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Patient satisfaction with hospital health care on acute psychiatric units: Development and validation of the PSYQUEST questionnaire



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ABSTRACT

Introduction: Despite of the evidence pointing out the importance of evaluating patient's satisfaction regarding medical services, there are no available tools validated in Spanish to assess perceived satisfaction regarding psychiatric hospitalization in acute units.

Objective: To design and validate a tool to assess perceived satisfaction regarding hospitalization in psychiatric short-term units (STU).

Method: A multicenter, cross-sectional study was conducted in 14 STU of Madrid public hospitals. A total of 370 patients participated in the study. A preliminary questionnaire version was assessed for content validity by an expert and a patient focus group. A psychometrical validation analysis was carried out. Reliability was examined based on Cronbach's alpha and Omega coefficients, construct validity was evaluated using exploratory (EFA) and confirmatory factor analysis (CFA) and predictive criterion validity was explored through multiple linear regression analysis.

Results: PSYQUEST is a questionnaire made up of 20 items grouped under 4 dimensions (*information and patient-doctor relationship, health staff care, services provided and general satisfaction*). It explains 75,52% of the variance. PSYQUEST showed good reliability ($\alpha = 0,88$ / $\omega = 0,89$) and criterion-based validity. Lower scores were found among patients with involuntary admissions, scarce clinical improvement or restrictive measures.

Conclusion: PSYQUEST showed good psychometric qualities. It can be used for evaluating inpatient satisfaction with psychiatric admissions.

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Introduction and rationale behind the study

The modern concept of quality as a management tool is that patient-perceived quality is an essential ingredient, beyond the quality of the product or service delivered.¹ Evaluation of improvement in symptoms as a measure of quality of care in mental health fails to reflect much that patients consider important, such as information at the start of their admission, the relationship with the psychiatrist and unit staff, patient involvement in treatment/decisions, safety in the unit, leisure alternatives, among other aspects.^{2–10} This is why evaluation of perceived satisfaction has been gaining traction in the healthcare field in recent years.^{7,11–13}

Patient satisfaction is not only an end in itself, but also has consequences for clinical outcomes. Evaluating patient-perceived satisfaction would be predictive of the patient's understanding of the information provided them, enable promptness in seeking help for future decompensation, adherence to drug treatment, and continuity of follow-up after discharge.^{14–17} Patient satisfaction is therefore an essential source of information to detect problems and develop effective action plans to improve quality in organisations.^{18,19}

Satisfaction surveys are the most widely used method of patient participation to ascertain their satisfaction with the care received, and have proven an effective way of measuring it.²⁰ Despite satisfaction questionnaires being widely used, many lack appropriate validity and internal consistency.^{10,21} Over the years, several systematic reviews have warned about the shortcomings in validating the satisfaction questionnaires analysed, the tendency of studies to use non-validated scales, the variability in relation to the dimensions, the length of the questionnaires, etc.^{2,22,23}

Involving patients in the development of questionnaires is a more recent issue, which would highlight ongoing reluctance on the part of professionals to recognise the role of patients in guiding mental health research and policy.^{24,25} Patient participation requires their continuous inclusion in the planning and organisation of health plans based on concrete actions. Failing to consider that the patient has knowledge would result in methods for estimating satisfaction that are far removed from the reality that they seek to address.²⁶

A good assessment of the reliability and validity of the scores of an instrument in a given application is essential to guarantee the quality of measurement and thus ensure that the results can be correctly interpreted and applied in clinical practice.²⁷ The design of a tool, following a quality methodology, that assesses the satisfaction perceived by adult patients admitted to short-stay psychiatric units would be relevant given the evidence that specific tools for this purpose are lacking in our field.

Therefore, the aim of the present study is to design a self-administered questionnaire of satisfaction with stays in acute units, and perform a validation analysis of the content, internal structure, and relationships with other variables related to satisfaction, which can be used by acute units to monitor patient satisfaction.

Material and methods

Study design and population

The present study was conducted in 14 psychiatric short-stay units in public hospitals of the Madrid Health Service (SERMAS).

The inclusion criteria for participants were: 1) having reached the age of majority, 2) ability to give written informed consent to participate in the study, and 3) having an acceptable level of understanding and being Spanish speakers.

The sample of patients was selected consecutively from March 2018 to March 2019. Participating units were consecutively added

to the study, which, together with differences in the number of beds and average length of stay, resulted in discrepancies in sample size between units.

