Review Article

Systematic Literature Review on Individuals' Satisfaction of Existence Affected by Bipolar Disorder

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Abstract: Patients with Bipolar Disorder (BD) suffer from poor quality of life (QOL) and impaired psychosocial functioning. This study aims to determine the quality of life in individuals suffering from bipolar disorder. The PRISMA Checklist 2020 was used as a protocol to conduct this systematic review. Databases such as PubMed, Cochrane, ClinicalTrail.gov, CINAHL , Embase, Science-direct and Google scholar were searched for the articles published between 2013 to 2023 using the keywords. The articles were uploaded on Mendley and duplicates were removed. The remaining articles were screened on the basis of title and abstract and then sought for retrieval. The retrieved articles were assessed for further eligibility. Following the application of inclusion and exclusion criteria, the final articles were obtained to be included in our systematic review for data extraction. There is poor QOL in BD patients compared with general population. Psychological and physical domain of QOL is affected the most in BD. There is also a significant impact upon social domain and levels of independence. However, environmental and spiritual domains of QOL are least effected. In the past few years, major achievements in the pharmacological control of BD patients have been done, thus diverting our attention to increasing the quality of life of BD patients. Our systematic review chiefly gives information about how BD negatively affects QOL in all domains of life. In recent years bipolar disorder has become an important health concern not only for individuals with BD but also for our society, thus more studies evaluating QOL in bipolar disorder should be further conducted.

Keywords: quality of life, bipolar disorder, mania, hypomania

1. INTRODUCTION

Bipolar disorder (BD) is a mental illness that causes unusual shifts in a person's mood, energy and activity levels, BD patients experience mood episodes that can be manic/hypomanic, depressive and neutral [1]. Spectrum of BD includes bipolar I disorder (with a prerequisite of at least one maniac episode during a lifetime), bipolar II disorder (demanding a lifetime of major depressive and hypomanic episodes, with no history of mania) and BD not otherwise specified [2]. Research indicates that brain is affected by each bipolar disorder mood episodes that disrupts the homeostasis between inflammatory mechanisms,

oxidative processes and neuroprotective mechanisms leading to neuronal death and progression of bipolar disorder [3]. Bipolar disorders are the major cause of disability all over the world [4]. The worldwide prevalence of BD is around 1% [5]. Research has indicated that 25 to 50% of patients with BD will try to attempt suicide once in their life while 15% to 19% will commit suicide [6]. The onset of BD is irrespective of ethnicity, nationality and socioeconomic status [7]. Research has highlighted that BD patients are at an increased risk of physical health problems which includes hypertension, diabetes, cardiovascular disease and weight gain [8]. Bipolar disorder is also commonly associated with psychiatric co-morbidities like anxiety disorders (31.8%), eating disorders(33%), drug abuse (33.5%), alcohol abuse (18.3%), attention deficit hyperactivity disorder (25%),obsessive compulsive disorder (21%)and post-traumatic stress disorder(4 to40%) [9]. Previous studies have shown that patients with BD suffer from poor quality of life and impaired psychosocial functioning [10]. The World Health Organization defines Quality of life (QOL)as "Individual's perception of his/her position in routine life in the context of system of principles and culture as well as in relation with common standards and personal goals" [11]. Depressive symptomatology causes significant psychosocial impairment which in turn negatively affects QOL [12. Research indicates that the lowest quality of life scores were recorded during the depressed state followed by manic/hypomanic states while there was least impairment of quality of life in euthymic states [13]. This study aims to determine the quality of life in individuals suffering from bipolar disorder. Although many studies related to QOL in BD have been conducted in past years, this systematic review however, will elucidate the impact of BD on various different domains of QOL. This will enable the healthcare professionals to have a better understanding of quality of life and thus, take measures which can improve the lifestyle of BD patients. It will also provide insight into strategies to potentially lessen the burden of illness for healthcare system.

2. MATERIALS AND METHODS

The PRISMA Checklist 2020 was used as a protocol to conduct this systematic review. Databases such as PubMed, Cochrane, ClinicalTrail.gov, CINAHL, Embase, Science-direct and Google scholar were searched for the articles published from 2013 to 2023 using the keywords "quality of life", "bipolar disorder", "mania" and "hypomania". The articles were uploaded on Mendley and duplicates were removed. The remaining articles were screened on the basis of title and abstract and then sought for retrieval. The retrieved articles were assessed for further eligibility on the basis of inclusion and exclusion criteria. The inclusion criteria were the articles in English language with free full text availability, articles evaluating the quality of life in BD patients, cross sectional studies, case control studies, randomized control trials and cohort studies. The exclusion criteria were the articles about the treatment of BD, case series, case reports, conference papers, editorial reviews, systematic reviews and grey literature. Following the application of these criteria, the final articles were obtained to be included in our systematic review for data extraction.

