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ABOUT COVER

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ORIGINAL ARTICLE

Observational Study

Composition of treatment alliance in bipolar disorder: A cross-sectional study of patients' perspectives

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Abstract

BACKGROUND
Treatment alliance has an impact on several key patient outcomes in all psychiatric disorders, including bipolar disorder (BD). It has been suggested that the construct of treatment alliance is different among patients from routine psychiatric settings compared to psychotherapeutic settings. However, research on the composition of treatment alliance in psychiatric disorders, such as BD, is relatively limited.

AIM
To determine whether a broader construct of treatment alliance was prevalent among outpatients with BD.

METHODS
This is a cross-sectional study, conducted in the psychiatric unit of a multi-specialty hospital in north India over 12 mo (September 2018 to September 2019). A consecutive sample of 160 remitted adult outpatients with BD on mood stabilizers for at least a year were selected. The principal instrument to assess treatment alliance was the Working Alliance Inventory-client version (WAI-Client). Other potential constituents of the alliance explored were perceived trust in clinicians assessed by the Trust in Physicians (TRIP) scale, perceived support from clinicians assessed by the Psychosocial Care by Physicians (PCP) scale, and perceived treatment satisfaction assessed by the Patient Satisfaction Questionnaire (PSQ). Associations between scores on all scales were determined by correlational and multiple regression analyses. Exploratory factor analysis of combined items of all scales was conducted using a principal components analysis.

RESULTS
Scores on all the three WAI-Client subscales were significantly correlated with each other (r = 0.66-0.81; P < 0.0001). The total TRIP scores were associated with the total WAI-Client scores (r = 0.28; P < 0.01). The total TRIP scores and the total

PCP scores were also significantly associated with the WAI-Client scores on the Task subscale (r = 0.28-0.29; P < 0.01). The total TRIP scores were significantly associated with the total PSQ scores (r = 0.45; P < 0.0001). Factor analysis yielded two independent and coherent factors, which explained 69% of the variance in data. Factor-1 ("alliance and support"), which explained about 41% of the variance, was comprised of a combined WAI-Client goal-task-bond component as well as the PCP support items. Factor-2 ("trust and satisfaction"), which explained about 28% of the variance, consisted of all the TRIP trust and the PSQ treatment satisfaction items.

CONCLUSION
A broader construct of treatment alliance in BD was found. Apart from collaborative components, this construct included patients' perceptions regarding trust in clinicians, support from clinicians, and treatment satisfaction.

Key Words: Treatment alliance; Bipolar disorder; Composition; Factor-analysis

Core Tip: Research on the composition of treatment alliance in bipolar disorder (BD) is relatively limited. This study examined its composition in 160 remitted adult outpatients with BD using four different scales. Factor analysis yielded two independent factors explaining 69% of the variance. Factor-1 comprised of a combined Working Alliance Inventory goal-task-bond component and perceived clinicians' support. Factor-2 consisted of items relating to the perceptions of trust in clinicians and satisfaction with treatment. This study suggested that in addition to collaborative components, treatment alliance among patients with BD also includes patients' perceptions of clinicians' trust, clinicians' support, and treatment satisfaction.

INTRODUCTION

Interest in the alliance between patients and clinicians has been gaining ground in mental health care because of its pivotal role in all aspects of psychiatric practice. Though the evidence is relatively scarce, stronger clinician-patient alliances appear to influence a variety of patient outcomes across different psychiatric disorders[1,2]. The principal benefit of an effective alliance is enhanced treatment adherence and engagement[1-5]. Other benefits for patients include reduced symptom severity, improved quality of life and functioning, favorable treatment attitudes, and greater treatment satisfaction[1-3]. The construct of treatment alliance in mainstream psychiatry has its roots in psychotherapy[1-3,6,7]. Of all the frameworks proposed, psychiatric practice in clinical settings has found Bordin's collaborative concept of working alliance the easiest one to adopt[1,2]. This model has a tripartite structure comprised of mutual agreements between clients and therapists on the goals and tasks of treatment, along with emotional bonds between them consisting of shared feelings of trust, acceptance, and confidence[8-11]. However, even this model is not readily transposed from psychotherapeutic to conventional psychiatric settings because of several discrepancies between the two treatment milieus[2-4,6,7]. These include the dissimilarities in nature, goals, and duration of treatment, the differences in types of patients, the diversities in treatment locations and professionals providing care, and the conflicts between the legal responsibilities of clinicians and their roles as therapists. Additionally, the notion of treatment alliance in psychiatry has also been influenced by other subsequent developments, such as the need for patient-centered care and shared decision-making (SDM), recovery-orientated approaches to care, and theories of clinician-patient communication[1,4,5,7,12]. This has led to proposals for enlarging the concept of treatment alliance in psychiatry by incorporating theoretical perspectives other than psychotherapeutic ones[2-4,6,7]. Focused research on the construct of alliance to determine its exact composition among patients from routine psychiatric settings has also been recommended[1,3,4,6,7]. However, despite such recommendations, research on the constituents of treatment alliance in psychiatric disorders has been limited[2,4,6,7].

