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What makes community psychiatric nurses label non-psychotic chronic patients as ‘difficult’: patient, professional, treatment and social variables

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Received: 17 March 2010 / Accepted: 23 June 2010 / Published online: 3 July 2010
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Abstract

Purpose To determine which patient, professional, treatment and/or social variables make community psychiatric nurses (CPNs) label non-psychotic chronic patients as ‘difficult’.

Methods A questionnaire was designed and administered to 1,946 CPNs in the Netherlands. Logistic regression was used to design models that most accurately described the variables that contributed to perceived difficulty.

Results Six variables were retained in the final logistic model. Perception-related variables (feeling powerless, feeling that the patient is able but unwilling to change, and pessimism about the patient’s change potential) dominated treatment-related variables (number of contacts per week and admission to a locked ward in the last year) and social variables (number of psychosocial problems).

Conclusion This research shows that perceived difficulty is related to complex treatment situations, not so much to individual patient characteristics. If the constructed model has good predictive qualities, which remains to be tested in longitudinal research, it may be possible to accurately predict perceived patient difficulty. When used as a screening tool, such a model could improve treatment outcomes.

Keywords Public mental health · Social psychiatry · Substance abuse disorders · Affective disorders · Personality disorders · Psychiatric nursing

Introduction

Health care professionals do perceive certain patients as ‘difficult’, both in physical [1–5] and mental health care [6, 7]. In general medicine, perceived difficulty has found to be associated with multiple somatic complaints and psychiatric disorders [2–5]. In psychiatry, patients with severe mental illness in general are often considered difficult to treat [8], but few empirical studies have been undertaken to clarify the underlying reasons for this perceived difficulty [7]. Small studies of earlier date show that patients with psychotic or personality disorders are most likely to be perceived as difficult, with patients with mood disorders ranking next. ‘Difficult’ psychotic patients are characterized by professionals as ‘withdrawn’ and ‘hard-to-reach’, ‘difficult’ patients with personality disorders as ‘demanding’ and ‘claiming’, and ‘difficult’ patients with mood disorders as ‘dependent’ and ‘demoralizing’ [7].

The label ‘difficult’ is pejorative, stigmatizing, and imprecise [9] but often used in everyday mental health care, especially in services that are not highly selective such as public and community mental health centers [10]. From

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earlier work, we can distinguish three different meanings of the term. The first meaning refers to patients that do not improve or relapse repeatedly, so-called ‘difficult-to-treat’ patients [7, 11, 12]. The second refers to patients that are interpersonally challenging, so-called ‘difficult’ patients that supposedly have a complex character or personality [7, 13]. The third meaning refers to patients who find themselves in complex social and treatment situations, patients that have numerous social problems, frequently use inpatient and outpatient emergency services, and have difficulties in finding the right helping agency to have their needs met [14, 15]. The label ‘difficult’ thus represents a complex interplay of several factors and may refer to patient characteristics in terms of illness, behavior or character. It may, however, also reflect professionals’ lack of skills and motivation, or environmental factors such as patients’ social system or clinicians’ professional system [15].

In general, the ‘difficult’-label is associated with a low quality of the therapeutic alliance between patient and professional, which in itself is a predictor of a more negative treatment outcome [16, 17]. Also, ‘difficult’ patients more often lack a treatment plan, a key clinician and continuity of care in general, than other patients [10]. Service use of these patients is high and thus costly [18–20]. Therefore, it is relevant to understand which variables account for the perception of patients as difficult by professionals. Timely recognition of these variables may prevent perceived difficulty and thus result in improved treatment outcome. Currently, however, many of these factors are theorized or hypothesized only, and not empirically assessed in a larger study.