The sample size was calculated considering: 1) the target population [number of patients > 18 years who were discharged from the short-stay hospital units of the Autonomous Community of Madrid (CAM) in 2017 (9,596), minus the average percentage of readmissions in the CAM's short-stay hospital units in 2016 (11%)]: 8,541 patients, 2) the proportion or estimate of average overall perceived satisfaction: 50%, 3) confidence level (1 - alpha): 95%, and 4) precision: 5%. This gave a sample size of 368 patients.

Development of the items

A literature review was conducted in PubMed using the MeSH terms "patient satisfaction" AND "questionnaire" AND "psychiatry". Articles were selected that included questionnaires developed specifically for hospital admissions to acute psychiatric units, that had undergone a psychometric validation process, in self-administered format for adult patients. No time or geographical limit was set.

Based on the findings, a preliminary 40-item questionnaire was developed, grouped into 10 dimensions: Clinical information (four items), Pharmacological treatment (four items), General care (five items), Health care (four items), Non-pharmacological actions (four items), Services (four items), Security and privacy (three items), Regulations (four items), Non-voluntary actions (four items), Overall satisfaction (four items).

The scoring system for each item was established as a five-point Likert scale ordered categorically from least to most satisfied, with a central value: Strongly Disagree (1), Somewhat Disagree (2), Neither Agree nor Disagree (3), Somewhat Agree (4), Strongly Agree (5).

The questionnaire contained the objectives, instructions for completion, and guarantees of anonymity and confidentiality.

Data collection

The questionnaire was offered to all patients admitted to the short-stay unit who met the inclusion criteria on the day prior to discharge, provided that they had been admitted for at least 24 hours. They signed the informed consent document before participating.

The unit professionals also completed the questionnaire on socio-demographic factors and clinical variables and the questionnaire on hospitalisation characteristics for each patient. These questionnaires were prepared for this purpose by the research team based on the data collected in the literature search.

Content validation

The preliminary questionnaire was content validated by a group of 14 experts who were selected based on various criteria including clinical experience in the treatment of psychiatric inpatients, knowledge of research methodology, and/or experience in health management. A group of 14 adult patients in a stable phase, who had been admitted to a short-stay psychiatric unit in the last two years, was also selected.

Each expert independently assessed the clarity of the wording (yes/no), the relevance of each item in relation to the objective (score 1–10), and the appropriate ranking of the item within the dimension to be explored (yes/no). The patient panel assessed the clarity of the wording of the items (yes/no) and the relevance of the items to the objective of the study (yes/no).

The mean score and standard deviation of the assessment of relevance (0–10), clarity (0–1), and appropriateness (0–1) per item

in the expert group, as well as clarity (0-1) and relevance (0-1) in the patient group were calculated. A content validation index (CVI) was also calculated for each item,^{28,29} categorising the scores into three groups: Unnecessary: 1-4 points / Useful: 5-8 points / Essential: 9-10 points. The cut-off point, for the expert group, was set at CVI $\geq .51$.

Suggestions for the wording of the items and the classification of the judges' dimension were also collected in the spaces for free comments, and the relevant changes in wording and style were introduced in the final questionnaire.

Item reduction

Item reduction took place in two phases. On the one hand, during content validation, items that did not achieve a CVI score $\geq .51$ in the expert group or that did not achieve a mean score above 80% in the patient group were eliminated.

On the other hand, prior to the psychometric analysis, a correlation matrix analysis was performed, eliminating from the preliminary questionnaire those items that showed a correlation of less than .30 with perceived satisfaction.

Psychometric analysis

Prior to the data analysis, cases with a high number of unanswered items (> 20%) were eliminated. In those questionnaires with five or fewer unanswered items, missing values were estimated using the EM (expectation-maximization) algorithm of the SPSS programme.

The reliability analysis of the scores of each dimension and the total score of the questionnaire was performed by calculating Cronbach's Alpha coefficient (α) and the Omega Coefficient (ω), with values of $\alpha \geq .7$ and $\omega \geq .7$ being considered an adequate level of consistency.

The total database was then divided into two random subsamples, to perform an exploratory factor analysis (EFA) in one of them (n = 185) and a confirmatory factor analysis (CFA) in the other (n = 185). The EFA was performed with the programme FACTOR 10.9.³⁰

The unweighted least squares (ULS) extraction method was used with Promin (oblique) rotation on the polychoric correlation matrix. For the CFA, several multifactorial models and an exploratory bifactor analysis were tested. Confirmatory analyses on the various models were performed using LISREL 9.2. Fit statistics were calculated for each model.

