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## TREATMENT GOALS IN ADDICTION HEALTHCARE: THE PERSPECTIVES OF PATIENTS AND CLINICIANS

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### ABSTRACT

**Background:** Little is known about the perspectives of either patients or clinicians regarding treatment goals in addiction healthcare. In general, treatment goals involve abstinence or at least reduction of substance use.

**Aim:** To examine and compare the treatment goals indicated by both patients and clinicians at baseline, interim and exit measurement.

**Method:** A descriptive study was performed with multiple measurements of treatment goals. Patients ( $n = 111$ ) and clinicians ( $n = 20$ ) were recruited from three addiction treatment centres in the Netherlands. A Shared Decision Making Intervention (SDMI) was undertaken to promote and evaluate treatment agreement.

**Results:** Patients identified treatment goals of daytime activities and abstinence or reduced alcohol consumption as most important. Clinicians indicated psychological distress, daytime activities and substance use as most important. Differences between patients and clinicians were found for the treatment goals of physical health (patient > clinician) and psychological distress (clinician > patient). The results further showed that treatment goals of both patients and clinicians become more closely aligned during the course of treatment.

**Conclusion:** SDMI provides a method to explore and discuss discrepancy between patients' and clinicians' goals of treatment which leads to convergence. Such convergence is likely to be a necessary prerequisite for positive treatment outcomes.

Key words: treatment goals, shared decision-making, patient preference, clinician preference

### INTRODUCTION

The role of patients in the planning of their treatment is increasingly emphasized as part of the implementation of patient-centred approaches in healthcare (Stevenson *et al.*, 2000). Legislation has been passed in several countries aimed at strengthening the influence of patients in treatment decision-making (Crawford *et al.*, 2003). One model that promotes the active involvement of patients in treatment-related decision-making is the so-called shared decision-making (SDM) model, in which patient and clinician go through all phases of decision-making together, communicate

their preferences for treatment, and jointly agree upon the treatment to be implemented (Charles *et al.*, 1999).

Concordance between the treatment goals and expectations of patients and clinicians is known to positively influence the treatment process (Vertommen & Vervaeke, 1998). When patient and clinician have different goals and expectations, it may be more difficult to achieve agreement (Montgomery & Fahey, 2001). The attainment of concordance is even more difficult when patient and clinician are unaware of these discrepancies. However, differences in the goals and expectations of patients and clinicians can also provide potentially valuable information for the planning of care (Macpherson *et al.*, 2003).

Most mental healthcare studies addressing the goals and expectations of patients and clinicians for treatment focus mainly on patients with severe mental illness. Little is known about this topic in addiction healthcare. In general, treatment goals involve abstinence or at least reduction of substance use (Howard, 2003). In fact, van den Brink *et al.* (2003) have stated that care as opposed to cure has become the most important treatment modality in several countries as a result of the chronic and relapsing nature of dependence and the poor results attained to date for the cure of dependence (i.e. lack of long-term stable abstinence). Treatment generally involves other problem areas in addition to substance use.

Peckham (1977) studied goals indicated by patients in drug and alcohol programmes and was able to classify them into five major categories: drug usage/treatment; education; employment; social growth; and personal goals. The content of the goals was found to change over time in this study, which is – to our knowledge – one of the few to examine the nature of treatment goals over time. That is, most studies of treatment goals or preferences are cross-sectional and do not investigate changes over time (Montgomery & Fahey, 2001).

In other research, DeJong-Verhagen & DeJong (2001) have recommended the use of a structured procedure to systematically list and rank order the goals and expectations of patients, preferably at different times throughout the course of treatment. Use of such a structured procedure generally leads to a dialogue between clinician and patient regarding treatment goals and expectations, can result in treatment agreement, and can also facilitate the adjustment of treatment goals and expectations if necessary during the course of treatment. The likelihood of treatment goals being realized is assumed to be substantially higher when patient and clinician agree on them (Fakhoury *et al.*, 2005). Similarly, offering patients choices regarding the treatment goal is expected to lead to better adherence and treatment outcomes (Sanchez-Craig, 1990). In the SDM model, it is recognized that the expectations of patients and clinicians may not always be congruent. Clinician involvement in the decision-making process thus requires an understanding of the patient as an individual with unique values and priorities (Fenton, 2003).