In this study, we focused on patients with severe non-psychotic mental illness. The percentages of non-psychotic patients in long-term community mental health services are estimated between 20 and 50% [21–25]. The key clinicians in long-term care for these patients often are community psychiatric nurses (CPNs), the most numerous professionals in community mental health in several countries [23, 26–28]. In this paper, we report on the perception of CPNs in community mental health care for non-psychotic chronic patients. The aim of this study is to determine which patient, professional, treatment and/or social variables make CPNs label non-psychotic chronic patients as ‘difficult’, in order to define this term more accurately, and eventually improve care for patients labeled as such.

Methods

Design and participants

A cross-sectional survey design was used to describe community psychiatric nursing care for non-psychotic chronic

patients, assessing several patient, professional, treatment and social variables. The sampling frame was the database of the Dutch Association for Community Psychiatric Nurses (DACPN). This database includes 1,946 CPNs, about 70% of the total estimated number of 2,900 Dutch CPNs. An electronic questionnaire was developed and was available online between mid-December 2007 and late January 2008. CPNs were invited to participate by a postal letter in which the study was introduced as a general survey into current CPN-practice. Two weeks and 4 weeks after this letter, non-responders received a reminder in the form of a postal card.

Measures

The questionnaire was constructed by the authors, based on previous research among CPNs and previous Delphi-research on problems in the care of difficult patients among community mental health experts [15]. It consisted of 19 questions related to the CPN and the service he or she worked in. Another 23 items (rateable on a 7 point Likert-scale) were about the perceptions of the care for a selected patient. Furthermore, it included 23 questions about clinical, treatment and social characteristics of the selected patient in care. The first paper version of the questionnaire was tested by 27 CPNs after which some questions were omitted and text phrasing was altered. A second, internet-based version was tested by another six CPNs after which technical software-related errors were corrected.

Before answering the questionnaire, CPNs were asked to select a patient meeting the criteria for non-psychotic severe and persistent mental disorder [29]: a non-psychotic diagnosis (excluding schizophrenia, bipolar disorder and organic disorder), two or more years in psychiatric care and a GAF-score at or below 50. To ensure random sampling of patients, a fixed procedure was used. CPNs should select the first eligible patient on their next working day from their agenda (or progress as far ahead in time as necessary to encounter a patient meeting the criteria).

Degree of perceived difficulty, the dependent variable in this study, was measured by the question ‘to which extent do you rate this patient as “difficult”?’, scored on the same 7-point Likert-scale as the other perception-related items. At the time of the study, we were unaware of validated measures of psychiatric patients’ difficulty. Furthermore, single-item questions such as ours have been used widely before [2, 5, 10, 30].

Analysis

Due to a bimodal distribution (Table 1), the dependent variable was dichotomized into two values: no perceived difficulty (score 1–4) and perceived difficulty (5–7). Logistic regression was used to determine the effects of the

Table 1 Distribution of perceived difficulty over selected patients on 7 point Likert-scale

Likert-score (perceived difficulty 1 = low, 7 = high)	Number of selected patients (%)
1	10 (2.1)
2	74 (15.8)
3	165 (35.2)
4	83 (17.7)
5	100 (21.3)
6	29 (6.2)
7	4 (9)
	465 (99.1) ^a

^a Of the 469 patients described by CPNs, data of 4 patients on perceived difficulty was missing

patient, professional, treatment and social variables on perceived difficulty. Linearity of the relation between each variable and the dependent variable was assessed using cross tables for dichotomous and categorical variables, and scatter plots for continuous variables. Since some variables did not have a linear association with the dependent variable, these were categorized using dummy variables. Non-linearity was also found in 7 of the 23 continuous variables related to the professional's perception that were measured on the Likert-scale. These seven variables were omitted since categorization of the Likert-scale was not considered a valid way to interpret this non-linearity. Bivariate analyses were used to reduce the number of variables, since this was too high after categorisation for the number of cases to produce a stable model. A significance value of $p \leq 0.20$ was used to select variables to be included in the further analysis.

