cannabis-psychosis association was 90% (Table 6).

Table 6: Frequency (N, %) of different types of psychoactive substance use in bipolar and psychotic patients

Bipolar disorder type I*	Psychosis*
<i>Use of psychoactive substances</i>	
Tobacco 75%	Tobacco 90%
Alcohol 100%	Alcohol 50%
BZD 25%	BZD 25%
Cannabis 75%	Cannabis 90%

5-Profile of Most Comorbid Disorders:

According to this study, the profile of patients with comorbidities is:

- Married patients with more than two children.
- Female: the number of women is significantly higher.
- Average age of 40: patients with comorbidities have an earlier onset of their first episode.
- Regarding occupational status, comorbidities were more frequent in unemployed subjects.
- The prevalence of comorbidities was higher in urban than in rural areas.
- Most patients with comorbidities had a low educational level.
- With a family psychiatric history.
- With comorbid substance use disorders and pre-morbid personality disorder.

DISCUSSION

Comorbidity, a term coined by Feinstein in 1970 [2], can be defined as a non-random association between several morbid entities present in an individual. In the presence of one mental illness in a subject, there is a strong likelihood of finding another. Usually, but not necessarily, one category, considered primary, is favored, and one or more disorders are associated with it. Comorbidity implies that two morbid entities are absolutely independent of each other and can exist as such.

Vella *et al.*, note that “comorbidity should be defined as two or more diseases, with a distinct etiopathogenesis (or, if the etiology is unknown, with a distinct pathophysiology of an organ or system), which are present in the same individual within a defined period. This definition is closer to the idea of co-occurrence captured by Feinstein's (1970) definition [2], although it also adds the provision that some evidence of an underlying occasional distinctiveness is required for the term “comorbidity” to apply [2].

KRNK causality models postulate that one disorder can directly cause another disorder. In causal models, comorbidity results from the direct influence of one disorder on the development of the other. In directional causality models, one disorder causes the other. Obviously, comorbidities raise theoretical problems of classification and etiology, involving genetic factors and environmental factors such as epigenetic development. The clinician, on the other hand, is confronted with practical problems. How should we approach the management of a comorbidity? Which disorder to start with? Which therapy should be chosen? Should the two disorders be treated in different ways at the same time? Should we assume a causal relationship between the disorders and act accordingly? Can we choose the unitary hypothesis and adapt treatment?

1. Comorbidity with Depressive Disorder:

Psychiatric comorbidity is common in severe depression, affecting 60-70% of patients, with 30-40% presenting with two or more comorbidities. Anxiety disorders, addictions and certain personality disorders (borderline, histrionic) and eating disorders are the most common [4].

Anxiety disorders are highly comorbid with mood disorders, and this comorbidity has been considered a risk factor for suicidal behavior in patients with depressive mood disorders [5]. Patients with anxiety disorders are up to 70% more likely to develop depression, and those with specific anxiety disorders (separation anxiety, generalized anxiety or specific phobias) are three times more likely to suffer from depression [4-6]. These comorbidities worsen the prognosis of depression, reduce remission and response rates, prolong onset of action and may contribute to therapeutic resistance in 20-30% of cases [6]. The results of our study showed a high frequency of generalized anxiety disorder comorbidities in depressed patients. Almost 28.6% of depressed patients also had an anxiety disorder, in line with the literature.

2. Comorbidity with Anxiety Disorders:

Over 70% of people with an anxiety disorder may have a comorbid disorder. In people suffering from panic disorder with agoraphobia, some studies report comorbidity rates as high as 60%, including a high proportion of depression, generalized anxiety and social anxiety. Above all, there is a very high rate of comorbidity between the various anxiety disorders. Unfortunately, the comorbidity between depression and anxiety disorders often goes unnoticed. Up to 45% of people suffering from an anxiety disorder also suffer from depression at some point in their lives.

Comorbidity rates between generalized anxiety or panic disorder and agoraphobia exceed 55%. Furthermore, 20% of people with affective disorders experience anxiety and panic attacks. Indeed, some studies of people suffering from alcoholism have found co-morbidity rates with anxiety disorders sometimes exceeding 30%, the most common being social phobia and agoraphobia.

Anxiety disorders are often associated with affective disorders, particularly in bipolar disorder, where their presence worsens the clinical course, leading to more severe thymic episodes with shorter periods of remission, and increases the risk of suicide [7]. Anxiety disorders also frequently precede eating disorders, being particularly present in anorexics and bulimics. In parallel with this study, depression-anxiety was the most frequently encountered comorbidity. Among anxious patients, 46.2% also had depression.

