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Journal of Psychiatry and Behavioral Sciences

Open Access | Research Article

Users' Satisfaction in a Community Based Mental Health Service Provider in Greece

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Received: Dec 05, 2022

Accepted: Jan 11, 2023

Published Online: Jan 13, 2023

Journal: Journal of Psychiatry and Behavioral Sciences

Publisher: MedDocs Publishers LLC

Online edition: http://meddocsonline.org/

Keywords: Users' satisfaction; Community Mental Health; Verona Service Satisfaction Scale.

Abstract

Objective: To assess satisfaction and identify unmet needs among mental health service users in the 5 clinical departments of Child and Adolescent Centre in Greece, in order to improve quality of service provided.

Methods: The study population consisted of all the mental health service users in the 5 clinical departments of the Child & Adolescent Centre: We used the Verona Satisfaction Scale System (VSSS-EU / Greek version), patients' and relatives versions. We calculated the mean satisfaction score and the proportion of dissatisfied participants, i.e. those with a score 3,5 by clinical department and by dimension. We conducted multivariable linear regression analyses for all dimension scores and Total mean score, adjusting for age, gender, clinical department, participant status (patient/relative), duration of service use in the Centre and total service contact duration.

Results: Overall 138 service users participated in the study, response rate 39%. Mental health service users were quite satisfied with the service received in the Centre, total mean score 4,2/5. Users were most satisfied with the Professionals' skills and behavior: 4,5/5 and less satisfied with the type of intervention: 3,9/5. Overall,13 users were dissatisfied corresponding to 9,6% of the study population.

Conclusions: We conducted the first study to assess users' satisfaction with mental health services provided in our organization and one of the few similar studies conducted in community mental health service settings in Greece, the first after 2010. Mental health service users in the 5 clinical departments of the Child and Adolescent Centre in Greece are quite satisfied with the service received in the Centre, most satisfied with the Professionals' skills and behavior and less satisfied with the type of intervention, dissatisfaction being low at 9,6%. The study generated evidence about the users' unmet needs and allowed for the service adaptation and improvement.

Cite this article: Mavroeidi N, Sifnaios C, Krikonis K, Vourda A, Olympia K. Users' Satisfaction in a Community Based Mental Health Service Provider in Greece. J Psychiatry Behav Sci. 2023; 6(1): 1076.

Introduction

Mental health conditions have been on the rise during the last decade, while about 20% of the world's children and adolescents present with a mental health condition, according to the World Health Organization [1]. Consequently, patients with mental health issues represent a significant proportion, in both the private and public health sector.

Interest for the satisfaction of users of mental health services developed in parallel with the growing importance attributed to the rights of patients and to the development of community based mental health services in many European countries since the 80s.

It is worldwide acknowledged that the involvement of patients and their families is necessary for the improvement of mental health services. Assessing their satisfaction with the services they receive, as well as that of their relatives, is important for supporting their participation in the delivery and planning of care. The acceptance generated during the 80's and the 90's, increased in several countries as a result of the transition from an institutional service provision to a community-based model [2].

In a systematic review of the literature, twenty-eight scales for measuring mental health services users' satisfaction were identified; scales vary significantly with respect to length, focus, structure and quality [3]. In addition, despite the implementation of an increasing number of patient satisfaction studies, a considerable gap is observed between the collection of data and their utilization for the improvement of the services provided [4].

Although users of mental health services had often been considered as potentially unreliable judges of their treatment [5], it has also been argued that measuring satisfaction becomes even more important when patients themselves are unable to judge the provided care [6]. Furthermore, the correlation between satisfaction and the therapeutic relationship established with their therapist was highlighted for patients initially unable to consent to their treatment [7].

Gradually, the position was established in the literature that the opinion of mental health service users is essential and should not be absent. Three types of impact have been identified with respect to the users' participation in the evaluation of services received: 1) Impact on service planning and development 2) Impact on information development and dissemination 3) Impact on attitudes of service users and providers [8]. Moreover, the opinions and perceptions of their families or careers may and should be used when they are unable to provide them themselves.

The association between the degree of satisfaction of mental health services' users and discontinuation of follow-up emerged during the late 90's : Their degree of satisfaction is closely related to the effectiveness of the services provided, while reduced satisfaction is often associated with the discontinuation of mental health care [9]. Further, the importance of the analysis of satisfaction was recognized as an equivalent to the analysis of dissatisfaction and its association with discontinuation of mental health care was highlighted.

Dropout ranges 15-60% among mental health outpatient service users, a percentage that is even higher in the 15-24 age group [10]. Ruggeri et al. concluded that users' dissatisfaction is the crucial factor influencing withdrawal and dropout from community based mental health services [11]. Furthermore, satisfaction rating data are often used as a quality indicator for mental health services [12].

According to the literature, factors associated with mental health services users' satisfaction are categorized in 3 axes: a) related to the quality of the services provided (treatment, provider, etc.) b) related to the clinical severity, functionality and socio-demographic factors c) related to cultural and psychological parameters of the service user [13-15].

a) The working relationship and the communication with the consultant, the consultant's conveyance of clinical impressions and recommendations and the positive impact of consultant's interventions were significantly associated with the patient's satisfaction with the psychiatry consultation services in the Boston Children's Hospital [16]. Further, positive attitude from the professionals' side, professional competence and appropriateness of the environment in which care is provided are all factors associated with high satisfaction[17]. Both the technical and the interpersonal skills of the physician were identified to positively impact the satisfaction of service users [18]. In general, community-based service users tend to be more satisfied compared to hospital service users and service effectiveness is associated with higher satisfaction [19, 9]. Far fewer studies deal with the relationship of the level of satisfaction with the users' unmet needs or with the burden of care that the latter represent for the family.

b) A negative association is consistently reported between satisfaction and severity of symptoms or duration of illness while the degree of psychosocial functioning is positively associated with the service users' satisfaction. In other words, users tend to be less satisfied the more severe their symptoms are, the more impaired their social functioning and the longer their illness duration is. However, the type of mental disorder is only scarcely associated with satisfaction [20].

In addition, mental health service users' satisfaction was higher in cases where users were admitted voluntarily. Thus, coercion may have a key negative role for users' satisfaction [21]. On the contrary, the association with demographic factors (age, gender, marital status, etc.) as well as with socio-economic factors (educational level, income, etc.) does not appear stable nor consistent across studies.

c) The most important psychological factors that seem to be consistently related to mental health services users' satisfaction are the subjectively perceived quality of life (QoL) - positive correlation - and personality characteristics such as self-esteem, positive/negative life attitude, etc. [22].

Regarding the satisfaction studies in children and adolescents mental health service users, a critical review of the literature identified three universal components: "satisfaction with the adolescent–caregiver relationship", "satisfaction with the environment and the organization of the services'' and "treatment outcome" [23]. In many studies, the questionnaire is administered both to children and their parents / guardians. In a study carried out in a population of 1582 adolescents (mean age 15 years) and 1998 parents/guardians in seven in-patient units across Germany, it turned out that parents were usually more satisfied. The highest level of parents' satisfaction was observed with respect to handling of confidential information by the services, while the lowest was about the frequency of indi-

vidual sessions. Parents considered the frequency too low and asked for more sessions for their child. As for the adolescents, the highest level was also related to handling of confidential information by the service, while the lowest was related to the quality of food, the decoration of the ward and the opportunities to be alone [24].

