Noncompliance with Family Court Mandated Evaluations in a Juvenile Justice Clinic

Gabriel Kaplan, M.D., Delizia Pannullo, ACSW, David Brodzinsky, Ph.D., and Jennifer Clarke Hitt, MA

This study identified factors correlating with noncompliance with family court ordered evaluations. Ninety charts from a juvenile justice clinic were reviewed. Subject noncompliance was defined as failure to attend three consecutive appointments. Patient, family, and environmental factors were analyzed. Forty-two percent of the subjects were noncompliant. Five variables discriminated compliant from noncompliant subjects: parental cooperation, prior criminal charge, school behavior problems, treatment at another facility, and disruptive behavior disorder. Utilizing these predictors, only 13 percent of subjects were misclassified as noncompliant in a discriminant analysis. It is concluded that a Court order by itself does not guarantee compliance with a mental health evaluation. However, the findings suggest that the risk for noncompliance may be assessed at the outset of the evaluation utilizing the above identified factors.

Family court often mandates outpatient mental health assessments for children and adolescents who come to its attention. These referrals help to identify those youngsters suffering from mental illnesses and provide the court with recommendations used to reach appropriate dispositions. Thus, completed psychiatric evaluations can lead to recommending alternative plans for

Gabriel Kaplan, M.D., is an assistant professor of clinical psychiatry at New Jersey Medical School; Delizia Pannullo is a Clinician at the UMDNJ-CMHC in Newark, New Jersey; David Brodzinsky, Ph.D., is an associate professor of clinical and developmental psychology at Rutgers University in New Jersey; Jennifer Clarke Hitt is a Doctoral Candidate at Rutgers University. An earlier version of this paper was presented at the annual meeting of the American Psychiatric Association in New Orleans, May 11–16, 1991. Address reprint requests to: Gabriel Kaplan, M.D., 159 Millburn Avenue, Millburn, NJ 07041.

emotionally disturbed children who would not otherwise respond solely to correctional dispositions. Barnum and associates[1] examined the records of 140 youths arraigned on delinquency matters and concluded that referral to the clinic "appears to reflect court staff's recognition that the youth is at high risk for developing further delinquency and the hope that a careful and thorough diagnostic assessment can contribute to developing a broader plan of preventive intervention." Despite the mandate imposed by a court order to complete evaluation/treatment, clinicians find that many patients and their families self-terminate under these conditions.

The problem of attrition from child

psychiatric clinics has challenged administrators as well as clinicians for decades. Drop-out rates have been estimated to be as high as 85.4 percent.[2] Several studies have attempted to establish correlations between patient and family characteristics[2-4] and noncompliance. Although the search for reliable predictors of early termination has proven elusive, some factors have emerged as differentiating early terminators from compliant patients. For instance, lack of parental motivation, presence of parental psychopathology, and referral by an agency have all been found to correlate strongly with noncompliance in several studies.[2-4] All of the above attrition studies were conducted with general child outpatient populations. A review of the literature found no published studies of self-termination in a forensic youth population.

In a general psychiatry clinic, the issue of nonattendance raises a number of concerns, such as the effectiveness of outpatient services, wasted manpower, and staff frustration. In a population of court referred youngsters, where conduct disorders tend to predominate, there are additional considerations. Antisocial behaviors in youth correlate with serious problems in adulthood and constitute a very costly mental illness to society.[5, 6] Although traditional psychological interventions and prognoses have not been encouraging, progress has been made recently in identifying more effective treatments for these antisocial youngsters.[7] Therefore, youthful patients who self-terminate may miss the opportunity of an early intervention for disorders that often lead to further deterioration.

The purpose of this retrospective study was to attempt to identify factors correlated with noncompliance in a population of youth who were court ordered to attend a mental health clinic. By defining the profile of early terminators, patients at risk could be identified early on. Staff and court efforts could then be concentrated on enabling those patients to remain in treatment, thereby increasing their chances for therapeutic progress.

It was hypothesized that compliance would correlate with: (1) parental cooperation, as reported in prior studies of attrition; (2) patient/family involvement with an "auxiliary superego" such as a social agency or therapist; (3) lack of severe child/parental psychopathology, as reported in the literature; and (4) characteristics of the court order *per se.*

The last hypothesis deserves further comment: The investigators had noted that court orders in their geographical area appeared to have four components: (a) time frame in which the defendant is to return to court (e.g., from three months to unscheduled); (b) who is ordered for treatment (patient, caretaker and patient, etc.); (c) where the treatment is to take place (this study's clinic or no mention); and (d) who is to arrange for a first appointment (family or another agency). It was the authors' hypothesis that compliance with the court order would be more likely in those subjects who were ordered to return sooner than later (within three months), whose families were also included in the order

as mandated to participate in the evaluation, whose orders specifically mentioned the name of the clinic, and whose family was the party made responsible to make the appointment. Thus, it was hypothesized that court orders containing more specific directives and mandating a brief return time would result in increased compliance.

