

Measuring Patient Satisfaction in an Outpatient Psychiatric Clinic. What Factors Play a Role?

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Abstract

Introduction

Patient satisfaction is defined as the perception that one's general health care needs are being met. Prior research suggests that positive patient satisfaction with health care facilitates the physician-patient relationship and enhances the quality of life. Unfortunately, little is known about what factors play a role in influencing patient satisfaction.

Objective

The primary purpose of this study was to assess patient satisfaction (as measured by the PSQ-18 Patient Satisfaction Questionnaire) of patients seen by general psychiatry residents and to examine what factors might impact patient satisfaction. A secondary purpose was to explore the effects of (three one hour sessions) mentalization skills training on the physician-patient relationship and patient satisfaction. We hypothesized that depressive and anxiety symptoms would negatively impact patient satisfaction. We hypothesized that patients' satisfaction scores would improve if care was provided by residents who completed mentalization training.

Methods

This was a prospective case-control study, enrolling adult patients (n = 157) referred for psychiatric assessment in a psychiatric resident outpatient clinic. The Short Form PSQ-18 for patients was the primary outcome variable and was compared to Patient Health Questionnaire (PHQ-9) and anxiety Generalized Anxiety Disorder 7-Item scale (GAD-7) questionnaires. Outcome data from the PSQ-18 was compared among residents who either had or had not completed mentalization training. The data were analyzed with univariate analyses and to test multiple linear regression.

Results

Overall the patients were satisfied with clinician communication and interpersonal manner (PSQ-18 average scores of 4.21 +/- 0.66 and 4.15 +/- 0.69 respectively). The patients score on PHQ-9 was inversely related to their scores on time spent (TS) [p = 0.01] and accessibility/convenience (AC) [0.0009] subscale of patient satisfaction. GAD-7 score was inversely related to patients scores on AC subscale (p = 0.01). In regards to mentalization training, there was no difference in IRI (Interpersonal Reactivity Index) scores between the groups aside from Perspective taking (PT) subscale (p = 0.029).

Conclusions

Our study reveals that depression and anxiety can negatively impact PSQ-18 patient scoring in psychiatric outpatients seen for the first time in a resident clinic. However, this study failed to show that a brief mentalization-based training could improve patient satisfaction scores that were already quite high at baseline.

Introduction

Patient satisfaction is defined as the extent to which patients perceive their general health care and medical needs are being met [1]. Most health care providers are aware of the great importance of patient satisfaction in facilitating the provider-patient relationship. Recently there has been an increased effort to use patient satisfaction as a measure of overall quality of health care. Unfortunately, research on patient satisfaction with psychiatric care is scarce. Different instruments have been used to measure satisfaction [2, 3], yet, more studies are needed to ascertain the best technique for measuring quality of health care services and the determination of predictors of overall satisfaction. Recently there has been an increased effort to use patient satisfaction as one of several measure of overall quality of health care[1, 2] and with the approval of the Affordable Care Act (ACA) patient satisfaction is now tied to medicare reimbursement in some cases[3].

The PSQ-18 was designed using 18 questions to ensure rapid completion (2–3 minutes) [4] and has been used in different recent studies [5–12]. The questionnaire evaluates perceptions of technical quality, interpersonal manner, communication (doctor-patient), financial aspects, time spent for patient, convenience, accessibility and overall satisfaction.

The clinician's ability to explain, listen and empathize is thought to not only improve patient satisfaction and experience of care but also effect functional health outcomes. [4, 5] However, there is growing evidence that other factors outside the doctor patient relationship influence patient satisfaction (disease, age, educational level, anxiety, pain and personality). [6,7]