3. Comorbidity with Bipolar Disorder:

It is now clearly established that Bipolar Disorder (BD) is accompanied by significant comorbidity. We know from the major epidemiological studies ECA (Epidemiological Catchment Area Study) and NCS (National Comorbidity Survey) that mood disorders, anxiety disorders and substance abuse are highly comorbid with each other. Similarly, substance abuse, anxiety disorders and eating disorders are often associated with a family history of mood disorders and may respond favorably to antidepressant or thymoregulatory treatments. In addition, the incidence of anxiety and substance abuse disorders, and to a lesser degree of OCD, is significantly higher in people with bipolar disorder than in the general population.

The presence of comorbidities alters the course of BPD, leading to earlier affective symptoms, rapid-cycling forms and more severe episodes. Comorbid patients also experience longer hospital stays and difficulties in social and professional adaptation.

The majority of the patients with bipolar disorder type 1 were also substance abusers. The alcohol-TB I association was the most frequently encountered comorbidity (in 100% of patients). Moreover, contrary to the literature, only 25% of bipolar patients had a comorbid eating disorder.

4. Comorbidity with Obsessive-Compulsive Disorder:

Obsessive-compulsive disorder (OCD) is more severe when comorbid with major depressive disorder (MDD), leading to increased suicidal risk. In contrast, comorbidity with anxiety disorders seems to affect symptom expression rather than morbidity. A study in India, involving 545 patients in specialist clinics (2004-2009), revealed that 30% of patients had MDD and 21% had an anxiety disorder. Women with OCD and MDD had more severe symptoms, including religious obsessions and high suicidal risk. In contrast, those with an anxiety disorder had less frequent symptoms, more aggressive obsessions, checking and cognitive compulsions [9].

Among patients with obsessive-compulsive disorder, 54.5% were depressed and 27.3% had associated anxiety disorders, while 18.2% used psychoactive substances.

5. Comorbidity with Pathological Personalities:

Psychiatric comorbidities with personality disorders have been common and well-documented since ancient times, with a high prevalence of associations between mood disorders and personality disorders, notably borderline and histrionic (6-48%), as well as bipolar disorder and personality disorders (3-20%). These comorbidities complicate diagnosis and patient outcome, because of the significant relationship difficulties involved. The Diagnostic and Statistical Manual of Mental Disorders (DSM) defines ten disorders

grouped into three clusters. The psychotic register (paranoid, schizoid and schizotypal personalities), which presents a high degree of comorbidity with psychotic disorder, depression, anxiety and substance abuse [10]. Character disorders marked by extraversion (histrionic, narcissistic, borderline and antisocial personalities), presenting a high degree of comorbidity with mood disorders (especially depression), addictions (alcohol, drugs, medication, video games, sexuality, emotional dependence), Eating disorders (periods of anorexia and/or bulimia), Mood disorders (depression and bipolar disorder), Anxiety disorders (panic disorder, generalized anxiety), Post-traumatic stress disorder and neurotic register (avoidant, dependent and obsessive-compulsive personalities) comorbid above all with anxiety and depressive disorders.

Despite the diversity of traits, more than 10% of the general population is affected. Most of these personality pathologies present common psychiatric comorbidities (depressive episode, substance abuse, anxiety disorder, etc.) and are characterized by their difficulty of management, which remains complex, often requiring a combination of psychotherapy and psychotropic drugs due to the difficult therapeutic alliance to establish.

In this respect, the majority of patients with personality disorders in our study were depressed, with a prevalence rate of 28.6%. The use of psychoactive substances was also associated with personality disorders, at 42.8%.

6. Comorbidity with Psychotic Disorders:

Psychiatric comorbidities in patients with schizophrenia are common, with a notable prevalence of psychoactive substance use, affecting 47% of patients. Anxiety and depressive symptoms are also common, with rates of 15% for panic disorder, 29% for post-traumatic stress disorder and 23% for obsessive-compulsive disorder. Around 50% of schizophrenic patients present with depression, which can aggravate negative symptoms, while anxiety can induce paranoia and substance abuse can exacerbate positive and disorganizing symptoms [11]. These comorbidities disrupt the clinical picture and can complicate the course of the illness, with depressive symptoms possibly reappearing after a treated psychotic episode [12]. In the ECA study, it was estimated that 47% of patients with schizophrenia also had a diagnosis of lifetime substance use disorder. 191 This is consistent with the findings of a variety of other epidemiological and clinical studies, both in the U.S. and worldwide [13-14].

Psychotic patients presented with problematic psychoactive substance use at a prevalence of 28.6. And 14.3% had a comorbid depressive disorder.