Two models were made, one for the continuous perception-related variables and one for the (predominantly) dichotomous and categorical other variables. A third and final model was constructed by combining all variables retained in the previous models. In the first two models, variables stayed in the model at $p \leq 0.10$ to prevent preliminary exclusion of relevant factors. In the final model, variables remained in the model at $p \leq 0.05$. For all models, backward procedures were followed. Interaction effects of the variables included in the final models were explored ($p \leq 0.10$), which was also done for collinearity [31]. Goodness-of-fit was established using the classification table, and the Hosmer and Lemeshow test to test the models' accuracy of predicting perceived difficulty [32]. All analyses were performed with SPSS version 15.

Results

The 1,946 CPNs answered 776 questionnaires (response rate: 40%). Of these participants, about 20% did not carry

their own case-load of patients between 18 and 60 years of age. Another 20% did not have non-psychotic chronic patients under their care, resulting in 469 CPNs describing a patient (Table 2). Most CPNs were between 40 and 50 years of age. They predominantly worked in long-term care departments (≥ 2 years) of mental health institutes. They had a mean case-load size of 52.2 (sd 31.7, median 50) of which 12.4 (sd 13.6, median 8) were non-psychotic chronic patients (23.8% of the total case-load).

Table 2 Characteristics of surveyed Community Psychiatric Nurses (CPNs)

	<i>n</i> = 469 (%)
Sex	
Female	248 (52.9)
Age	
Mean (sd)	46.9 (7.3)
20–29	10 (2.1)
30–39	53 (11.3)
40–49	225 (48.0)
50–59	175 (37.3)
>60	6 (1.3)
Education	
CPN	412 (87.8)
CPN+	204 (43.5)
CPN + Master	11 (2.3)
Mean years of CPN-experience (sd) [range]	11.4 (8.6) [0–35]
Work setting	
Mental health services	411 (87.6)
Addiction services	35 (7.5)
Private practice	34 (7.2)
Forensic psychiatry	10 (0.6)
General hospital or academic psychiatry	6 (1.3)
Otherwise	15 (3.1)
Type of care	
Emergency services	133 (28.4)
Community-based < 2 years	301 (64.2)
Community-based ≥ 2 years	307 (65.5)
Partial hospital	17 (3.6)
Inpatient < 2 years	21 (4.5)
Inpatient ≥ 2 years	9 (1.9)
Evidence-based practice	
Mean hours of supervision (sd) [range]	1.5 (1.15) [0.2–8]
Method described in the work setting	202 (43.1)
Method described in the literature	110 (23.5)
No or non-described method	157 (33.5)
Case-load size	
Mean total number (sd) [median (range)]	52.2 (31.7) [50 (1–250)]
Mean number of non-psychotic chronic patients (sd) [median (range)]	12.4 (13.6) [8 (1–95)]

Table 3 Characteristics of patients described by Community Psychiatric Nurses (CPNs)

	<i>n</i> = 467 (%) ^a
Sex	
Female	269 (57.4)
Age	
18–24	43 (9.2)
25–34	78 (16.6)
35–44	143 (30.5)
45–54	138 (29.4)
55–60	65 (13.9)
In psychiatric care \geq 3 years	349 (74.5)
No legal confinement	387 (82.5)
Diagnosis (DSM IV)	
Axis I	
Mood disorder	228 (48.6)
Anxiety disorder	107 (22.8)
Substance abuse disorder	102 (21.7)
Somatoform disorder	8 (1.7)
Factitious Disorder	1 (0.2)
Dissociative disorder	30 (6.4)
Sexual disorder	7 (1.5)
Eating disorder	14 (3.0)
Impulse control disorder	43 (9.2)
ADHD/autism	48 (10.2)
Adjustment disorder	61 (13.0)
No or deferred diagnosis	33 (7.0)
Other	23 (4.9)
Primary diagnosis on Axis I	208 (44.3)
Mean number of Axis I diagnoses (sd) [range]	1.5 (0.81) [1–5]
Axis II	
Cluster A	33 (7.0)
Cluster B	210 (44.8)
Cluster C	83 (17.7)
NOS	52 (11.1)
No or deferred diagnosis	89 (19.0)
Axis III any diagnosis	152 (32.4)
Axis IV mean number of problems(sd) [range]	3.3 (1.8) [0–9]
Axis V GAF-score	
41–50	337 (71.9)
31–40	98 (20.9)
21–30	18 (3.8)
10–20	15 (3.2)
Social contacts \leq 3	387 (82.6)