Research on treatment alliance is particularly scarce for conditions such as bipolar disorder (BD) in spite of ample evidence suggesting that treatment alliance in BD has a similar impact on medication adherence and other patient outcomes[5,13-16]. This consideration prompted the current attempt at examining the composition of treatment alliance among outpatients with BD attending a hospital-based

psychiatric service. Factor analytic studies have been carried out in different groups of patients with psychiatric disorders using a variety of scales. These have shown that, particularly from the patient's perspective, collaborative aspects (task, goal, bond), trust in clinicians, cooperation, therapist support, and treatment satisfaction are the core components of the treatment alliance[17-20]. Additionally, existing studies of BD also indicate that apart from patients' views on collaboration with clinicians, their perceptions of trusting and supportive clinician-patient relationships, and their satisfaction with treatment is also associated with the strength and quality of alliances[21-25]. Thus, based on the existing evidence regarding treatment alliance, it was hypothesized that a broader construct of the alliance was more likely to exist among such patients. Therefore, in addition to collaborative aspects, other contributions to the construct of treatment alliance explored among patients of this study were perceived trust in clinicians, perceived clinicians' support, and treatment satisfaction.

MATERIALS AND METHODS

Participants

This was a part of a larger cross-sectional study which had examined the association of treatment alliance with medication adherence among outpatients with BD undergoing treatment at the psychiatry department of a multi-specialty hospital in north India. Sample size estimation, based on non-adherence rates of 30%, indicated that a minimum of 160 patients was required (alpha = 80%; $P < 0.05$).

Patients aged more than 18 years, with a Diagnostic and Statistical Manual of Mental Disorders-IV diagnosis of BD and on mood stabilizer treatment for at least a year before intake were selected. Patients with organic mental disorders, intellectual disabilities, acute illnesses, and potential for self-harm or violence were excluded. Patients had to be in remission during intake. Remission was defined as current scores of less than seven on the Hamilton Depression Rating Scale and less than six on the Young Mania Rating Scale. Finally, patients had to be accompanied by caregivers who were healthy adults involved in the patient's care.

Of the initial consecutive sample of 250 patients obtained over 12 mo (September 2018 to September 2019), 90 had to be excluded because they did not meet selection criteria. Thus, 160 patients formed the eventual sample of this study. The study was approved by the institutional review committees. Written informed consent was sought from the participants before inclusion and other ethical safeguards were also followed throughout the study.

Assessments

The diagnoses were re-confirmed using the Mini International Neuropsychiatric Interview[26]. Clinical details were compiled using the Self-Rated Retrospective Life Chart Form of the National Institute of Mental Health[27]. Assessment of the collaborative components of treatment alliance was carried out using the Working Alliance Inventory-client version (WAI-Client)[8]. The WAI-Client has 36 items grouped into three subscales of goal, task, and bond, with a seven-point rating for each item. Higher scores (range 36-252) reflect more positive ratings of the alliance. Patients' perceptions of support from clinicians were assessed with the Psychosocial Care by Physicians (PCP) scale and their perceived trust in clinicians was measured with the Trust in Physicians-Short Form scale (TRIP)[28,29]. Both these scales are derived from the validated Cologne Patient Questionnaire and have a four-point item rating system. The 15-item PCP has four subscales of "Emotional Support", "Supportive Behavior" (subjective perceptions of support from physicians) "Informational Support", and "SDM". Higher scores (range 15-60) indicate greater levels of perceived support. Higher scores on the three-item TRIP (range 4-12) suggest greater levels of trust in physicians and their competence. Treatment satisfaction was examined using the Patient Satisfaction Questionnaire (PSQ)[30]. Higher scores on this four-item scale (range 0-12) denote greater satisfaction. To ensure uniformity of assessments, scale items were read out to all the patients and caregivers while eliciting their responses.