The relationship of the global satisfaction score of the questionnaire with socio-demographic variables (sex, age groups, marital status, and civil incapacity) and clinical and hospitalisation variables (diagnostic group, type of admission, degree of improvement at discharge, weeks of hospitalisation, coercive measures and restriction of leave during admission) was studied using the multiple linear regression analysis technique.

Results

The response rate was 89.09% (n = 376). The number of cases analysed was 370. In 90.43% (n = 340) of the cases the questionnaire was fully completed, only 13.51% of the questionnaires had one to five unanswered items ($\leq 20\%$).

Content validity and item reduction

It was observed that the mean rating of the items was high for both experts and patients as shown in Table 1.

Table 1
Item content evaluation: mean scores of the judges.

Judges	Evaluation	Mean	SD
Experts (N = 14)	Relevance (0-10)	9.46	.50
	Clarity (0-1)	.97	.05
	Adequacy (0-1)	.98	.03
Patients (N = 14)	Clarity (0-1)	.97	.04
	Relevance (0-1)	.96	.07

In the content validation process, items 2, 12, 23, 24, and 31 were discarded. Of these, items 2, 12, 23, and 24 obtained CVI scores below .51 in the expert group; while items 12, 24, and 31 did not achieve a mean score above 80% in the patient group. 1.

Using EFA techniques, we determined those items that showed low factor loadings with the overall factor, also observing that those items that had been worst rated by the judges showed very low correlations.

Twenty items were finally deleted from the preliminary questionnaire: 2, 10, 11, 12, 16, 17, 18, 19, 21, 22, 23, 24, 28, 30, 31, 32, 33, 34, 35, 36.

Psychometric analysis

Factor analysis

With regard to the EFA, the mean fit of the data to a factor analysis model was assessed using the index proposed by Kaiser-Meyer-Olkin, with a result KMO = .87, which indicated performance of the FA as appropriate (KMO $\geq .80$). Horn's (1965) parallel analysis suggested up to four factors. The factor analysis revealed four components explaining a cumulative percentage of variance of 75.52%. Table 2 shows the factor structure of the items.

The CFA confirmed the theoretical four-dimensional structure with all saturations statistically significant ($> .40$) ($p < .001$), as well as the correlations between the factors. The statistical fit indices of the confirmatory factor models showed an adequate fit to the proposed theoretical model as shown in Table 3.

The PSYQUEST questionnaire (Appendix A) finally comprised 20 items, distributed as follows: Information and patient-doctor relationship (items 1,3,4,4,5,13), Health staff care (7,8,9,14,15), Services provided (20,25,26,27,29), General satisfaction (6,37,38,39,40).

Reliability analysis

In the reliability analysis of the PSYQUEST questionnaire, an overall α coefficient of .88 and an overall ω coefficient of .89 were obtained. The reliability analysis for each dimension obtained similar results: Information and patient-doctor relationship $\alpha = .79/\omega = .79$, Health staff care $\alpha = .83/\omega = .84$, Services provided $\alpha = .71/\omega = .72$, General satisfaction $\alpha = .81/\omega = .82$.

Table 4 summarises the results of the descriptive and reliability analysis of the scores for each item and each dimension.

Criterion validity

Predictive criterion validity was assessed using the multiple linear regression analysis technique according to the sociodemographic characteristics and clinical variables of the patients, and variables related to admission practices. Table 5 summarises the results obtained.

No differences were found in general satisfaction related to gender or age groups. A tendency towards lower satisfaction was observed in the group with single marital status.

Regarding variables related to clinical and admission characteristics, cases admitted involuntarily to the unit had significantly lower satisfaction scores. Those who showed a clear improvement in symptomatology at discharge were more satisfied than those who showed no or only slight improvement. No difference

Table 2
EFA: factor loadings.