^a Due to missing data on characteristics of 2 of 469 patients described by CPNs

The selected patients (Table 3) show a high prevalence of mood disorders (48.6%), cluster-B personality disorders (44.8%), and a somewhat lower prevalence of anxiety

(22.8%) and substance abuse disorders (21.7%). Furthermore, over 32.4% of them had a diagnosis on Axis III, the mean number of psychosocial problems on Axis IV was 3.3 and most patients (71.9%) had a GAF-score on Axis V between 41 and 50. Of all 465 described patients, 28.4% was perceived difficult by their treating CPNs.

After bivariate screening of patient, professional, treatment and social variables ($p \leq 0.20$), 39 variables were selected to be included in two logistic regression models (Table 4). The first model contained all variables except the 16 perception-related items. Perceived difficulty showed a moderate to strong relation to the GAF-score, the number of Axis I diagnoses, the presence of an Axis III-diagnosis and the number of psychosocial problems on Axis IV (Table 5, model 1). Apart from these patient and social variables, the number and type (especially intensive and acute care) of psychiatric treatment used by the patient were related to the label 'difficult'. The second model (Table 5, model 2), in which the 16 items related to the professional's perception of patient and treatment were entered, yielded a compact model of five continuous variables of which 'feeling powerless' had the strongest relation to perceived difficulty. The third model (Table 5, model 3) combined the variables retained in the previous two models, resulting in a final model with six variables. Patient variables were no longer present in this model while treatment, social and perception-related variables remained. The number of psychosocial problems proved to have the strongest relation to perceived difficulty with feelings of powerlessness being almost as strongly related.

In terms of goodness-of-fit, this model classified patients correct in 74.2% of cases and the Hosmer and Lemeshow test was not significant ($\chi^2 = 11.92$, $df = 8$, $p = 0.16$), indicating support for our model. The previous two models classified patients correct in 70.3 and 69.9% of cases, respectively, with Hosmer and Lemeshow tests neither being significant.

Discussion

From this study, we may conclude that Community Psychiatric Nurses (CPNs) label about a third to a fourth of their total patient caseload as 'difficult'. We found that a relatively small number of (six) characteristics accounts for the perception of non-psychotic chronic patients as 'difficult'. To our knowledge, this is the first study that investigates such characterization of non-psychotic chronic patients.

Findings

The 28% of patients perceived as difficult is quite high compared to findings from other research: 6% among

Table 4 Significance of variables in bivariate screening ($n = 465$)