Further, a more severe clinical picture and positive expectations at the onset of treatment are associated with a lower and higher level of satisfaction, respectively [25,26], while the degree of satisfaction of parents or caregivers affects the effectiveness of the treatment provided to their children [27]. In a study conducted in families with children with developmental disorders, it was highlighted that families of children with autism comment negatively and rate low the primary care physician compared to other subgroups, such as mental retardation. At the same time, they usually ask their physician for information about complementary or alternative treatments and community based support and resources [28]. In another study conducted in France, it was highlighted that although the satisfaction of parents of autistic children was high, they seemed to feel that they were not adequately involved with the child's personal program, that communication with staff was suboptimal and that services provided were not as specific and tailored as needed [29].

Overall, the impact of different factors has been studied with respect to the mental health service users' satisfaction: users' expectations (the difference between what they expect and what they actually get), demographic and socioeconomic characteristics- also considered as indirect factors determining expectations, personality factors (negative/positive attitude towards life), duration of the disease, duration of service use, severity of symptoms and psychosocial functionality, treatment effectiveness [30,13].

Few studies have focused on the satisfaction of users of mental health services in Greece. Kabadai and Niakas (2004) conducted research focusing on the satisfaction of users in a Community Mental Health Center in northern Greece [31]. Another study was carried out in two outpatient psychiatric services in Athens and Ioannina among patients and relatives [32,33]. Finally, Aggelidis (2009) studied the patients' satisfaction at the Katerini Mental Health Center and that of the residents of the psychosocial rehabilitation units of the Petra Olympos Psychiatric Hospital [34].

The aim of our study was to improve the quality of mental health services provided by the non-profit mental health service provision sector in Greece, in order to meet the needs of the service users. More specifically, our objectives were to assess satisfaction and to identify unmet needs among service users in the 5 clinical departments of our organization "Child and Adolescent Centre".

Population and Methods

Study Population and data sources

The study population consisted of all the mental health service users in the 5 clinical departments of the Child & Adolescent Centre- C&AC- in Greece. The C&AC is a nonprofit organization ,providing community based mental health services to children, adolescents, adults and their families in the island of Chios island (in the North Aegean Region) and in the Athens metropolitan area, (in Attiki region, Greece). At the time of the study, 2 out of the 5 clinical departments were operating in Peristeri - Attiki, serving exclusively users with Autism spectrum disorders- ASD: the Specialized ASD Centre- for children, adolescents and adults and the ASD day care Centre for individuals aged 15-22, with medium and low functioning ASD. Three departments were operating in the island of Chios: The Mental health Mobile unit -MHMU-providing services to users of any age, the Adults' Mental Health Department and the Children's and Adolescents' department.

The Mental health Mobile unit and the ASD Day care Centre both participate in the Psychargos deinstitutionalization project, funded and supervised by the Ministry of Health, the respective services being provided without additional charges for the users. The remaining 3 departments provide outpatient mental health services on a fee for service basis, the user being remunerated for the respective cost upon request, by the National Organization for the provision of Health services (EOPYY). The amount remunerated varies according to the diagnosis and additional eligibility and coverage criteria set by the Organization.

All users, or their relatives in case of patients not able to participate due to intellectual disability or aged less than 18 years, were eligible to participate. Patients both unable to participate in person and without a relative able to participate, were excluded from the study.

Data on the diagnoses of the population were provided by clinical departments, using the ICD10 codes and grouped in broader categories: Group 1: F00-09 (Mental disorders due to known physiological condition), F10-19 (Mental and behavioral disorders due to psychoactive substance use). Group2:F20-29(Schizophrenia, schizotypal, delusional, and other non-mood psychotic disorders), F30-39 (Mood [affective] disorders). Group3:F40-48 (Anxiety, dissociative, stress-related, somatoform and other non psychotic mental disorders), F50-59 (Behavioral syndromes associated with physiological disturbances and physical factors), F60-69 (Disorders of adult personality and behavior). Group4:F70-79 (Intellectual disabilities). Group 5: F80-89 (Pervasive and specific developmental disorders) Group 6: F90-98 (Behavioral and emotional disorders with onset usually occurring in childhood and adolescence. Group 7: Z00-Z99 (Factors influencing health status and contact with health services).

Data collection tool

We used the Verona Satisfaction Scale System (VSSS-EU) [35], developed specifically for measuring the users' satisfaction with community based mental health services, as previously translated and standardized in Greece by the faculty of Medicine of University of Ioannina, with 2 versions, one for the patients and one for the relatives [32,33]. The VSSS consists of 54 questions/items distributed in 7 dimensions of satisfaction).

In agreement with the respective research team in the University of Ioannina, we included 8 additional questions, with respect to the professional categories of speech & language and occupational therapists, not included in the original version of the VSSS. The formulation and content of the new questions was similar to that used in the respective original questions of the VSSS.

As a result, the number of questions that make up each dimension was formed as follows: a) Total satisfaction (3 questions), b) Professionals' Skills and behavior (24 questions), c) Information (3 questions), d) Accessibility (2 questions), e) (Self

perceived) Efficacy (8 questions), f) Types of Intervention (17 questions) g) Participation of Relatives (5 questions).

Participants were asked to give an overall rating of their experience of the mental health services they had received in the previous year while refraining to answer questions not relevant to the service used: for example, they were asked not to answer questions regarding professionals not involved in their care.

Four initial questions were used in order to collect socio demographic data and service utilization data: time of service use at the Centre and time of overall service contact, irrespectively of the provider.

Scoring of the answers

For items 1-40 and 55-62, satisfaction rating was on a 5-point Likert scale: 1 = terrible, 2 = mostly unsatisfactory, 3 = mixed, 4 = mostly satisfactory, 5 = excellent. The items are presented with alternate directionality to reduce stereotypic responses. Items 41-54, referring to Type of Intervention, consist of three questions each: first the subject is asked if he/she had received the specific intervention (Question A: "Did you receive the intervention x in the last year?")- If the answer is "yes," the participants are asked about their satisfaction on a 5-point Likert scale, as above (Question B). If the answer is "no," the subject is asked Question C: "Do you think you would have liked to receive intervention x?" (6 = no, 7 = don't know, 8 = yes). These questions allowed measuring the participants' satisfaction with the specific interventions provided and identifying unmet needs, from the patient's point of view, in the name of services not provided, yet, desired.

Patients were considered dissatisfied if their mean scores were below 3.5 [35].

Data Collection

The VSSS-EU was self-administered and completed anonymously by participants. Completed questionnaires were collected in a sealed envelope and ultimately placed in a box with non-transparent sides, in order to enhance confidentiality and non identification of the participants. The secretary or a mental health professional of the department, according to the department's specific conditions, handed over the questionnaire to service users.

Statistical analysis

For the descriptive analysis of nominal and ordinal variables, we calculated frequency and relative frequency, while for scale one's we calculated mean and standard deviation. To examine the fit of the scale variables to the normal distribution we used the Kolmogorov-Smirnov test, which was not rejected in any case, allowing the use of parametric tests to examine mean differences between the levels of the independent variables.

Using 3.5 as a cut-of for the VSSS score we calculated the mean satisfaction score and the proportion of dissatisfied participants by clinical department and by dimension. Next, we compared total mean score and mean satisfaction scores by dimension across departments.

To examine independence between nominal and ordinal variables we utilized the chi-squared tests test of independence, while t- test and analysis of variance (Anova) were used for the comparison of the means. Pearson correlation coefficient was used to examine the bivariate relationship of scale variables.

