# Parents' Perceived Treatment Match and Treatment Retention Over 12 Months Among Youths in the LAMS Study

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**Objective:** The goal of these analyses was to describe the 12-month prevalence of mental health services retention for youths ages six to 12 years and identify predictors of treatment retention. Data were from the Longitudinal Assessment of Manic Symptoms study.

**Methods:** In a longitudinal cohort study, 416 children and their parents completed measures of mental health services use and parents' perception of the services and participated in semistructured psychodiagnostic interviews during a baseline and 12-month assessment. Logistic regression analyses examined the effects on 12-month treatment retention of demographic and clinical variables and parents' perception of how well their children's treatment matched their needs.

**Results:** Sixty-nine percent of youths (N=289) continued to use services at 12 months. After the analyses controlled for other demographic and clinical factors, white race (p<.001) and greater functional impairment (p=.024) were associated with treatment retention; greater perceived treatment match at baseline significantly predicted retention above and beyond the effects of sociodemographic and clinical variables (p=.001).

**Conclusions:** Parents' perceptions about appropriateness of treatment, white race, and functional impairment predicted 12-month treatment retention.

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An estimated 13% of U.S. children have a mental disorder (1); however, only half of the youths who may be in need of services receive them and, of these, many do not stay in treatment (1,2). According to a meta-analysis, the mean treatment dropout rate in child samples is 47% (3), and this rate may be even higher among children treated in innercity clinics (4). Children's utilization of services is of high importance for public health because obtaining adequate treatment in childhood can reduce not only current impairment but also the likelihood of having psychiatric problems later in life (5,6).

Several child and parent factors have been identified as predictors of retention in mental health services. Studies have consistently shown that higher socioeconomic status (7–9), younger child age (10), higher parent education level (11,12), and living in a two-parent household (9,13,14) are associated with retention. Parents' recognition of a psychiatric concern and parent burden resulting from child psychiatric problems are also associated with increased service utilization (15). Several studies have found racial or ethnic minority status to be associated with lower retention rates (9,10,16,17); a few studies, however, have found no effect of

race or ethnicity on retention (8,13,18). This inconsistency may be due to variability in the samples' demographic and clinical characteristics, methodology, and service use definition. Studies examining treatment retention across multiple treatment sites are rare (13,18). Improved understanding of predictors of treatment retention should ultimately help to improve access to and engagement in mental health services.

Because parents usually make the decision to access services for children, parents' perceptions of mental health services are important determinants of whether a child receives and stays in treatment (9,19,20). Early models of health behavior, such as Donabedian's (21) structure-process-outcomes model, suggest that both individual patient characteristics and patient-practitioner interpersonal processes influence quality of care. Building on such models, Kazdin and colleagues' (9) barriers-to-treatment model indicates that, in addition to sociodemographic factors, families' perceptions of the treatment or of the therapeutic relationship further affect the likelihood of retention. Parents' perceptions of relevance, or match, of a treatment to their children's needs have received little attention in

the service-retention literature, although the scant extant research suggests that children are less likely to continue treatment if it does not match their parents' expectations (9,22). Among a sample of parents with low incomes from racial or ethnic minority groups (typically factors indicative of high risk for dropout), those whose motivations for initiating treatment matched the goals of treatment were more likely to continue treatment compared with parents whose motivations did not match treatment goals (23). Better understanding of these perceptions, and the interplay of these perceptions and sociodemographic variables, may point to factors that can be targeted to improve engagement in mental health services and increase service retention.

Because of its large sample size and clinical and demographic heterogeneity, the Longitudinal Assessment of Manic Symptoms (LAMS) provides a rich longitudinal data set with which to examine the effects of sociodemographic characteristics, clinical factors, and parents' perceptions of treatment on treatment retention. Previous analyses of treatment retention in the LAMS sample found that 435 of 573 (76%) participants continued to receive services at sixmonth follow-up (13). These earlier analyses indicated that living with both biological parents and perceived benefit of treatment by parents were associated with retention at six months.