Several studies have looked at patient's satisfaction in psychiatric settings[8–10]. Kelstrup et al sent 274 German patients a questionnaire concerning satisfaction with psychiatric treatment 1 month after their discharge from a psychiatric hospital. Patients who were diagnosed as suffering from affective disorders or from reactive psychoses, were more satisfied than patients with schizophrenia or paranoia or with transitory adjustment reactions. Patients who had no personality disorder diagnosis and patients with character neurosis, were more satisfied than patients with antisocial or borderline personality disorders. Patients on antidepressant medication were much more satisfied than other patients. [8] More recently, Gebhardt et al evaluated 113 German patients at time of discharge from a psychiatric hospital. They found that patient satisfaction was dependent on symptom severity, global functioning at discharge, pharmacologic disturbances during treatment, and on the diagnostic group.[11] An Indian study of 60 individuals utilized a cross-sectional study design, to evaluate patient satisfaction in an outpatient setting utilizing the patient satisfaction questionnaire. They found that patient's satisfaction was correlated to illness severity. [10]

In a post hoc analysis of 6 randomized trials of patients with major depression under antidepressant medication (selective serotonin reuptake inhibitor, serotonin-norepinephrine reuptake inhibitor), a correlation of satisfaction with the improvement in depressive symptoms was observed. [12]

Factors that influence patient satisfaction are likely disease specific, also older age, educational level and the absence of anxiety and pain influences satisfaction with care [14]. To our knowledge, there have not been any studies that focused specifically on the physicians skills as a potential factor influencing patient satisfaction.

The ability to empathize is a key skill for psychiatrists because it helps the therapist conduct their sessions sensitively and flexibly. It is also an important skill in every doctor-patient interaction, including those devoted primarily to prescribing and monitoring medication. Effective “Mentalizing” sessions can foster effective communication, problem solving skills and empathy (15,16). Despite these positive attributes, to date there are no formal studies assessing how patient satisfaction is affected by clinicians utilizing a Mentalization approach.

Although patient satisfaction has been evaluated in a broad psychiatric setting. No study has yet to evaluate patient satisfaction on initial outpatient visit. Mood symptoms are a primary symptom or presentation to a psychiatrist, our study evaluated whether or not mood symptoms played a role in affecting patient satisfaction during an initial evaluation.

This study sought to examine PSQ-18 measures and the relationship to symptom severity (as assessed with the PHQ-9 and GAD-7) from psychiatric patients seen in a resident psychiatry. A secondary aim of the study was assess the impact of resident mentalization training on PSQ-18 outcomes. We hypothesized that empathy training based on teaching basic skills of mentalization would improve therapeutic alliance and that that therapeutic alliance would be reflected in improved patient satisfaction scores.

An exploratory aim examined the Interpersonal Reactivity Index (IRI) performed among patients.

Materials And Methods

The Mayo Clinic Institutional Review Board approved this minimal risk study prior to any research activities.

This was a prospective case- controlled study performed among patients being seen for an “initial” psychiatric evaluation in an outpatient resident clinic at a major psychiatric center located in Minnesota. The study was reviewed by Mayo clinic IRB and found to have minimal risk. The study included male or female patients 18 years or older who provided informed consent. The patient was given a brochure by the desk receptionist that described the study and its objectives. The study excluded patients who were unable to provide informed consent due to cognitive or language barriers. Patients with diagnoses of schizophrenia, delusional disorder or psychotic disorder NOS, and also those with traumatic brain injury, other organic brain syndromes, mental retardation, pervasive developmental disorders, and dementia, or active addiction or prescription use of barbiturates, benzodiazepines, opiates, hallucinogens, stimulants and/or cocaine at the time of appointment were excluded from the study.

The outpatients of third year general psychiatry residents who agreed to participate were evaluated for their mentalization capacity and satisfaction before and after their treating physician received three 50 minutes mentalization-based therapy (MBT) teaching sessions. During training sessions the residents learned basic MBT skills.