Finally, we conducted multivariable linear regression analyses for all dimension scores and Total mean score, adjusting for age, gender, clinical department, participant status (patient/relative), duration of service use in the Centre and total service contact duration. The two-sided level of statistical significance was set at 0.05 and data analysis was conducted using IBM SPSS 20.0 (Statistical Package for Social Sciences).

Ethics: The questionnaires were completed anonymously after written informed consent provided by participants. Non identification was further enhanced by the collection proce-dure, as described above. After collection, the data were made accessible only to members of the research team and were used exclusively for scientific purposes, within the aim and objectives of the study. Users had been informed in writing about all the above. In addition, they had been informed that their participation or not should be a decision of free will, without any possible interference with the type, the quality nor the availability of the services used and received.

Results

At the time of the study, a total of 424 users were receiving mental health services at the 5 clinical departments of the Child and Adolescent Centre. Overall, 72 users (16.9%) were excluded: 55 (12.9%) were considered unable to participate, either in person or their relatives/carers and 17 (4%) had repeatedly skipped their appointments. Eventually, 137 of the 352 eligible service users or their relatives participated in the study, response rate 38.9%, ranging 31-80% across clinical departments.

Table 1 summarizes the characteristics and demographics of the study population by clinical department.

The overall mean and median age of the service users was 32.4 (SD=18.8) and 32 (IR=31.3) years respectively; 43.4 (SD=14.5) and 41 (IR=24) years for patients participating in the study themselves and 23.2 (SD=17.1) and 16.5 (IR=27) years as reported by the participating relatives. The age of the users differed significantly across clinical departments ($p<0.001$), and as reported by the participating patients and their relatives ($p<0.001$).

Information on their gender was provided by 122 participants: 77 females (63.1%) και 45 males (36.9%). Gender distribution differed significantly across the clinical departments ($p=0.005$), and between patients and relatives ($p<0.001$).

Information on the duration of service use at the Centre was provided by 121 participants (88.3%).

Almost 1/3 (32.2%) of the participants had been receiving services for < 1 year and for 1-3 years respectively at the Centre, while 35,5% for > 3 years. The distribution of time of service use at the Centre did not differ significantly across clinical departments ($p=0.725$).

Overall service contact duration of < 1 year was observed in 14.5% of the participants, while 42.7% had been in contact with mental health services for 1-3 years and for > 3 years, respectively. Overall service contact duration was more often longer for ASD Day Care Centre and Specialized ASD Centre users when compared to Adults Mental Health Department, Children's & Adolescents' Department and Mobile Unit users ($p=0.007$).

Satisfaction scores by dimension and by clinical department are presented in **Table 2**. For all VSSS-EU dimensions, mean score was higher than the 3.5 threshold marking the dissatisfac-

tion of the users.

Total mean satisfaction score was 4.2 (SD=0.6) and did not differ significantly across the clinical departments (p=0.476), ranging 4.1 -4.3. Users' satisfaction was highest as per the Professionals' skills and behavior dimension in all departments, (ranging from 4.3 to 4.6), and lowest as per the Type of intervention dimension in all departments, (ranging from 3.6 to 4.0).

Satisfaction scores differed significantly across the clinical departments with regard to Access-D4 and Type of intervention-D6 (p<0.001 and p=0.044, respectively). In the post hoc analysis, satisfaction with D4-access was significantly different between the Mobile Unit and the Children's & Adolescents' Department (p=0.001); similarly, satisfaction with D6- Type of intervention differed significantly between the Specialized ASD Centre and the Mobile Unit (p=0.027). Within each clinical department, mean satisfaction scores for all dimensions did not significantly differ (p>0.05), and finally, all seven-dimension mean satisfaction scores were positively and significantly correlated to each other (p<0.05).

Further, overall service contact duration was positively and significantly correlated with service use at the Centre (p<0.005).

After stratification, patients' satisfaction was identified as significantly higher than that of the relatives, with respect to the Professionals' skills and behavior (p=0.002) and Access (p<0.001) **(Table 3)**.

Table 4 presents the distribution of participants who reported having received specific service interventions in the previous year and of those wishing to have specific service interventions that they had not received, according to the answers provided to the questions 41-54 corresponding to Dimension 6- Type of intervention.

The distribution of users that had received a service intervention did not differ across departments (p>0.05), apart from those receiving family sessions (p=0.042) and recreational activities in the service (p=0.021). In addition, the distribution of users wishing to receive a service intervention but did not receive it did not differ across departments (p>0.05), apart from those wishing to receive medication prescription (p=0.027), individual sessions (p=0.023) and shelter work (p=0.014).

The frequencies of dissatisfied users (score <3.5), by clinical department and by dimension, are presented in **Table 5**.

Due to very small numbers, comparison of dimension specific proportions of dissatisfied users across the clinical departments was not feasible.

In the bivariate analysis, age was positively and significantly correlated with Access (p=0.004) and Efficacy (p= 0.047) satisfaction scores. Additionally, satisfaction with Access was significantly higher for males when compared to females (p=0.017) and Type of intervention score was significantly lower for the specialized ASD Centre (p=0.044).

We also conducted multivariable linear regression analyses for all dimension scores and Total mean score, adjusting for age, gender, clinical department, participant status (patient/relative), duration of service use in the Centre and overall service contact duration.

Overall satisfaction-D1 and efficacy-D5 scores increased significantly with age when controlling for other variables (p=0.019 and p=0.029, respectively).

Table 1: Users' satisfaction, Demographics and service utilization characteristics.

		Specialised ASD Centre	ASD Day Care Centre	Adults Mental health department	Children's & Adolescents' Department	Mobile Unit	Total
Population		30	16	30	87	261	424
Eligible		30	15	24	85	198	352
Participants/Response		16/53%	12/80%	15/62.5%	34/40%	61/31%	138/38.9%
Type of participant							
Relatives		16 / 100%	11 / 100%	0	35 / 100%	12 /19.7%	74 /54
Patients		0	0	14 / 100%	0	49 / 80.3%	63/ 46%
Gender							
Female		6 / 40%	3 /33%	11 / 84.6%	18 / 52.9%	39 /76.5%	77 / 63.1%
Male		9 / 60%	6 / 66.7%	2 / 15.4%	16 / 47.1%	12 /23.5%	45 / 36.9%
Age	*Mean (SD)*	23.6 / 15	24.5/11.3	33.8 / 7.4	18.5 /15.8	44.8/16.7	32.4 /18.8
	Median (IR)	18.0 / 29.8	18.5 /17.5	36.0 / 9	12.0 /30	49.0 / 26	32 /31.3
CAC service use duration	*<1 year*	6 / 40%	0	2 /15.4%	14 /41.2%	17 /35.4%	39/ 32.2%
	1-3 years	6 / 40%	3 /27.3%	7 /53.8%	12 /35.3%	11 /22.9%	39 /32.2%
	>3 years	3 /20%	8 /72.7%	4 /30.8%	8 /23.5%	20 /41.7%	43 /35.5%
Overall service contact duration	*<1 year*	0	0	1 /9.1%	7 /21.9%	8 / 18.2%	16 /14.5%
	1-3 years	5 /35.7%	0	7 /63.6%	18 /56.3%	17 /38.6%	47 /42.7%
	>3 years	9 /64.3%	9 /100%	3 /27.3%	7 /21.9%	19 /43.2%	47 /42.7%

Values are presented as N / %, unless stated otherwise, SD: Standard deviation, IR: Interquartile range

Table 1.1: Users' satisfaction, ICD10 Diagnostic categories, by clinical department.

