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To what extent psychiatric patients feel involved in decision making about their mental health care? Relationships with socio-demographic, clinical, and psychological variables

De las Cuevas C. Peñate W. To what extent psychiatric patients feel involved in decision making about their mental health care? Relationships with socio-demographic, clinical, and psychological variables.

Background: Shared decision making (SDM) is an essential component of patient-centered care, but there is little information about its use in the psychiatric care.
Objective: To measure to what extent psychiatric patients feel they were involved in the process and steps of decision making about treatment choice and to analyse the influence of socio-demographic, clinical, and psychological processes on this perception.
Methods: Cross-sectional survey involving 1100 consecutive psychiatric outpatients invited to complete the nine-item Shared Decision-Making Questionnaire (SDM-Q-9), health locus of control and control preferences, self-efficacy and drug attitude scales, as well as a questionnaire including socio-demographic and clinical variables.
Results: A high response rate of 77% was registered, resulting in a sample of 846 psychiatric outpatients. SDM-Q-9 total score indicate a moderately low degree of perceived participation, with differing perceived implementation of the individual the SDM process steps. Patient diagnosis evidenced significant differences in SDM perception. Patients' perception of SDM was explained by four main variables: the older the patient, the lower self-reported SDM; having a diagnosis of schizophrenia increases the likelihood of lower SDM; a positive attitude towards psychiatric drugs favors greater SDM, as well as a higher level of self-efficacy.
Conclusion: The result of this study suggests that SDM is currently not widely practiced in psychiatric care. Further research is needed to examine if the low level of participation self-reported is justified by psychiatric patients' decisional capacity.

Carlos De las Cuevas[1], Wenceslao Peñate[2]

[1]Department of Internal Medicine, Dermatology and Psychiatry, University of La Laguna, San Cristóbal de La Laguna, Canary Islands, Spain; and [2]Department of Personality, Assessment and Psychological Treatments, University of La Laguna, San Cristóbal de La Laguna, Canary Islands, Spain

Keywords: psychiatric patients; SDM-Q-9; shared decision making

Prof. Carlos De las Cuevas, Department of Internal Medicine, Dermatology and Psychiatry, School of Medicine, San Cristóbal de La Laguna, Spain.
Tel: 0034 609 521 405;
Fax: 0034 922 319 353;
E-mail: cdelascuevas@gmail.com

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Significant outcomes

- Shared decision making (SDM) self-reported by psychiatric patients was moderately low.
- Although psychiatric patients received some aspects of SDM, they self-reported poorly on some of SDM steps involved, being uncommon that a complete SDM approach was used.
- Age, attitudes towards psychiatric treatment, self-efficacy and the diagnoses of schizophrenia predict SDM experienced.

Limitations

- The study registered patients' perceptions of decision-making experience and not studies patient consultations directly.
- Cross-sectional study design.
- Possible response biases associated to the use of self-report measure.

Background

For a long time, everyday psychiatric clinical practice meant that psychiatrists made decisions for their patients. However, in the last two decades there has been a growing recognition in the Spanish National Health System of the importance of considering patients' values and preferences in clinical decisions and the model of relationship has moved from a dominant paternalistic one towards a pluralistic model that attempts to democratise decision making, share understanding, and empower patients (1,2).

There are several reasons to enhance psychiatric patients' active participation in decisions about their treatment: first, a legal imperative, as psychiatric patients have the right to be fully informed on chances and risks of available treatments (3); second, an ethical imperative, because a considerable number of patients want to be involved more than they are (4); third, a clinical evidence base support, as treatments are presumed to be more successful if patients are involved in decisions (5); finally, an economic reason because it reduces unwanted treatments and allows an appropriate allocation of resources (6). One concept to achieve this is SDM. SDM is an interactive process of the clinical decision-making model that ensures that both patient and physician are equally and actively involved and share information in order to come to an agreement, for which they are jointly responsible (7). The essential components of the SDM model include health professional and patient participation at all steps of the decision-making process; these steps include professional disclosure, exchange of information, deliberation about options, patients' preferences, negotiation, and coming to an agreement on a decision to implement (8). In this sense, SDM is a sequential hierarchic process where each step makes sense by itself and can take place independently of other steps expressing specific communication patterns (9). Consequently, the patient–professional relationship can vary in SDM as a whole and throughout each step of the process, with each step potentially including distinct forms of SDM (10).

Although there is substantial research on SDM, until now there exists little information on the extent to which this apparently accepted model is reflected in the daily practice of mental health professionals. Moreover, little is known about the factors conditioning psychiatric patients' perceived involvement in their care.

The study of psychological processes as beliefs about having control, self-efficacy, attitudes towards drug treatments, and psychological reactance could be of crucial importance for their possibilities to engage in SDM together with staff in the health care system (11–16). Psychological reactance is an aversive affective reaction in response to regulations or impositions that impinge on freedom and autonomy (17,18), and through limiting and threatening freedom, recommendations to follow a medication have the potential to elicit reactance and, as a result, lead patients to ignore the recommended treatment. Health locus of control refers to the individual's beliefs regarding the control of health (19). A patient with an internal locus of control believes that health outcomes are a direct result of his or her own behaviour while a patient with an external locus of control believes that health outcomes are a result of either chance or powerful other people, such as physicians. Finally, sense of self-efficacy reflects the individual's belief in his/her own skills to plan and perform certain activities to attain particular aims (11,20) and leads to a greater sense of confidence and control, translating into a greater theoretical likelihood of both intending to perform the behaviour and actually doing so.