Statistical analysis

The data were analyzed using the Statistical Package for the Social Sciences, version 23 for Windows. The nature of the distribution was ascertained by the Kolmogorov-Smirnov test. All continuous variables were normally distributed. Thus, Pearson's coefficients were used to determine the correlation between the scores on all scales and between the subscales of the WAI-Client. The Bonferroni correction was used to minimize chance associations. The significance level after the Bonferroni correction was set at 0.0003. Results from the stepwise multiple regression analyses, which were a part of the larger study were also used to determine associations between different scales. The composition of treatment alliance in BD was examined using exploratory factor analysis of items from all four scales. After the optimum number of factors was determined, a principal components analysis using orthogonal rotation with the varimax technique was conducted to determine the final factor solution. The analysis was approved by a biomedical statistician.

RESULTS

Patient profiles

The majority of the participants were middle-aged males who were married, literate, and employed, and came from rural, middle-class, nuclear families. Ratings of the course of their illness by patients and caregivers revealed indicators of favorable as well as adverse course and outcome. Though the patients had been ill for 18 years on average, they had also been on treatment for an average of 17 years. Moreover, their age of onset was relatively late, with episodes that were not frequent and were only of mild to moderate severity. At intake, the patients were in prolonged remission, with adequate insight and functioning, and low levels of residual symptoms. However, about half of them had predominantly manic episodes, episodes with psychotic symptoms, inadequate adherence, and multiple breakthrough episodes, relapses, or hospitalizations. Other indicators of poor outcome present in about 20%-30% of the patients included rapid-cycling course, comorbid physical or psychiatric disorders, and lifetime suicidal attempts. These details are included in Table 1.

Treatment alliance: Component scores and correlations

The results of the treatment alliance component scores and their correlations are depicted in Table 2. The average total WAI-Client scores were high, suggesting that patients had predominantly positive views about their alliances with clinicians. Mean scores were significantly higher on the Bond subscale, followed by the Task and Goal subscales. The mean PCP scores were similarly high, indicating that patients' subjective perceptions were that their clinicians had been supportive of them. Weighted mean PCP scores were highest on the "Supportive behavior" subscale, followed by the subscales measuring emotional support, SDM, and informational support. The TRIP scores also revealed high levels of trust in the clinicians and their competence. The PSQ scores correspondingly indicated that patients were quite satisfied with the care they were receiving, including their access to clinicians and the competence displayed by them.

Scores on all the three WAI-Client subscales were significantly correlated with each other. The highest values of correlation coefficients were obtained for association between the Goal and Task subscale scores ($r = 0.81$; $P < 0.0001$), followed by the association between the Bond and Task subscale scores ($r = 0.69$; $P < 0.0001$), and the association between the Bond and Goal subscale scores ($r = 0.66$; $P < 0.0001$). The total TRIP scores were significantly associated with the total WAI-Client scores ($r = 0.28$; $P < 0.01$) and scores on the Task subscale ($r = 0.29$; $P < 0.01$). The total PCP scores were significantly associated with the WAI-Client Task subscale scores ($r = 0.28$; $P < 0.01$). The PCP-SDM subscale scores were significantly associated with the total WAI-Client scores ($r = 0.28$; $P < 0.01$) and scores on the goal subscale ($r = 0.28$; $P < 0.01$). However, the results of the stepwise multiple regression analyses (not included here) found that the PCP-SDM scores explained only about 3%-4% of the variance in the total WAI-Client and Goal subscale scores, while the TRIP scores contributed very little to the variance in the WAI-Client scores. Finally, the total TRIP scores were significantly associated with the total PSQ scores ($r = 0.45$; $P < 0.0001$).