Diagnosis	Specialised ASD Centre	ASD Day Care Centre	Adults' Mental health departme nt	Children's & Adolescent s' Departmen t	Mobile Unit	Total
Group 1: F00-09	0	0	0	0	26 / 9%	26 / 5%
Group 2: F20-29, F30-F39	1 / 3%	0	0	1 / 3%	92 / 32%	94 / 20%
Group 3: F40-48, F50-59, F60-69	0	0	4 / 4%	12 / 32%	87 / 29%	103 / 21%
Group 4: F70-79	2 / 5%	0	4 / 4%	0	11 / 4%	17 / 4%
Group 5: F80-89	34 /92%	16/100%	63 / 66%	2/ 5%	14 / 4%	129 /27%
Group 6: F90-98	0	0	19 / 20%	2 / 5%	9 / 3%	29 / 6%
Group 7: Z00-Z99	0	0	6 / 6%	21 / 55%	56 / 19%	83 / 17%

Values are presented as N / %, unless stated otherwise.

Table 2: Users' satisfaction, VSSS-EU Service mean satisfaction scores, by clinical department.

Score	Total population	Specialize d ASD Centre	ASD Day Care Centre	Adults Mental health department	Children's & Adolescents' Department	Mobile Unit	F	P value
Overall Satisfaction	4.2 (0.8)	4.3 (0.7)	4.3 (0.7)	4.0 (1.0)	4.0 (0.7)	4.4 (0.7)	1.499	0.206
Professional's skills and behavior	4.5 (0.6)	4.6 (0.5)	4.5 (0.5)	4.6 (0.6)	4.3 (0.6)	4.6 (0.6)	1.51	0.203
Information	4.2 (0.7)	4.3 (0.7)	4.2 (0.6)	3.9 (0.8)	4.0 (0.7)	4.3 (0.8)	1.34	0.259
Access	4.2 (0.5)	4.1 (0.4)	4.1 (0.3)	4.4 (0.5)	3.9 (0.4)	4.4 (0.6)	5.892	**<0.001**
Efficacy	4.1 (0.7)	4.0 (0.5)	4.3 (0.7)	4.0 (0.8)	4.0 (0.6)	4.3 (0.7)	1.251	0.293
Type of intervention	3.9 (0.5)	3.6 (0.5)	4.0 (0.7)	3.9 (0.3)	3.9 (0.7)	4.0 (0.4)	2.517	**0.044**
Relatives' involvement	4.2 (0.8)	4.4 (0.5)	4.2 (0.6)	4.1 (0.6)	4.1 (0.7)	4.1 (0.9)	0.417	0.796
Total Score	4.2 (0.6)	4.2 (0.5)	4.2 (0.6)	4.1 (0.6)	4.1 (0.6)	4.3 (0.6)	0.884	0.476

Values are presented as mean (SD).

Table 3: Users' satisfaction, VSSS-EU service mean satisfaction scores by dimension, stratified by patients and relatives.

		N	Mean	SD	t-test	df	P value
Overall satisfaction	*Relatives*	72	4.2	0.7	-1.21	131	0.228
	Patients	61	4.3	0.8			
Professionals' skills and behavior	*Relatives*	74	4.4	0.6	-3.175	134	**0.002**
	Patients	62	4.7	0.5			
Information	*Relatives*	73	4.1	0.7	-0.902	133	0.368
	Patients	62	4.2	0.8			
Access	*Relatives*	74	4	0.4	-4.011	111	**<0.001**
	Patients	62	4.4	0.6			
Efficacy	*Relatives*	74	4.1	0.6	-1.011	134	0.314
	Patients	62	4.2	0.7			
Types of interventions	*Relatives*	73	3.8	0.6	-1.508	120	0.134
	Patients	62	4	0.4			
Relative's involvement	*Relatives*	73	4.2	0.7	0.366	118	0.715
	Patients	62	4.1	0.8			
Total Score	*Relatives*	74	4.2	0.6	-0.811	134	0.419
	Patients	62	4.3	0.6			

Table 4: Users' satisfaction, VSSS EU Subjects receiving and subjects not receiving but wishing for specific service interventions.

		Specialised ASD Centre	ASD Day Care Centre	Adults' Mental health department	Children's & Adolescents' Department	Mobile Unit	Total
1. Medication prescription	*Received*	46.70%	66.70%	33.30%	13%	63.70%	48.20%
	Wished	0%	0%	0%	0%	5.30%	1.80%
2. Individual rehabilitation	*Received*	92.30%	60%	55.60%	76.50%	68.90%	71.10%
	Wished	0%	50%	0%	0%	6.70%	12%
3. Individual sessions	*Received*	91.70%	88.90%	81.80%	83.30%	90.60%	88.30%
	Wished	0%	0%	50%	67%	0%	27%
4. Compulsory treatment	*Received*	0%	0%	0%	6.30%	8.90%	4.30%
	Wished	0%	0%	0%	0%	2.40%	1.20%
5. Family sessions	*Received*	50%	62.50%	33.30%	52.60%	30.40%	40.70%
	Wished	25%	33.30%	0%	44.40%	35.50%	33.30%
6. Sheltered accommodation	*Received*	0%	25%	0%	5.90%	4.40%	5.50%
	Wished	0%	33.30%	0%	0%	2.30%	3.70%
7. Recreational activities in the service	*Received*	35.70%	87.50%	11.10%	5.60%	6.70%	18.10%
	Wished	37.50%	100%	50%	17.60%	35.70%	35.10%
8. Group sessions	*Received*	7.70%	20%	35.70%	15.80%	2.10%	11.20%
	Wished	55.60%	0%	12.50%	13.30%	31.80%	27.50%
9. Shelter work	*Received*	18.20%	14.30%	0%	7.10%	2.20%	6%
	Wished	71.40%	25%	0%	7.70%	5%	12.50%
10. Informal admission to hospital	*Received*	0%	0%	0%	0%	4.70%	2.30%
	Wished	0%	0%	0%	0%	5%	2.50%
11. Practical help by the service at home	*Received*	26.70%	0%	0%	14.30%	9.10%	11.20%
	Wished	44.40%	33.30%	11.10%	0%	15.40%	17.30%
12. Welfare benefits	*Received*	26.70%	28.60%	11.10%	21.40%	20.40%	21.30%
	Wished	20%	25%	12.50%	18.20%	14.70%	16.40%
13. Help in finding open employment	*Received*	0%	0%	0%	7.10%	0%	1.30%
	Wished	33.30%	0%	0%	0%	11.60%	10.70%
14. Recreational activities outside the service	*Received*	7.70%	62.50%	0%	11.80%	11.60%	14.90%
	Wished	63.60%	50%	33.30%	26.70%	23.70%	31.90%

Table 5: Users' satisfaction, VSSS EU Dissatisfied users, by clinical department and by dimension.