The findings from a number of other studies show that preferences for treatment identified by clinician and patient can often differ significantly (Middelboe *et al.*, 1998, 2001; Montgomery & Fahey, 2001; Macpherson *et al.*, 2003; Wiersma, 2006; Lasalvia *et al.*, 2007). This underlines the importance of active patient involvement and a negotiation approach for clinician and patient to the planning of care (Slade *et al.*, 1996; Lasalvia *et al.*, 2007). In this light, an important aspect of the SDM model is that clinician and patient must take steps to build a consensus about the preferred treatment (Charles *et al.*, 1997). Research has further shown that the SDM model is particularly suited for long-term decisions required within the context of a chronic illness or when an intervention involves more than one session (Joosten *et al.*, 2008).

In light of the above, the aim of the present study was to evaluate the perspectives of patients and clinicians with regard to the goals of treatment in several problem areas. Therefore, we developed

an SDM intervention (SDMI) to systematically and frequently discuss and evaluate a wide range of treatment goals. SDMI has shown significant additional benefits over and above a well-established three-month inpatient treatment programme (Joosten *et al.*, 2009). This present study is, to our knowledge, the first study to focus on treatment goals indicated by not only clinicians but also patients for addiction healthcare. In this study, we defined treatment goals as problem areas related to addiction on which the patient wanted to work during treatment. We expected differences to exist at baseline in the treatment goals of patients versus clinicians. We further expected the treatment goals of patients and clinicians to become more closely aligned during treatment.

## METHODS

Patients received SDMI along with a three-month inpatient treatment. Patients were recruited for the present study between January 2005 and May 2006.

### Study design

A descriptive study was undertaken with multiple measurements of treatment goals. Clinicians were trained in the protocols of SDMI before the study began.

### Participants

Patients and clinicians were recruited from three addiction treatment centres in the Netherlands: GGZ Noord- en Midden-Limburg (site Venray), Novadic-Kentron (sites Breda and Tilburg) and Tactus (sites Rekken en Zutphen). Patients were dependent on psychoactive substances and participated in a three-month inpatient treatment programme. In this study, clinicians were the nurses or social workers who had the most contact with the patients. The clinicians worked at the inpatient treatment unit. All three centres had comparable inpatient, cognitive behavioural treatment programmes that included both individual and group components. These treatment programmes contained, among other elements, relapse prevention and social skills training. In the Netherlands, the treatment population is mixed (alcohol- and drug-dependent patients), which is uncommon in other countries. All of the patients who applied for help at one of the treatment centres during the study period were included in the present study. No distinctions were made with regard to type of substance used. Patients were excluded for the following reasons: under 18 years of age; insufficient knowledge of the Dutch language; severe psychiatric co-morbidity that could impede the process of shared decision-making and thus adherence to the intervention protocol; or no provision of informed consent to participate in the study. At the follow-up evaluation, patients received a voucher for €20. The study was approved by the Dutch Ethical Assessment Committee for Experimental Investigations on People (No. 4.108).

### Measures

Patients' baseline characteristics were measured using the European Addiction Severity Index (EuropASI) and the Composite International Diagnostic Interview – Substance Abuse Module (CIDI-SAM).

EuropASI measures the severity of addiction problems (McLellan *et al.*, 1980) and is a clinical research interview designed to assess problem severity in seven areas of functioning: physical health; employment; alcohol use; drug use; legal; family/social; and psychiatric. The Dutch version

of EuropASI used in the present study also included gambling (Hendriks *et al.*, 1989; Hartgens *et al.*, 1994). Eight *severity scores* ranging from 0 (no problem) to 9 (extremely serious problem) were derived from this interview.

Type and severity of substance dependence was also assessed at baseline using the CIDI-SAM (Compton *et al.*, 1996), which is an expanded and more detailed version of the substance use sections of the CIDI. The interview questions cover the diagnostic criteria of the DSM-III, DSM-III-R, DSM-IV and ICD-10 psychoactive substance-use disorders.

