Physicians' Recognition of Psychiatric Disorders in Children and Adolescents

Grace Chang, MD; Virginia Warner, MPH; Myrna M. Weissman, PhD

- We examined the ability of physicians to recognize psychiatric and behavioral problems in the children and adolescents under their care. The report by 35 physicians of psychopathology in their patients was compared with the reports of parents and of children which were derived from direct and independent assessments of the children and of parents about their children. Physicians' reports of psychological problems were also compared with reports by a child psychiatrist who used all available data on the children and made a best estimate diagnosis. Agreement between the physicians and any of the three other sources of information—parents, children, or child psychiatrist—was poor, with \( \rho \) ranging from \(-0.15\) to \(0.11\). Physicians tended to underreport both minor and serious psychiatric problems in children. These results are discussed in the context of the recent American Medical Association initiative to improve the health of children and adolescents. (AJDC 1988;142:736-739)

Children with psychiatric disorders are doubly disadvantaged. They suffer not only from psychic difficulties but they must also depend on others to recognize their distress and to seek appropriate treatment for them. Unfortunately, children with psychiatric illness often have parents with similar disorders\(^1\) who may be less effective in their parenting roles when ill.

The prevalence of psychiatric disorders in children is not trivial. According to the Congressional Office of Technology Assessment, one of eight children in the United States suffers from a mental health problem severe enough to require treatment. Yet of these 2.5 million children, 70% to 80% are not getting appropriate mental health services (New York Times, Jan 27, 1987, p C6).

Physicians can play an important role in early diagnosis of psychiatric problems. They see many children who might benefit from psychiatric services and they are one of the main conduits for child psychiatric referrals.\(^2\) Recognition of psychiatric problems is the essential first step in diagnosis and treatment.

This study examined physicians' reports of psychiatric disorders in children under their care. Their detection of psychopathology in their patients is compared with reports of parents about their children and children about themselves derived from direct, structured, and independent interviews of parents and children.

**PATIENT AND METHODS**

Children between the ages of 6 and 17 years (n = 138) were drawn from a family study of 220 males and females between the ages of 6 and 23 years from families with either depressed or nonpsychiatrically ill parents of comparable sociodemographic background. Details of study design are presented elsewhere.\(^3\) Parents of 120 (87%) of the 138 children agreed to have their children's physician, usually a pediatrician, contacted for this study. The other 18 children (13%) were excluded because of parents' refusal.

Direct interviews were obtained from 93% of the eligible children and from a parent from 100% of the children (n = 120). In all but six cases the parent interviewed was the biological mother. Interviewers were MD, PhD, or masters-level mental health professionals with a minimum of four years' experience in child assessment or treatment. The interviewer of the child and of the mother about the child was "blind" to the diagnostic status of the child's parents. Similarly, the interviewer of the parent was blind to the diagnostic status of the child and of any previous psychiatric data on the parents. The interviewers received approximately 30 hours of training in research assessments during which the diagnostic reliability of the interviewer was achieved using videotaped practice interviews.\(^4\) During the course of study, the field supervisor provided additional monitoring of the interviewers' interrater reliability by observing direct interviews.

The psychiatric diagnostic assessment of the child was made using the Schedule for Affective Disorders and Schizophrenia for School-Aged Children, Epidemiologic version,\(^5\) which is a widely used research instrument for obtaining lifetime diagnoses in children\(^6\) and which generates Diagnosti-

The prevalence of psychiatric disorders in children is not trivial. According to the Congressional Office of Technology Assessment, one of eight children in the United States suffers from a mental health problem severe enough to require treatment. Yet of these 2.5 million children, 70% to 80% are not getting appropriate mental health services (New York Times, Jan 27, 1987, p C6).

Physicians can play an important role in early diagnosis of psychiatric problems. They see many children who might benefit from psychiatric services and they are one of the main conduits for child psychiatric referrals.\(^2\) Recognition of psychiatric problems is the essential first step in diagnosis and treatment.

This study examined physicians' reports of psychiatric disorders in children under their care. Their detection of psychopathology in their patients is compared with reports of parents about their children and children about themselves derived from direct, structured, and independent interviews of parents and children.

