Diagnostic strategies of bipolar disorders; Review

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Abstract:

This review provides an up-to-date discussion of the principles and strategies for diagnosis of bipolar disorders and describe briefly symptoms, epidemiology. We reviewed the Published literatures concerning Diagnostic strategies of bipolar disorders up to December, 2017. Search was conducted using electronic databases; Medline, and Embase. Search strategy through mentioned databases was performed using medical subject headings (MeSH) as following, “bipolar disorders”, “Diagnosis”, “screening”. Primary care doctors are the initial in addition to the continuous factor of contact for many patients with bipolar disorder, with responsibility for exact medical diagnosis and appropriate continuous care. Individuals with bipolar disorder experience at least some depressive symptoms at least one-third of the weeks in a year, and these subsyndromal depressive symptoms can be connected with substantial impairment across a range of domains. High risk for suicide has been documented

during depression within bipolar disorder; hence it will certainly likewise be important to assess for depressive symptoms and suicidality. Diagnostic accuracy can be improved by attentiveness to the key symptoms and indications of bipolar disorder. Pharmacologic and psychosocial treatments can give efficient management for manic and depressive symptoms and maintain remission over the long term in numerous patients.

Introduction:

Bipolar disorder (BD) is a chronic disease connected with severely debilitating symptoms that can have extensive effects on both patients and their caregivers [1]. BD normally begins in adolescence or early adulthood and can have life-long damaging impacts on the patient's mental and physical wellness, educational and occupational functioning, and social relationships [2].Although not as typical as significant depressive condition (MDD), the lifetime prevalence of BD in the United States is substantial (estimated at roughly 4%), with comparable rates despite race, ethnic culture, and sex [3].Long-term end results are persistently suboptimal [4].The financial burden of BD to culture is substantial, completing nearly $120 billion in the United States in 2009. These prices consist of the straight prices of treatment and indirect expenses from minimized work, efficiency, and operating [5].Provided the burden of health problem to the individual and to society, there is an immediate need to enhance the care of patients with BD.

There is a growing recognition of the substantial contribution that innovative technique nurses (APNs) such as nurse practitioners (NPs) and clinical nurse specialists (CNSs) can make in the recognition and care of patients with BD [6].Most patients with BD present originally to health care providers, yet- via an absence of resources or expertise- lots of do not obtain an ample assessment for possible bipolar medical diagnosis [7].Early recognition can result in earlier initiation of reliable treatment, with beneficial effects on both the short-term end result and the long-term course of the disease [4].Patients with BD are likewise likely to have various other psychiatric and medical comorbidities, and, therefore, count on their primary care carrier for alternative care [8].Lastly, the value of collaborative, team-based care is increasingly identified in handling BD. APNs, by their training and experience, are well matched to assist in optimal patient care in collaboration with the various other healthcare staff member [8].An especially essential function for APNs within health care depends on the care of the patient, while experts take care of the bipolar illness. It is vital that these 2 specialties collaborate in order to remain abreast of each other's present phase of therapy.

This review provides an up-to-date discussion of the principles and strategies for diagnosis of bipolar disorders and describe briefly symptoms, epidemiology.

Methodology:

We reviewed the Published literatures concerning Diagnostic strategies of bipolar disorders up to December, 2017. Search was conducted using electronic databases; Medline, and Embase. Search strategy through mentioned databases was performed using medical

subject headings (MeSH) as following, "bipolar disorders", "Diagnosis", "screening". Furthermore, bibliographic of found articles were manually search for more relevant studies. Restriction to our search was applied to only English language published studies.

Discussion:

• Epidemiology

Bipolar I disorder starts generally at 18 years and bipolar II problem at 22 years [9]. A neighborhood research study using the Mood Disorder Questionnaire (MDQ) disclosed an occurrence of 3.7 percent [10].The National Comorbidity Study revealed start typically in between 18 and 44, with greater rates between 18 and 34 compared to 35 and 54 [12]. In a study of members of the DBSA, more than half of the patients did not look for take care of 5 years and the right medical diagnosis was not made until an average of eight years after they first looked for therapy [11].

Bipolar affective disorder has not consistently been associated with sociodemographic elements. Males and women are just as affected by bipolar I, whereas bipolar II is much more common in females. No clear association between race/ethnicity, socioeconomic condition, and locale of residence (e.g., rural vs. city). There is a greater rate of bipolar disorder in unmarried individuals [9].

Financial analyses typically include straight treatment prices, indirect costs arising from mortality, and indirect expenses associated with morbidity and shed productivity. This is the

design for bipolar disorder and others that are long-term or life time problems. Misdiagnosis results in exorbitant expenses and persecution. Late discussion, inadequate medical diagnosis, and undertreatment add heavily to expenses.