Treatment goals were assessed using the Goals of Treatment Questionnaire (GoT-Q), which is based in part upon the Camberwell Assessment of Need (CAN) (Phelan *et al.*, 1995; McCrone *et al.*, 2000; Varo *et al.*, 2002). Two additional areas of need are covered by the GoT-Q, namely: gambling and legal. Two versions of the GoT-Q were completed: one by the patient and one by the clinician. The 'areas of need' were translated into 'treatment goals' for which the patient could indicate a desire to work on this *definitely*, *possibly* or *definitely not*. The clinician similarly indicated for each goal whether – in his/her opinion – the patient should *definitely*, *possibly* or *definitely not* work on that particular goal during treatment. GoT-Q involves brief phrases or statements, which were elaborated during the intervention. Patients and clinicians were administered the GoT-Q for the second, third and fourth SDMI sessions.

The procedure for determination of the perspectives of patients and clinicians on the goals of treatment using the GoT-Q was extended using a Q-sort (Cronbach, 1990). Cards representing the 24 GoT-Q treatment goals had to be sorted by patient and clinician separately using the same response categories as for the questionnaire (i.e. into the categories of *definitely*, *possibly* or *definitely not*). After this, those treatment goals that were sorted into the *definitely* and *possibly* piles were ordered by the patient and clinician separately with respect to importance and priority.

## Intervention

SDMI involves five sessions. In the *introductory session* (session I) at the first week of treatment, the clinician introduces the procedure for SDMI to the patient. At the end of this session, the patient is given the questionnaire and Q-sort cards. Both patient and clinician complete the questionnaire and Q-sort cards before the next session. In session II, one week after the introductory session, the patient's treatment goals and expectations are explored and compared to those of the clinician, who completes the same questionnaire but then with respect to the patient. Similarities and differences between the clinician's and patient's perceptions are discussed. Based on this discussion, a treatment contract is drawn up. During the *interim evaluation* (session III), which is halfway through the course of treatment (sixth week of treatment), the goals and expectations for treatment are again explored using the questionnaire, the results are again discussed by patient and clinician, and the course of treatment is adjusted as necessary. At the end of the treatment programme, a *final evaluation* is undertaken (session IV) in terms of the goals and expectations recorded in the treatment contract. In addition, new goals and expectations are explored on the basis of the questionnaire and Q-sort cards that are completed before this session. In the case of discontinuation of treatment prior to interim (session III) or final (session IV) evaluation, it is attempted to arrange for an exit interview in which the same content is addressed as in the final evaluation (session IV). A *follow-up evaluation* (session V) is carried out three months after treatment by an independent researcher. In this follow-up meeting, the goals and expectations agreed upon during the final evaluation are evaluated by the patient only.

Prior to the start of the intervention, the clinicians were trained on the use of the SDMI protocol and in selected aspects of motivational interviewing (MI) techniques (Rollnick & Miller, 1995). In general, MI is used to motivate patients for treatment in addiction healthcare. In this study, MI was offered in a structured way by protocol. MI techniques were used to explore and compare the indicated treatment goals and reach final agreement on the goals of treatment. MI represented a small but essential part of SDMI. The initial one-day training session and subsequent booster session one month later were held on site. An SDMI manual in which the protocol for each of the sessions was described in detail was used. The clinicians also completed a checklist following each of the SDMI sessions to ensure that they had carried out all of the necessary procedures. At baseline, the first author introduced the study to the patients. After this, the patient signed an informed consent form.

### Statistical analyses

Descriptive statistics were used to describe baseline characteristics of the total population.  $\chi^2$  analyses, or Fisher's exact test for dichotomous data, and independent sample *t*-test were used to test for differences between SDMI completers and SDMI drop-outs regarding baseline characteristics.

The Q-sort categorizations of the goals of treatment by patients and clinicians were assigned the following codes: *definitely* = 2; *possibly* = 1; *definitely not* = 0. An importance/priority score was next calculated as follows. First, the Q-sort rankings of the goals of treatment within the response categories of *definitely* and *possibly* were reversed: the most important goal – which was ranked number one within a response category – was assigned a score of 24; the second most important goal – which was ranked number two – was assigned a score of 23, and so forth. Thereafter, the Q-sort response code for a particular treatment goal was multiplied by the goal's ranking to yield an importance/priority score. These scores could thus range from 0 (*not important*) to 48 (*very important*). For example, if treatment goal *Alcohol use* was categorized as *definitely* and also ranked as the most important goal with the Q-sort, its importance/priority score would be 2 (*definitely*)  $\times$  24 (revised from 1) = 48. All of the goals in the category *definitely not* were assigned an importance/priority score of 0.