Composition of treatment alliance: Results of the exploratory factor analysis

The Bartlett's test of Sphericity and the Kaiser-Meyer-Olkin measure both indicated that factor analysis was appropriate for the combined data from all the scales. Only factors with eigenvalues > 1 were retained and loadings that were ≥ 0.4 were identified as significant loadings for each factor. The Scree plot also tailed off at two factors. Thus, the final factor solution that provided the best fit for the data consisted of two factors, which explained 69% of the variance in the data. Factor-1 or the "alliance and support" factor explained about 41% of the variance. It was made up of a combined WAI-Client component comprising of goals, tasks, and bonds as well as all the PCP support items. Factor-2 or the "trust and satisfaction" factor explained about 28% of the variance and consisted of all the TRIP trust items and the PSQ treatment satisfaction items. The results of the factor analysis are shown in Table 3.

DISCUSSION

The existing literature suggests that a broader construct of treatment-alliance may be prevalent among patients from conventional psychiatric settings[2,4,6,7]. Nevertheless, studies of the composition of alliance among these patients are relatively few compared to studies among psychotherapy clients. The majority of studies among patients receiving psychotherapy have found a two-factor structure of treatment alliance, employing either the WAI or other measures[31-34]. These two factors have usually included a "relationship" or bond factor and another "collaborative" or combined task and goal factor[1, 2,10,11], although the second factor has also included treatment satisfaction and help from therapists[17, 18]. Others have found a single factor structure of alliance that incorporates the three dimensions of task, goal, and bond[31,35-38]. An equal number of studies have found separate factors for the three dimensions, but have noted a great deal of overlap between the task and goal components[39-41]. Among patients with psychiatric disorders, factor-analytic studies of the WAI or the Helping Alliance

Table 1 Participants' profiles

Demographic & clinical variables	Patients with BD, *n* = 160
Age (yr)	
mean ± SD (range)	43.96 ± 13.51 (18-65)
Sex	
Male, *n* (%)	107 (67)
Female. *n* (%)	53 (33)
Marital status	
Currently single, *n* (%)	27 (17)
Currently married, *n* (%)	133 (83)
Year of education	
mean ± SD (range)	11.85 ± 3.27 (5-18)
Occupation	
Not earning, *n* (%)	43 (26)
Earning, *n* (%)	117 (74)
Family income, in rupees per month	
mean ± SD (range)	36977 ± 29385 (1500-131500)
Family type	
Nuclear, *n* (%)	106 (66)
Non-nuclear, *n* (%)	54 (34)
Residence	
Rural, *n* (%)	128 (80)
Urban, *n* (%)	32 (20)
Middle socioeconomic class, *n* (%)	110 (69)
Diagnosis	
BD type I, *n* (%)	157 (98)
BD type II, *n* (%)	3 (02)
Most recent episode	
Manic or hypomanic[1], *n* (%)	88 (55)
Depressive, *n* (%)	72 (45)
Age of onset (yr)	
mean ± SD (range)	26.11 ± 09.50 (12-60)
Duration of illness (mo)	
mean ± SD (range)	210.88 ± 132.73 (12-600)
Duration of treatment (mo)	
mean ± SD (range)	202.05 ± 129.01 (12-570)
Duration of current remission (mo)	
mean ± SD (range)	19.82 ± 38.99 (4-456)
HDRS score	
mean ± SD (range)	2.24 ± 1.18 (1-7)
YMRS score	
mean ± SD (range)	1.56 ± 0.830 (1-6)
Insight-YMRS item 11 score	