Diagnostic evaluations and procedures

Prescreening and enrollment

Psychiatry residents who consented to participate in the study attended three 50 minutes sessions on mentalization based therapy (MBT) led by same senior faculty member for all residents to assure that everyone received comparable training. The sessions consisted of discussing the basics of theory of MBT, mock interviews, and homework assignments to practicing mentalization with friends and family between the meetings. All new patients at the resident clinic were invited to participate in the patient satisfaction portion. Once patients were identified, study personnel reviewed their medical record and current medication list to ensure they were qualified to participate. Subjects who met enrollment criteria were included in the study and were given the Interpersonal Reactivity Index (IRI) before and Patient's satisfaction questionnaire (PSQ-18) after the appointment with their resident care provider. Chart review was done to obtain demographic information.

Screening measures:

Patient's satisfaction questionnaire (PSQ-18) is an 18-item questionnaire designed to assess the patients overall satisfaction with a clinician. It included several dimensions including: technical quality, interpersonal manner, communication (doctor-patient), financial aspects, time spent for patient, convenience, accessibility and overall satisfaction.

The Interpersonal Reactivity Index (IRI) is a questionnaire consisting of 28 questions divided equally among four distinct subscales. The subscales are: "Perspective Taking (PT)" described as "the tendency to spontaneously adopt the psychological view of others in everyday life;" "Empathic Concern (EC)" described as "the tendency to experience feelings of sympathy or compassion for unfortunate others;" "Personal Distress (PD)" described as "tendency to experience distress or discomfort in response to extreme distress in others;" and "fantasy (FS)" described as "the tendency to imaginatively transpose oneself into fictional situations". This questionnaire does not calculate an overall value but calculates a separate score for each of the subscales. [17,18]

Results:

Patient's description:

157 (90 pre- and 67 post- physician training) patients enrolled in the study, with a mean age of 41.2 (+/- 15.4) years. 60% of patients were married, 29% single and 11% were either divorced or widowed. 57% of

patients were employed. 33% of patients met criteria for an axis II diagnosis based on clinician assessment. There were no significant differences in demographics between the group of patients seen by residents with mentalization training and (those who did not participate in training) 13% versus 31% respectively ($p = 0.01$). There were no differences between the patients' groups in AUDIT (3.7 ± 5.2 with training vs 2.2 ± 2.5 without training; $p = 0.088$), PHQ-9 (10.9 ± 5.9 vs 11.5 ± 7.2 ; $p = 0.735$), GAD-7 (9.5 ± 5.9 vs 10.3 ± 7.2 , $p = 0.513$). See Table 1 for details.

Patient's satisfaction questionnaire (PSQ-18)

The patients were mostly satisfied with clinician communication and interpersonal manner (PSQ-18 average scores of 4.21 ± 0.66 and 4.15 ± 0.69 respectively). To examine whether depression and anxiety ratings influenced the patients' perception of the quality of medical care, we used Pearson correlation test for PHQ-9 and GAD-7 ratings (see Table 2). The data had a normal distribution. PSQ-18 scores on time spent (TS) and accessibility/convenience (AC) were inversely correlated with higher PHQ-9 scores (see Table 2) ($p = 0.01$ and 0.0009 respectively). This showed that if patients were more depressed they were less likely to find their clinicians to be accessible and spending adequate time with them. In regards to anxiety symptoms, the patients score on the GAD-7 was inversely related to their scores on the accessibility and convenience (AC) subscale of the PSQ-18 ($p = 0.01$). This demonstrates that if patients were more anxious they were less likely to find their doctor accessible.

There was no significant difference between the composite PSQ-18 rating before or after the mentalization training (see Fig. 1).

The Interpersonal Reactivity Index (IRI)

To examine whether there are any changes in empathy depending on the age of patients we have performed Pearson Correlation test. FS and EC items seemed to be statistically significant for the studied group (see Table 4).

There was no association between PHQ-9 scores and IRI scores. However, for anxiety scores elevated GAD-7 scores were positively associated with "Fantasy" (FS) ($p = .028$) and Personal Distress (PD) ($p = 0.02$) on the IRI. In regards to mentalization training, there was no difference in IRI scores between the groups aside from Perspective taking (PT) subscale: 15.0 ± 5.3 for no training vs 16.8 ± 5.0 for trained group; $p = 0.029$. In previous studies the PT was found to be consistently related to measures of interpersonal functioning, social competence and high self-esteem but not to affective empathy [18]. See Table 3 for details.