Descriptive statistics were further used to describe the goals of treatment and their categories, original ranking of the treatment goals, and the importance/priority score for sessions II, III, and IV during treatment (i.e. patient scores, clinician scores and difference scores – that is, patient minus clinician scores). Spearman rank-order correlations were calculated to explore the correspondence between importance/priority scores for patients and clinicians for each treatment goal and session separately. Pearson product moment correlation were calculated to examine the correlations between the total number of goals sorted into the *definitely* and *possibly* categories by patients and clinicians per session.

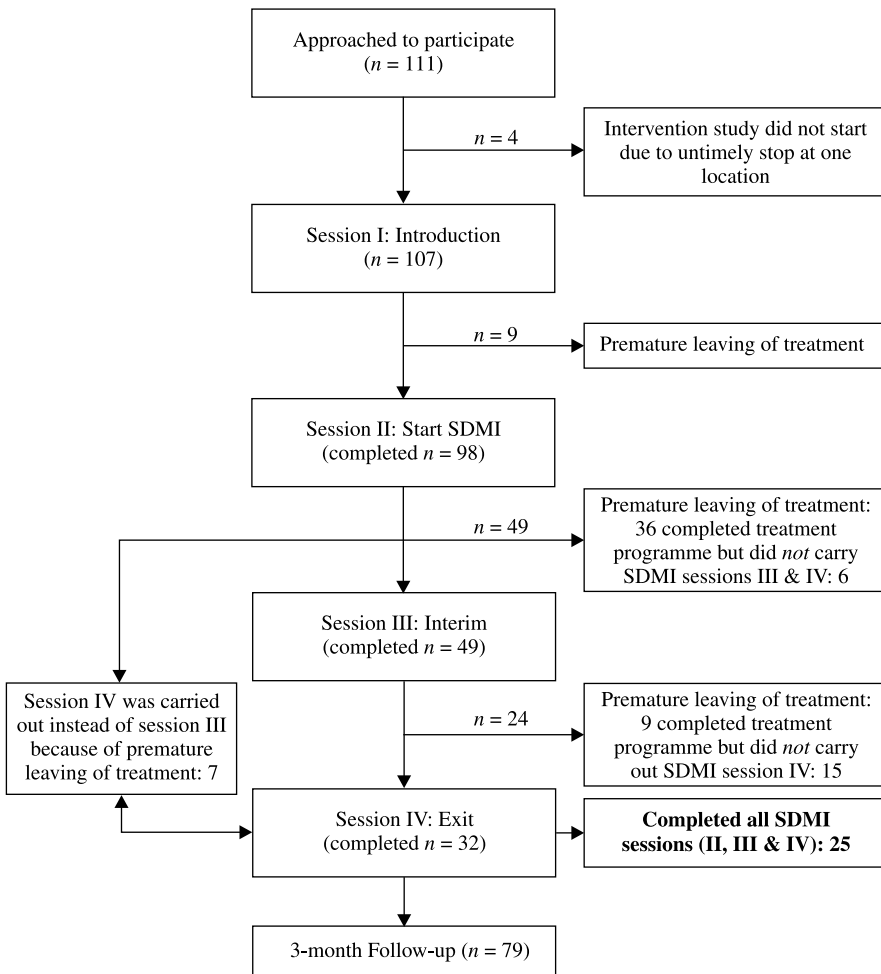
Wilcoxon signed-rank tests were conducted to determine whether the importance/priority scores changed during the course of treatment for either patients or clinicians. The treatment goals were compared between sessions II (start) and III (interim) and between sessions II and IV (exit). Finally, Mann-Whitney tests were conducted to compare the importance/priority scores for patients who completed all of the SDMI sessions and patients who dropped out after session II.

All of the statistical tests were two-sided with a *p* value of 0.01 or less considered to indicate statistical significance. All of the analyses were performed using SPSS for Windows (release 14.0).