The aim of the present study was to measure to what extent psychiatric patients feel they were involved in the process and different steps of decision making about treatment choice in their psychiatric consultations and to analyse the influence of socio-demographic, clinical, and psychological processes on this perception.

Methods

Sample recruitment

From October 2013 to April 2014, 1100 consecutive psychiatric outpatients, belonging to a basic health area of 135 000 inhabitants of the Canary Islands Health Service, seen in the Community Mental Health Services on Tenerife Island (Canary Islands, Spain) were invited to participate in a cross-sectional study. Patients were eligible for inclusion in the study if they were aged 18 and over and were diagnosed by their psychiatrists with psychiatric disorders using the International Classification of Diseases, Tenth Edition (ICD-10) codes as F20 (schizophrenia), F31 (bipolar affective disorder), F32–33 (depressive episode and recurrent depressive disorder), F40–48 (obsessive-compulsive disorder and other neurotic, stress-related and somatoform disorders). Before the consultation with her/his psychiatrist, each participant received a full explanation of the study, after which they signed an informed consent document approved by the clinical research ethics committee of Nuestra Señora de Candelaria Teaching Hospital in Santa Cruz de Tenerife. Each participant then filled out a brief socio-demographic survey and the

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questionnaires that integrate the study with the exception on the shared decision-making questionnaire (SDM-Q) that was completed after the consultation.

Measures

Socio-demographic characteristics and clinical variables. Age, sex, educational level (no formal education, primary studies, secondary studies, and university degree), history as psychiatric patient (in years), and type of psychoactive drugs currently taken were assessed. For assessment purposes, the drugs were divided into the common groups of psychotropic drugs: antidepressants (tricyclics, selective serotonin reuptake inhibitors and serotonin and norepinephrine selective reuptake inhibitors), benzodiazepines, antipsychotics (conventional and atypical), and mood stabilisers. For statistical analysis purposes, a new variable (number of different drugs) was drawn up as an indirect measure of treatment complexity. We also recorded how long patients had been under psychiatric treatment (in months), the number of different psychiatrists treating them during that time, and the number of psychiatric admissions specifying their voluntary or involuntary character. Patients' diagnoses and treatments were collected from their therapeutic recommendation sheets.

Instruments

SDM-Q. The nine-item Shared Decision-Making Questionnaire (SDM-Q-9) is a valid, reliable, and brief self-report questionnaire that assesses the patients' view of the decision-making process in a consultation (21) that has been adapted and validated into Spanish (22). The questionnaire consists of nine items, each describing one step of the SDM process (23). The questionnaire was developed to show the extent to which patients feel they were involved in the process by means of scoring nine items on a six-point Likert scale, ranging from 0 ('completely disagree') to 5 ('completely agree'). Summing up all items leads to a raw total score between 0 and 45. Multiplication of the raw score by 20/9 provides a score forced (transformed) to range from 0 to 100, where 0 indicates the lowest possible level of SDM and 100 indicates the highest extent of SDM. As it is more intuitively interpretable, the original authors encourage use of the transformed score. Patients completed SDM-Q-9 immediately after their clinical consultation with their psychiatrist and not in the presence of the treating health professional.

Hong Psychological Reactance Scale (HPRS). The HPRS (24) is a 14-item self-report questionnaire designed to measure the individual difference in reactance proneness, that is, a person's trait propensity to experience psychological reactance. Psychological Reactance (19) assumes that, when an individual's freedom is threatened, the individual will be motivated to restore the perceived loss of freedom. Participants indicated the extent to which they endorsed each statement on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Multidimensional Health Locus of Control (MHLC) Form C Scale. Form C of the MHLC scale (25) is an 18-item, general purpose, condition-specific locus of control scale that could easily be adapted for use with any medical or health-related condition. There are four subscales of the form C of the MHLC: (1) internal health locus of control (IHLC), which is the belief that one's own behaviours affect one's health status; (2) chance health locus of control (CHLC), which is the belief that one's health condition is a matter of fate, luck, or chance; (3) doctors (DHCL) health locus of control, which is the belief that are doctors who determine the outcomes of patient health; and (4) other people health locus of control (PHLC), which is the belief that other people, such as family and friends have control over one's health status. Internal and chance subscales comprised 6 items, while doctors and other people subscales comprised 3 items, totalling 18 items on the questionnaire. Patients are asked to rate, on a six-point Likert scale, the degree to which they agree or disagree with each statement. Higher scores on each subscale indicate a stronger belief in that type of control.