Professional variables	<i>p</i>
Sex	0.682
Age category	0.055
Educational level	0.194
Number of working hours	0.741
Work setting	0.068
Years of CPN-experience	0.030
Type of care	0.073
Evidence-based practice	0.869
Hours of supervision	0.273
Case-load size	0.064
Perception-related items	
‘I expect that this patient will not improve much as a result of my care’	0.00
‘I feel powerless towards this patient’	0.00
‘I do not experience success in the care of this patient’	0.00
‘I feel pressured by this patient’	0.00
‘This patient is dependent on me’	0.00
‘This patient has too high expectations of his/her contact with me’	0.00
‘This patient is not hopeful about the care offered’	0.00
‘There is no clear view on the problems and the treatment of this patient’	0.00
‘I feel that this patient is able but unwilling to change’	0.00
‘This patient is not offered intensive treatment while he/she should be’	0.00
‘This patient’s treatment is not consistent’	0.00
‘I do not have faith in the treatment of this patient’	0.00
‘I am pessimistic about the patient’s change capacities’	0.00
‘People around this patient think that he/she is able but unwilling to change’	0.00
‘This patient causes trouble within his/her family or social system’	0.00
‘This patient plays hardly any role in his/her family or social system’	0.22
Patient variables	
Sex	0.738
Age category	0.045
Years of psychiatric care	0.487
Legal confinement (once, repeatedly or constantly during last year)	0.019
Axis I diagnosis	$5 \times p \leq 0.20$
Axis II diagnosis	0.054
Number of Axis I diagnoses	0.006
Primary diagnosis on Axis I or Axis II	0.837
Axis III-diagnosis (no/yes)	0.002
Social variables	
Number of psychosocial problems (Axis IV)	0.000
GAF-score (Axis V)	0.000
Number of social contacts ($\leq 3 / > 3$)	0.045
Treatment variables	
Number of mental health contacts per month ($\leq 1 / > 1$)	0.000
Regularity of contacts (regular, irregular)	0.471
Treatment goal (recovery, prevent relapse, structure life, monitor risk behavior, unclear)	$2 \times p \leq 0.20$
Number of mental health professionals involved	0.435
Cooperation of mental health professionals involved (none, irregular, regular)	0.414
Additional psychiatric services (emergency services, admission, partial hospital)	$3 \times p \leq 0.20$
Number of additional psychiatric services	0.006
Number of non-psychiatric institutions involved	0.302

psychiatric inpatients with both psychotic and non-psychotic disorders [30] and 15% of ambulatory patients with physical disorders [3, 4]. It is, however, lower than the 37% of high

medical service-using patients of a health maintenance organization perceived as ‘frustrating’ by providers [2]. Unfortunately, since these populations differ substantially

Table 5 Multivariable logistic regression models for perceived difficulty using three sets of variables (descriptive variables, perception-related variables and combined) ($n = 465$)

	OR ^a	95% CI	AOR ^b	95% CI	<i>p</i>
Model 1: patient, professional, treatment and social variables ($p \leq 0.10$)					
Dichotomous/categorical					
Substance abuse disorder (no/yes)	1.42	0.89–2.28	0.50	0.27–0.94	0.031
Diagnosis Axis III (no/yes)	1.97	1.30–3.00	2.02	1.25–3.27	0.004
CPN contacts per week ($\leq 1/> 1$)	2.65	1.75–4.02	2.07	1.27–3.37	0.003
Use of crisis intervention services during last year (no/yes)	2.10	1.38–3.19	1.97	1.05–3.68	0.033
Use of open closed ward during last year (no/yes)	1.84	1.17–2.88	1.90	0.97–3.76	0.063
Use of locked admission ward during last year (no/yes)	2.06	1.23–3.44	2.34	1.13–4.82	0.021
GAF-score (reference category = 41–50)	1	–	1	–	0.00
31–40	2.90	1.80–4.65	3.07	0.94–10.09	0.064
21–30	2.84	1.08–7.46	3.23	1.08–9.69	0.036
10–20	3.11	1.09–8.86	2.52	1.44–4.41	0.001
Number of diagnoses Axis I (reference category = 1)	1	–	1	–	0.088
2 diagnoses	1.78	1.11–2.88	1.80	1.01–3.20	0.047
>2 diagnoses	2.22	1.24–3.98	1.80	0.87–3.75	0.113
Continuous ^c					
Number of psychosocial problems Axis IV (0–9)	1.34	1.20–1.51	1.25	1.08–1.43	0.002
Number of used psychiatric services during last year (0–7)	1.22	1.06–1.40	0.79	0.61–1.04	0.095
Model 2: perception-related variables ($p \leq 0.10$)					
Continuous ^c					
‘I feel powerless towards this patient’ (1–7)	1.75	1.51–2.20	1.51	1.27–1.81	0.000
‘I feel that this patient is able but unwilling to change’ (1–7)	1.35	1.17–1.56	1.18	0.99–1.40	0.072
‘I am pessimistic about the patient’s change capacities’ (1–7)	1.37	1.21–1.56	1.30	1.07–1.59	0.009
‘This patient causes trouble within his/her family or social system’ (1–7)	1.29	1.16–1.44	1.20	1.02–1.41	0.027
‘This patient does not receive intensive treatment while he/she should’ (1–7)	1.57	1.31–1.80	1.30	1.13–1.49	0.000
Model 3: all remaining variables combined ($p \leq 0.05$)					
Dichotomous					
CPN contacts per week ($\leq 1/> 1$)	2.65	1.75–4.02	1.25	1.09–1.44	0.001
Use of locked admission ward during last year (no/yes)	2.06	1.23–3.44	2.81	1.70–4.66	0.000
Continuous ^c					
Number of psychosocial problems Axis IV (1–9)	1.34	1.20–1.51	2.18	1.20–3.97	0.011
‘I feel powerless towards this patient’ (1–7)	1.75	1.51–2.20	1.67	1.42–1.98	0.000
‘I feel that this patient is able but unwilling to change’ (1–7)	1.35	1.17–1.56	1.27	1.06–1.51	0.008
‘I am pessimistic about the patient’s change capacities’ (1–7)	1.37	1.21–1.56	1.19	1.01–1.39	0.035