This study explored possible racial-ethnic disparities in retention as well as associations between treatment retention and sociodemographic variables, child clinical characteristics, and perceived treatment match across an extended period of 12 months. We sought to determine whether perceived treatment match contributed to the prediction of treatment retention above and beyond child and family sociodemographic and clinical characteristics.

# **METHODS**

# **Participants**

The LAMS, a prospective study of youths with elevated symptoms of mania (ESM), recruited participants ages six through 12 years during their first visit to one of nine outpatient clinics associated with one of four LAMS academic medical centers; recruitment took place between November 2005 and November 2008. Of 1,111 youths who were screened and considered eligible, 621 agreed to participate in the longitudinal portion of LAMS; an additional 86 children without ESM matched for sex, age, race, ethnicity, and insurance status also agreed to participate, for a total of 707 youths who participated in the baseline assessment. A total of 675 (95%) youths remained eligible after 12 months, and of these, 416 (62%) had received outpatient medication or psychotherapy services at baseline and had 12-month treatment data available and were included in these analyses. LAMS study design, participant selection and eligibility criteria, and demographic characteristics of the sample have been reported previously (24,25). Children were reassessed by trained research assistants every six months by phone or in person

(depending on family preference) with the state-of-the-art measures described below.

All study procedures were approved by the institutional review board at each study site. Caregivers and children provided informed consent and assent before completing any study measures.

#### Measures

Demographic characteristics. Child sex, age, race, ethnicity, insurance status, family structure (whether the child was living with both biological parents), and caregiver education were recorded at baseline. To maintain consistency with previous analyses of service use in the LAMS sample (26), baseline age was categorized as younger (six or seven years old) or older (eight to 12 years old) in these analyses.

Parenting stress. The Parent Stress Survey (PSS) (27), a 25-item parent-report questionnaire, assessed parents' experiences with several stressful events related to parenting, familial matters, and children's mental health needs. Each item is rated as 0, no, or 1, yes, and scores are a sum of all items. Possible scores range from 0 to 25, with higher scores indicating greater parenting stress.

Mental health services use. Caregivers completed the parent version of the Services Assessment for Children and Adolescents (SACA), a valid and reliable instrument, at each interview (28). The SACA surveys inpatient, outpatient, and school service use. Information on the type of treatment used (therapy, medication, both, other, and unknown) and parents' perception of how well the child's treatment matched his or her needs (not well, somewhat well, or very well) was also collected (28). Only data on outpatient services use were included in these analyses. Children were identified as having been retained in treatment at the 12-month assessment if they continued to receive the same outpatient services—for example, medication and psychotherapy—that they had used at baseline.

Children's clinical characteristics. Children and caregivers were interviewed at baseline by using the Schedule for Affective Disorders and Schizophrenia for School-Aged Children-Present and Lifetime (K-SADS-PL) (29) with additional questions about mood symptoms from the Washington University in St. Louis K-SADS (30). The Children's Global Assessment Scale (CGAS) was used to assess children's overall functioning at home, at school, and with peers at baseline (31). Scores range from 1 to 100, with lower scores indicating more significant impairment.

# **Analyses**

We conducted bivariate comparisons at 12-month follow-up of children who continued to receive the outpatient services they had received at baseline versus those who had discontinued a baseline service; chi square tests were used for categorical variables and t tests were used for continuous

variables. Hierarchical logistic regression examined the relationship between participant characteristics and treatment retention. Baseline sociodemographic and clinical variables entered in the first block included child sex, ethnicity, race, age (six or seven versus eight to 12), and insurance status (Medicaid versus self-pay or private insurance), primary caregiver education, family structure, CGAS score, number of diagnoses, presence of a depressive or bipolar disorder, most recent type of outpatient treatment (medication or psychotherapy only versus a combination of medication and psychotherapy), and PSS score. Parents' perceived treatment match at baseline, according to ratings on the SACA (not well or somewhat versus very well), was entered in the second block to determine if this factor contributed to the prediction of treatment retention above and beyond effects of baseline sociodemographic and clinical variables (indicated by a significant change from block 1, according to chi square results). To assess whether treatment match moderated the effect of race, the treatment match × race interaction term was added to the model in a third block.