mean ± SD (range)	0.50 ± 0.56 (0-2)
Insight-HDRS item 17 score	
mean ± SD (range)	0.55 ± 0.4 (0-2)
GAF score	
mean ± SD (range)	69.04 ± 11.245 (48-92)
Total number of episodes	
mean ± SD (range)	6.94 ± 5.77 (1-40)
Number of manic episodes[1]	
mean ± SD (range)	3.68 ± 3.62 (0-30)
Number of depressive episodes	
mean ± SD (range)	2.73 ± 2.71 (0-12)
Most recent episode polarity	
Manic or hypomanic[1], *n* (%)	88 (55)
Depressive, *n* (%)	72 (45)
Average severity of manic episodes[1,2], *n* (%)	1.77 ± 0.62 (1-3) median 2
Average severity of depressive episodes[2], *n* (%)	1.49 ± 0.56 (0-3) median 1
Patients with at least one episode of psychotic mania, *n* (%)	107 (67)
Patients with at least one episode of psychotic depression, *n* (%)	84 (53)
Rapid cycling affective disorder, *n* (%)	30 (19)
Seasonal pattern, *n* (%)	62 (39)
Lifetime suicidal attempts, *n* (%)	34 (21)
Patients with any lifetime psychiatric comorbidity, *n* (%)	43 (27)
Patients with comorbid substance use disorders, *n* (%)	34 (21)
Patients with comorbid anxiety disorders, *n* (%)	18 (12)
Patients with lifetime comorbid physical illness, *n* (%)	54 (34)
Lifetime history of inadequate medication-adherence, *n* (%)	77 (48)
Lifetime history of relapses or breakthrough episodes, *n* (%)	85 (53)
Any history of hospitalization, *n* (%)	82 (51)
On mood stabilizer prophylaxis, *n* (%)	160 (100)
On lithium carbonate, *n* (%)	116 (73)
Average dose	720 ± 193 mg/d
On sodium valproate, *n* (%)	42 (27)
Average dose	1021 ± 284 mg/d
On antipsychotics, *n* (%)	105 (66)
On antidepressants, *n* (%)	40 (25)

[1]Manic and hypomanic episodes have been clubbed together and referred to as mania/manic episodes.

[2]Severity was graded as 0-3 with 0 representing remission, 1 representing a mild episode, 2 representing a moderate episode, and 3 representing a severe episode.

BD: Bipolar disorder; GAF: Global Assessment of Functioning Scale; HDRS: Hamilton Depression Rating Scale; YMRS: Young Mania Rating Scale.

Questionnaire (HAQ) have also found alliance to consist of either two[17,18,32] or three factors[19,20]. Other studies have found a single factor structure of treatment alliance[18,42], including studies of those with BD[21,43].

The approach used in this study to determine the constituents of treatment alliance in BD was partly driven by the collaborative theory of alliance and partly by incorporating components of possible relevance to the alliance in BD, such as patients' perceptions of clinicians' trust, clinicians' support, and

Table 2 Components of treatment alliance: Scores on the four scales

Scores	Patients with BD, *n* = 160, mean ± SD (range)
WAI-Client scores	
Total WAI-Client scores	222.82 ± 20.14 (142-252)
Goal subscale	72.24 ± 7.97 (45-84)
Bond subscale	76.94 ± 7.97 (44-84)
Task subscale	73.64 ± 7.55 (49-84)
PCP scores[1]	
Total PCP scores	40.34 ± 5.86 (22-60)
Emotional support subscale	14.45 ± 3.23 (8-33)
Informational support subscale	6.5 ± 1.03 (4-8)
SDM subscale	9.68 ± 1.57 (5-12)
Supportive behaviour (support) subscale	9.69 ± 1.35 (4-12)
TRIP scores	
Total TRIP scores	10.12 ± 1.45 (8-12)
I completely trusted my doctors	3.40 ± 0.50 (2-4)
I had the impression that the doctors are very competent	3.38 ± 0.51 (2-4)
With the doctors in this hospital one is in good hands	3.40 ± 0.50 (2-4)
PSQ scores	
Total PSQ scores	9.39 ± 1.99 (6-12)
Satisfied with places and times of appointment	2.30 ± 0.59 (1-3)
Satisfied with time available for talking about problems	2.31 ± 0.55 (1-3)
Feel confident that members of service are competent to deal with problems	2.39 ± 0.49 (2-3)
Pleased with the care received from the service so far	2.38 ± 0.50 (1-3)
Correlations between scores on different scales and subscales	Pearson's coefficients[2]
Goal and Task subscale scores of the WAI-Client	0.81[a]
Bond and Task subscale scores of the WAI-Client	0.69[a]
Bond and Goal subscale scores of the WAI-Client	0.66[a]
Total TRIP scores and WAI-Client total scores	0.28[b]
Total TRIP scores and WAI-Client Task subscale scores	0.29[b]
Total PCP scores and WAI-Client Task subscale scores	0.28[b]
PCP-SDM subscale scores and WAI-Client total scores	0.28[b]
PCP-SDM subscale scores and WAI-Client Goal subscale scores	0.28[b]
Total scores on the TRIP and the PSQ	0.45[a]

[a]$P < 0.0001$.