^a Bivariate OR, not corrected for other variables

^b Adjusted OR, corrected for other variables in the model

^c ORs of continuous variables increase with each unit increase on given scale or number

from ours, prevalence percentages cannot be readily compared.

In the final logistic model, six variables were independently related to the outcome of ‘difficulty’, none of which were related to the patient’s diagnosis. Weakly significant correlations of certain diagnoses (e.g. substance abuse disorder, dissociative disorder, cluster-B personality disorder) were lost in the multivariable analyses. Of the six variables, three were related to professionals’ perceptions of patients and their interactions with them (feeling

powerless, feeling that the patient is able but unwilling to change, and pessimism about the patient’s change potential). Two other variables were treatment-related (number of contacts per week and admission to a locked ward in the last year), showing that high service use correlates with perceived difficulty. The strongest relation, however, existed between the current number of psychosocial problems and perceived difficulty. In summary, the model shows the domination of professionals’ subjective perceptions of patients, followed by social and treatment

variables. These findings lend most support to our previously described explanation of ‘difficult’ as referring to a complex treatment situation in which the patient has many social problems and uses services intensively and the professional has several negative perceptions related to these patient problems. These outcomes fit in well with what is generally considered the designated role of CPNs in mental health care, namely to treat long-term patients with many complex psychiatric and psychosocial problems that have been unsuccessful in earlier treatment. They also show, however, that this is not an easy task.

In previous research, an important factor in the qualification of non-psychotic patients as difficult was the professional’s perception of patients as ‘able but unwilling to change or behave differently’ [15]. In the present study, this perception-related variable was also retained in the multivariable model. Patients that are considered able to make changes in their lives may easily be considered in less need and less deserving of care than others. Irrespective of its correctness, this notion may add to a discrepancy of perceived need between patient and professional, which has been found to be persistent [33], associated with lower quality of life [34], and predictive of disagreement and negative therapeutic alliance [35]. There is some evidence that, for instance, patients with substance abuse [36] and personality disorders [37, 38] have higher needs than patients with psychotic disorders. Also, non-psychotic patients reported more needs than their treating staff did, whereas in psychotic patients this was exactly the opposite [38]. Recent studies confirm this picture of higher staff-rated needs in psychotic patients [39–41], others do not [42, 43]. Hence, patients may want more from professionals than these think is necessary. This incongruence may be the root for perceived difficulty by professionals, which will be exemplified in the next paragraph.