[A table showing correlations among all independent variables as well as bivariate relationships between the independent variables and treatment retention is available as an online supplement to this article.]

All analyses used SPSS 22; p<.05 was the cutoff for statistical significance.

### **RESULTS**

Two-thirds (N=289, 69%) of the 416 participants who were using outpatient services at baseline and had complete service use data at the 12-month follow-up interview continued to use the services they had used at baseline. A majority of participants were male (N=284, 68%) and white (N=269, 65%), with a mean $\pm$ SD age at baseline of 9.4 $\pm$ 1.9. Children who continued to use their baseline outpatient services were more likely than children who discontinued a baseline service to be white (p<.001) and to have greater functional impairment (p=.023), more diagnoses (p=.003), a bipolar disorder diagnosis (p=.038), and a caregiver who reported more parenting stress (p=.003) at baseline [see online supplement].

The results of logistic regression analyses examining the relationship between participant characteristics at baseline and treatment retention are presented in Table 1. In both the first and second models, white race (compared with racial minority groups) was associated with greater odds of continued use of baseline outpatient services at 12 months (p<.001). Greater functional impairment was also associated with greater odds of treatment retention, although the odds ratio (OR) was close to 1.0 in both model 1 (p=.040) and model 2 (p=.024). The addition of perceived treatment match in the second model significantly contributed to the prediction of outpatient services retention; thus after controlling for sociodemographic and clinical factors, the analyses indicated that perceived treatment match was significantly

related to retention (p=.001). The treatment match  $\times$  race interaction did not significantly contribute to the model, nor was it significantly associated with retention.

#### DISCUSSION

Outpatient treatment retention in the LAMS sample was fairly stable between the six- and 12-month follow-up interviews (76% and 70%, respectively) (13). Preliminary analyses indicated that several clinical factors, including more impaired global functioning, number of diagnoses, bipolar disorder diagnosis, and more parenting stress at baseline, were associated with 12-month treatment retention. Global functioning was associated with the odds of retention (OR=.97) after the analyses controlled for other demographic and clinical variables. The effects of the number of diagnoses, bipolar disorder diagnosis, and parenting stress were nonsignificant after the analyses controlled for other variables, likely because of shared variance among them [see online supplement].

Primary analyses suggested that white race and perceived treatment match were independent predictors of 12-month treatment retention. Of the sociodemographic variables, white race alone was significantly associated with greater odds of 12-month treatment retention, even after the analyses controlled for the effects of other sociodemographic characteristics, clinical severity, and perceived treatment match. As such, the effect of race on 12-month treatment retention in this sample cannot be explained by differences in socioeconomic status.

Parents' perceived treatment match-assessed early in the child's treatment-also predicted outpatient service retention over 12 months above and beyond several sociodemographic and clinical factors. Results are similar to a finding by Kazdin and colleagues (11) in reference to a sample of youths being treated for oppositional and aggressive behavior. They found that at the end of treatment, perceived irrelevance of treatment significantly contributed to treatment dropout. The current study adds to this literature by elucidating the relationship between parent perceptions and treatment retention in a more diagnostically heterogeneous group. The effect of perceived treatment match was not moderated by race, indicating that low perceived match affected retention similarly across racial groups. Together with earlier findings from the LAMS sample indicating that living in a two-parent household and parents' perceived benefit of treatment at baseline predicted retention at six months (13), the current findings support parent perceptions of treatment as robust, stable predictors of retention. LAMS service retention findings are also consistent with theoretical models that identify individual characteristics and treatment perceptions as predictors of service use and quality (9,21).