	General satisfaction	Satisfaction with healthcare staff	Services provided	Satisfaction with the psychiatrist	General satisfaction questionnaire
1. The psychiatrist explained to me the reason and objectives for my stay				.470	.651
3. The psychiatrist explained to me the reasons why he/she thinks I need to take medication				.676	.527
4. The psychiatrist explained to me the benefits and side effects of the medication				.502	.547
5. The psychiatrist considered my opinion when deciding on the treatment options				.399	.676
13. The interviews with the psychiatrist are helpful to me	.341				.614
7. I was treated with respect by the staff of the inpatient unit during my stay		.518			.677
8. The staff took an interest in me during my stay		.653			.638
9. I feel that the staff understand/listen to me		.597			.579
14. My relationship with the staff has helped me during my stay				.370	.572
15. The staff are there for me when "I feel really bad"		.635			.545
20. I'm satisfied with the leisure alternatives in the unit (TV, radio, reading, arts, and crafts)		.464			.612
25. I'm satisfied with the different rooms on the ward (dining room, bedroom, TV room)			.831		.313
26. I'm satisfied with the level of tranquillity offered by the unit			.512		.407
27. I feel that I have spaces for privacy during my stay			.355		.618
29. The personal belongings I have access to during my stay are those I feel I need			.446		.705
6. The medication has helped me to feel better			.335		.488
37. In general, I'm satisfied with my stay in the unit	.423				.672
38. I feel better on discharge than when I was admitted	.561				.617
39. My stay has helped me to cope better with my health problem	.773				.583
40. I would come back to the hospital for help in the future if I needed it	.551				.530

Note: Absolute loadings below .3.

Table 3
Confirmatory factor model fit statistics.

Model	χ^2	df	p	RMSEA	90% CI RMSEA		p	NNFI	CFI	SRMR	GFI
					Lower lim	Upper lim					
4-factor multidimensional model	443.134	164	<.001	.095	.084	.106	<.001	.918	.929	.076	.900
4-factor model with a general second-order factor	473.044	166	<.001	.099	.089	.110	<.001	.913	.924	.085	.796
Bifactor model	347.758	150	<.001	.085	.074	.097	<.001	.938	.951	.067	.840

CFI: Comparative Fit Index; CI: confidence interval; df: degrees of freedom; GFI: Global Fit Index; NNFI: Non-Normed Fit Index; RMSEA: Root Mean Square of Approximation; SRMR: Standardised Root Mean Residuals.

was found in relation to diagnostic group or coercive measures at admission. The group that had suffered some kind of restriction of permission to leave, visits, or calls during admission scored significantly lower.

Discussion

Evidence on the importance of patient satisfaction with procedures as well as their active participation in the evaluation of medical services is widely described in the literature.^{2,3,5,21,31–35} Patient satisfaction is a broad and multidimensional concept that has been used as a predictor, an outcome measure, or as a factor in the treatment process.³⁶ Although perceived satisfaction should not be equated with the quality of care offered in the units, without perception of the care received as satisfactory, it is impossible to speak of good quality of care.³⁷

This study psychometrically evaluates PSYQUEST, the self-administered questionnaire, in Spanish, of perceived patient satisfaction during psychiatric admissions, designed specifically for adult short-stay psychiatric unit settings. The final form of the PSYQUEST questionnaire consists of four dimensions with individualised satisfaction scores in addition to an overall score. A 5-point Likert scale was used to score the items, including a cen-

tral response, which allows for greater variability of response to be explored versus dichotomous or lower-ranked options.^{38,39}

A group of patients collaborated in the process of content validation of the questionnaire, which made it possible to include relevant aspects in the first person and to introduce style corrections, improving comprehensibility. The viability of the study is reflected on the one hand, by the low percentage of patients who did not consent to participate in the study and, on the other, by the low non-response rate obtained for the questionnaire items that were completed.

The psychometric analysis showed good quality for the questionnaire, with a high internal consistency both in overall score and by dimensions, as well as a good fit to the proposed four-dimensional model. The analysis of the perception of satisfaction by dimensions allows a better understanding of the areas with lower satisfaction.⁴⁰ In contrast to unidimensional questionnaires, multidimensional questionnaires offer the possibility of analysing in greater detail the aspects with the lowest scores and thus adapt initiatives and interventions to implement improvements in the quality of care.⁴¹ Two of the most recent reviews of satisfaction scales in psychiatric services defined some of the dimensions of satisfaction most frequently reflected in the questionnaires, including quality of care, relationship with staff, non-pharmacological measures, and overall satisfaction.^{2,21} The PSYQUEST questionnaire

Table 4

Descriptive analysis of each item and reliability analysis of the scores for each dimension.