Subjects and Methods

Records from a juvenile justice service program were examined. This program is part of a university-based community mental health center that largely serves a minority population. The service offers specialized treatment for juvenile sex offenders, and a majority of court referrals are due to this problem. However, other reasons for referral include evaluations of need for out of home placement and violent behavior. Youths referred to this program receive comprehensive mental health assessments. Involvement with the clinic ranges from short evaluations to brief therapies.

The charts of 90 subjects consecutively discharged from the clinic were reviewed. Data from the charts were scored in a standardized data sheet. There were 21 variables under study as follows: *Patient factors*: age, race, home town, history of psychiatric symptoms (violence, stealing, hyperactivity, depression, suicide attempt), medication, prior treatment, school functioning, DSM-III-R recorded discharge diagnoses, prior criminal charge, and type of termination; *Family factors*: parental occupation and marital status, history of incarceration, psychiatric problems, and ini-

tial cooperation with the evaluation; and *Environmental factors*: involvement with other agencies and court order parameters. All charts were initially scored by a research assistant and later reviewed by one investigator (D.P.) to check for missing data.

All variables were categorical with the exception of "age," which for the purpose of chi-square analyses was dichotomized into younger (7 to 12 years) and older (13 to 18 years) groups. Since there is no agreement in the available literature regarding what constitutes noncompliance, the criterion used in this study was that one in effect for those nonforensic cases at the same clinic; subjects were considered noncompliant if they had failed to attend three consecutive appointments. The variable "Initial Cooperation" was rated as Yes/No based on the record's assessment of parental cooperation during the first contact. For instance, a rating of "No" was given if the clinician had recorded "uncooperative; hostile; resistant" or similar, when describing the subject's parents. Subjects were seen by either a master level social worker or a doctoral candidate in psychology. Consultations with a board-certified child psychiatrist were obtained on an as needed basis.

Sample The sample consisted of 12 girls (13%) and 78 boys (87%) ranging in ages from 7 to 18 years (mean 14.1 years). Sixty-one subjects (68%) had been evaluated for a sex offense. Regarding race, 80 subjects were black (89% of the population), five were white (6%), three were hispanic (3%), and two were not classified. Sixty-seven (75%) young-

sters were living with the family and 23 were placed elsewhere. Forty-four parents were never married (48% of the sample), 26 were divorced (29%), 13 parents were married (15%), and the marital status for the parents of seven subjects was unknown. Twenty-seven families (30% of the sample) were on welfare. While information to accurately determine social class was unavailable, 99 percent of the subjects would probably be placed in the lower and working class socioeconomic status.

Statistical Analyses The relationship between termination status (compliant versus noncompliant) and all other study variables was assessed using the chi-square test. In addition, a stepwise discriminant analysis was used to identify the best predictors for noncompliance.

Results

Characteristics of the Sample Regarding the subjects' history of problems, 67 youngsters (75% of the sample) had a history of poor school behavior; 39 (44%) were violent; 27 (30%) had stolen; 18 youngsters (21%) had a history of physical abuse, and 15 (17%) of sexual abuse. Sixteen subjects (17% of the sample) complained of past history of depression and seven (8%) had made suicide attempts. While a significant number of subjects had shown some form of psychiatric problem, only 13 patients (16%) were in treatment at another facility at the time of the forensic referral.

Regarding family history, 44 subjects (50%) had relatives who were substance

or alcohol abusers, 12 (14%) had a family history of mental illness, and 26 (30%) had a history of incarcerated family members. Thirty-five families (40%) were involved with the Child Protective Agency at the time of contact with the Juvenile Justice Service.

Regarding the recorded discharge diagnoses, only one subject did not meet criteria for any disorder. The DSM-III-R Axis I diagnoses most commonly made were the disruptive behavior disorders (52%) followed by the adjustment disorders (35%). No diagnoses of psychotic disorders were recorded in this population. Table 1 shows the Axis I diagnostic distribution in this sample.