As noted above, race remained a significant factor in treatment retention after the analyses controlled for treatment match, suggesting that treatment match did not completely explain or moderate racial group differences in retention, although it appeared to be an important influence on retention. Prior work has found differences among racial-ethnic groups in attitudes toward pharmacotherapy and psychotherapy and about whether particular emotions and behaviors among children require professional intervention (20,32,33). In addition, previous research has indicated that parents from racial and ethnic minority groups may be more likely to feel stigmatized by using mental health services (34) and that youths from minority groups are less likely to receive adequate mental health care (7), which could increase the likelihood of dropping out of treatment. These factors, which are related to service use but were not included in these analy-

ses, may explain racial-ethnic disparities in retention better than perceived treatment match. Current study results suggest that an improved match between parents' treatment expectations and the execution of treatment could improve retention across racial groups. Future research should investigate other potential targets for intervention to improve engagement in outpatient services among families from racial minority groups.

These results should be interpreted in light of some limitations. Data regarding children's service use included parent report and, therefore, were susceptible to potential recall errors. In addition, the study design did not allow examination of other aspects of treatment that might serve as predictors of retention—for example, the treatment modality used by a therapist, the appropriateness of the treatment modality chosen, and the provider's credentials. It is important to note that, for some youths, discontinuation of an outpatient treatment may have been clinically indicated; as noted above, better global functioning was associated with dropping out of treatment. However, the main analyses controlled for baseline global functioning.

In addition, LAMS primarily enrolled children with ESM and, therefore, may not be representative of all children initiating outpatient services; this sample may have had more severe symptomatology, which could have made them more likely to remain engaged in treatment. Last, although LAMS is a multisite study in which children were recruited from a total of nine outpatient clinics, all sites are located in

TABLE 1. Association of baseline characteristics and treatment retention among youths with elevated symptoms of mania at 12-month follow-upa

		Model 1			Model 2		
Characteristic	OR	95% CI	р	OR	95% CI	р	
Female (reference: male)	1.29	.76-2.20	ns	1.35	.78-2.32	ns	
Hispanic/Latino ethnicity (reference: other ethnicity)	1.47	.43-5.03	ns	1.20	.34-4.24	ns	
White race (reference: other race)	3.94	2.13-7.28	<.001	4.12	2.20-7.72	<.001	
Age 8-12 (reference: 6-7)	.94	.53-1.66	ns	.99	.56-1.76	ns	
Medicaid insurance (reference: private insurance or self-pay)	1.66	.90-3.10	ns	1.77	.95–3.29	ns	
Primary caregiver education			ns			ns	
(reference: less than high school diploma)							
High school diploma	.84	.33-2.10	ns	.91	.36-2.30	ns	
Bachelor's degree or higher	1.09	.37-3.17	ns	1.11	.38-3.27	ns	
Lives with both biological parents (reference: lives with ≤1 biological parent)	.76	.43-1.35	ns	.68	.38–1.23	ns	
Global functioning	.97	.94-1.00	.040	.97	.94-1.00	.024	
Number of diagnoses	1.11	.87-1.42	ns	1.15	.90-1.48	ns	
Bipolar disorder (reference: absent)	1.02	.51-2.04	ns	.93	.46-1.89	ns	
Depressive disorder (reference: absent)	1.06	.48-2.32	ns	1.08	.49-2.40	ns	
Received both medication and therapy (reference: medication or therapy alone)	.72	.40-1.32	ns	.67	.36–1.23	ns	
Parenting Stress Survey score	1.05	.99-1.12	ns	1.06	1.00 - 1.13	ns	
Parent perceived treatment match rated very well (reference: not well or somewhat)				2.53	1.47-4.36	.001	

<sup>&</sup>lt;sup>a</sup> Model 1 included sociodemographic and clinical variables and model 2 included parent perceived treatment match. Adding the race  $\times$  perceived treatment match interaction in model 3 did not significantly contribute to the overall model. Model statistics: model 1,  $\chi^2$ =41.58, Nalgelkerke R<sup>2</sup>=.15, df=14, p<.001; model 2, block  $\chi^2$ =12.05, change in Nalgelkerke R<sup>2</sup>=.04, df=1, p=.001; full model,  $\chi^2$ =53.63, Nalgelkerke R<sup>2</sup>=.19, df=15, p<.001

the Midwest; therefore, results may not be generalizable to children across the United States and elsewhere.