7. Comorbidity with Post-Traumatic Stress Disorder:

Post-traumatic stress disorder (PTSD) is frequently associated with other psychiatric disorders, with around 80% of sufferers responding to at least one other diagnosis, including depressive, anxiety, somatic, and substance use disorders. Around 46% of individuals with PTSD have a substance use disorder, particularly alcohol, tobacco and opioids, with significant rates among veterans [17]. Depression is also very common, being three to five times more common in people with PTSD [18]. Although PTSD has been reclassified as a trauma-related disorder, it remains linked to anxiety disorders, as evidenced by a 40% rate of generalized anxiety disorder among veterans with PTSD [20]. On the other hand, rates of PTSD in people with borderline personality disorder (BPD) range from 25% to 58%, and vice versa, indicating a complex interaction between these conditions [21].

Almost half of the patients with post-traumatic stress disorder had associated depression at a prevalence of 28.6%.

8. Comorbidity with Substance Use Disorders:

Dual pathology refers to comorbidity between psychiatric disorders and addictions. The prevalence of substance abuse (excluding tobacco) among patients suffering from mental disorders is 20-30%, and 40-50% of patients being treated for addiction suffer from mental disorders. Precarious populations (homeless, in prison, etc.) are more affected by these associations, which have a very serious prognosis. These associations aggravate symptoms and complicate treatment, particularly in precarious populations.

In GOURANI's study, he observed a significant comorbidity between SPA dependence and depression. Thus, 28.1% of tobacco-dependent smokers had moderate to severe depression. For cannabis, 35.4% of dependent users had moderate to severe depression. As for alcohol, 58.3% of dependent users had moderate to severe depression [22, 23].

The study by J.R. COUGLE *et al.*, showed that 15.5% of tobacco users had an anxiety disorder [24]. According to the study by F. S. STINSON *et al.*, the prevalence of anxiety disorders among cannabis users is 18% [25]. The results of a study by MB TERRA *et al.*, in Brazil show that 19.3% of alcohol users have an anxiety disorder [26]. The study by I. GASQUET *et al.*, in France showed that 21.9% of psychotropic drug users have an anxiety disorder [27], while the study by PAIVA CB *et al.*, showed that 24% of cocaine users have an anxiety disorder [28].

The study by J.R. Cogle *et al.*, showed that 5.1% of tobacco users had bipolar disorder. The study by F. S. STINSON *et al.*, found that 24% of cannabis users had bipolar disorder. A study in the United States by K.T.BRADY and R.B.LYDIARD showed that 16.1% or

about 3.9% of alcohol users have bipolar disorder [29]. The study by Mirin SM and Weiss RD, also in the USA, reported that 22% of cocaine users have bipolar disorder [29].

The study by E. Guillem *et al.*, showed that 4.8% of cannabis users have schizophreniform disorder/schizophrenia [30]. The study by N. Libuy *et al.*, found that 5.2% of cannabis users had a schizophrenic disorder. In the study by N. Libuy *et al.*, 1.1% of cocaine users had a schizophrenic disorder.

9. Limitations of the Study:

The main limitation of this type of survey lies in the fact that the diagnosis is based on information reported by the patient. This method of data collection is therefore prone to bias, since the questions do not allow for sufficiently precise diagnosis. No diagnostic scale was used to confirm psychiatric diagnoses, as this method is prone to error and bias.

Another limitation concerns the size of the sample, making it impossible to generalize the results to a target population. The sample in this study is not representative. Sampled populations cannot shed light on the state of clinical populations. Although a sample size of over 100 provides satisfactory statistical power to verify the presence of comorbidity and compare it across indicators, it is insufficient to accurately estimate comorbidity levels.

CONCLUSION

The results of this study underline the high prevalence of different mental disorders receiving treatment at the Arrazi hospital in Salé, as well as important comorbidity between them. Furthermore, it highlights the need to assess and take into account the possible presence of such comorbidity in the organization of psychiatric care and in patient management. The strong association between mental disorders is a cause for concern, as the coexistence of several internalized disorders can have major consequences and is generally associated with a poor prognosis (Costello *et al.*, 2005). These situations often pose a problem for the practitioner, and deserve special attention right from the first consultation, in order to adapt treatment by taking these comorbidities into consideration, both clinically and therapeutically. The results of our study thus support the importance of early identification of each of the mental disorders and the comorbidity among them, with the aim of preventing worsening of symptomatology. Thus, the data provided in this study has important implications and also supports the importance of educating practitioners in the simultaneous detection and management of these disorders. More prospective longitudinal studies would be needed, in order to understand the impact of these disorders on public health in a more complete and precise way, and to better understand the emergence of comorbidity among each of the mental disorders.

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