General Perceived Self-Efficacy Scale. The General Perceived Self-Efficacy Scale (26) is a 10-item self-report scale that measures general self-efficacy as a prospective and operative construct. In contrast to other scales designed to assess optimism, this scale explicitly refers to personal agency, that is, the belief that one's actions are responsible for successful outcomes. Each item is scored from 1 (not at all true) to 4 (completely true). The summary score ranges from 10 to 40, with the highest score indicating high self-efficacy.

Drug Attitude Inventory. The Drug Attitude Inventory (DAI-10) (27) is a 10-item self-report scale developed to assess patient's belief about the efficacy of drugs. Specifically, the scale measure the subjective responses and attitudes of psychiatric patients towards their treatment by revealing whether the patients are satisfied with their medications and

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evaluating their understanding of how the treatment is affecting them. Items represent subjective experience presented as self-report statements with which the patient agrees or disagrees. These are based on actual recorded and transcribed accounts of patients, and response options are true/false only. Each response is scored as +1 if correct or −1 if incorrect. The final score is the grand total of the positive and negative points and ranges in value from −10 to 10, with higher scores indicating a more positive attitude towards medication. A positive total score means a positive subjective response; a negative total score means a negative subjective response.

Statistical analyses. Frequencies analyses were carried out for describing the sample. To contrast both general levels of SDM and specific SDM steps, according to different psychiatric diagnoses, ANOVAs were performed. Finally, logistic regression analysis was performed to estimate the best explaining variables of SDM. In this sense an SDM dichotomous variable was computed: low perception of SDM by psychiatric patients (total SDM-Q scores representing percentile 25 or lower), and high perception of SDM (scores representing percentile 75 or higher). Statistical analyses were only done with participants without missing data. This implies that we can find differences in sample size, according to groups of analyses.

Results

We recorded a high response rate of 77% resulting in a sample of 846 psychiatric outpatients. The 846 patients who agreed to participate in the study had a mean age of 49.9 ± 13.6 years (range 18–87), and 64.4% were female. Concerning educational level, 9.1% of patients could only read and write, 34.5% had completed primary studies, 37.2% had completed secondary studies, and 19.2% had a university degree. The primary diagnoses of respondents were schizophrenia (20%); bipolar disorder (12.2%); depressive disorders (49.8%); and anxiety disorders (17.9%). The average duration of treatment was 9.8 ± 8.9 years (range 0.08–40). The mean number of psychotropic drugs used was 3.0 ± 0.8 (range 0–8). Only 12.6% of the patients were under monotherapy treatment, whereas 27.9% received two drugs, 25.6% received three, 17.6% received four, and 14.4% received five or more drugs. Benzodiazepine tranquillizers were the most common medications, used by 80.4% of the patients followed by antidepressants (used by 70.4%), antipsychotics (used by 33%) and mood stabilisers (used by 31.9%). Table 1 shows the sample distribution according to socio-demographic and clinical variables included in the study as well as self-reported questionnaires scores.

The analysis of SDM-Q-9 results suggests that SDM is currently not widely practiced in psychiatric outpatient care. The average SDM-Q-9 score showed that the mean of the sample was slightly below the midpoint of the scale in their perceptions of the extent to which SDM indicating a moderately low level of participation perceived. As can be observed, very different level of agreement was registered in the different questionnaire items indicating different relevance in the sample of the stages involved in SDM. Five of the nine items of the questionnaire showed a majority of patients disagree. The higher level of disagreement was registered by items 2 and 6, that represent two of the more relevant steps in SDM process, since the great majority of patients informed that their doctors do not want to know their level of involvement desired in decision making, and reported that their doctors did not ask them about their options preferences. Table 2 shows percentages of agreement with SDM-Q items in psychiatric outpatients as well as their descriptive analysis.

According to the SDM-Q-9 total score, the four diagnostic groups of psychiatric patients differ significantly. Table 3 summarises the main data from the ANOVA analysis performed. Since transformed score (0–100) was used, mean scores registered indicate that all the groups are situated slight below the middle level in how patients feel SDM process in their relationship with their clinicians. Analysing specific differences (*Bonferroni test*), there is only a significant difference: depressive patients scored higher levels in SDM than patients with schizophrenia ($p \leq 0.001$). A similar pattern was found between patients with bipolar disorder and schizophrenic patients, but it does not reach significance ($p \leq 0.07$).

Considering SDM as a process integrated by several steps (from recognition that a decision needs to be made to final agreement on how to proceed), a new ANOVA was performed; now taking into account the different items (representing different contents/steps in SDM). Table 4 summarises the data obtained. As can be observed, there were significant differences in five of the nine questionnaire items/steps: 1 (disclosure that a decision needs to be made), 3 (equipoise statement), 4 (informing on the benefits/risks of the options), 7 (negotiation), and 9 (arrangement of follow-up). The general sense (*Bonferroni adjust*) points out lower scores in schizophrenia patient subsample comparing with depressive patients (items 3, 4, and 9), comparing with anxiety patients (item 1), and comparing with both depressive and bipolar patients (item 7).