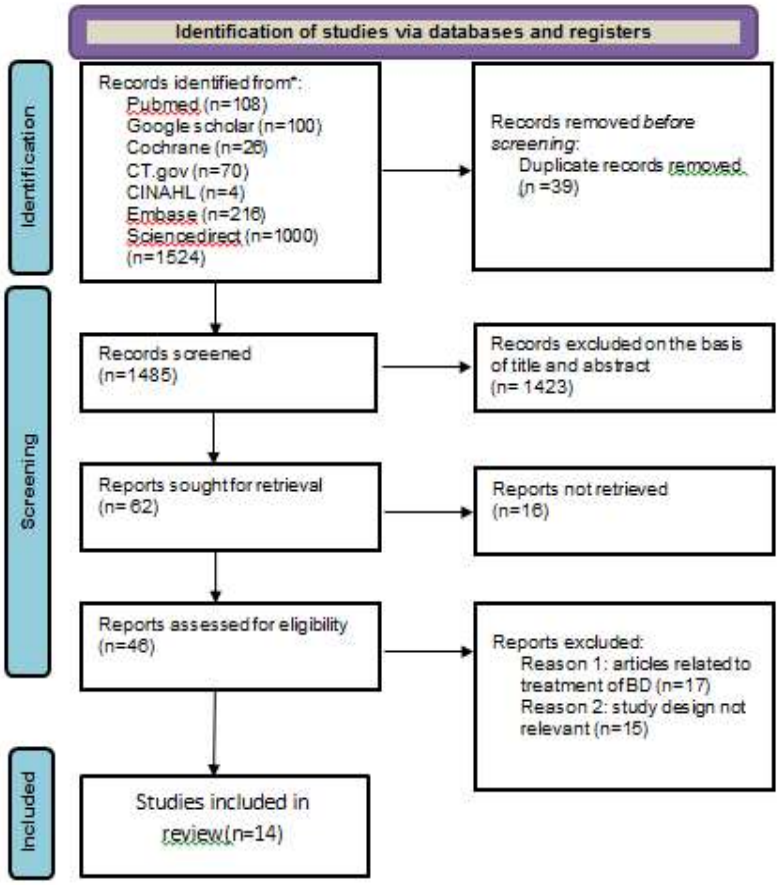

Figure 1: PRISMA Flow chart

3. RESULTS AND DISCUSSION

Using our research strategy, we initially found 1524 articles. Firstly, 39 duplicates were removed yielding 1485 articles out of which 1423 articles were excluded on the basis of title and abstract, 16 on the basis of unavailability of full text, 17 on the basis of irrelevance to Quality of life and 15 on basis of irrelevant study designs. Consequently, 14 studies were finally included which fulfilled the inclusion criteria. Among 14 selected articles, 8 were cross sectional studies [3,4,6,10,14,18,20,21,1] was longitudinal study [5, 1] was cohort study [17, 2] were case control studies [12,16, 1] study was secondary analysis15 and 1 study was qualitative research19 as represented by bar diagram (figure1) .The studies were conducted in different parts of the world including USA3,10,4,UK3,12, Canada [3], Japan [10,12,20], Germany [18], Sweden [17], Sri Lanka [14], Spain [15], Brazil [5], Norway [16], Denmark [19], Sapparo [20], Italy [21], Uganda [6], Australia [3]. The included studies consisted of a total of 2524 participants diagnosed with BD I or BD II. Among these, 1567(62.08%) were males and 957 (37.91%) were females. A variety of scales were used for the assessment of quality of life in BD patients. WHO QOL-BREF scale was used in 2 articles [5, 14], Health survey short form -36 (SF-36) was used in 3 articles [6, 15,20], SF-12 was used in 2 articles [4,21]. The other scales used in different articles were Global Assessment of Functioning GAF (2 articles15, 17), EQ-5D-5L (1 article10), BD Symptom Scale. The included articles revealed the impact of BD on various domains of QOL. The physical domain of QOL was affected in BD patients according to 10

articles [3, 4, 6, 10, 12, 14, 15-17,21] with major consequences being sleep disturbances (insomnia, hypersomnia) and exhaustion. 12 articles [3-6, 10, 12, 14-16, 19-21] reported significant impact on psychological domain in BD patients manifested predominantly as anxiety, depression, suicidal ideations and cognitive failures. 4 articles [12,14,18,19] reported poor social relations, loneliness and social isolation in BD patients. Environmental domain of QOL was affected in BD patients according to 1 article only [12]. Moreover, 8 articles [4,5,10,14,15,17,19,20] revealed low levels of independence in BD patients with high levels of presenters and absenteeism along with impaired work productivity. Only 1 article [19] reported the impact on spiritual domain of QOL.