# CONCLUSIONS

Parents' perceptions early in treatment and family sociodemographic characteristics were important, robust indicators of whether their children continued to receive mental health services. Previous research has often focused on demographic factors and barriers associated with initiating treatment; current results demonstrate that families who were able to overcome potential barriers to begin treatment may encounter further difficulties that prevent them from fully engaging in treatment. Quality improvement strategies should be developed and implemented to promote treatment match and family-provider communication, including early discussion of treatment plans with parents and goals for incorporating parents into the treatment plan, explanation of the rationale for selected treatment modalities, a choice of treatments when feasible, and mechanisms for assessing and addressing concerns that may prevent families from engaging in treatment.

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#### **REFERENCES**

- Merikangas KR, He JP, Brody D, et al: Prevalence and treatment of mental disorders among US children in the 2001–2004 NHANES. Pediatrics 125:75–81, 2010
- Leaf PJ, Alegria M, Cohen P, et al: Mental health service use in the community and schools: results from the four-community MECA Study. Journal of the American Academy of Child and Adolescent Psychiatry 35:889–897, 1996
- 3. Wierzbicki M, Pekarik G: A meta-analysis of psychotherapy dropout. Professional Psychology: Research and Practice 24:190, 1993
- McKay MM, Lynn CJ, Bannon WM: Understanding inner city child mental health need and trauma exposure: implications for preparing urban service providers. American Journal of Orthopsychiatry 75:201–210, 2005
- Boggs SR, Eyberg SM, Edwards DL, et al: Outcomes of Parent-Child Interaction Therapy: a comparison of treatment completers and study dropouts one to three years later. Child and Family Behavior Therapy 26:1–22, 2005
- Harrington R, Rutter M, Fombonne E: Developmental pathways in depression: multiple meanings, antecedents, and endpoints. Development and Psychopathology 8:601–616, 1996
- Alexandre PK, Martins SS, Richard P: Disparities in adequate mental health care for past-year major depressive episodes among Caucasian and Hispanic youths. Psychiatric Services 60:1365–1371, 2009
- Armbruster P, Fallon T: Clinical, sociodemographic, and systems risk factors for attrition in a children's mental health clinic. American Journal of Orthopsychiatry 64:577–585, 1994
- Kazdin AE, Holland L, Crowley M: Family experience of barriers to treatment and premature termination from child therapy. Journal of Consulting and Clinical Psychology 65:453–463, 1997