## RESULTS

**Patient and clinician characteristics**

Details on the flow of the participant through the study are presented in Figure 1. A total of 111 patients was initially approached to participate in the study and 107 participated in the introductory session. Nine patients did not receive the SDMI – eight due to early drop-out from treatment and one patient died due to cardiovascular causes. The baseline characteristics for the original 107 patients were compiled (Table 1). As can be seen, EuroASI baseline severity scores for *Legal* ( $t = 3.08, p < 0.01$ ) and *Family/Social* ( $t = 2.64, p = 0.01$ ) were significantly lower among patients who completed session IV (exit). In addition, none of the patients of non-Dutch origin completed



**Figure 1. Flow diagram of participants**

**Table 1**  
**Baseline characteristics of patients**

Characteristic	Baseline		Session II		Session III		Session IV	
	SDMI (n = 107)	n	SDMI (n = 98)	n	SDMI (n = 49)	n	SDMI (n = 32)	n
Age, mean (SD), years	40.7 (10.5)	107	40.3 (10.6)	98	41.2 (10.6)	49	41.2 (11.0)	32
Gender, % male	76.6	82	78.6	77	81.6	40	75.0	24
Country of birth, %								
Netherlands	88.8	95	88.8	87	89.8	44	100.0*	32
Other	11.2	12	11.2	11	10.2	5	0	0
Relationship, %								
Married	13.3	14	14.6	14	12.2	6	9.4	3
Divorced/widow	43.8	46	40.6	39	36.7	18	43.8	14
Never married	42.9	45	44.8	43	51.0	25	46.9	15
Employment full- or part-time %	61.0	64	61.5	59	58.3	28	56.3	18
Years of education, mean (SD)	11.3 (2.6)	107	11.3 (2.7)	98	11.3 (2.8)	49	11.7 (3.0)	32
Type of substance dependence, %								
Alcohol dependence	73.8	79	73.5	72	69.4	34	78.1	25
Drug dependence	41.1	44	41.8	41	44.9	22	43.8	14
Years of alcohol use, mean (SD)	17.4 (9.7)	91	17.2 (9.8)	83	16.4 (9.0)	43	16.5 (9.5)	30
Years of drug use, mean (SD)	8.4 (7.4)	69	8.3 (7.6)	65	8.3 (7.1)	34	7.6 (8.0)	24
Primary substance use, %								
Alcohol	52.8	56	51.5	50	50.0	24	56.3	18
Cocaine/stimulants	10.4	11	11.3	11	10.4	5	12.5	4
Polydrug	27.4	29	27.4	27	29.2	14	28.1	9
Other	9.4	10	9.4	9	10.4	5	3.1	1
EuropASI severity scores, mean (SD)								
Physical health	2.5 (2.1)		2.5 (2.1)		2.5 (2.2)		3.1 (2.4)	
Work, education and income	3.5 (1.8)		3.6 (1.7)		3.6 (1.8)		3.6 (1.6)	
Alcohol	5.3 (2.6)		5.2 (2.6)		5.0 (2.6)		5.7 (2.1)	
Drugs	3.3 (3.2)		3.4 (3.2)		3.6 (3.2)		3.5 (3.3)	
Legal	1.6 (1.9)		1.5 (1.8)		1.6 (1.9)		0.9 (1.3)**	
Family/social relationships	4.0 (1.5)		4.0 (1.6)		3.7 (1.4)		3.4 (1.4)**	
Psychological/emotional problems	5.9 (2.0)		5.8 (2.0)		5.5 (2.1)		5.9 (2.0)	
Gambling	0.3 (1.2)		0.3 (1.2)		0.4 (1.3)		0.3 (1.3)	
Drop-out before session II (n = 9)								
n								
Drop-out before session III (n = 58)								
n								
Drop-out before session IV (n = 75)								
n								

\*  $p < 0.05$ , \*\*  $p < 0.01$

session IV (exit). No significant differences were detected between patients who started the SDMI or dropped out prior to the start of the SDMI. Twenty clinicians carried out SDMI. Most of the clinicians were female (75%), had a mean age of 35.3 years ( $\pm 11.7$ ), with 11.3 years ( $\pm 12.7$ ) of employment experience on average, and 5.4 years ( $\pm 5.1$ ) of experience working in addiction healthcare. An average of six patients ( $6.3 \pm 4.4$ ) were allocated to each clinician.