DSM-III-R comorbid Axis II diagnoses were recorded only in 11 patients (12%) as follows: specific developmental disorders (7%), personality disorders (4%), and mild mental retardation (1%).

Differences Between the Compliant and Noncompliant Groups The sample was divided into compliant and noncompliant groups according to the criterion described above. Thirty-eight subjects (42%) had been discharged for noncompliance. Using chi-square procedures, differences between the two

Table 1
Axis I Diagnoses for the Total Sample
(N = 90)

Diagnosis	N	%
Conduct disorder	39	43
Attention deficit (ADHD)	2	2
Oppositional defiant disorder	6	7
Adjustment disorder	31	35
Dysthymic disorder	7	8
Substance abuse	2	2
Other	2	2
No diagnosis	1	1

groups reached statistical significance for six of the study variables. Due to the large number of variables analyzed, a conservative value of $p < .01$ was used to determine significance. Subjects were more likely to be compliant with a court order for mental health evaluation or treatment if they: did not live in the inner city area, had no school behavior problems, were not previously charged with an offense, had no history of family members in jail, did not have a disruptive behavior disorder, and had parents who were initially cooperative in the evaluation or treatment process. Table 2 shows the frequency distribution for these variables.

In addition, a set of four variables approached significance: subject younger than 13 years old ($\chi^2 = 4.71$, $df = 1$, $p < .05$), subject's history of violence ($\chi^2 = 4.30$, $df = 1$, $p < .03$) and stealing ($\chi^2 = 4.99$, $df = 1$, $p < .02$), and subject currently in treatment at another facility ($\chi^2 = 3.74$, $df = 1$, $p < .053$).

Because the variables that correlated with noncompliance were likely to correlate with each other to some degree, a stepwise discriminant analysis was performed to determine the unique variance accounted for in the noncompliance data by the individual predictor variables. The variables used for this analysis included all the factors found to be significantly related to noncompliance as well as those showing a trend approaching significance in the previous set of analyses. The discriminant analysis also yielded a profile of the degree of accuracy in classifying subjects into compliant and noncompliant groups based upon the set of predictor variables. In conducting this analysis, a significant level of .05 was used as the criterion for determining whether a variable would be accepted into the set of discriminating predictor variables. Results of the analysis indicated that five variables contributed independent and significant variance in discriminating compliant from noncompliant subjects (Wilks' lambda $= 0.52$, $F = 12.21$, $df = 6.79$, $p < .0001$). Parental cooperation accounted for the most unique variance (25.4%), followed by history of prior criminal charge (13.8%), school behavior problems

Table 2
Significant Differences Between Compliant (N = 52) and Noncompliant (N = 38) Subjects ($df = 1$)

	Compliant (N)	Noncompliant (N)	χ^2
Lives in inner city	31	32	6.32[a]
Disruptive disorder	21	26	6.91[a]
Family history of jail[1]	10	16	6.49[a]
School behavior problems	33	34	7.80[a]
History of prior charge	5	15	11.32[b]
Parental cooperation	47	17	22.27[c]

[1] Total N = 88.
[a] $p < .01$.
[b] $p < .001$.
[c] $p < .0001$.

(7.7%), patient in treatment at another facility (5.0%), and patient characterized by a disruptive behavior disorder (4.7%).

Finally, the results of the discriminant analysis indicated that the five predictors were quite successful in accurately classifying the subjects into compliant and noncompliant groups. Only 17 percent of the noncompliant subjects were inaccurately classified as compliant, and only 13 percent of compliant subjects were misclassified as noncompliant.

Discussion

To our knowledge, this is the first report of factors related to attrition in a forensic juvenile clinic. The literature reviewed was expanded to include reports on a somewhat similar situation: civil outpatient commitment.[8, 9] However, this search failed to yield any reports on noncompliance as well.

The authors presented four hypotheses, three of which were supported by this study's findings. As predicted, compliance with a court order did significantly correlate with initial parental cooperation, involvement of the patient in a therapeutic situation prior to the referral, and lack of severe patient/family psychopathology (e.g., chronic antisocial problems). Initial parental cooperation was the factor most significantly correlated with compliance. Not only does this relationship have face validity but it has also been a consistent finding in other studies. The factors contributing to the parental lack of cooperation were not elucidated in this study. However, issues such as severity of alcohol abuse, antisocial features, and family chaos,

which were prevalent in this population may have decreased the parents' ability to participate in the evaluation process.