	Total population	Specialized ASD Centre	ASD Day Care Centre	Adults Mental health department	Children's & Adolescents' Department	Mobile Unit
Overall Satisfaction	20 / 15%	2 / 12,5%	1 / 10%	4 / 28,6%	8 / 23,5%	5 /8,1%
Professionals' skills and behavior	5 / 3,7%	0	0	1 / 6,7%	2 / 5,9%	2 / 3,3%
Information	7 / 5,2%	1 / 6,3%	1 / 9,1%	0	4 / 11,8%	1 / 1,7%
Access	20 / 15,2%	2 / 12,5%	1 / 10%	3 / 20%	6 / 18,2%	8 / 13,8%
Efficacy	15 / 11,1%	2 / 12,5%	1 / 9,1%	2 / 13,3%	6 / 17,6%	4 / 6,8 %
Type of intervention	21 / 16,5%	7 / 43,8%	2 / 20%	2 / 14,3%	5 / 18,5%	5 / 8,3%
Relatives' involvement	14 / 13,2%	0	1 / 10%	1 / 12,5%	3 / 9,7%	9 / 21,4%
Total mean Score	13 / 9,6%	1 / 6,3%	1 / 9,1%	2 / 13,3%	4 / 11,8%	5 / 8,3%

Values are presented as N / %, unless stated otherwise

Discussion

In our study we assessed the users' satisfaction with mental health services provided by the 5 clinical departments of Child and Adolescent Centre in Chios island- North Aegean region and Athens metropolitan area- Attiki region, in Greece.

Overall, 138 users, corresponding to 39% of eligible service users, participated in the study, response ranging 31-80% across clinical departments. This response is higher than the one observed in the English community based mental health survey at the national level-31.5% or among outpatient mental health service users in USA-30%, but lower than the respective proportion observed in a community based setting in Italy -64%, in hospital outpatient services in India-47% and Qatar-81% or after hospital discharge in Latvia-78% [37-41,18]. We consider that the response in our study is compatible with the average observed in satisfaction surveys conducted among health services' users as their participation is usually reported below 50% [42,43]. However, as identified in a satisfaction survey across 164 Swiss hospitals, with a range of response 16-80%, health service users' satisfaction, as expressed after hospital discharge, is strongly correlated with propensity to participate in the satisfaction survey: more satisfied users tend to be more prone to participate than less satisfied or dissatisfied ones, leading to an upward bias with respect to the assessment of users' satisfaction [44]. Although a participation bias may be inferred in our study, similar study designs to assess propensity to participate related to satisfaction have not been reported for community based mental health services.

Significant heterogeneity of the study population was observed across departments with respect to age, gender, overall service contact duration and diagnosis, while service use at the Centre did not differ: the mean and median age is 32 years, respectively, in our population; however, the population at the Children's and Adolescents' department is younger: 18, 5 and 12 years respectively, fact related to its target population; the female to male ratio is 1.7 in the entire study population ,0,49 in the ASD Day Centre, 0,66 in the Specialized ASD Centre, 1.12 in the Children's and Adolescents' Dpt, 3.25 in the Mobile unit and 5.5 in the Dpt of Mental Health services for adults; almost 43% of the service users had been in contact with mental health services for 1-3 and >3 years, respectively, while overall service contact duration was significantly more often longer at ASD Day Centre and ASD Specialized Centre, as compared with the other 3 departments. Further, users seem to be rather stable in their relationship with the Centre, as service use at the Centre is significantly correlated to overall contact service duration. The distribution of diagnoses differed across departments: overall, the most frequent diagnoses' groups were: group 3-anxiety disorders & personality disorders 21%, group 2- psychotic disorders and affective disorders 20%, group 5- Specific and Pervasive developmental disorders 18% and group 8- life events –category Z ICD10 17%; More than 60% of the population in the Mobile unit consists of users with psychotic, affective and anxiety disorders, whereas, a similar proportion of the population in the Children's and Adolescents' department consists of individuals younger than 18 years with Specific & Pervasive developmental disorders and Attention Deficit Disorder-ADD; in the Dpt of Mental health services for adults Anxiety and Personality disorders represent almost 60% of the population; the ASD Day Centre and ASD Specialized Centre both have a rather homogenous population with respect to diagnosis , as all their users have autism.

Our study bears considerable similarities and differences with previous studies assessing mental health service users' satisfaction with respect to: a. The composition of our population: Several studies were conducted with homogenous populations with respect to diagnosis, i.e. psychosis, obsessive compulsive disorder, depression, autism spectrum disorders [35,45,46,29]. On the opposite, our study bears considerable similarities with respect to diagnosis diversity with previous studies conducted in outpatient departments or after hospital discharge, in India, Ethiopia, China, Japan, Latvia [18,40,41, 47,48]; however, persons with autism are included in our population whereas they seem not to be included in those population.,

b. The data collection sites: There are several studies collecting data from one service or site, either community based, outpatient department or hospital psychiatric ward [20,41,45,49]. In addition, there are studies with multiple participating sites or in which participants are service users from multiple providers, usually studies conducted at the national or regional level or catchment area, or with a multicenter design [35,37-39,47, 48]. We have included participants from 5 clinical departments of the same organization- service provider.

c. The data collection tool: We used the Verona scale VSSS, developed explicitly for assessing users' satisfaction with community based mental health services, addressing 7 dimensions of users' satisfaction, already used in other European and non-European countries and in more than 15 studies, considered as one of the four most established questionnaires in studies of this type [13,35,36,39]. Other questionnaires used for assessing mental health service users' satisfaction include the Patient Satisfaction Questionnaire- PSQ18, Experience of care and Health outcome- ECHO field test version, Charleston Psychiatric Outpatient questionnaire, Patient Doctor Relationship Questionnaire -PDQR, Measures of Process of Care- MPOC, Psychiatric Inpatient Experience Questionnaire -PIPEQ, Questionnaire for use in low income countries for measuring mental health service users' satisfaction, study specific questionnaires [20, 37, 38, 40, 41 47, 49, 50]. Further, whereas satisfaction with professionals' skills and behavior is assessed explicitly for all members of an interdisciplinary team in VSSS, different tools refer only to physicians or to mental health workers in general.

Users are quite satisfied with service provision at the Centre: total mean score was higher than 4: 4.2/5, ranging 4-4,4 across departments, observed disparities being non-significant and only 9.6% of participants were dissatisfied, i.e. with a total mean score < 3.5.

The results of our study may be compared with results obtained in previous studies using VSSS, in Greece, other European or Arabic countries [13, 32,35,39,45]. More specifically, total mean score was similar to or slightly higher than that obtained in 2 previous studies conducted in Greece in community based mental health services and higher than scores obtained in the Epsilon study: range 3.47-4.19 across the 5 European sites [35].

The majority of studies conducted using different data collection tools report high or moderate satisfaction among the mental health service users, in different countries and service provision settings, i.e. outpatient services, hospital psychiatric wards. Satisfaction is usually expressed as the proportion of the population moderately or highly satisfied, ranging 65 - 95%. Patients surveyed after hospital discharge are most of the time quite satisfied with the service received, although it was known from older studies that satisfaction is increased with commu-

nity-based services [9,41,48]. The absence of a control group, with community-based service users, may probably influence these results.

The proportion of dissatisfied patients in our study - 9.6% is included among the lowest encountered in the literature, in studies using both VSSS and other questionnaires: In the Epsilon study, dissatisfaction ranged 11-60% across sites and was estimated at 12.7% in a hospital outpatient setting in India, 22.4 and 38% in 2 studies conducted in outpatient settings in Ethiopia respectively, 23% in a community-based study in Italy (18, 20, 35, 39, 49]. Results should though be interpreted with caution when it comes to comparison across studies with different designs and different tools used.

Overall, relatives were found as satisfied as patients with respect to Total mean score in our study; however , they were less satisfied than patients with respect to Professionals' skills and behavior and Access. Contrary to our findings, in the study by Bletsa et al, patients were globally more satisfied than relatives.