An interpretation of mean scores also reveals interesting data: as low scores point out 'disagreement'

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Table 1. Socio-demographic and clinical characteristics of the psychiatric outpatients sample studied ($n = 846$)

Variable	Category	Number of cases	% of the sample
Age (mean age 49.9 ± 13.6; rank 18–87)	18–30 years	81	9.6
	30–45 years	227	26.8
	45–60 years	359	42.4
	60–75 years	156	18.4
	>75 years	23	2.7
Sex	Male	302	35.6
	Female	546	64.4
Educational level	Can read and write	77	9.1
	Primary	293	34.5
	Secondary	316	37.2
	University	163	19.2
ICD-10 diagnosis*	Schizophrenia	170	20.0
	Bipolar disorder	104	12.2
	Depressive disorders	423	49.8
	Anxiety disorders	152	17.9
History of psychiatric admissions (60.9% involuntary)	No	570	67.2
	1	101	11.9
	2	60	7.1
	3	47	5.5
	≥4	71	8.3
No. of psychiatrists (mean 2.7 ± 2.0; rank 1–12)	1	289	34.0
	2	224	26.4
	3	130	15.3
	4	69	8.1
	≥5	137	16.1
Psychotropic drugs (mean 3.0 ± 0.8 drugs; rank 0–8)	No drugs	17	2.0
	One drug	107	12.6
	Two drugs	237	27.9
	Three drugs	217	25.6
Polypharmacy 85.4%	Four drugs	149	17.6
	Five or more drugs	122	14.4
Treatment	Antidepressants	598	70.4
	Tricyclics	31	3.7
	SSRIs	449	52.9
	SNSRIs	308	36.3
	Benzodiazepines	683	80.4
	Antipsychotics	280	33.0
	Conventional	40	4.7
	Atypical	271	31.9
	Mood stabilisers	229	27
	Anticholinergics	40	4.7
		Mean ± SD	Transformed
Form C MHLC Scales	Internal	24.4 ± 7.3	4.1 ± 1.2
	Chance	15.0 ± 6.9	2.5 ± 1.1
	Doctors	15.3 ± 3.4	5.1 ± 1.1
	Other people	10.8 ± 3.7	3.6 ± 1.2
Psychological reactance	Affective	20.1 ± 6.6	3.4 ± 1.1
	Cognitive	16.5 ± 6.3	2.1 ± 0.8
	Total	36.7 ± 11.4	2.6 ± 0.8
DAI-10			3.5 ± 4.1
General Self-Efficacy Scale			29.2 ± 6.9

DAI-10, Drug Attitude Inventory; ICD, International Classification of Diseases; MHLC, Multidimensional Health Locus of Control; SNRIs, selective noradrenaline reuptake inhibitors; SSRIs, selective serotonin reuptake inhibitors; transformed, mean of items score.

and high score 'agreement', items 2 and 6 clearly indicate 'disagreement': patients disagree in considering that clinicians formulate a statement of equality in the relationship, and they consider that clinicians do not ask them much about which treatment they wish. In the opposite are items 5 and 9: in general, patients feel that

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Table 2. Percentage of agreement with shared decision-making questionnaire items in psychiatric outpatients and descriptive analysis

SDM-Q-9 items	% Agree	% Disagree	Mean	SD
My doctor made clear that a decision needs to be made	46.1	53.9	2.29	2.47
My doctor wanted to know exactly how I want to be involved in making the decision	5.6	94.4	0.26	1.03
My doctor told me that there are different options for treating my condition	58.0	42.0	2.81	2.39
My doctor precisely explained the advantages and disadvantages of the treatment options	54.1	45.9	2.59	2.35
My doctor helped me understand all the information	89.5	10.5	4.36	1.35
My doctor asked me which treatment option I prefer	15.4	84.6	0.74	1.65
My doctor and I weighed the different treatment options thoroughly	44.0	56.0	2.07	2.32
My doctor and I selected a treatment option together	48.3	51.7	2.30	2.24
My doctor and I came to an agreement on how to proceed	64.9	35.1	3.08	2.22
Total score			20.5	11.1
Transformed score*			45.6	24.7

* 0–100 scale; higher scores indicate higher perceived shared decision making.

Table 3. Differences in SDM-Q-9 total score among psychiatric outpatients

Patients diagnoses	*n*	Mean	SD	*F*	*p*	η^2
Schizophrenia	170	39.18	23.74	5.66	0.001	0.020
Bipolar disorder	104	46.82	24.36			
Depressive disorder	421	48.21	24.72			
Anxiety disorder	151	44.47	25.06			

p, probability; SDM-Q-9, shared decision making; SD, standard deviation; η^2, squared eta.

clinician try that they understand the information, and look for an agreement in treatment procedure.

To determine the possible variables explaining SDM's perceptions by psychiatric patients, a logistic regression analysis was performed. For that, a binary variable was computed attending SDM-Q-9 scores: patients with *low* perception of SDM (SDM-Q-9 $\leq$25), and *high* perception of SDM (SDM-Q-9 $\geq$75). Low-SDM group was composed by 229 patients (59 schizophrenia, 25 bipolar disorder, 102 depressive disorder, and 43 anxiety disorder), and high-SDM group was composed by 131 patients (17 schizophrenia, 16 bipolar disorder, 73 depressive disorder, and 26 anxiety disorder). As predictive variables, both socio-demographic variables (age, gender, educational level, treatment duration, and diagnoses), and psychological processes variables (attitudes to medicines, health locus of control, psychological reactance, and self-efficacy), were taken into account. Table 5 summarises the mean coefficients obtained.