Conclusions:

Our study's goal was to evaluate patient satisfaction in an outpatient psychiatry resident clinic and support the premise that Mentalization training can be a helpful part of improving patient satisfaction. Our study shows that the patients seen in the general outpatient clinic had a general overall favorable

impression of their clinicians (average was a 4/5). However, our study shows that patients seen in an outpatient psychiatry clinic are more likely to be displeased with time related parameters. Depressed patients are more likely to be impatient and frustrated with both the accessibility and the amount of time their clinician spends with them. Furthermore, anxious patients are more likely to find their physicians inaccessible. This replicates similar findings in other studies [6–13,20,21]. Given these results, the use of patient satisfaction questionnaires to measure physician performance in a setting where anxiety and depression dominate the patients presenting symptomology should be administered and interpreted with extreme caution (especially in accessibility and time spent parameters). This study supports the notion that patient satisfaction surveys must always be contextualized and should not be seen as objective measures of a physician's performance.

This study was intended to be a brief introduction to mentalization techniques and not a comprehensive tutelage on the complex subject. The intervention was designed to be simple and short to accommodate practical didactic limitations of an average residency training program. Although our brief training of residents in mentalization strategies did not significantly improve their already high patient rating scale results, we were able to show that mentalization strategies can be easily incorporated into the residency didactic setting.

Limitations

In regards to the correlation between depression, anxiety and patient satisfaction, this study was limited by the relative small sample size, limited single assessment of patient satisfaction and lack of information on other factors that could be limiting the level of satisfaction (i.e. pain). In regards to the assessment of the impact of mentalization training, this study was limited by its participants (only third-year psychiatry residents at a single institution). We also trained only residents that agreed to participate in mentalization training. It is possible that they were more likely to be more empathic and interested in mentalization skills at baseline in comparison to control group, on the other hand it is also possible that the control group felt that they were familiar with the skills and that they did not need additional training hence no statistical difference between the two groups in their impact on patients' satisfaction surveys. Other investigators should replicate our research in multiple institutions and/or with more representative samples of physicians. The sample size could also be considered a limitation. This study is also limited by the relatively short intervention of three educational sessions introducing residents to Mentalization. It is reasonable to hypothesize that the trends in PSQ-18 scores noted would have reached significance had the intervention been more extensive. It could also be argued that the PSQ-18 was not the best way to evaluate the resident's ability to build a good therapeutic alliance through mentalization strategies. Another limitation was that we did not measure the resident's degree of mastery of the mentalization strategy. It is possible that despite being taught the techniques, they did not learn them well enough to put them into practice. Another important source of bias to consider is that mentalization training was based on resident interest (vs. randomizing trainees to training or no training). Despite these limitations, this study points out the limitations of the PSQ-18 in psychiatry and the general mentalization abilities of the outpatient population. Furthermore, this study introduces an approach to defining and measuring the

benefits of mentalization training for psychiatry residents, which may improve their competence, the quality of care they provide and patient outcomes.

Suggestions for future Studies

Future studies should try and apply mentalization training to a larger, more diverse physician population. Furthermore, Future studies should try ad evaluated learners mastery of the concepts to see if it correlates to improvements in outcome measure. Other studies might also include other outcome measures besides the PSQ-18 to evaluate the quality of the doctor patient interaction.

Table 1
Clinical and demographic characteristics of patients evaluated by physicians with and without mentalization training.