- **Comordibility**

Patients with bipolar disorder have high rates of medical, psychological, and substance abuse problems, which add to decreased life expectancy and reduced quality of life. A majority meet criteria for at least 1 other mental illness; anxiety and substance abuse conditions are most usual, with a 40% to 60% lifetime frequency [13].As compared to the basic population, patients with bipolar illness have higher rates of diabetic issues mellitus and liver and heart disease and experience raised special needs and mortality from these health problems [14].The family doctor has an important opportunity to boost end results by aggressive screening for, and maintenance of, these comorbid conditions.

- **Diagnosis**

A medical diagnosis of bipolar disorder is apparent when a patient presents with florid mania however is challenging when the initial presentation includes depressive signs; researches usually report that 50% or even more of patients at first existing with anxiety [15].Mostly due to the fact that unipolar clinical depression (ie, MDD) is more typical compared to bipolar depression, and due to the fact that bipolar anxiety lacks pathognomonic features, bipolar disorder is typically inaccurately determined as MDD [16].Among patients that are ultimately detected with bipolar affective disorder, about 70% supposedly had a first misdiagnosis and more than 33% remained misdiagnosed for 10 years or more [17].Postpone in medical diagnosis is a certain issue in women with bipolar disorder type II, since the signs and symptoms of hypomania could not be

very obvious [18].In addition, misdiagnosis during the postpartum period prevails; in a research of 56 women referred for postpartum depression, 54% were later on rediagnosed with bipolar disorder.

The postponed acknowledgment of bipolar disorder has adverse clinical and health care price effects [16].From a scientific point of view, patients with bipolar disorder who are treated with antidepressants alone (the criterion of care for MDD) are much less most likely to have an appropriate reaction and are at danger for manic button or cycle velocity (ie, increased frequency of mood episodes gradually).

From a health economic point of view, care is most likely to be more costly in patients with postponed diagnosis of bipolar disorder compared to in those identified early. In an analysis from the California Medicaid program, 2 groups of patients with bipolar disorder were contrasted: those that were detected with bipolar affective disorder at initial discussion and those that had actually a delayed medical diagnosis during a 6-year follow-up [19].Patients with a postponed diagnosis of bipolar disorder stood for almost twice as lots of situations as those with initially recognized bipolar disorder (28.2% vs 14.5%, specifically), and the annualized overall price each patient in the postponed team was $2316 higher in the 6th year compared with the expense for patients whose condition was initially recognized as bipolar illness (P <.001). Additionally, costs for patients with bipolar disorder and a postponed diagnosis enhanced by $10 regular monthly before the correct medical diagnosis (P <.001) and decreased by $1 later (P =.006 for the change in incline) [19].Hence, the factor to consider of the opportunity of bipolar illness in patients with depressive problems is vital to boosting end results and decreasing the prices of care of patients with bipolar disorder.

Evaluating each patient for a history of mania and hypomania on their initial presentation of depressive symptoms is an early step towards the acknowledgment of bipolar disorder.Validated tools that can be used consist of the Mood Disorder Questionnaire, [20] the Composite International Diagnostic Interview, variation 3.0, [21] and the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire [22].Clinical screening can be supplemented with electronic health record (EHR)-based case findings, where information accumulated by self-report or a health care aide is participated in the EHR and is screened for feasible signs of bipolar disorder. These tools aid to make certain that the medical professional acknowledges patients that are more probable to have bipolar disorder, assistance aid in directing the scientific meeting, and could encourage active follow-up for any kind of emerging signs of bipolar disorder.

- **Symptoms and presentation**

Depression

Although mania or hypomania are the defining characteristics of bipolar disorder, throughout the training course of the illness depressive symptoms are more typical than manic signs and symptoms. Patients with bipolar disorder spend a substantial percentage of time struggling with syndromal or sub-syndromal depressive signs. The outcome of a 12-year possible longitudinal research, in which 146 patients with bipolar I disorder completed weekly state of mind scores, reported that depressive signs were 3 times more common compared to manic or hypomanic signs and symptoms [23].Patients invested 32% of weeks with symptoms of depression. In a separate study of 86 patients with bipolar II condition this proportion was much higher at 50% [24].A similar research by the Stanley Foundation Bipolar Network monitored 258 bipolar patients (three quarters of which had bipolar I condition) for a year using the National Institute

for Mental Health (NIMH) Life Chart Method (LCM). On average, patients invested 33% of the time clinically depressed and a large proportion (> 60%) suffered four or more state of mind episodes in a year [25].Nevertheless, the percentage of time invested clinically depressed did not vary between bipolar I and II patients. To date, such researches have all been performed on adults and it is unclear whether these observations extend to children or teenagers with bipolar illness.