Participants were most satisfied with Professionals' skills and behavior, mean score 4.5 and least satisfied with Type of Intervention, mean score 3.9. Satisfaction was quite high in the remaining dimensions, mean score 4.2, respectively in each of them, while mean scores were well above the dissatisfaction threshold in all dimensions and departments. Relatives were less satisfied than patients with respect to Professionals' skills and behavior, mean scores:4.4-4.7 and Access: 4-4.4, respectively. Mean dimension specific score in each dimension and Total mean score were found to be correlated with those of all remaining dimensions, marking the strong interdependence observed across dimensions.

Disparities across dimension specific satisfaction was also observed in previous studies using VSSS: satisfaction was lowest with Relatives' Involvement and Information in the multisite European study Epsilon, in Italy and in Germany [35,39, 45]. Satisfaction in these dimensions differs between 2 different groups of users in a previous study conducted in 2 different community based mental health services in Greece [34]. On the contrary, results are similar to ours in the study by Bletsa and Kallinikou [32,33], with participants most satisfied with Professionals' skills and behavior and least satisfied with type of intervention, results nevertheless observed in a homogenous population deprived of the particularities characterizing our study population. Participants were least satisfied with Information and Type of Intervention in a previous study conducted in Kuwait and Saudi Arabia [13].

Similarly, in an outpatient service in India, patients' satisfaction was correlated with technical quality, interpersonal manner and communication with the physician [18]. In the English community mental health national survey, treatment type, and more specifically, talking therapies and medication were identified as important factors influencing users' satisfaction [37].

Information provided to the patients about their diagnosis, prognosis and treatment was valued as a factor associated with satisfaction in outpatient settings or identified as missing by patients surveyed after their hospital discharge in Japan [20,48, 53]. Access was also identified to have a role in users' satisfaction, either in terms of distance or transportation or in terms of financial cost [20,37].

Dimension 6- Type of Intervention is quite particular, in the sense that it aims to assess satisfaction with various types of interventions received by the user and to identify unmet needs, as expressed by the proportion of users that had not received an intervention but would have liked to receive it. In our study, items with quite high proportions of users-25-35%- "wishing to have had the intervention they did not receive'' include items 43: individual sessions, 45: family sessions, 47 and 54: Recreational activities outside and inside the service, respectively, the latter being the most popular with almost 1/3 of non-receivers wishing to have had it. Further, proportions of 10-24% were identified in items 51 – practical help by the service at home, 52- welfare benefits and 53- shelter work. It is known from the literature that mental health service users have multiple needs and usually necessitate a holistic coverage of global needs by the service [17].

Types of intervention included in dimension 6 may not necessarily fit the needs and / or expectations of part of our population, specifically children and adolescents of the homonymous department or the population of the Adults' department presenting mainly with anxiety disorders, while they probably fit better the needs of adults with psychosis or OCD as previously mentioned in the literature [13,35,39,45].

Satisfaction scores differed significantly across the clinical departments with regard to Access-D4 between the Mobile Unit and the Child & Adolescents' Department and Type of intervention-D6 between the Specialised ASD Centre and the Mobile Unit. Access is assessed with 2 items: the first one assessing satisfaction with appearance, comfort level and physical layout of the premises and the second addressing the financial cost of the service provided. Both the Mobile unit and the Children's & Adolescents' department had similar scores as per the first item, 4.3 and 4.4 respectively; on the contrary, scores for the second item differed substantially, 4.6 and 3.5 respectively; this result is probably related to the fact that there is no charge for the service use at the Mobile unit ,as its entire budget is provided by the Ministry of Health; on the contrary, there is a cost charged on a fee for service basis at the Children's and Adolescents' department, reimbursed by the National Organisation for the Provision of health services, according to predefined eligibility criteria.

More pronounced disparities had been identified in previous studies involving different sites, as observed in the Epsilon study, finding attributed by the authors to the different organization and characteristics of service provision across the different sites and mental health systems [35].

Our study involves different clinical departments, the populations of which differ with respect to age, gender, overall service contact duration and distribution of diagnoses.

Nevertheless, in our study all departments belong to the same organization, thus, share the same or very similar principles and procedures in service provision, potentially accounting for the relative homogeneity identified across them with respect to Total mean score of satisfaction and dimension specific satisfaction.

Users were mostly dissatisfied with Type of Intervention-15.5% of the study population and Overall Satisfaction-15% and least dissatisfied with Professionals' skills and behavior-4.4%, followed by Information and Access- 5% respectively. Dissatisfied participants with Efficacy and Relatives' involve-

ment represented 11 and 13.7%, respectively, of the total study population. Participants were mostly dissatisfied with Information and Relatives' Involvement in previous studies using VSSS in Epsilon European study, in a catchment area in Italy and in an outpatient university clinic in Germany [35,39,45]. Further, in a sample of Arab patients, increased dissatisfaction, in almost ⅔ of the patients, was observed with respect to Information and type of Intervention [13]. and type of Intervention [13]. The dissatisfaction proportions in previous studies using other data collection tools range from 10-38%.

We were not able to compare dimension specific dissatisfaction across departments due to very small numbers; however, results have been used to detect existing dissatisfaction in the departments and consider context specific mitigation measures and interventions.

Age was identified as the only variable significantly correlated with Overall satisfaction and satisfaction related to service Efficacy in our study, after controlling for other potential confounders, ie gender, clinical department, participant status (patient or relative), duration of service use in the Centre and overall service contact duration: Older users tended to report higher Overall satisfaction and were more satisfied with service Efficacy than younger ones. Our results are similar to those of previous studies in which age is associated with increased satisfaction, either globally or related to a specific dimension or other domain in studies not using VSSS [18,35,39,45]. Contrary to previous studies, our results did not confirm an association between gender, service use duration in the Centre, overall service contact duration, clinical departments and users' satisfaction. Male gender had been associated with increased satisfaction of mental health services' users, as well as longer illness or longer overall service contact duration [18,40]; however, evidence is often contradictory in previous studies and results should be interpreted with caution in the absence of control for confounding factors [21].

In our study we were able to pay special attention to the satisfaction profile of parents of persons younger than 18 years old in the department of Children's and Adolescents and parents of persons with autism in the ASD Specialised Centre and in the ASD Day Care Centre. Parents seem quite satisfied in our study, with a Total mean score of 4.2 in the 2 ASD departments and 4.1 in the Children and Adolescents' department. In particular, parents are satisfied with Information and Relatives' involvement, with scores above 4 in both dimensions. Our findings differ from those reported in previous studies in which parents of persons with autism are not satisfied with information provided and with their involvement in the care provided to the child [29,51]. The aspect of working with the young service users, integrating their preferences and those of their parents in the design of care and service delivery, in a family inclusive practice, is addressed for both neurotypical populations and persons with autism, in qualitative and quantitative studies [52, 53]. Further, it is acknowledged that services that engage parents in their children's care increase the likelihood for their children to remain under care; in addition, young people's engagement with services is usually influenced by the views of their parents [54,55]. In our study, however, we did not assess satisfaction nor the views of children and adolescents themselves, as previously studied in a qualitative study in Sweden [56].

We have conducted the first study to assess mental health service users' satisfaction in our organization and one of the few studies conducted in Greece within the mental health sector service provision. While skepticism had been expressed about the components and significance of the users' satisfaction with respect to evaluation of quality of service and authors had been suggesting the reorientation rather towards perceived quality of care, several studies consider users' satisfaction within the acceptability indicator for service quality assessment [57,58]; further, satisfied mental health service users are more prone to remission of symptoms and recovery [59]; finally, users satisfaction is considered to significantly contribute to a patient-centered delivery of care model, as an authentic and quality deinstitutionalization process does not care only about the reduction of the hospital beds but also about meeting the needs of patients [11,60].

