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Original article

Are therapeutic relationships in psychiatry explained by patients' symptoms? Factors influencing patient ratings

R. McCabe *, S. Priebe

Unit for Social and Community Psychiatry, Barts and the London School of Medicine, Newham Centre for Mental Health, London E13 8SP, UK

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Abstract

Objective. – To investigate the therapeutic relationship and how it is influenced by sociodemographic and clinical factors.

Method. – This study analysed self-ratings of the therapeutic relationship in 90 first-admitted, 72 long-term hospitalised and 41 out-patients with schizophrenia along with 249 alcoholic and 42 depressive in-patients and their association with sociodemographic and clinical variables. In all the patients, the therapeutic relationship was assessed using a simple scale based on three items.

Results. – The therapeutic relationship differed significantly across groups. It was rated most positively by alcoholic patients and least positively by long-term hospitalised schizophrenia patients. Increased observer-rated psychopathology was significantly associated with a poorer therapeutic relationship in all groups except the hospitalised schizophrenia patients. In this group, increased self-rated symptoms were associated with a poorer relationship. In multiple regression analyses, 3–28% of the relationship variance was explained by psychopathology.

Conclusions. – Patient ratings of the therapeutic relationship were partially explained by psychopathology, leaving the greater part of the variance to be explained by factors other than sociodemographic and clinical characteristics.

Keywords: Professional patient relations; Assessment; Psychiatry; Psychopathology; Therapeutic relationship

1. Introduction

The therapeutic relationship between clinicians and their patients is of central importance in the delivery of mental health care. A large body of research exists in psychotherapy indicating that the therapeutic relationship is a strong predictor of patient outcome, regardless of the theoretical orientation of therapy [9]. Empirical studies of the therapeutic alliance in psychiatric settings have also investigated its association with outcome. In line with psychotherapy findings, a more positive therapeutic relationship in psychiatric settings is consistently associated with a better outcome reflected in indices such as time spent in hospital, level of symptomatology and quality of life, a finding replicated across different diagnoses and treatment settings [4,5,10,24,27]. Moreover, the relationship appears to be important to the patients' subjective quality of life, particularly in long-term treatment situations [14,27,28].

Apart from its association with outcome, little is known about how the patient–therapist relationship in psychiatric care varies in different diagnostic groups and treatment settings or what factors are associated with global assessments of its quality. Isolated studies have reported that a more positive therapeutic relationship in the treatment of severe mental illness is associated with older age [3], more service contacts [10] and less severe symptoms [1,4,16].

The relative paucity of research on the therapeutic relationship in psychiatry is reflected in the absence of a widely accepted method for its assessment in psychiatric treatment. The methods and underlying concepts used in the studies to date have mostly been developed for psychotherapy [13] with some of the empirical studies conducted in psychiatric settings assessing the relationship in the context of psychotherapy [5,11] rather than routine psychiatric care. This study employed a simple assessment of the patient–clinician relationship in routine psychiatric care that is briefer than other scales, but overlaps in content covering the basic elements of alliance scales, i.e. feeling understood, respected and receiving the right care [15] and has predictive validity in relation

* Corresponding author.
E-mail address: r.mccabe@qmul.ac.uk (R. McCabe).

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to the treatment outcome [24]. In the present study, this measure was used to investigate (i) whether the therapeutic relationship varies across diagnostic groups and treatment settings and (ii) how the therapeutic relationship is associated with sociodemographic and clinical variables. On the basis of previous findings, it was hypothesised that the therapeutic relationship would be more positively rated by older patients and those with less severe symptomatology.

2. Methods

2.1. Sample

A secondary analysis was conducted on five samples, all meeting ICD-10 criteria for the relevant diagnosis. Sample A consisted of 90 patients with a diagnosis of schizophrenia admitted to a psychiatric hospital for the first time [18]. Samples B and C were both subgroups with schizophrenia of the Berlin Deinstitutionalisation Study [7] who had been hospitalised continuously for at least 6 months and were followed up after one and a half years: sample B consisted of 72 patients who were still in hospital at follow-up and sample C of 41 patients who had been discharged and were living in the community. Sample D was made up of 249 in-patients with alcoholism [21]. Sample E comprised 42 in-patients with depression [26]. More details on each sample are available in the papers cited above.