As can be observed, five variables were statistically significant in the equation: age, treatment duration, schizophrenia disorder, positive attitude to drugs, and self-efficacy. In the case of treatment duration variable, the value 1.0 is included in confidence interval. Consequently, its role in predicting low/high SDM cannot be established. The final contributions point out that age has a negative contribution (less SDM as age increases) and schizophrenia disorder is a 'risk' for low SDM. On the other hand, a positive attitude towards drugs and increases in self-efficacy are associated to high SDM.

Discussion

This is the first large, community psychiatry-based survey exploring the degree to which psychiatric outpatients feel they are involved in the process and steps of decision making about treatment choice analysing the influence of socio-demographic, clinical and psychological variables on this perception. Treatment decision making in psychiatry is often likely to be complex, with additional issues such as comorbidity and chronicity meaning that symptoms and decisions are more likely to fluctuate and change over time and be influenced by a broad range of factors (28).

According to SDM-Q-9 total score, psychiatric patients' SDM self-reported levels were moderate, tending to be low, which is consistent with previous studies carried out in similar health-care setting but with other methodology, where most patients informed of experiencing a passive role, with their psychiatrists making the final decision after considering the patient's opinion (29,30).

When we pay attention to the different items of the questionnaire, representing the different steps involved in SDM process, it becomes clear that although psychiatric patients received some aspects of SDM (e.g. being involved in making decisions in some way), they self-reported poorly on some of SDM steps involved, being uncommon that a complete SDM approach was used, since most patients feel that an equal relationship is not established (item 2) and that they do not participate in the selection of treatment (item 6). On the other hand, the vast majority of patients reported that their psychiatrist helped them to understand all the

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Table 4. Differences in SDM-Q-9 items scores among psychiatric outpatients according to diagnoses

Item	Step in SDM process	Diagnoses	Mean	SD	*F*	*p*	η^2
My doctor made clear that a decision needs to be made	Disclosure that a decision needs to be made	Schizophrenia	1.89	2.41	3.397	0.017	0.012
		Bipolar disorder	2.05	2.42			
		Depressive disorder	2.35	2.48			
		Anxiety disorder	2.72	2.48			
My doctor wanted to know exactly how I want to be involved in making the decision	Formulation of equality of partners	Schizophrenia	0.19	0.90	0.905	0.438	0.003
		Bipolar disorder	0.39	1.21			
		Depressive disorder	0.26	1.04			
		Anxiety disorder	0.23	0.99			
My doctor told me that there are different options for treating my condition	Equipoise statement	Schizophrenia	2.37	2.42	2.809	0.039	0.010
		Bipolar disorder	2.92	2.40			
		Depressive disorder	2.98	2.36			
		Anxiety disorder	2.74	2.37			
My doctor precisely explained the advantages and disadvantages of the treatment options	Informing on the options' benefits and risks	Schizophrenia	2.27	2.38	4.387	0.004	0.015
		Bipolar disorder	2.95	2.37			
		Depressive disorder	2.78	2.32			
		Anxiety disorder	2.19	2.30			
My doctor helped me understand all the information	Investigation of patient's understanding and expectations	Schizophrenia	4.27	1.55	2.322	0.074	0.008
		Bipolar disorder	4.51	1.30			
		Depressive disorder	4.45	1.35			
		Anxiety disorder	4.13	1.67			
My doctor asked me which treatment option I prefer	Identification of preferences	Schizophrenia	0.55	1.48	1.958	0.119	0.007
		Bipolar dsorder	0.54	1.38			
		Depressive disorder	0.82	1.73			
		Anxiety disorder	0.88	1.78			
My doctor and I weighed the different treatment options thoroughly	Negotiation	Schizophrenia	1.61	2.21	4.675	0.003	0.016
		Bipolar disorder	2.42	2.37			
		Depressive disorder	2.26	2.35			
		Anxiety disorder	1.82	2.26			
My doctor and I selected a treatment option together	Shared decision	Schizophrenia	1.96	2.19	2.386	0.068	0.008
		Bipolar disorder	2.13	2.22			
		Depressive disorder	2.48	2.25			
		Anxiety disorder	2.29	2.28			
My doctor and I came to an agreement on how to proceed	Arrangement of follow-up	Schizophrenia	2.53	2.20	5.104	0.002	0.018
		Bipolar disorder	3.14	2.17			
		Depressive disorder	3.31	2.23			
		Anxiety disorder	3.02	2.21			

SDM-Q-9, shared decision making; SD, standard deviation; *p*, probability; η^2, squared eta.

information (item 5) and that reached an agreement of follow-up (item 9). When these results are analysed considering the diagnosis of the patient, those with schizophrenia reported less participation in SDM, both taking into account the total score of the questionnaire or the analysis of each questionnaire item or SDM step process involved.