The strengths of our study include its implementation in 5 clinical departments that had different populations with respect to age, gender, psychiatric morbidity and status of the users: patients and relatives. Further, we have been able to assess the satisfaction of parents of persons younger than 18 years and of parents of children with autism, who represent a distinct category of needs among service users, with limited representation in the existing literature on service users' satisfaction.

We acknowledge several limitations in our study. Our study design and analysis did not address potential confounders, such as the severity of symptoms, social functioning and self-perceived quality of life, factors known to interfere with mental health service users' satisfaction. Our decision was based rather on feasibility issues and concerns with respect to the total length of the questionnaires to be filled in and suspected hesitancy from the users' side , as well as, on perceived reluctance from the mental health and administration staff side; however, the contribution of potential confounding factors is considered as rather limited, as it explains 10-30% of the observed variance of the satisfaction [35,39]; further, our study focused more on the service provision characteristics. Similarly, we refrained from including the users' diagnosis in the design as it is acknowledged that diagnosis has inconsistent or null interference with satisfaction.

Further, the response 0f 39% may have introduced a participation bias: it is not known whether the participants were as satisfied or dissatisfied as the non-respondents. We consider that the involvement of independent researchers in data collection would have probably contributed towards an increased response and participation, related to the as-sistance they would be able to provide to participants ,in their identity outside the department's permanent staff .In addition, our study population may not be representative of service users in similar clinical departments in Greece; thus , results may not correspond to the satisfaction profile of service users in similar clinical departments in Greece. Further, the use of the VSSS for users younger than 18 years old may be considered in the limitations of our study. The availability of the relatives' version allowed its use by the parents of the minors.

Conclusions

We have conducted the first study to assess users' satisfaction with mental health services provided in our organization and one of the few similar studies conducted in community mental health service settings in Greece, the first after 2010. Mental health service users in the 5 clinical departments of the nonprofit organization Child and Adolescent Centre in Greece are quite satisfied with the service received in the Centre, most satisfied with the Professionals' skills and behavior and less sat-

isfied with the type of intervention, dissatisfaction being low at 9,6%. The study generated evidence about the users' unmet needs and allowed for the service adaptation and improvement. Assessing the users' satisfaction is an important component for improving the quality of service provided, both at the organizations' and at the mental health system level. Conducting similar studies in mental health and social care institutions in Greece may contribute to the improvement of care provided and to the efficient use of allocated resources.

References

1. World Health Organization.
2. Chamberlin J. User/consumer involvement in mental health service delivery. Epidemiol Psichiatr Soc. 2005; 14: 10-4.
3. Miglietta E, Belessiotis-Richards C, Ruggeri M, Priebe S. Scales for assessing patient satisfaction with mental health care: A systematic review. J Psychiatr Res. 2018; 100: 33-46.
4. Brown A, Ford T, Deighton J, Wolpert M. Satisfaction in child and adolescent mental health services: translating users' feedback into measurement. Adm Policy Ment Health. 2014; 41: 434-446.
5. Crawford MJ, Kessel AS. Not listening to patients--the use and misuse of patient satisfaction studies. Int J Soc Psychiatry. 1999; 45: 1-6.
6. Ruggeri M, Greenfield T. The Italian version of the service satisfaction scale (SSS-30) adapted for community-based psychiatric patients: Development, factor analysis and application. Evaluation and Program Planning. 1995; 18: 191-202.
7. Sheppard M. Client satisfaction, extended intervention and in-terpersonal skills in community mental health. J Adv Nurs. 1993;18: 246-259.
8. Mockford C, Staniszewska S, Griffiths F, Herron-Marx S. The impact of patient and public involvement on UK NHS health care: a systematic review. Int J Qual Health Care. 2012; 24: 28-38.
9. Henderson C, Phelan M, Loftus L, Dall'Agnola R, Ruggeri M. Comparison of patient satisfaction with community-based vs. hospital psychiatric services. Acta Psychiatr Scand. 1999; 99: 188-195.
10. Henzen A, Moeglin C, Giannakopoulos P, Sentissi O. Determinants of dropout in a community-based mental health crisis centre. BMC Psychiatry. 2016; 16: 111.
11. Ruggeri M, Salvi G, Bonetto C, Lasalvia A, Allevi L, et.al. Outcome of patients dropping out from community-based mental health care: a 6-year multiwave follow-up study. Acta Psychiatr Scand Suppl. 2007; 437: 42-52.
12. Kelley SD, Nixon CT, Bickman L. Evaluating mental health services for children and adolescents. In D. Drotar (Ed.), Handbook of research in pediatric and clinical child psychology: Practical strategies and methods. 2000; 463-489.
13. Zahid MA, Ohaeri JU, Al-Zayed AA. Factors associated with hospital service satisfaction in a sample of Arab subjects with schizophrenia. BMC Health Serv Res. 2010; 10: 294.
14. Edlund MJ, Young AS, Kung FY, Sherbourne CD, Wells KB. Does satisfaction reflect the technical quality of mental health care? Health Serv Res. 2003; 38: 631-645.
15. Garland AF, Haine RA, Boxmeyer CL. Determinates of youth and parent satisfaction in usual care psychotherapy. Eval Program Plann. 2007; 30: 45-54.
16. Kitts RL, Gallagher K, Ibeziako P, Bujoreanu S, Garcia G, et al.. Parent and young adult satisfaction with psychiatry consultation services in a children's hospital. Psychosomatics. 2013; 54: 575-584.
17. Fortin M, Bamvita JM, Fleury MJ. Patient satisfaction with mental health services based on Andersen's Behavioral Model. Can J Psychiatry. 2018; 63: 103-114.
18. Jena S, Gupta M. A survey of patient satisfaction of patients attending a psychiatry outpatient clinic at a tertiary care centre. International Journal Of Community Medicine And Public Health. 2018; 5: 2026-2030.
19. Ruggeri M, Salvi G, Perwanger V, Phelan M, Pellegrini N, et al. Satisfaction with community and hospital-based emergency services amongst severely mentally ill service users: a comparison study in South-Verona and South-London. Soc Psychiatry Psychiatr Epidemiol. 2006; 41: 302-309.
20. Yimer S, Yohannis Z, Getinet W, Mekonen T, Fekadu, et al. A. Satisfaction and associated factors of outpatient psychiatric service consumers in Ethiopia. Patient Prefer Adherence. 2016; 10: 1847-1852.
21. Woodward S, Berry K, Bucci S. A systematic review of factors associated with service user satisfaction with psychiatric inpatient services. J Psychiatr Res. 2017; 92: 81-93.
22. Michalski CA, Diemert LM, Hurst M, Goel V, Rosella LC. Is life satisfaction associated with future mental health service use? An observational population-based cohort study. BMJ Open. 2022; 29;12: e050057
23. Biering P. Child and adolescent experience of and satisfaction with psychiatric care: a critical review of the research literature. J Psychiatr Ment Health Nurs. 2010; 17: 65-72.
24. Keller F, Naumann A, Fegert JM. Satisfaction with in-patient child and adolescent psychiatric treatment: development and psychometric properties of the BEST questionnaires for adolescents and for parents. Child Adolesc Psychiatry Ment Health. 2021; 15: 46.
25. Garland AF, Aarons GA, Saltzman MD, Kruse MI. Correlates of adolescents' satisfaction with mental health services. Ment Health Serv Res. 2000; 2: 127-139.
26. Godley SH, Fiedler EM, Funk RR. Consumer satisfaction of parents and their children with child/adolescent mental health services. Evaluation and Program Planning. 1998; 21: 31-45.
27. Acri M, Bornheimer LA, Jessell L, Flaherty HB, McKay MM. The impact of caregiver treatment satisfaction upon child and parent outcomes. Child Adolesc Ment Health. 2016; 21: 201-208.
28. Liptak GS, Orlando M, Yingling JT, Theurer-Kaufman KL, Malay DP, et al. Satisfaction with primary health care received by families of children with developmental disabilities. J Pediatr Health Care. 2006; 20: 245-252.
29. Rattaz C, Ledesert B, Masson O, Ouss L, Ropers G, et al. Special education and care services for children, adolescents, and adults with autism spectrum disorders in France: Families' opinion and satisfaction. Autism. 2014; 18: 185-93.
30. Bleich SN, Ozaltin E, Murray CK. How does satisfaction with the health-care system relate to patient experience? Bull World Health Organ. 2009; 87: 271-278.
31. Kabadai M, Niakas D. Patient satisfaction with services provided by a Community Mental Health Center in northern Greece. Archives of Hellenic Medicine. 2004; 21: 354-362
32. Bletsa D. Translation and adaptation into Greek of the Verona Service Satisfaction Scale - VSSS-54: qualitative method of Focus Groups: psychometric properties: acceptability, content validity [dissertation]. Ioannina: University of Ioannina. 2008.