The hypothesis that an "auxiliary superego" such as an agency or therapist could act as a facilitator of compliance was supported only in the case of those patients who were in treatment, but not in the case of agency involvement. In contrast to those patients in treatment, families under the aegis of the child protective service were not more likely to comply. One possibility is that the child protective agency did not see as its duty the supervision of compliance with a court order.

Regarding the third hypothesis, those patients who had more severe psychopathology, such as a disruptive disorder (a more chronic syndrome than the transient adjustment disorder) and whose families had more antisocial problems (such as history of incarceration), were less likely to comply. Since families with these types of disorders have chaotic life styles, they may not be able to plan and prepare for regular attendance to a clinic. Furthermore, children with antisocial behavior are usually defiant and unlikely to cooperate with keeping appointments. The final hypothesis of a relationship between court order parameters and compliance was not supported by the data.

Two nonpredicted results showed strong significance and survived a stepwise discriminant analysis: "history of prior criminal charge" and "lives in inner city" both positively correlated with noncompliance. The presence of a prior charge is consistent with a history of

chronic and severe problems. However, the factor "lives in inner city" as predictor of noncompliance was somewhat surprising since proximity to the clinic correlated with increased compliance in other studies. In the present study, the clinic was located within the city offering geographical proximity to city dwellers relative to patients who travelled from outlying areas. Thus, living in the city was expected to increase clinic attendance. It is possible that other factors such as poverty, transportation problems (e.g., does not own car, no access to public transportation), and antisocial attitude may have counteracted the clinic's actual geographical proximity, thereby decreasing patient compliance.

The overall attrition rate of 42 percent in this study was no larger in absolute numbers than the one observed in general child psychiatric clinics, which ranged from 30 to 85 percent.[2] However, the present study's data suggest that since 42 percent of the subjects were discharged for noncompliance, a court order *per se* does not guarantee compliance with the court's intentions. Perhaps other mechanisms have to be put in place to oversee compliance.

A subject was more likely to be noncompliant if she/he had a disruptive disorder, parents who were not cooperative, a past history of school problems, a prior criminal charge, and was not in treatment at the time of the referral. Thus, the subjects who dropped out appeared to be those most disturbed. Self-termination deprived these youth of an opportunity to complete a treatment which may have resulted in improvement.

This study does not escape the limitations of research resulting from applying a chart review method. For instance, the issues of clinicians' selective data recording, missing data, and diagnostic accuracy problems tend to make the results difficult to generalize. In addition, since no other studies of this type were available for comparison purposes, it is unclear whether the diagnostic composition of this study's population is typical of a juvenile forensic group. The low incidence of substance abuse problems found in this sample may have been due to the court's referral of these youngsters to facilities dedicated specifically to these disorders. Furthermore, the possible effects of diagnostic comorbidity as well as therapist factors were not examined.

Despite its limitations, this paper provides initial data on the little researched topic of noncompliance with family court mandated treatment. The findings suggest that the likelihood of noncompliance may be identified at the outset of a court ordered evaluation. Further prospective studies are needed to confirm the strength of these predictors. The identification of youngsters at risk for self-termination would be important data to share with the court so that additional steps are taken to improve compliance, such as closer monitoring by probation officers.

References

1. Barnum R, Famularo R, Bunshaft D, Fenton T, Bolduc S: Clinical evaluation of juvenile delinquents: who gets court referred? Bull Am Acad Psychiatry Law 17:335–44, 1989
2. Novick J, Benson R, Rembar J: Patterns of

termination in an outpatient clinic for children and adolescents. J Am Acad Child Adolesc Psychiatry 20:834–44, 1981

3. Gould MS, Shaffer D, Kaplan D: The characteristics of dropouts from a child psychiatry clinic. J Am Acad Child Adolesc Psychiatry 24:316–28, 1985

4. Sirles EA: Dropout from intake, diagnostics, and treatment. Community Ment Health J 26:345–59, 1990

5. Robins LN: Deviant Children Grown Up. Baltimore, Williams and Wilkins, 1966

6. Robins LN: Epidemiological approaches to natural history research: antisocial disorders in children. J Am Acad Child Adolesc Psychiatry 20:566–80, 1981

7. Kazdin AE: Treatment of antisocial behavior in children: current status and future directions. Psychol Bull 102:187–203, 1987

8. Lamb RH, Weinberg LE, Gross B: Court mandated community outpatient treatment for persons found not guilty by reason of insanity. Am J Psychiatry 145:450–6, 1988

9. Hiday VA, Scheid-Cook TL: A follow-up of chronic patients committed to outpatient treatment. Hosp Community Psychiatry 40:52–9, 1989