- Harpaz-Rotem I, Leslie D, Rosenheck RA: Treatment retention among children entering a new episode of mental health care. Psychiatric Services 55:1022–1028, 2004
- Garland AF, Haine-Schlagel R, Accurso EC, et al: Exploring the effect of therapists' treatment practices on client attendance in community-based care for children. Psychological Services 9: 74–88. 2012
- Johnson E, Mellor D, Brann P: Factors associated with dropout and diagnosis in child and adolescent mental health services. Australian and New Zealand Journal of Psychiatry 43:431–437, 2009
- 13. Horwitz S, Demeter C, Hayden M, et al: Parents' perceptions of benefit of children's mental health treatment and continued use of services. Psychiatric Services 63:793–801, 2012
- 14. Warnick EM, Gonzalez A, Robin Weersing V, et al: Defining dropout from youth psychotherapy: how definitions shape the prevalence and predictors of attrition. Child and Adolescent Mental Health 17:76–85, 2012
- Godoy L, Mian ND, Eisenhower AS, et al: Pathways to service receipt: modeling parent help-seeking for childhood mental health problems. Administration and Policy in Mental Health and Mental Health Services Research 41:469–479, 2014
- Kendall PC, Sugarman A: Attrition in the treatment of childhood anxiety disorders. Journal of Consulting and Clinical Psychology 65:883–888. 1997
- 17. Gonzalez A, Weersing VR, Warnick EM, et al: Predictors of treatment attrition among an outpatient clinic sample of youths with clinically significant anxiety. Administration and Policy in Mental Health and Mental Health Services Research 38:356–367, 2011
- Arnold LE, Elliot M, Sachs L, et al: Effects of ethnicity on treatment attendance, stimulant response/dose, and 14-month outcome in ADHD. Journal of Consulting and Clinical Psychology 71: 713-727, 2003
- Corrigan P: How stigma interferes with mental health care. American Psychologist 59:614–625, 2004
- 20. Yeh M, McCabe K, Hough RL, et al: Why bother with beliefs? Examining relationships between race/ethnicity, parental beliefs about causes of child problems, and mental health service use. Journal of Consulting and Clinical Psychology 73:800–807, 2005
- Donabedian A: The quality of care. How can it be assessed? JAMA 260:1743–1748, 1988
- Morrissey-Kane E, Prinz RJ: Engagement in child and adolescent treatment: the role of parental cognitions and attributions. Clinical Child and Family Psychology Review 2:183–198, 1999
- 23. Gross D, Julion W, Fogg L: What motivates participation and dropout among low-income urban families of color in a prevention intervention? Family Relations 50:246–254, 2001
- Horwitz SM, Demeter CA, Pagano ME, et al: Longitudinal Assessment of Manic Symptoms (LAMS) study: background, design, and initial screening results. Journal of Clinical Psychiatry 71: 1511–1517, 2010
- 25. Findling RL, Youngstrom EA, Fristad MA, et al: Characteristics of children with elevated symptoms of mania: the Longitudinal Assessment of Manic Symptoms (LAMS) study. Journal of Clinical Psychiatry 71:1664–1672, 2010
- 26. Horwitz SM, Storfer-Isser A, Demeter C, et al: Use of outpatient mental health services among children of different ages: are younger children more seriously ill? Psychiatric Services 65: 1026–1033, 2014
- Sisson D, Fristad M: A survey of stress and support for parents of children with early-onset bipolar disorder. Bipolar Disorders 3:58, 2001
- Horwitz SM, Hoagwood K, Stiffman AR, et al: Reliability of the services assessment for children and adolescents. Psychiatric Services 52:1088–1094, 2001

- 29. Kaufman J, Birmaher B, Brent D, et al: Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (K-SADS-PL): initial reliability and validity data. Journal of the American Academy of Child and Adolescent Psychiatry 36:980-988, 1997
- 30. Geller B, Zimerman B, Williams M, et al: Reliability of the Washington University in St. Louis Kiddie Schedule for Affective Disorders and Schizophrenia (WASH-U-KSADS) mania and rapid cycling sections. Journal of the American Academy of Child and Adolescent Psychiatry 40:450-455, 2001
- 31. Shaffer D, Gould MS, Brasic J, et al: A Children's Global Assessment Scale (CGAS). Archives of General Psychiatry 40:1228-1231,
- 32. Carpenter-Song E: Caught in the psychiatric net: meanings and experiences of ADHD, pediatric bipolar disorder and mental health treatment among a diverse group of families in the United States. Culture, Medicine and Psychiatry 33:61-85, 2009
- 33. Alegría M, Pescosolido BA, Williams S, et al: Culture, race/ ethnicity and disparities: fleshing out the socio-cultural framework for health services disparities; in Handbook of the Sociology of Health, Illness, and Healing: A Blueprint for the 21st Century. Edited by Pescosolido BA, Martin JK, McLeod JD, et al. New York,
- 34. Young AS, Rabiner D: Racial/ethnic differences in parent-reported barriers to accessing children's health services. Psychological Services 12:267-273, 2015

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