Patients	Physician's mentalization training		p-value
	No (N = 90)	Yes (N = 67)	
Age	42.2 ± 15.7	39.8 ± 14.9	0.348
Gender (male)	38 (42%)	21 (31%)	0.164
Hx of abuse	28 (31%)	29 (43%)	0.117
Drug use	29 (32%)	16 (24%)	0.253
Hx of hospitalization	28 (31%)	9 (13%)	0.010
Axis II Dx	14 (16%)	19 (28%)	0.052
Substance abuse	27 (30%)	10 (15%)	0.028
AUDIT	2.2 ± 2.5	3.7 ± 5.2	0.088
PHQ-9	11.5 ± 7.2	10.9 ± 5.9	0.735
GAD-7	10.3 ± 7.2	9.5 ± 5.9	0.513

Table 2
PHQ-9 and GAD-7 Scores Compared to PSQ-18 Sub-scores

IRI	GS	TQ	IM	Co	FA	TS	AC
PHQ-9	-0.09774	-0.09783	-0.07682	-0.11747	-0.06006	-0.18719	-0.26408
	(p = 0.2248)	(p = 0.2244)	(p = 0.3405)	(p = 0.1441)	(p = 0.4564)	(p = 0.0193)	(p = 0.0009)
GAD-7	0.03404	0.02165	0.06251	0.00669	-0.01108	-0.05786	-0.20600
	(p = 0.6908)	(p = 0.8003)	(p = 0.4647)	(p = 0.9377)	(p = 0.8970)	(p = 0.4987)	(p = 0.0150)

GS- general satisfaction, TQ- technical quality, IM- interpersonal manner, CO- communication, FS- financial aspects, TS- time spent, AC- accessibility and convenience.

Table 3
IRI items and PHQ-9 and GAD-7

IRI	PT	FS	EC	PD
PHQ_9	-0.14911	0.14214	-0.01540	0.10303
	0.0632	0.0767	0.8487	0.2006
GAD_7	-0.15398	0.19717	0.03038	0.18639
	0.0703	0.0200	0.7225	0.0280

Table 4. Patient's Self Reported Rating on the INTERPERSONAL REACTIVITY INDEX
by Sub-scale

IRI scale	Class Variable	n	mean	median	min	max	sd	95% CI For Mean	p-value
PT	Mentalization Training (MT) = No	90	16.78	17	4	28	4.95	(15.74, 17.82)	0.029
	MT = Yes	67	15.00	14	4	27	5.31	(13.7, 16.3)	
FS	MT = No	90	12.69	12	2	27		(11.43, 13.95)	0.919
	MT = Yes	67	12.45	12	4	27	5.48	(11.11, 13.78)	
EC	MT = No	90	20.90	21	8	28	4.69	(19.92, 21.88)	0.233
	MT = Yes	67	19.67	20	6	28	5.42	(18.35, 20.99)	
PD	MT = No	90	10.81	10	0	25	5.69	(9.62, 12)	0.106
	MT = Yes	67	11.90	12	2	22	4.42	(10.82, 12.97)	

There was no difference between average PSQ- 18 scores before and after brief resident Mentalization training ($p = .439$).

Declarations

Ethics approval and consent to participate

Study was approved by Mayo Clinic IRB as IRB Application #: 10-007225, under the title “The use of mentalization in outpatient psychiatric clinic. Does residents’ capacity to think psychologically (mentalize) improve their patient- doctor interactions? A Pilot study.” IRB Approval Date: 11/23/2010. All participants signed IRB approved consent forms prior to starting the study. The study was approved for expedited review procedures (45 CFR 46.110, item 7). The Reviewer conducted a risk-benefit analysis, and determined the study constitutes minimal risk research. The Reviewer determined that this research satisfies the requirements of 45 CFR 46.111. The Reviewer noted that oral consent with HIPAA authorization is appropriate for this study. The written HIPAA form was reviewed and approved with revisions.

Consent for publication

Not applicable

Availability of data and materials

The datasets during and/or analysed during the current study available from the corresponding author on reasonable request.

Competing interests

The authors declare that they have no competing interests.

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No funding for this project was provided.

Authors' contributions

MR initiated the project, developed the protocols, helped write the paper and helped recruit staff. BC and PC provided general support to the project and reviewed manuscript versions offering significant input. All authors read and approved the final manuscript.