Significant depressive episodes in bipolar affective disorder are similar to those experienced in unipolar major clinical depression. Patients suffer depressed mood and experience profound loss of interest in activities, combined with other signs such as exhaustion, fat burning or gain, trouble sleeping or remaining awake, psychomotor slowing down, feelings of worthlessness, extreme regret and suicidal thoughts or activities. For patients presenting with an initial episode of anxiety, it may not be possible to compare those who will certainly take place to suffer recurrent unipolar clinical depression and those that will develop bipolar disorder. Nonetheless, evidence suggests there may be refined distinctions in between bipolar and unipolar anxiety. Particularly, anxiety in the course of bipolar illness may be most likely to reveal indications of psychomotor retardation, to have melancholic functions (such as sensations of worthlessness and significant anhedonia), to reveal features of atypical anxiety (such as hypersomnia and weight gain) [26] and to reveal psychotic features-- specifically in youths [27].Patients experiencing an initial episode of clinical depression who present these features and have a family history of bipolar disorder might go to raised risk of establishing bipolar disorder.

Sub-syndromal depressive symptoms prevail in patients with bipolar disorder (specifically those with bipolar II disorder) and are typically related to considerable interpersonal or work-related

disability. The management of these chronic, low-grade depressive symptoms is as a result of significant relevance, yet is also a considerable treatment challenge.

Mania and hypomania

The longitudinal study of bipolar symptomatology stated above reported that patients with bipolar I disorder suffered syndromal or sub-syndromal manic or hypomanic signs and symptoms approximately 9% of the moment over 12 years [23].For patients with bipolar II condition, approximately 1% of weeks were invested hypomanic [24].Similarly, the 1-year prospective follow-up research study conducted by the Stanley Foundation Bipolar Network reported that usually patients experienced syndromal manic signs and symptoms about 10% of the time [28].However, there was no considerable difference in the proportion of time spent with manic signs between patients with bipolar I or II disorder. In the majority of instances, individuals with bipolar disorderwill experience both manic and depressive episodes throughout the program of their ailment, although one epidemiological survey recognized a sub-population of approximately 20% who had never experienced a depressive episode. For those who have both depressive and manic episodes, the evidence above indicates that mania is much less typical compared to depression in those with bipolar disorder. Nonetheless, the extreme behaviours related to it can be ruining and patients with mania typically require hospitalisation to reduce injury to themselves or others.

Patients in the acute manic stage exhibit expansive, grand affect, which might be mostly euphoric or irritable. Although dysphoric mood is extra often associated with depressive episodes, element analytic studies of signs in patients with pure mania recommend dysphoric mood (such as clinical depression, shame and stress and anxiety) can be popular in some manic patients [29].

Mixed states

In a full-on combined episode, criteria are satisfied for a depressive episode and a manic episode virtually each day for a minimum of 1 week [30] Nevertheless, a mixture of manic and clinically depressed signs could occur without reaching full analysis standards. For example, a patient could have competing ideas, agitation, overactivity and flight of suggestions, however really feel useless, guilty and self-destructive. The patients with bipolar I condition who took part in the 12-year longitudinal research mentioned formerly spent a typical 6% of weeks in a blended or biking state (where polarity of episode was transforming and signs and symptoms of both existed) [23].For patients with bipolar II condition the proportion was simply over 2% [24].It is approximated that around 2 thirds of patients will experience a combined episode eventually in their illness [31].A research study of 441 patients with bipolar affective disorder reported that subclinical mixed episodes are common- with 70% of those in a depressed episode revealing medically significant signs of hypomania and 94% of those with mania or hypomania revealing substantial depressive symptoms [32] Sub-threshold mixed episodes were more than two times as common as limit blended episodes. The combination of dark, depressed affect with overactivity and auto racing thoughts makes combined states a particularly dangerous time for people with bipolar disorder.

Conclusion:

Primary care doctors are the initial in addition to the continuous factor of contact for many patients with bipolar disorder, with responsibility for exact medical diagnosis and appropriate continuous care. Individuals with bipolar disorder experience at least some depressive symptoms at least one-third of the weeks in a year, and these subsyndromal depressive symptoms can be connected with substantial impairment across a range of domains. High risk for suicide has been

documented during depression within bipolar disorder; hence it will certainly likewise be important to assess for depressive symptoms and suicidality. Diagnostic accuracy can be improved by attentiveness to the key symptoms and indications of bipolar disorder. Pharmacologic and psychosocial treatments can give efficient management for manic and depressive symptoms and maintain remission over the long term in numerous patients.

Bipolar disorder is an expensive and disabling disease. Patients with bipolar disorder may be misdiagnosed with another illness in their initial presentation. Major challenges to precise diagnosis consist of problems in differentiating bipolar anxiety from unipolar depression. Significant heterogeneity in between various patients of bipolar disorder, such that they would report different symptoms, and high comorbidity of bipolar disorder with compound use and various other psychological diagnoses makes precise diagnosis even more difficult.

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