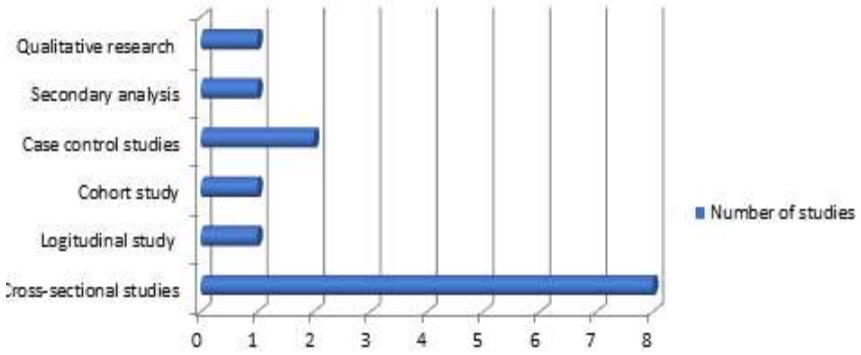

Figure 2: Study Design

Although many of the articles included in our review validate that there is a multifaceted relation between BD and QOL, most of them claim that there is poor QOL in BD patients compared with the general population. Psychological and physical domain of QOL is affected the most in BD. There is also a significant impact upon social domain and levels of independence. However, environmental and spiritual domains of QOL are least influenced by BD. Quality of life is also affected differently during certain phases of BD. QOL is better during manic and euthymic phases and worst during depressive phase. Depressive phase of BD is associated with poorer psychological QOL in comparison to the manic phase of BD [5]. It is usually characterized by gloominess, irritability, suicidal ideation, somatic disturbances and negative outlook towards life [22]. The patients who have more depressive symptoms, are usually younger, unmarried and without a university degree [10]. Higher levels of stress cause a disturbed circadian rhythm which further deteriorates the mental health and leads to poor prognosis [14]. These findings are in accordance with a previously conducted research stating that BD patients suffer from poor mental and physical health [23]. Distorted sleep patterns are a major culprit in worsening the QOL. Sleep disturbances have a significant effect on HRQOL [24]. They are associated with more severe depressive symptoms in BD patients 16. Another study has declared half of the subjects suffering from BD as “impaired sleepers” owing to sleep disturbances [15]. A recent study has also suggested that sleep deprivation initiates psychiatric symptoms and plays a role in progression of bipolar disorder. Moreover, these sleep disorders have been reported even in euthymic phase of BD [25]. Psychological and social domain is affected even in remission states [12]. Patients with BD experience not only subjective but also objective cognitive dysfunctioning [20]. The patients with mixed states have reported social isolation, loneliness, low self-esteem and feelings of guilt and hopelessness [19]. An earlier study has also analyzed the mixed states in bipolar disorder and thus has confirmed the severe reoccurrence of psychiatric symptoms such as suicidal tendencies, anxiety attacks and depression in BD patients [26]. The articles included in our study are quite heterogeneous with certain articles supporting the idea that quality of life is not much affected in BD

patient. As reported, WHOQOL-BREF assessments are not significantly different from each other in any of the subdomains suggesting that changes in QOL may not be as significant as expected5. The idea has been proven by a previous qualitative study stating that some subjects continue to do exceptionally well despite having being diagnosed with BD. In fact, BD provided them with better opportunities in terms of career and socialization [27]. There is a negative correlation between QOL and internalized stigma; the lesser the stigma, the better the QOL [12]. The society is still reluctant to address mental illnesses due to enormous stigma associated with it [28]. However, the recent advances in media and technology have started to revolutionize society's perspective towards psychiatric illnesses [29]. BD patients show low levels of emotional intelligence as compared to healthy controls. However, the subjects with higher pre-morbid intelligence find it easy to cope with their day to day life [17]. Lower age and lower sensitivity in BD leads to higher scores on physical domain of QOL, meanwhile, coping strategies have proven to be beneficial for improvement of mental health [21]. Our systematic review included articles from various parts of the world which gave a more generalized overview of impact of BD on QOL rather than in a specified population. Factors like routine, independence and social support, which were shown to have a significant effect on QOL, have not been taken into account while assessing the quality of life. Effect of physical and mental co-morbidities on QOL of BD patients has not been discussed in our study. Moreover, most of the articles had included patients irrespective of their phase of illness; the results were affected by their state of illness thus lessening the quality of our included articles. A variety of QOL assessment tools and multiple study designs were used in different articles which made evaluative comparisons quite difficult.

4. CONCLUSION

In the past few years, major achievements in the pharmacological control of BD patients have been done, thus diverting our attention to increasing the quality of life of BD patients. Our systematic review chiefly gives information about how BD negatively affects QOL in all domains of life (physical, psychological, social, levels of independence, environmental and spiritual). While most of the articles are of the view that BD has a profound negative impact on QOL, some articles have also hypothesized that QOL in BD may not be as much affected as was previously assumed. This tells us that there is a multi- faceted relationship between QOL and BD. In recent years bipolar disorder has become an important health concern not only for individuals with BD but also for our society, thus more studies evaluating QOL in bipolar disorder should be further conducted. Such knowledge can help us develop those therapeutic interventions that can ameliorate not only physical symptoms, but also improve functioning and QOL in BD patients.

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