## Outcomes

The patients in general indicated the following treatment goals as most important: *Daytime activities*, *Alcohol* (abstinence or reduction of use), *Psychological distress* and *Drugs* (abstinence or reduction of use). In general, clinicians indicated *Psychological distress*, *Daytime activities*, *Alcohol* and *Drugs* as the most important treatment goals for patients. The difference scores showed patients to judge *Physical health* as more important than clinicians did, and clinicians to judge *Psychological distress* as more important.

Overall, there were strong correlations between the treatment goals identified by patients and clinicians (Table 2). At sessions III (interim) and IV (final), 13 of the 24 treatment goals had correlations higher than 0.50 for patients and clinicians. Surprisingly, those patients who completed all of the SDMI sessions were *less* likely to show good agreement with their clinician at baseline than other patients. Treatment goals of patients and clinicians who completed the intervention did appear to become more closely aligned during the course of treatment. In particular, *Psychological distress*, *Money*, *Education* and different care-related treatment goals became more closely aligned during treatment. The total number of treatment goals identified by patients and clinicians on average were compared (Table 3). The correlations between the number of treatment goals identified by patients and clinicians were generally significant and found to become stronger during the course of treatment (i.e. increase from low agreement at the start of treatment to greater agreement at the end of treatment). The correlations between patients and clinicians who completed all of the SDMI sessions was again quite small at baseline.

Some significant changes with regard to treatment goals were also found to occur during the course of treatment. Patients judged treatment goals of *Physical health* ( $Z = -3.12, p < 0.01$ ), *Telephone*, *PC*, *internet* ( $Z = -2.81, p < 0.01$ ) and *Legal* ( $Z = -2.83, p < 0.01$ ) to be significantly less important at session III than at session II. Similarly, *Information* ( $Z = -2.90, p < 0.01$ ) was judged to be significantly less important at session IV than at session II. Clinicians rated *Daytime activities* ( $Z = -3.61, p < 0.01$ ), *Information* ( $Z = -3.03, p < 0.01$ ), *Psychological distress* ( $Z = -3.87, p < 0.01$ ) and *Alcohol* ( $Z = -3.13, p < 0.01$ ) as significantly less important at session IV than at session II. Furthermore, differences between the judgement of importance by patients and clinicians became significantly smaller from session II to session III for the treatment goals of *Telephone*, *PC*, *internet* ( $Z = -3.03, p < 0.01$ ) and *Physical health* ( $Z = -2.66, p < 0.01$ ). The difference score for treatment goal *Drug use* ( $Z = -2.81, p < 0.01$ ) also changed significantly from session II to session IV: the goal was judged as more important by patients than clinicians at session II and vice versa at session IV.

The total number of treatment goals identified by both patients and clinicians also changed during treatment. Patients indicated fewer treatment goals at session IV than at session II ( $t = 3.80, p < 0.01$ ). Clinicians indicated fewer treatment goals at sessions III compared to session II ( $t = 2.71, p < 0.01$ ), and at session IV compared to session II ( $t = 2.86, p < 0.01$ ). No significant changes were detected during the course of treatment in the difference scores for the number of treatment goals identified by patients and clinicians (i.e. patient minus clinician scores). Similarly, no significant



**Table 2**  
**Correlation between patient and clinician (Spearman) regarding importance score of treatment goals by session**