[b]$P < 0.01$.

[1]Weighted mean scores were highest on the "Supportive behavior" subscale (subjective perceptions of support by physicians), followed by the subscales measuring emotional support, shared decision-making and informational support.

[2]Only significant associations that persisted after the Bonferroni corrections are shown. Significant associations were also noted between the Working Alliance Inventory-client version (WAI-Client) total and subscale scores and the Trust in Physicians scores, between the WAI-Client total and subscale scores and the Psychosocial Care by Physicians total and subscale scores, but these did not cross the Bonferroni threshold.

BD: Bipolar disorder; PCP: Psychosocial Care by Physicians; PSQ: Patient Satisfaction Questionnaire; SDM: Shared decision-making; TRIP: Trust in Physicians; WAI-Client: Working Alliance Inventory-client version.

treatment satisfaction. In common with other studies from psychotherapeutic and clinical settings, two relatively independent factors were found to constitute the treatment alliance in BD based on patients' perceptions. The two-factor structure represented a statistically valid factor solution that accounted for a

Table 3 Components of treatment alliance: Results of factor analysis

Components	Initial eigen values[1]			Rotation sums of squared loadings[1]		
	Total	Percentage of variance	Cumulative percentage	Total	Percentage of variance	Cumulative percentage
1	2.789	46.482	46.482	2.459	40.980	40.980
2	1.336	22.272	68.754	1.666	27.774	68.754
Components[2]	Factor 1			Factor 2		
WAI-Client Task scores	0.913			-		
WAI-Client Goal scores	0.903			-		
WAI-Client Bond scores	0.850			-		
PCP total scores	0.552			-		
TRIP total scores	-			0.820		
PSQ total scores	-			0.795		

[1]Bartlett's Test of Sphericity - χ^2 = 356.39; df = 15; *P* < 0.001; Kaiser-Meyer-Olkin measure = 0.72 - this indicated that factor analysis was appropriate for the data.

[2]Only factors with Eigen values of > 1 were retained and loadings that were ≥ 0.4 were identified as significant loadings for each factor. The Scree plot tailed off at 2 factors.

PCP: Psychosocial Care by Physicians scale; PSQ: Patient Satisfaction Questionnaire; TRIP: Trust in Physicians; WAI-Client: Working Alliance Inventory-client version.

large proportion of variance in the data. The variance explained (69%) was comparable to earlier studies using a variety of instruments among clients from psychotherapeutic settings[31,32,38,39] or among patients from clinical settings[17], including those with BD[21]. Then again, the composition of factors obtained in this study was a little different from the existing studies. Factor-1 of this study consisted of a combined goal-task-bond component ("alliance") and perceived clinicians' support ("support"), while factor-2 consisted of patients' perceptions of trust in clinicians ("trust") and their satisfaction with the treatment received ("satisfaction").

The aggregation of goals, tasks, and bonds into a single component as a part of factor-1 was not unexpected given that there is a great deal of overlap between these dimensions. Significant correlations between the three WAI subscales found in this study have also been reported in several earlier ones and are commonly cited as evidence for this overlap[8,31,35,36,40]. Additionally, a similar integrated alliance factor combining goal, task, and bond items of the WAI has also been replicated across several factor-analytic studies[31,35,36,38,42]. It has been proposed that the integration of the three dimensions could be unique to patients' perceptions of the alliance[10,38,40]. Unlike therapists, patients do not differentiate between the three components of tasks, goals, and bonds and view them as a unified entity. The three dimensions may seem also indistinguishable to patients because they develop simultaneously during treatment. Moreover, it appears that for patients, the quality of their attachment with their clinicians is of primary importance[10,11,42]. Therefore, stronger bonds with clinicians are likely to enhance their agreement on goals and tasks of treatment. Nevertheless, the importance of collaboration as a part of the treatment alliance in BD is supported by several studies that have shown that patients assign a key role to the quality of interactions with their clinicians while rating alliance[23,25,44-46]. The presence of a "support" component as a part of factor-1 was also in keeping with the existing literature on the composition of alliances. One of the earliest concepts of treatment alliance formulated by Horvath and Luborsky[10] was based on patients' perceptions of their therapists as being supportive and helpful in addition to a sense of working together with them[11,17,18]. Since then many factor-analytic studies of the WAI, the HAQ, and other scales have consistently shown that perceived therapist supportiveness and helpfulness is an integral part of the alliance[17,31,36,39]. Additionally, these studies have found that the dimensions of perceived helpfulness and collaboration are highly correlated. This was similar to the association of the PCP support scores and the scores on the goal and tasks components of the WAI-Client in this study. It is also likely that perceived clinician support plays a greater role in patients' rather than clinicians' views of the alliance[36,46]. Moreover, quite a few studies of BD have shown that patients believe clinician support and helpfulness to be a central part of the treatment alliance[24,45-48].