The fact that psychiatric patients self-reported a low participation in SDM may be due to very different situations:

First, it could be an objective reflection of reality. Because SDM requires that patients are able to act as competent decision makers (31), it is appropriate that psychiatrists do not use SDM with everyone but first consider the patient's decisional capacity (32). Patients' psychopathology, as disturbances of thought, depression, mania as well as compulsive doubts, can lead to impaired decisional capacity and result in psychiatrists not engaging in SDM with patients showing any of these characteristics. However, it is necessary to differentiate if psychiatrists prefer a cooperative therapeutic alliance with patients, but they need to consider patient competence as a critical obstacle to participation, or they really prefer to put into practice a paternalistic role with patients giving no opportunity for SDM. Not all psychiatrists agree with or implement SDM in their clinical practice. Some of them perceive medical and legal decisions as inappropriate to share with schizophrenic patients or those who are acutely ill, even though research has found that it is possible and recommendable (32,33).

Previous works had shown a positive attitude towards concordance in the field of psychotropic drugs prescription among psychiatrists working at community setting with broader experience

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Table 5. Summary of logistic regression analysis for variables predicting shared decision-making patients' perceptions, controlling for psychological processes and socio-demographic and clinical variables ($n = 360$)

Variables	B	Wald	*p*	OR	CI 95%	
Gender (male)	0.03	0.01	0.928	1.026	0.585	1.801
Age	−0.04	14.77	0.000	0.958	0.937	0.979
Educational level	0.10	0.46	0.498	1.105	0.827	1.477
Treatment duration	0.01	4.98	0.026	1.003	1.000	1.006
Drugs num	−0.03	0.06	0.800	0.975	0.801	1.186
Diagnoses		20.48	0.000			
Diagnoses (schizophrenia)	−1.50	10.67	0.001	0.224	0.091	0.550
Diagnoses (bipolar disorder)	−0.35	0.52	0.470	0.706	0.275	1.813
Diagnoses (depressive disorder)	0.40	1.31	0.253	1.489	0.753	2.943
DAI	0.11	10.61	0.001	1.116	1.045	1.191
HLC-internal	0.01	0.43	0.514	1.011	0.978	1.046
HLC-chance	0.02	1.36	0.244	1.023	0.985	1.062
HLC-doctors	0.07	2.35	0.127	1.068	0.981	1.162
HLC-others	−0.01	0.04	0.849	0.993	0.927	1.064
PR-affective	−0.02	0.77	0.380	0.980	0.938	1.025
PR-cognitive	0.01	0.08	0.772	1.007	0.961	1.056
Self-efficacy	0.04	5.00	0.025	1.045	1.005	1.086
constant	−1.679	1.668	0.197	0.187		

B, β coefficients; CI, confidence interval; DAI, Drug Attitude Inventory; HLC, Health Locus of Control; OR, odds ratio; *p*, probability; PR, psychological reactance.

providing a greater conviction of the importance of the patient's decision about treatment (34). However, studies remark the necessity of further research to address the extent to which this apparently accepted model is reflected in the daily practice of mental health professionals.

The literature has shown that three are the main barriers to implementing shared decision in those patients in whom no clinical contraindications exist that include: overworked physicians with limited time availability, insufficient training of health-care providers about SDM and the use of patient decision aids, and clinical information systems that failed to track patients throughout the decision-making process and that are unable to efficiently integrate the steps of SDM into the daily workflow (35). Other potential barriers include a lack of a supportive culture, misperceptions about the desire of patients to be informed and involved, and about the usefulness and quality of decision aids (36).

Although clinicians frequently pointed to time constraints as the primary barrier to SDM, no consistent evidences are available at present time that more time is required to engage in SDM in clinical practice than to offer usual care (37). McCabe et al. (38) consider that involvement in decision making appears to be influenced by the individual psychiatrist and specific symptoms but not visit length.

In order for patients and professionals to have a more equal role in decisions about care, professionals need a variety of skills. These range from technical communication and interpersonal skills to more fundamental changes in attitudes about the relative roles and expertise of patients and professionals (39). Although we have recently seen the incorporation of communication skills training into medical curricula of the medical schools of our country, health-care professionals with limited or no training in SDM characterise our current health care situation. At present time our health care system needs to ensure training at postgraduate level and throughout professional development to enhance clinical skills in supporting people to take decisions about their health and health care.

Another possibility is that patients experienced the role they wanted and they had a psychiatrist who wanted to meet the preferences of their patients. It is necessary to have in mind that a considerable proportion of psychiatric patients preferred a passive decisional control (30,40). Finally, it is convenient to consider the possibility that psychiatric patients sometimes may not be a reliable source of information as well as self-report biases of questionnaires used (41).

Psychological reactance, health locus of control, attitude to drugs, and self-efficacy have demonstrated their relevance in SDM, when SDM is assessed as patients' preferences of participation (30). In the present study, SDM has been assessed as patients' perception of their experience of participation in their last psychiatric consultation that took place minutes before. In this context, only self-efficacy and drug attitudes seem to play a relevant role while neither health locus of control nor psychological reactance registered significant differences. Patients' preferences can be affected by their wishes and

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willingness for participating in an SDM procedure. But the facts (how they feel their clinicians behave) seem to be only affected by their self-efficacy level and, especially, their confidence in drugs' efficacy. This result can have implications about patients' disposition: they feel they participate more in an SDM procedure, as they rely on their own coping ability, but if they also feel they are being helped by their prescriptions.