Dimension	Item	Mean	SD	Discrimination index	α if the item is eliminated	α	ω
Satisfaction with the psychiatrist	1. The psychiatrist explained to me the reason and objectives for my stay	4.44	1.024	.562	.748	.79	.79
	3. The psychiatrist explained to me the reasons why he/she thinks I need to take medication	4.49	.966	.652	.719		
	4. The psychiatrist explained to me the benefits and side effects of the medication	4.05	1.229	.596	.742		
	5. The psychiatrist considered my opinion when deciding on the treatment options	4.30	1.025	.612	.731		
	13. The interviews with the psychiatrist are helpful to me	4.72	.697	.437	.786		
Satisfaction with the health staff	7. I was treated with respect by the staff of the inpatient unit during my stay	4.66	.719	.544	.816	.83	.84
	8. The staff took an interest in me during my stay	4.67	.693	.698	.779		
	9. I feel that the staff understand/listen to me	4.50	.827	.643	.790		
	14. My relationship with the staff has helped me during my stay	4.52	.830	.655	.786		
	15. The staff are there for me when "I feel really bad"	4.52	.902	.614	.801		
Services of the unit	20. I'm satisfied with the leisure alternatives in the unit (TV, radio, reading, arts, and crafts)	3.98	1.186	.505	.652	.71	.72
	25. I'm satisfied with the different rooms on the ward (dining room, bedroom, TV room)	4.22	.999	.464	.671		
	26. I'm satisfied with the level of tranquillity offered by the unit	4.16	1.099	.471	.666		
	27. I feel that I have spaces for privacy during my stay	3.99	1.253	.517	.647		
	29. The personal belongings I have access to during my stay are those I feel I need	4.05	1.213	.410	.692		
General satisfaction	6. The medication has helped me to feel better	4.41	.910	.566	.787	.81	.82
	37. In general, I'm satisfied with my stay in the unit	4.48	.859	.568	.786		
	38. I feel better on discharge than when I was admitted	4.60	.844	.591	.780		
	39. My stay has helped me to cope better with my health problem	4.48	.932	.744	.730		
	40. I would come back to the hospital for help in the future if I needed it	4.54	.908	.544	.794		

 α : Cronbach's alpha; ω : Omega coefficient. α coefficient for the total test scores: .88; ω coefficient: .89.

reflects these aspects of satisfaction that are considered important by patients.

It is also similar to most international questionnaires in that it does not include items on coercive measures or specific treatment activities, such as occupational therapy or group therapy.^{9,15,34,42–44} This was reflected during the item reduction process, where we understand that the lack of correlation with the satisfaction factor of the eliminated items may have been in part because they referred to subpopulations less represented within the total sample. For example, 46 patients out of 370 had been subject to coercive measures, which was too small a proportion for the related items to reach statistical significance in the correlation analysis. A control group study would be necessary to reflect these aspects. In the case of items related to therapies, we understand that the differences in the treatment offered by the different inpatient units resulted in a small number of people receiving such therapies. Other items referring to religion, race, sexual orientation, and inpatient unit regulations also showed insufficient correlation and were therefore removed from the final questionnaire.

Comparing the questionnaire score with external variables allowed us to determine that the questionnaire has predictive criterion validity, with differences similar to those reported in the literature. Higher overall satisfaction scores were observed in those patients with a greater degree of clinical improvement during their stay.^{45,46} Likewise, patients who were admitted involuntarily to the units or who had restricted leave permissions during their stay (outings and/or visits and/or calls) had significantly lower satisfaction scores; this data is consistent with other similar studies conducted in Europe and the United States which reflect the impact of coercive experiences on patient perception.^{42,43,47–54} No differences associated with age groups, gender, or diagnostic groups were found in general satisfaction. These findings are consistent

with recent systematic reviews, which highlight the discrepancy between studies that have assessed such associations.²²

Regular monitoring of satisfaction with mental health services has proved useful to understand the capacity of the service to adapt to changes in the organisation and patient needs.⁵⁵ It would be advisable to use the PSYQUEST questionnaire to perform regular longitudinal measurements in short-stay units, both to evaluate quality of care and later to monitor changes in satisfaction after measures have been implemented.

Limitations

The limitations of self-report questionnaires that may affect the results need to be considered among the limitations of this study. These include social desirability bias, whereby the patient tends to choose the response that offers a socially acceptable image, or acquiescence response bias, which marks tendency to respond at the positive end of the scale. Although the questionnaire was given anonymously, with the intention of minimising these limitations, the patients completed it within the hospital unit, which may have partly favoured these effects.