2.2. Instruments

A modified version of the Helping Alliance Scale [24] was used to assess the therapeutic relationship, a measure that is applicable in the same way to different psychiatric treatment settings. It is brief and easily understandable, thus maximising the completion rate by the patients. Three items which focus on therapeutic relationship(s) pertinent in one's treatment situation ("Does your case manager/key worker/therapist/doctor understand you and is he/she engaged in your treatment/care?", "Do you believe you are receiving the right treatment/care for you?", and "Do you feel respected and well regarded?") were summed to yield an indicator of one's relationship with the primary clinician. The professional background of the primary clinician varied according to the sample and setting and included psychiatrists, psychologists and psychiatric nurses. Each item was rated on a scale, which combined the properties of a visual analogue scale and an 11-point rating scale with the extreme poles 0 (not at all) and 10 (yes entirely).

Psychopathology was observer rated using the 18-item version of the Brief Psychiatric Rating Scale [17].

Self-rated needs for care were assessed on the Berlin Needs Assessment Schedule [8]. This schedule assesses the patients' view of their need for help or support in 16 domains (dichotomous ratings for each domain: 0, no need; 1, need exists) and if a need exists, the extent to which support is received from friends/relatives and services on a scale from 0 (no support) to 4 (high support). To calculate unmet needs, scores on the items asking whether support was received were categorised into dichotomous ratings as follows: a score of 0 or 1 (no or low support) was considered to be an unmet need while a score of 2 or 3 (moderate or high support) was considered to be a met need.

Self-rated symptoms, i.e. non-specific psychological and physical complaints, were assessed by the Von Zerssen Complaints Checklist [29]. Each complaint is rated between 0 (non existent) and 3 (severe). Interviewers were trained psychiatrists or psychologists not involved in patients' treatment.

The above instruments were employed because of their applicability across different diagnostic groups and treatment situations.

2.3. Statistics

Differences between groups with respect to sociodemographic and clinical data were analysed by means of χ^2, t-test and analysis of variance (ANOVA). With the current sample sizes (using the mean sample size of 99) in an ANOVA, an effect size of 0.2 will be detected with 95% power, with a significance level of 0.05 [2]. The ANOVA for testing differences in the therapeutic relationship was repeated with the influence of BPRS sum score controlled for as a co-variate. Cronbach's alpha was calculated to determine the internal reliability of the modified HAS. Correlation coefficients were computed to assess the test–retest reliability of the HAS in samples B and C. Pearson correlations between ratings of the therapeutic relationship and demographic and clinical variables (age, sex, number of hospitalisations, BPRS sum score, BPRS subscale scores, unmet needs and self-rated symptoms) were computed. Stepwise multiple linear regression analysis, based on significant bivariate correlations, was conducted for each of the five groups separately to identify independent predictors of the therapeutic relationship.

3. Results

3.1. Sociodemographic and clinical characteristics

Sociodemographic and clinical characteristics of the five samples are presented in Table 1. The groups differed significantly in age, sex, BPRS subscale and sum scores, total number of unmet needs, self-rated symptoms sum score and the therapeutic relationship score. The long-term hospitalised schizophrenia group had higher BPRS sum scores than all groups except the first-admission schizophrenia group. First-admitted schizophrenia patients had more unmet needs than the discharged schizophrenia patients and alcoholic in-patients. Hospitalised schizophrenia and depressed in-patients also had more unmet needs than alcoholic in-patients. Depressive in-patients had higher self-rated symptom sum scores and anxiety–depression subscale scores than all the other groups.

Table 1
Sociodemographic and clinical characteristics of the five samples

	A First-admission schizophrenia ($N = 90$)	B Hospitalised schizophrenia ($N = 72$)	C Discharged schizophrenia ($N = 41$)	D Alcoholics ($N = 249$)	E Depressives ($N = 42$)	Statistics (df)
Female	60 (66.6%)	33 (45.8%)	18 (43.9%)	109 (43.8%)	42 (100%)	χ^2 (4) = 55.2
Age	30.3 (10.0)	52.3 (13.9)	41.9 (12.5)	40.2 (8.7)	41.7 (110)	$F(4) = 45.5$[a]
No. previous hosp	9.5 (8.8) –	10.4 (12.6)	3.3 (14.2)	1.1 (1.8)		$F(3) = 8.7$[b]
BPRS sum score	48.2 (10.5)	49.9 (14.3)	38.2 (13.6)	33.0 (7.2)	36.0 (6.7)	$F(4) = 66.9$[c]
Anxiety/depression	11.17 (3.2)	12.1 (5.0)	10.9 (4.9)	10.5 (3.6)	15.0 (2.8)	$F(4) = 13.7$[d]
Anergia	10.8 (3.5)	11.7 (4.3)	9.3 (3.5)	7.4 (2.6)	7.2 (2.8)	$F(4) = 39.8$[e]
Thought disorder	10.5 (3.9)	10.1 (5.1)	6.8 (3.7)	5.0 (1.5)	4.4 (1.0)	$F(4) = 87.1$[f]
Activity	6.9 (3.0)	8.5 (3.6)	5.8 (3.1)	5.4 (2.0)	5.8 (2.4)	$F(4) = 22.2$[g]
Hostility	8.8 (3.2)	7.5 (3.6)	5.5 (3.3)	4.8 (1.9)	3.5 (1.1)	$F(4) = 55.7$[h]
Unmet needs	4.6 (2.1)	4.0 (2.3)	3.4 (2.3)	2.8 (2.0)	4.2 (2.2)	$F(4) = 13.2$[i]
Self-rated symptoms	30.1 (14.6)	24.5 (16.0)	21.1 (16.6)	20.9 (13.9)	39.4 (15.0)	$F(4) = 16.4$[j]
Therapeutic relationship	6.7 (2.5)	6.6 (2.8)	8.1 (1.9)	8.5 (1.8)	7.6 (2.1)	$F(4) = 13.7$[k]