Treatment goal	Total population				Patients completed all SDMI sessions (n = 25)				Patients not completed all SDMI sessions (n = 73)					
	Session II (n = 98)		Session III (n = 49)		Session IV (n = 32)		Session II		Session III		Session IV		Session II	
Accommodation	0.78**	0.82**	0.80**	0.78**	0.62**	0.77**	0.67**	0.77**	0.62**	0.77**	0.67**	0.77**	0.62**	0.77**
Food	0.43**	0.69**	0.65**	0.33	0.67**	0.67**	0.67**	0.67**	0.67**	0.67**	0.67**	0.67**	0.67**	0.45**
Looking after the home	0.36**	0.68**	0.35	0.26	0.74**	0.44*	0.44*	0.44*	0.74**	0.44*	0.44*	0.44*	0.74**	0.40**
Self-care	0.22*	0.12	-0.05	-0.14	0.24	-0.25	-0.25	-0.25	0.24	-0.25	-0.25	-0.25	0.24	0.34**
Daytime activities	0.26*	0.27	0.55**	0.43*	0.47*	0.40*	0.40*	0.40*	0.47*	0.40*	0.40*	0.40*	0.47*	0.23*
Physical health	0.28**	0.44**	0.31	0.23	0.62**	0.33	0.33	0.33	0.62**	0.33	0.33	0.33	0.62**	0.30*
Psychotic symptoms	0.20*	0.53**	0.73**	0.14	0.60**	0.74**	0.74**	0.74**	0.60**	0.74**	0.74**	0.74**	0.60**	0.24*
Information	0.17	0.56**	0.45*	-0.07	0.65**	0.44*	0.44*	0.44*	0.65**	0.44*	0.44*	0.44*	0.65**	0.22
Psychological distress	0.31**	0.58**	0.47**	0.33	0.55**	0.51**	0.51**	0.51**	0.55**	0.51**	0.51**	0.51**	0.55**	0.33**
Safety to self	0.34**	0.36*	0.31	0.39	0.32	0.19	0.19	0.19	0.32	0.19	0.19	0.19	0.32	0.33**
Safety to others	0.48**	0.42**	0.40*	0.62**	0.69**	0.56**	0.56**	0.56**	0.69**	0.56**	0.56**	0.56**	0.69**	0.42**
Alcohol	0.65**	0.72**	0.81**	0.69**	0.60**	0.80**	0.80**	0.80**	0.60**	0.80**	0.80**	0.80**	0.60**	0.64**
Drugs	0.84**	0.80**	0.91**	0.87**	0.77**	0.91**	0.91**	0.91**	0.77**	0.91**	0.91**	0.91**	0.77**	0.84**
Gambling	0.59**	0.46**	0.73**	0.40*	0.55**	0.60**	0.60**	0.60**	0.55**	0.60**	0.60**	0.60**	0.55**	0.67**
Company	0.34**	0.49**	0.50**	0.22	0.57**	0.62**	0.62**	0.62**	0.57**	0.62**	0.62**	0.62**	0.57**	0.37**
Intimate relationships	0.32**	0.47**	0.29	-0.09	0.35	0.21	0.21	0.21	0.35	0.21	0.21	0.21	0.35	0.43**
Sexual expression	0.33**	0.67**	0.68**	0.28	0.71**	0.69**	0.69**	0.69**	0.71**	0.69**	0.69**	0.69**	0.71**	0.35**
Child care	0.78**	0.91**	0.89**	0.89**	0.94**	0.93**	0.93**	0.93**	0.94**	0.93**	0.93**	0.93**	0.94**	0.75**
Education	0.05	0.08	0.36*	-0.03	0.19	0.33	0.33	0.33	0.19	0.33	0.33	0.33	0.19	0.09
Telephone, PC, internet	0.20	0.59**	0.60**	0.29	0.58	0.63**	0.63**	0.63**	0.58	0.63**	0.63**	0.63**	0.58	0.12
Transport	0.40**	0.42**	0.43*	0.32	0.40	0.51**	0.51**	0.51**	0.40	0.51**	0.51**	0.51**	0.40	0.44**
Money	0.52**	0.60**	0.45**	0.34	0.42	0.36	0.36	0.36	0.42	0.36	0.36	0.36	0.42	0.59**
Benefits	0.46**	0.17	0.58**	0.22	-0.14	0.48*	0.48*	0.48*	-0.14	0.48*	0.48*	0.48*	-0.14	0.55**
Legal	0.64**	0.52**	-	0.72*	-	-	-	-	-	-	-	-	-	0.63**

\*  $p < 0.05$ , \*\*  $p < 0.01$

Table 3  
Mean total number of treatment goals by patients and clinicians

Total number mean (SD)	Total population			Patients completed all SDMI sessions			Patients did not complete all SDMI sessions					
	<i>n</i>	Patients	Clinicians	Correlation (Pearson)	<i>n</i>	Patients	Clinicians	Correlation (Pearson)	<i>n</i>	Patients	Clinicians	Correlation (Pearson)
Session II	98	12.8 (3.5)	12.0 (2.9)	0.27**	25	13.2 (3.1)	11.7 (2.4)	0.17	73	12.7 (3.7)	12.0 (3.0)	0.30*
Session III	49	13.1 (3.3)	11.2 (1.7)	0.37**	25	12.5 (3.7)	11.0 (1.7)	0.41*				
Session IV	32	11.3 (4.1)	10.5 (2.5)	0.59**	25	11.2 (4.0)	10.3 (2.3)	0.51**				

\*  $p < 0.05$ , \*\*  $p < 0.01$

differences in the importance/priority difference scores were found for SDMI completers versus non-completers.