Another limitation we found derives from the very concept of satisfaction that the questionnaire is intended to measure. As it is a multidimensional concept, it is clearly impossible to make a global measurement of it by means of a single source of information collection. In our opinion, this limitation does not detract from the value of the tool because, although it is advisable to complement the information with other methods, the information collected through the satisfaction questionnaire is of great value not only as a way of better understanding the patient's experience but also as self-assessment of the quality of the service.

Table 5

Association of the sociodemographic and clinical characteristics of the sample and satisfaction with the PSYQUEST questionnaire.

Variables	Global satisfaction questionnaire ¹		Information and patient-doctor relationship ²		Health staff care ³		Services provided ⁴		General satisfaction ⁵	
	β	SE	β	SE	β	SE	β	SE	β	SE
<i>Sociodemographic</i>										
Sex (reference: female)										
Male	N.S.	-	N.S.	-	-.257*	.130	N.S.	-	N.S.	-
Age groups (reference: > 65)										
18–34	-1.37	2.724	-.274	.391	N.S.	-	.062	.407	-.219	.343
35–64	1.14	2.439	.120	.350	N.S.	-	.323	.363	.103	.307
Civil status (reference: married/couple)										
<i>Divorced/Separated/</i>										
Widow	1.198	1.675	-.326	.222	.102	.192	-.154	.250	.395	.211
Single	-3.104*	1.551	.232	.239	-.266	.161	-.499*	.231	-.104	.195
Civil incapacitation (reference: guardianship)										
No incapacitated	N.S.	-	1.239*	.478	N.S.	-	N.S.	-	N.S.	-
Guardianship	N.S.	-	.674	.680	N.S.	-	N.S.	-	N.S.	-
<i>Clinical and admission</i>										
Diagnostic group (reference: Group 1)										
Group 2	2.34	1.40	.545*	.193	N.S.	-	N.S.	-	.287	.180
Group 3	-.57	1.68	.309	.231	N.S.	-	N.S.	-	-.031	.216
Group 4	1.33	1.66	.343	.229	N.S.	-	N.S.	-	.343	.213
Type of admission (reference: involuntary)										
Voluntary	3.93*	1.38	.554**	.168	.095	.150	N.S.	-	.278	.176
Level of improvement (reference: mild/no improvement)										
Frank improvement	5.79**	1.60	.819**	.219	N.S.	-	.604*	.252	.788**	.205
Coercive measures (reference: No)										
Yes	-.36	3.21	N.S.	-	-.194	.208	-.302	.231	-.094	.411
Restriction of leave permits (reference: No)										
Yes	-2.61*	1.22	N.S.	-	-.229	.141	-.556*	.177	-.292	.156
Weeks of hospital stay (reference: < 2 weeks)										
2–4 weeks	N.S.	-	N.S.	-	N.S.	-	-.433*	.199	N.S.	-
> 4 weeks	N.S.	-	N.S.	-	N.S.	-	-.213	.231	N.S.	-

β: standardised beta coefficient; SE: standard error.

* p < .05.

** p < .001. N.S.: Not significant. Adjusted R-squared value for sociodemographic variables: 1 = .05, 2 = .057, 3 = .02, 4 = .02, 5 = .04. Adjusted R-squared for clinical variables: 1 = .11, 2 = .09, 3 = .01, 4 = .07, 5 = .09.

This study was not designed to determine differences in the perception of satisfaction between groups with different clinical diagnoses, demographic differences, or in relation to the various therapeutic interventions during admission. This was reflected during the item reduction process, where we understand that the lack of correlation with the satisfaction factor of those items that were eliminated may have been in part because they referred to subpopulations less represented in the total sample.

Conclusions

The PSYQUEST self-administered questionnaire has a good psychometric quality, based on the analysis of the content, the internal structure of the questionnaire, and the relationships with external variables. The results obtained show adequate reliability in terms of internal consistency, both by dimensions and in the overall questionnaire. The factor structure analysis confirmed the proposed theoretical structure of four dimensions and the regression analysis also showed good criterion validity as the scores were associated with variables reported in the literature related to satisfaction.

The questionnaire explores dimensions considered important by patients and was developed in collaboration with a patient working group. It is easy to complete, making it a practical tool for regular use in short-stay psychiatric units, as well as a useful and appropriate tool for use in research contexts.

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Conflict of interests

The authors have no conflict of interest to declare.

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Appendix A. Additional material

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