The oft-noted differences between professionals’ views of ‘difficult’ patients with psychotic disorders (as ‘hard-to-reach’) and non-psychotic disorders (as ‘dependent’ or ‘claiming’) may be explained by disagreement over needs for care. Professionals tend to see patients with psychotic disorders as more or ‘really’ sick, compared to patients without a psychotic disorder. Thus, the needs of patients are scored lower by professionals, while patients themselves score them higher. Our research, however, shows a high number of psychosocial problems (mean 3.3) among patients with non-psychotic disorders. As such, high needs may be present, yet the judgement of needs as ‘justified’ remains partly arbitrary and agreement over care needs is unlikely to be reached through ‘objective’ measures. Recent research consistently suggests that negotiation over needs for care results in better outcomes [35, 44–46]. Even when professionals perceive needs to be lower than

patients, as in non-psychotic patients, it may be wiser to negotiate than to ignore patient-rated needs.

Strengths and limitations

There are some methodological limitations to this research. Selection bias may have occurred through differential non-response to the CPN-survey. Yet, responders did not differ from non-responders on demographic variables. Furthermore, the subject of the questionnaire was generally stated, and therefore is it highly unlikely that non-responders would have perceived non-psychotic chronic patients differently than responders. The sampling of patients, through selection of the first patient meeting the criteria in the CPN’s agenda, was beyond our direct control but since CPNs were unaware of the content of the following questions, it is unlikely that they have deliberately chosen more or less ‘difficult’ patients. Furthermore, information bias is a risk since information about patients is provided by their CPNs and errors cannot be ruled out. Although we do not know if these are random or systematic errors, we have reason to believe that the large number of observations largely evens out these possible errors. Last, in bivariate screening some variables (e.g. ‘evidence-based practice’) unexpectedly failed to reach statistical significance. However, these variables were few in number, their *p* value was well above the preset level of 0.20, and the number of observations was sufficiently high, thus indicating a very low probability of non-detection of true associations.

The strength of this study lies in the large number of CPNs involved and the patients described. To our knowledge, similar research into the relevant clinical problem of ‘difficult’ non-psychotic patients has not been carried out on this scale. The electronic format of the questionnaire strongly reduced missing and inaccurate data to an absolute minimum (only 1.6% of the returned questionnaires were partly invalid). Through this design, we were able to reach CPNs evenly spread out over the Netherlands, thus representing different mental health institutions. The Delphi-variables were valid translations of data provided by community mental health experts in an extensive Delphi-study that has been reported on in detail before [15]. We have reason to believe that the results of our study also apply to CPNs outside the Netherlands since their role is relatively comparable worldwide [28]. They often, if not always in long-term care, work in close collaboration with psychiatrists. Psychiatrists tend to largely depend on the information provided by CPNs, which makes CPNs’ perception of the patient highly relevant to psychiatrists’ own role and care in relation to the patient. The extent to which our results apply to other front-line professionals (e.g. other psychiatric nurses, social workers or occupational therapists) is uncertain and warrants more research, but as of yet

we have no reason to assume that these key clinicians perceive patients very differently.

Practice implications

The implications for clinical practice partly depend on the predictive qualities of our models, to be assessed in longitudinal research. If it is possible to accurately predict perceived patient difficulty, the predictive variables may be used in a screening tool. Then, preventive actions may be taken to prevent possible future perception of these patients as difficult. Such preventive actions may consist of, for instance, increased attention for the therapeutic alliance between patient and professional, a focus on congruence of patient-rated and professional-rated needs for care, and organizational changes that facilitate high-quality care for patients in complex treatment situations. The overall purpose of these preventive measures, implemented through training and supervision, would be in line with our findings, be to redefine difficulty from an individual patient characteristic into a characteristic of the treatment situation.

Acknowledgments Funding for this study was provided by Zon-MW ‘Geestkracht’ (Grant 100-002-031), Altrecht Mental Health Care and Gelderse Roos Mental Health Care. We thank the DACPN and the participating CPNs for their efforts.

Conflict of interest statement The authors declare that they have no conflict of interest.

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