Bonferroni adjusted post hoc multiple comparisons ($P \leq 0.05$).
[a] Group A vs. B, C, D, E, groups C, D, E vs. B.
[b] Groups D and E vs. B and C.
[c] Group A vs. C, D, E, group D vs. B, C, groups C, E vs. B.
[d] Group D vs. B, group E vs. A B, C, D.
[e] Group A vs. D, E, groups D, E vs. B, C, group B vs. C.
[f] Group A vs. C, D, E, groups D, E vs. B, C, group B vs. C.
[g] Group A vs. B, D, groups C, D, E vs. B.
[h] Group A vs. B, C, D, E, group D vs. B, E, group E vs. B, C, group B vs. C.
[i] Group A vs. C, D, groups B, E vs. D.
[j] Group A vs. C, D, group E vs. A, B, C, D.
[k] Group A vs. C, D, group B vs. C, D.

3.2. The therapeutic relationship

Internal consistency coefficients for the HAS were $\alpha = 0.78$ for the first-admission schizophrenia patients, $\alpha = 0.72$ for the long-term hospitalised schizophrenia patients, $\alpha = 0.71$ for the schizophrenia out-patients, $\alpha = 0.75$ for the alcoholic patients and $\alpha = 0.75$ for the depressive patients.

Inter-item correlations between the HAS items were as follows: receiving the right treatment and feeling understood ($r = 0.59$, $P < 0.000$); receiving the right treatment and feeling respected ($r = 0.47$, $P < 0.000$); and, feeling understood and feeling respected ($r = 0.51$, $P < 0.000$).

In the long-term hospitalised and discharged schizophrenia samples, the therapeutic relationship had already been assessed 1.5 years before the rating in this study, so that the stability of ratings over time could be tested. Both the samples were hospitalised at the initial assessment: sample B remained in the same setting until the second assessment, while sample C had been discharged into the community. The test–retest correlation coefficients were $r = 0.58$ ($P < 0.01$) for the group that stayed in the hospital setting and $r = -0.15$ in the group that was resettled in the community.

First-admission and long-term hospitalised schizophrenia patients rated the therapeutic relationship significantly lower than both the schizophrenia out-patients and the alcoholic in-patients. The difference between groups remained statistically significant after controlling for the influence of the BPRS sum score ($F = 2.5$; df = 4; $P < 0.05$).

3.3. Bivariate correlations

Concerning sociodemographic characteristics, older first-admission schizophrenia patients tended to rate the therapeutic relationship more highly ($r = 0.22$, $P < 0.04$) as did male alcoholic patients compared with their female counterparts ($t = 3.0$, $P < 0.003$). There was no significant relationship between the self-rated unmet needs and the therapeutic relationship in any of the groups. However, in every group except the long-term hospitalised schizophrenia patients (see Table 2), objective ratings of symptoms, i.e. the BPRS sum score, were significantly inversely correlated with the therapeutic relationship (first-admission schizophrenia: $r = -0.4$, $P < 0.000$; discharged schizophrenia: $r = -0.32$, $P < 0.03$; alcoholics: $r = -0.16$, $P < 0.02$; in-patient depression: $r = -0.50$, $P < 0.004$). In contrast, subjectively rated symptoms were significantly associated with the therapeutic relationship only in the hospitalised schizophrenia ($r = -0.37$, $P < 0.008$) and alcoholic patients ($r = -0.18$, $P < 0.01$).