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Figures

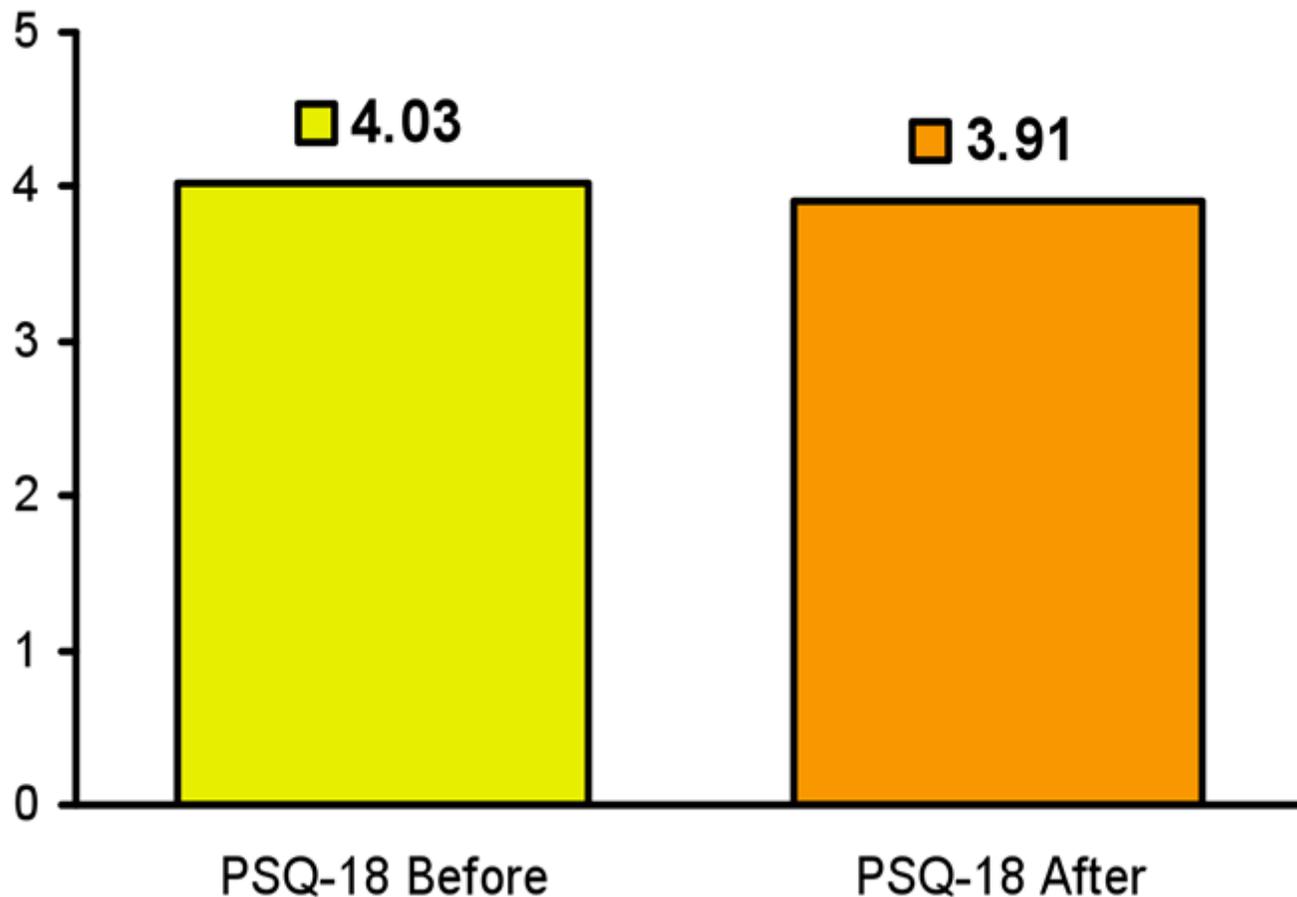


Figure 1

The difference between average PSQ- 18 scores before and after brief resident Mentalization training. There was no difference between average PSQ- 18 scores before and after brief resident Mentalization training ($p=.439$).