33. Kallinikou E. The standardization of the Verona Service Satisfaction Scale-54 (VSSS-54) questionnaire in Greece [dissertation]. Ioannina: University of Ioannina. 2008.

34. Aggelidis G. The use of mental health services in the community: a comparative assessment of the satisfaction of the clients of the Katerini mental health center and the residents of the psychosocial rehabilitation units of the Petras Olympos psychiatric hospital [dissertation]. Ioannina: University of Ioannina. 2009

35. Ruggeri M, Lasalvia A, Bisoffi G, Thornicroft G, Vàzquez-Barquero JL, et al. Satisfaction with mental health services among people with schizophrenia in five European sites: results from the EPSILON Study. Schizophr Bull. 2003; 29: 229-245.

36. Priebe S, Miglietta E. Assessment and determinants of patient satisfaction with mental health care. World Psychiatry. 2019; 18: 30-31.

37. Stamboglis N, Jacobs R. Factors Associated with Patient Satisfaction of Community Mental Health Services: A Multilevel Approach. Community Ment Health J. 2020; 56: 50-64.

38. Crosier M, Scott J, Steinfeld B. Improving satisfaction in patients receiving mental health care: a case study. J Behav Health Serv Res. 2012; 39: 42-54.

39. Lora A. Patient Satisfaction with Community-Based Psychiatric Services. International Journal of Mental Health. 2003; 32: 32-48.

40. Bener A, Ghuloum S. Gender difference on patients' satisfaction and expectation towards mental health care. Niger J Clin Pract. 2013; 16: 285-291.

41. Novikova NB, Taube M. Evaluation of the Patients' Satisfaction with Psychiatric Health Care Services with an Adapted PIPEQ-OS Tool. Proceedings of the Latvian Academy of Sciences. 2019; 73: 348-355.

42. Siddiqui ZK, Wu AW, Kurbanova N, Qayyum R. Comparison of Hospital Consumer Assessment of Healthcare Providers and Systems patient satisfaction scores for specialty hospitals and general medical hospitals: confounding effect of survey response rate. J Hosp Med. 2014; 9: 590-593.

43. Elliott MN, Edwards C, Angeles J, Hambarsoomians K, Hays RD. Patterns of unit and item nonresponse in the CAHPS Hospital Survey. Health Serv Res. 2005; 40: 2096-2119.

44. Perneger TV, Peytremann-Bridevaux I, Combescure C. Patient satisfaction and survey response in 717 hospital surveys in Switzerland: a cross-sectional study. BMC Health Serv Res. 2020; 20: 158.

45. Mavrogiorgou P, Siebers F, Juckel G, Kienast T. Patient satisfaction with specialized mental health service for obsessive-compulsive disorder. Ann Gen Psychiatry. 2013; 12: 41.

46. Kessing LV, Hansen HV, Ruggeri M, Bech P. Satisfaction with treatment among patients with depressive and bipolar disorders. Soc Psychiatry Psychiatr Epidemiol. 2006; 41: 148-155.

47. Jiang S. How Does Online Patient-Provider Communication Heal? Examining the Role of Patient Satisfaction and Communication Experience in China. Health Commun. 2019; 34: 1637-1644.

48. Shiina A, Ojio Y, Sato A, Sugiyama N, Iyo M, et al. The recognition and expectations of ex-inpatients of mental health services: A web-based questionnaire survey in Japan. PLoS One. 2018; 13: e0197639.

49. Woldekidan NA, Gebresillassie BM, Alem RH, Gezu BF, Abdela OA, et al. Patient Satisfaction with Psychiatric Outpatient Care at University of Gondar Specialized Hospital: A Cross-Sectional Survey. Psychiatry J. 2019; 2019: 5076750.

50. Mayston R, Habtamu K, Medhin G, Alem A, Fekadu A, et al. Developing a measure of mental health service satisfaction for use in low income countries: a mixed methods study. BMC Health Serv Res. 2017; 17: 183.

51. Renty J, Roeyers H. Satisfaction with formal support and education for children with autism spectrum disorder: the voices of the parents. Child Care Health Dev. 2006; 32: 371-85.

52. Coates D. Client and parent feedback on a Youth Mental Health Service: The importance of family inclusive practice and working with client preferences. Int J Ment Health Nurs. 2016; 25: 526-535.

53. Russell S, McCloskey CR. Parent Perceptions of Care Received by Children With an Autism Spectrum Disorder. J Pediatr Nurs. 2016; 31: 21-31.

54. Howe D, Batchelor S, Coates D, Cashman E. Nine key principles to guide youth mental health: development of service models in New South Wales. Early Interv Psychiatry. 2014; 8: 190-197.

55. Ingram SD, Cash SJ, Oats RG, Simpson A, Thompson RW. Development of an evidence-informed in-home family services model for families and children at risk of abuse and neglect. Child & Family Social Work. 2015; 20: 139-148.

56. Persson S, Hagquist C, Michelson D. Young voices in mental health care: Exploring children's and adolescents' service experiences and preferences. Clin Child Psychol Psychiatry. 2017; 22: 140-151.

57. Gill L, White L. A critical review of patient satisfaction. Leadership in Health Services. 2009; 22: 8-19.

58. Samartzis L, Talias MA. Assessing and Improving the Quality in Mental Health Services. Int J Environ Res Public Health. 2019; 17: 249.

59. Vermeulen JM, Schirmbeck NF, van Tricht MJ, de Haan L. Genetic Risk and Outcome of Psychosis (GROUP) investigators. Satisfaction of psychotic patients with care and its value to predict outcomes. Eur Psychiatry. 2018; 47: 60-66.

60. Salisbury TT, Killaspy H, King M. Relationship between national mental health expenditure and quality of care in longer-term psychiatric and social care facilities in Europe: cross-sectional study. Br J Psychiatry. 2017; 211: 45-49.