As the BPRS sum score was significantly related to the therapeutic relationship, exploratory correlations with individual BPRS subscales were then calculated. The correlations were weak to moderate and if a Bonferroni adjustment

Table 2
Correlations between the therapeutic relationship and observer and self-rated symptoms

	A First-admission schizophrenia ($N = 90$)	B Hospitalised schizophrenia ($N = 72$)	C Discharged schizophrenia ($N = 41$)	D Alcoholics ($N = 249$)	E Depressives ($N = 42$)
BPRS sum score	–0.40**	–0.18	–0.32*	–0.16*	–0.50**
BPRS anxiety/depression	–0.15	–0.19	–0.45**	–0.15*	–0.50**
Anergia	–0.25*	–0.12	–0.02	–0.08	–0.24
Thought disorder	–0.35**	–0.02	–0.03	–0.03	–0.34
Activity	–0.27**	–0.08	–0.09	–0.09	–0.31
Hostility	–0.22*	–0.32**	–0.51**	–0.09	–0.10
Self-rated symptoms	–0.19	–0.37**	–0.04	–0.18*	–0.03

* $P < 0.05$.
** $P < 0.01$.

was done (resulting in a P value < 0.001), only two of these correlations would remain significant. In the first-admitted schizophrenia patients, the therapeutic relationship was inversely correlated with anergia ($r = –0.25$, $P < 0.02$), thought disorder ($r = –0.35$, $P < 0.001$), activity ($r = –0.27$, $P < 0.01$) and hostility ($r = –0.22$, $P < 0.05$). In the discharged schizophrenia group, the significant associations were with anxiety/depression ($r = –0.45$, $P < 0.006$) and hostility ($r = –0.5$, $P < 0.001$). Finally in both the alcoholic and depressive group, there was a significant association only with anxiety/depression ($r = –0.15$, $P < 0.03$ and $– 0.5$, $P < 0.004$, respectively).

3.4. Multivariate prediction

When the variables significant on a bivariate level were entered into multiple regression analyses, in four of five samples, psychopathology explained between 3% and 28% of the total variance in the therapeutic relationship (see Table 3). Thought disorder explained 12% of the variance in the first-admitted schizophrenia patients. Self-rated symptoms explained 12% of the variance in the long-term hospitalised schizophrenia patients. Hostility explained 28% of the variance in the discharged schizophrenia patients. Finally, anxiety–depression explained 16% of the variance in patients with depression. Of the sociodemographic variables and other variables in the model, age independently contributed to the prediction of the therapeutic relationship in the first-admitted schizophrenia sample (explaining 4% of the variance) as did being male (explaining 8% of the variance) in the alcoholic sample.

4. Discussion

To our knowledge, this is the first study that used identical methods to compare the therapeutic relationship in routine psychiatric treatment across different diagnostic groups in in- and out-patient care. In-patients with schizophrenia had significantly poorer therapeutic relationships than out-patients with schizophrenia and alcoholic in-patients. Comparing the three schizophrenic samples, the poorer relationship among in-patients remained significantly lower after controlling for the influence of symptomatology in the first-admitted patients and marginally significant in the long-term hospitalised patients.

Similar to Clarkin et al. [1] who used observer ratings of the relationship, we found no significant difference in global

Table 3
Multiple regression analyses of the therapeutic relationship on the independent variables age, sex, BPRS subscale scores and self-rated symptoms

Step	Predictor variables	Adjusted R^2 after each step	β	P
First-admission schizophrenia				
1	BPRS thought disorder subscale	0.12	–0.37	0.001
2	Age	0.16	0.21	0.001
Alcoholics				
1	Sex	0.08	–0.30	0.001
2	Self-rated symptoms	0.11	–0.17	0.02
Depressives				
1	BPRS anxiety/depression subscale	0.16	–0.44	0.02
Hospitalised schizophrenia				
1	Self-rated symptoms	0.12	–0.37	0.01
Discharged schizophrenia				
1	BPRS hostility subscale	0.28	–0.55	0.001

ratings of the relationship between depressed patients and patients with schizophrenia. The statistical power for this analysis was reasonable: the effect size corresponded to half a scale point on the 11-point HAS items. Although these analyses were conducted on varying sample sizes, the likelihood to detect differences between the two smallest samples was still acceptable (i.e. more than 80% power).