The second factor consisted of a combination of trust in clinicians and treatment satisfaction among patients of this study. Although Bordin's concept of bonds includes feelings of mutual trust between patients and therapists[8-10], perceived trust in clinicians, favorable views about their competence, and treatment satisfaction could have emerged as independent constituents of treatment alliance in this

study simply because separate scales were used to measure these aspects. Moreover, cultural influences on alliance may have had some bearing in this study. The scores on various scales suggested the pre-eminence of trust, bonds, and emotional support as opposed to the goal and task dimensions of the alliance. This is in keeping with the suggestions that not only are Asian patients more likely to have a global view of treatment alliance, but they may also place a much higher value on their relationship with clinicians than on the collaborative aspects of treatment[38]. Consistent with this notion, studies of BD among Chinese patients have shown that patients' trust in clinicians and respect for their authority was far more influential in forging effective alliances than mutual agreements on tasks and goals[49,50]. However, the finding that trust in clinicians and positive beliefs regarding clinicians' competence is a necessary part of treatment alliance seems to be a universal finding[3,51]. Accordingly, the contribution of perceived trust to alliance formation found in this study has been noted by other factor-analytic studies with the WAI and other scales[17,31,32,52]. Studies of patients with BD have also shown that the trusted physician is regarded by them as a positive asset[22,23,44,53]. The treatment satisfaction component of factor-2 consisted of patients' satisfaction with the outcome of treatment, their confidence in the clinicians' abilities, and their access to the clinicians. Factor-analytic studies of the HAQ have shown that perceived satisfaction with treatment outcome is an essential component of alliances[18]. Similarly, patients' confidence in the clinician's competence has formed a part of the construct of alliance in other studies[31,32,52]. Moreover, these studies have also shown that there is considerable overlap between trust or bond, treatment satisfaction, and confidence in clinicians[18,31,52], which was similar to the significant association between the scores on the trust (TRIP) and the patient satisfaction (PSQ) components of this study. Finally, studies of BD have also found treatment satisfaction is associated with patients' perceptions of treatment alliances[21,25,49,50,53]. This suggests that the "trust and satisfaction" factor of this study was a conceptually valid component of treatment alliance in BD.

Limitations

This exploratory study of treatment-alliance in BD had some limitations. Patients of this study had relatively higher total and subscale scores on the WAI-Client compared to other studies of BD using the same scale[54]. Moreover, unlike the other studies, scores on the bond subscale were significantly higher than the task and goal subscales in this study[35,36]. The precedence given to emotional support on the PCP was also different from other studies[28,29], but was in keeping with priority given to emotional bonds with clinicians. Apart from the cultural influences mentioned above, these differences could have been due to the favorable demographic attributes and the relatively stable course of illness among these patients, especially at the time they were assessed. Therefore, these findings will need to be replicated across different patient samples before they can be considered conclusive. This study focused exclusively on patients' perceptions of alliance in BD. Although the existing literature is somewhat inconclusive regarding differences between patients' and clinicians' perceptions of treatment alliance [55], it has to be acknowledged that patients' perceptions represent only one-half of the total picture. The cross-sectional design of this study could have been a limiting factor, though many studies have shown that factor structures remain stable over time[33,37,42]. Some scales used in this study, including the WAI, have not been validated in Indian patients. Finally, though factors like clinicians' support and treatment satisfaction have been considered as indicators of patient outcome, they are also included as a part of several alliance measures[3].