As with any research this study has some limitations. However, there are also a number of strengths. Limitations of this study include the fact that we did not study patient consultations directly, but only registered patients' perceptions of decision-making experience. Since a cross-sectional survey was carried out, the study could only demonstrate associations and not causality. The fact that our sample comprised more women than men reflects the recurrent factor of many population-based studies focused on reporting the determinants of service use for mental health reasons that had evidenced the higher prevalence of female gender (42,43). The strengths of this study include the large number of psychiatric outpatients who agreed to participate in the study and the large number of socio-demographic, clinical, and personality variables included. Another strength of the current study is that regression analyses performed were controlled for the contribution of these variables. Finally, the results of our study should be interpreted with caution given the explorative nature of the study carried out. Further research is required to replicate and evaluate the relevance of our findings and to clarify if the low level of SDM participation self-reported is justified by psychiatric patients' decisional capacity or is a consequence of a psychiatrists' lack of communication skills necessary for proper SDM or a psychiatrist's preference of paternalism in their relationship with patients.

Clinical implications

Since patients actively involved in their health and health care tend to have better outcomes, and, some evidence suggests, lower costs (44,45), the low perception of participation in decision making in psychiatric patients make necessary that mental health professionals need to raise their thoughtfulness regarding patient's participation in health care decisions each time a relevant treatment decision is about to be made.

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Ethical Standards

The authors assert that all procedures contributing to this work comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008.

References

1. Taylor K. Paternalism, participation and partnership – the evolution of patient centeredness in the consultation. Patient Educ Couns 2009;**74**:150–155.
2. De Las Cuevas C. Towards a clarification of terminology in medicine-taking behaviour: compliance, adherence and concordance are related although different terms with different uses. Curr Clin Pharmacol 2011;**6**:74–77.
3. Pelto-Piri V, Engström K, Engström I. Paternalism, autonomy and reciprocity: ethical perspectives in encounters with patients in psychiatric in-patient care. BMC Med Ethics 2013;**6**:49.
4. Moulton B, King JS. Aligning ethics with medical decision-making: the quest for informed patient choice. J Law Med Ethics 2010;**38**:85–97.
5. Loh A, Leonhart R, Wills CE, Simon D, Harter M. The impact of patient participation on adherence and clinical outcome in primary care of depression. Patient Educ Couns 2007;**65**:69–78.
6. Coulter A, Collins A. Making Shared Decision-Making a Reality: No Decision About Me, Without Me. London: King's Fund, 2011.
7. Härter M. Shared decision making – from the point of view of patients, physicians and health politics is set in place. Z Arztl Fortbild Qualitatssich 2004;**98**:89–92 (in German).
8. Elwyn G, Charles C. Shared decision making: from conceptual models to implementation in clinical practice. In: Edwards A, Elwyn G, editors. Shared decision-making in health care: achieving evidence-based patient choice. New York: Oxford University press, 2009:117–121.
9. Fenton WS. Shared decision making: a model for the physician-patient relationship in the 21st century? Acta Psychiatr Scand 2003;**107**:401–402.
10. De Las Cuevas C, Peñate W, Perestelo-Pérez L, Serrano-Aguilar P. Shared decision making in psychiatric practice and the primary care setting is unique, as measured using a 9-item Shared Decision Making Questionnaire (SDM-Q-9). Neuropsychiatr Dis Treat 2013;**9**:1045–1052.
11. Holden G. The relationship of self-efficacy appraisals to subsequent health related outcomes: a meta-analysis. Soc Work Health Care 1991;**16**:53–93.
12. Schwarzer R, Fuchs R. Self-efficacy and health behaviors. In: Conner M, Norman P, editors. Predicting health behavior: research and practice with social cognition models. Buckingham, UK: Open University Press, 1996. 163–196.