In all the five samples, more severe symptoms—observer rated in four groups and self-rated in one group—were related to a poorer therapeutic relationship, which is consistent with other studies [1,4,16]. It is noteworthy that the relationship was mainly with observer-rated rather than self-rated psychopathology, indicating that the reported association between observer rated psychopathology and patient-rated therapeutic relationship is not due to a generalised rating bias. In the present study, particular symptoms displayed different associations with the relationship. Although these symptoms were not consistent across diagnostic groups, the data suggest that hostility may be particularly important to the formation of a therapeutic relationship in schizophrenia [10]. It might be expected that the strength of the association between the relationship and different symptom domains will be influenced by stage of illness and contextual factors such as the treatment setting. Studies of the therapeutic process would be useful to elucidate specific aspects of psychopathology that are more or less important to the formation and maintenance of the patient–clinician relationship in different diagnostic presentations.

Assessments of other self-rated constructs such as subjective quality of life are associated with age and sex in some groups but not in others [20,25]. In the present study, older first-admitted schizophrenia patients had better therapeutic relationships, a finding also reported by Draine and Solomon [3]. In the main, however, the present results support other studies (e.g. [1,6,10]) suggesting that sociodemographic factors are not consistently associated with the therapeutic relationship. Self-rated constructs are more consistently correlated with symptomatology, in particular depressive mood [12]. In this study, depressive mood was inversely correlated with the subjective ratings of the relationship in some groups, i.e. out-patients with schizophrenia and in-patients with depression, but not others, i.e. first-admitted and long-term hospitalised schizophrenia patients. It remains to be seen in further studies, what features of the samples and settings are most relevant for explaining such differential associations.

The findings from the multiple regression analyses indicate that psychopathology explains only a limited amount of the total variance in the therapeutic relationship leaving the greater proportion of the variance unexplained. Moreover, differences between groups in the quality of the relationship remained significant when the influence of psychopathology was controlled for. Thus, the patients' assessment of the therapeutic relationship does not appear to be simply an epiphenomenon of psychopathology. In this respect, the absence of an association between unmet needs for care (self-rated) and the therapeutic relationship suggests that patients' views of the therapeutic relationship are relatively independent from other self-rated evaluation criteria [21] and not dominated by the extent to which clinicians have been able to meet the present needs. Given that the assessments of the therapeutic relationship are not adequately explained by psychopathology, further research is indicated to identify factors that account for the unexplained variance, e.g., patient and clinician characteristics along with the aspects of the treatment situation.

This study has certain methodological limitations. Only three diagnostic groups were compared and only one sample consisted of out-patients. In addition, the out-patient schizophrenia and in-patient depression samples, although homogenous, were relatively small compared to the other groups. The samples also differed significantly on variables other than diagnosis and treatment setting. As far as the therapeutic relationship is concerned, the assessment method used was very simple and only the patient perspective was assessed and not that of the therapist. Despite these limitations and the tentative nature of the study, the findings suggest that the therapeutic relationship is an independent construct that is worth assessing and exploring. Patients who are acutely ill can complete a simple assessment that discriminates between different patient groups and settings and could be used as a basis for more specific research.

The simple measure used in this study for assessing the global quality of the therapeutic relationship has acceptable internal consistency across different patient groups. The test–retest correlations in the long-term hospitalised and discharged schizophrenia samples indicate that ratings have a reasonable stability over a long period of time when the setting remains unchanged. When patients move into a new setting with different clinicians, however, their ratings of the therapeutic relationship appear not to be influenced by their view of previous relationships in other settings, underlining the plausibility of the results yielded by the HAS. The HAS also has discriminative abilities, face and content validity and, in other modified forms, predictive validity in relation to outcome [19,22–24]. As long as more elaborate, specifically developed methods are not available or perhaps not applicable depending on the purpose and circumstances of the assessment—for example for patients with severe mental illness who are in an acute phase of illness with limited attention and motivation for longer assessments, the scale used herein may be applied in research and routine care for assessing the patients' perspective of the overall quality of the therapeutic relationship.

In conclusion, the variance in the patient global ratings of the relationship is consistently, but only partially explained by psychopathology. Different aspects of psychopathology appear to be more important in different groups and settings. Given that the therapeutic relationship consistently predicts outcome, assessing it in longitudinal studies evaluating outcome of different treatment methods and care settings may capture an important influential factor, in which case psychopathology should be controlled for. If assessed, global mea-

sures of the therapeutic alliance can be utilised for different purposes. Firstly, as an independent predictor or moderator variable, potentially modifying the effect of treatment interventions such as different medication regimes. Secondly, as a mediating variable explaining how particular service characteristics, e.g., staff-to-patient ratio in community mental health teams, may be linked to outcome. Finally, a positive relationship between clinician and patient may be a desirable outcome in its own right making services more humane and acceptable to its users.

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