## DISCUSSION

The purpose of the present study was to gain insight into the number and importance of treatment goals from both the perspectives of patients and clinicians in addiction healthcare. The greatest differences between the patients and clinicians were found for *Physical health* (patients > clinicians) and *Psychological distress* (clinicians > patients). However, a high degree of correspondence was generally found between patient and clinician with regard to the number of treatment goals identified and their relative importance. The results further showed that treatment goals of both patient and clinician become more closely aligned during treatment.

A major strength of this study is its prospective, longitudinal design with multiple measurement points for the number, importance and priority of treatment goals during the course of treatment. Most of the studies of treatment goals and/or preferences to date have been cross-sectional (Montgomery & Fahey, 2001), which may also explain the finding of mostly no results. These studies measured goals or preferences once and usually at baseline or beginning of treatment. Another strength of the present study is the use of a manual as the basis of the intervention.

Some possible limitations of the present study should be taken into consideration when interpreting the results. Only 25 patients completed the all of the SDMI sessions. A number of patients did not complete the questionnaires at the end of treatment despite completion of the treatment itself. None of the patients from non-Dutch origin initially included in the study completed the final SDMI session (session IV), which means that information on their attainment of treatment goals and the extent to which they agreed with their clinician on the goals of treatment over time could not be assessed. Perhaps this intervention is not suitable for patients from non-Dutch origin. Finally, some baseline differences were found between patients who did and did not complete session IV (exit). Patients with higher severity scores for *Legal* and *Family/Social* did not complete session IV. A reason for this difference might be that these problem areas involve not only the patient but the entire system.

The present findings show strong and increased agreement between patients and clinicians on not only the number of treatment goals identified during the course of treatment but also their relative importance/priority for treatment. This is in contrast to the findings of previous mental healthcare studies that have shown the preferences of patients and clinicians to differ significantly (Middelboe *et al.*, 1998, 2001; Montgomery & Fahey, 2001; Macpherson *et al.*, 2003; Wiersma, 2006) and to continue to differ significantly (Lasalvia *et al.*, 2007). In this present study, those patients who completed the intervention were *less* likely to show good agreement with their clinician at baseline than other patients in the study. Treatment goals of patients and clinicians who completed the intervention did appear to become more closely aligned during the course of treatment. It is possible that a discrepancy between the clinician's and patient's goals for treatment provides valuable and possibly critical information for the planning and evaluation of treatment. SDMI provides a method to explore and discuss this discrepancy. A dialogue with regard to differences in the goals of treatment and expectations may also promote better treatment outcome, although additional research is needed to explore this possibility.

The goals of treatment were found to change for both patients and clinicians during the course of treatment. Patients judged the treatment goals of *Physical health, Telephone, PC, internet use* and *Legal* to be significantly less important during the course of treatment. Clinicians judged *Daytime activities, Information about treatment, Psychological distress* and *Alcohol use* to be significantly less important during the course of treatment. Differences between patients and clinicians with regard to some of the treatment goals also declined during the course of treatment. Both patients and clinicians indicated significantly fewer treatment goals during the course of treatment. Treatment goals could be either achieved or judged to be less important than at the start of treatment. More research is needed to examine which treatment goals are achieved and if the achievement of certain intermittent treatment goals may, in fact, be a necessary prerequisite for long-term positive change in the area of substance abuse behaviour (Howard, 2003).

Like those with other complex disorders, people with substance-related disorders face a broad range of problems that could also be incorporated into the individual's treatment plan. The results of the present study reveal a specific intervention aimed at the promotion of shared decision-making with regard to the goals of addiction treatment to foster convergence of the perspectives of patients and clinicians. Such convergence is likely to be a prerequisite for the achievement of positive treatment outcomes, but further research is needed to determine whether such convergence of treatment goals will lead to better treatment outcomes.

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