13. Shapiro DH Jr, Schwartz CE, Astin JA. Controlling ourselves, controlling our world. Psychology's role in understanding positive and negative consequences of seeking and gaining control. Am Psychol 1996;**51**:1213–1230.
14. Seibel CA, Dowd ET. Reactance and therapeutic noncompliance. Cognit Ther Res 1999;**23**:373–379.
15. Janowski K, Kurpas D, Kusz J, Mroczek B, Jedynak T. Health-related behavior, profile of health locus of control and acceptance of illness in patients suffering from chronic somatic diseases. PLoS One 2013; 10; **8**:e63920.
16. Mcniel DE, Gormley B, Binder RL. Leverage, the treatment relationship, and treatment participation. Psychiatr Serv 2013;**64**:431–436.
17. Brehm JW. Responses to loss of freedom: a theory of psychological reactance. Morristown, NJ: General Learning Press, 1972.
18. Brehm SS, Brehm JW. Psychological reactance: a theory of freedom and control. London: Academic Press Inc., 1981.
19. Wallston KA. Hocus-pocus, the focus isn't strictly on locus: Rotter's social learning theory modified for health. Cogn Ther Res 1992;**16**:183–199.
20. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. Psychol Rev 1977;**84**:191–215.
21. Kriston L, Scholl I, Hölzel L, Simon D, Loh A, Härter M. The 9-item Shared Decision Making Questionnaire (SDM-Q-9). Development and psychometric properties in a primary care sample. Patient Educ Couns 2010;**80**:94–99.
22. De Las Cuevas C, Perestelo-Perez L, Rivero-Santana A, Cebolla-Martí A, Scholl I, Härter M. Validation of the Spanish version of the 9-item Shared Decision Making Questionnaire. Health Expect 2014. doi: 10.1111/hex.12183 [Epub ahead of print].
23. Simon D, Schorr G, Wirtz M et al. Development and first validation of the shared decision-making questionnaire (SDM-Q). Patient Educ Couns 2006;**63**:319–327.
24. Hong SM, Faedda S. Refinement of the Hong psychological reactance scale. Educ Psychol Meas 1996;**56**:173–182.
25. Wallston KA, Stein MJ, Smith CA. Form C of the MHLC scales: a condition-specific measure of locus of control. J Pers Assess 1994;**63**:534–553.
26. Schwarzer R, Jerusalem M. Generalized self-efficacy scale. In: Weinman J, Wright S, Johnston M, editors. Measures in health psychology: a user's portfolio. Causal and control beliefs. Windsor, England: NFER-NELSON, 1995. 35–37.
27. Hogan TP, Awad AG, Eastwood R. A self-report scale predictive of drug compliance in schizophrenics: reliability and discriminative validity. Psychol Med 1983;**13**:177–183.
28. Simmons M, Hetrick S, Jorm A. Shared decision-making: benefits, barriers and current opportunities for application. Australas Psychiatry 2010;**18**:394–397.
29. Matthias MS, Salyers MP, Rollins AL, Frankel RM. Decision making in recovery-oriented mental health care. Psychiatr Rehabil J 2012;**35**:305–314.
30. De Las Cuevas C, Peñate W, De Rivera L. Psychiatric patients' preferences and experiences in clinical decision-making: examining concordance and correlates of patients' preferences. Patient Educ Couns 2014 (in press).
31. Hamann J, Leucht S, Kissling W. Shared decision making in psychiatry. Acta Psychiatr Scand 2003;**107**:403–409.
32. Hamann J, Mendel R, Cohen R et al. Psychiatrists' use of shared decision making in the treatment of schizophrenia: patient characteristics and decision topics. Psychiatr Serv 2009;**60**:1107–1112.
33. Hamann J, Langer B, Winkler V et al. Shared decision making for in-patients with schizophrenia. Acta Psychiatr Scand 2006;**114**:265–273.
34. De Las Cuevas C, Rivero-Santana A, Perestelo-Pérez L, Serrano-Aguilar P. Attitudes toward concordance in psychiatry: a comparative, cross-sectional study of psychiatric patients and mental health professionals. BMC Psychiatry 2012;**12**:53.
35. Friedberg MW, Van Busum K, Wexler R, Bowen M, Schneider EC. A demonstration of shared decision making in primary care highlights barriers to adoption and potential remedies. Health Aff 2013; 32, **2**:268–275.
36. Barry MJ, Frosch DL, Shannon D, Bowen M. Aligning incentives for patient engagement: enabling widespread implementation of shared decision making. Washington, DC: Informed Medical Decisions Foundation, 2013.
37. Legare F, Witteman H. Shared decision making: examining key elements and barriers to adoption into routine clinic practice. Health Aff (Millwood) 2013;**32**:276–284.
38. Mccabe R, Khanom H, Bailey P, Priebe S. Shared decision-making in ongoing outpatient psychiatric treatment. Patient Educ Couns 2013;**91**:326–328.
39. Légaré F, Ratté S, Stacey D et al. Interventions for improving the adoption of shared decision making by healthcare professionals. Cochrane Database Syst Rev 2010;**12**:CD006732.
40. De Las Cuevas C, Peñate W. Preferences for participation in shared decision making of psychiatric outpatients with affective disorders. Open J Psychiatr 2014;**4**:16–23.
41. Fadnes L, Taube A, Tylleskär T. How to identify information bias due to self-reporting in epidemiological research. Internet J Epidemiol 2009;**7**(2).
42. Wang P, Lane M, Olfson M, Pincus H, Wells K, Kessler R. Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. Arch Gen Psychiatry 2005;**62**:629–640.
43. Smith K, Matheson F, Moineddin R et al. Gender differences in mental health service utilization among respondents reporting depression in a national health survey. Health 2013;**5**:1561–1571.
44. Hibbard JH. Engaging health care consumers to improve the quality of care. Med Care 2003;**41**:I61–I70.
45. Hibbard JH, Greene J. What the evidence shows about patient activation: better health outcomes and care experiences; fewer data on costs. Health Aff 2013;**32**:207–214.

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