CONCLUSION

Despite these limitations the findings of this study have provided preliminary evidence in favor of a broader concept of treatment alliance among outpatients with BD. The composition of alliance in these patients went beyond the usual collaborative elements to include perceptions of trust in clinicians, perceived support from them, and satisfaction with their treatment. Such an expanded concept of treatment alliance would also be congruent with the results of studies of BD, which have found that patients' views on collaboration with clinicians, clinicians' support, trust in clinicians and their expertise, and treatment satisfaction are associated with effective treatment alliances in BD[5,13-16]. The results emphasize the need for further research into the construct of treatment alliance in BD given its likely impact on adherence and other treatment outcomes. The findings of this study might also provide clinicians with insights into the kind of treatment relationships their patients seek from them. It appears that patients appreciate a collaborative and supportive relationship that promotes mutual trust and enhances perceived satisfaction. Therefore, treatment alliances that incorporate these components are more likely to help patients with BD.

ARTICLE HIGHLIGHTS

Research background

Treatment alliance has an impact on several key patient outcomes in all psychiatric disorders, including bipolar disorder (BD). It has been suggested that the construct of treatment alliance is different among patients from routine psychiatric settings compared to psychotherapeutic settings; however, research on the composition of treatment alliance in psychiatric disorders, such as BD, is relatively limited. The findings of this study might provide clinicians with insights into the kind of treatment relationships their patients seek from them. It appears that patients appreciate a collaborative and supportive relationship that promotes mutual trust and enhances perceived satisfaction. Therefore, treatment alliances that incorporate these components are more likely to help patients with BD.

Research motivation

There is evidence to suggest that the concept of treatment alliance may differ among patients with psychiatric disorders seeking treatment in routine clinical settings. This study attempted to determine whether a broader construct of treatment alliance was prevalent among outpatients with BD. However, this was a preliminary exploratory study of treatment-alliance in BD that had some methodological limitations. The results emphasize the need for further, methodologically advanced research into the construct of treatment alliance in BD given its likely impact on adherence and other treatment outcomes.

Research objectives

Based on the existing evidence regarding treatment alliance, it was hypothesized that a broader construct of the alliance was more likely to exist among such patients. Therefore, in addition to collaborative aspects, other contributions to the construct of treatment alliance explored among patients of this study were perceived trust in clinicians, perceived clinicians' support, and treatment satisfaction.

Research methods

This was a cross-sectional study, conducted in the psychiatric unit of a multi-specialty hospital in north India over 12 mo (September 2018 to September 2019). A consecutive sample of 160 remitted adult outpatients with BD on mood stabilizers for at least a year were selected. The principal instrument to assess treatment alliance was the Working Alliance Inventory-client version (WAI-Client). Other potential constituents of the alliance explored were perceived trust in clinicians assessed by the Trust in Physicians (TRIP) scale, perceived support from clinicians assessed by the Psychosocial Care by Physicians (PCP) scale, and perceived treatment satisfaction assessed by the Patient Satisfaction Questionnaire (PSQ). Associations between scores on all scales were determined by correlational and multiple regression analyses. Exploratory factor analysis of combined items of all scales was conducted using a principal components analysis.

Research results

Scores on all the three WAI-Client subscales were significantly correlated with each other (r = 0.66-0.81; P < 0.0001). The total TRIP scores were associated with the total WAI-Client scores (r = 0.28; P < 0.01). The total TRIP scores and the total PCP scores were also significantly associated with the WAI-Client scores on the task subscale (r = 0.28-0.29; P < 0.01). The total TRIP scores were significantly associated with the total PSQ scores (r = 0.45; P < 0.0001). Factor analysis yielded two independent and coherent factors, which explained 69% of the variance in data. Factor-1 ("alliance and support"), which explained about 41% of the variance, was comprised of a combined WAI-Client goal-task-bond component as well as the PCP support items. Factor-2 ("trust and satisfaction"), which explained about 28% of the variance, consisted of all the TRIP trust and the PSQ treatment satisfaction items.

Research conclusions

A broader construct of treatment alliance in BD was found. Apart from collaborative components, this construct included patients' perceptions regarding trust in clinicians, support from clinicians, and treatment satisfaction.

Research perspectives

More focused research is needed to determine the components of treatment alliance in BD. Future research should also determine the relative importance of the different components of alliance and their impact on key patient outcomes.

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FOOTNOTES

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