**PATIENT AND METHODS**

Children between the ages of 6 and 17 years (n = 138) were drawn from a family study of 220 males and females between the ages of 6 and 23 years from families with either depressed or nonpsychiatrically ill parents of comparable sociodemographic background. Details of study design are presented elsewhere.\(^3\) Parents of 120 (87%) of the 138 children agreed to have their children's physician, usually a pediatrician, contacted for this study. The other 18 children (13%) were excluded because of parents' refusal.

Direct interviews were obtained from 93% of the eligible children and from a parent from 100% of the children (n = 120). In all but six cases the parent interviewed was the biological mother. Interviewers were MD, PhD, or masters-level mental health professionals with a minimum of four years' experience in child assessment or treatment. The interviewer of the child and of the mother about the child was "blind" to the diagnostic status of the child's parents. Similarly, the interviewer of the parent was blind to the diagnostic status of the child and of any previous psychiatric data on the parents. The interviewers received approximately 30 hours of training in research assessments during which the diagnostic reliability of the interviewer was achieved using videotaped practice interviews.\(^4\) During the course of study, the field supervisor provided additional monitoring of the interviewers' interrater reliability by observing direct interviews.

The psychiatric diagnostic assessment of the child was made using the Schedule for Affective Disorders and Schizophrenia for School-Aged Children, Epidemiologic version,\(^5\) which is a widely used research instrument for obtaining lifetime diagnoses in children\(^6\) and which generates Diagnosti-

The prevalence of psychiatric disorders in children is not trivial. According to the Congressional Office of Technology Assessment, one of eight children in the United States suffers from a mental health problem severe enough to require treatment. Yet of these 2.5 million children, 70% to 80% are not getting appropriate mental health services (New York Times, Jan 27, 1987, p C6).

Physicians can play an important role in early diagnosis of psychiatric problems. They see many children who might benefit from psychiatric services and they are one of the main conduits for child psychiatric referrals.\(^2\) Recognition of psychiatric problems is the essential first step in diagnosis and treatment.

This study examined physicians' reports of psychiatric disorders in children under their care. Their detection of psychopathology in their patients is compared with reports of parents about their children and children about themselves derived from direct, structured, and independent interviews of parents and children.

**PATIENT AND METHODS**

Children between the ages of 6 and 17 years (n = 138) were drawn from a family study of 220 males and females between the ages of 6 and 23 years from families with either depressed or nonpsychiatrically ill parents of comparable sociodemographic background. Details of study design are presented elsewhere.\(^3\) Parents of 120 (87%) of the 138 children agreed to have their children's physician, usually a pediatrician, contacted for this study. The other 18 children (13%) were excluded because of parents' refusal.

Direct interviews were obtained from 93% of the eligible children and from a parent from 100% of the children (n = 120). In all but six cases the parent interviewed was the biological mother. Interviewers were MD, PhD, or masters-level mental health professionals with a minimum of four years' experience in child assessment or treatment. The interviewer of the child and of the mother about the child was "blind" to the diagnostic status of the child's parents. Similarly, the interviewer of the parent was blind to the diagnostic status of the child and of any previous psychiatric data on the parents. The interviewers received approximately 30 hours of training in research assessments during which the diagnostic reliability of the interviewer was achieved using videotaped practice interviews.\(^4\) During the course of study, the field supervisor provided additional monitoring of the interviewers' interrater reliability by observing direct interviews.

The psychiatric diagnostic assessment of the child was made using the Schedule for Affective Disorders and Schizophrenia for School-Aged Children, Epidemiologic version,\(^5\) which is a widely used research instrument for obtaining lifetime diagnoses in children\(^6\) and which generates Diagnosti-
Results

Of the 120 children, 85 (71%) had either a completed physician questionnaire (76 cases) or chart (nine cases) returned. Thirty-five physicians responded. The 85 children ranged in age between 6 and 17 years. There were 40 males and 45 females. Thirty-nine children had depressed parents and 45 children were the offspring of normal control subjects. Direct interviews were obtained from 94% of the 85 children and from 100% of their parents. Compared with those children whose physicians did not respond, the children with physician responses did not differ on \( \chi^2 \) analysis in the following variables: parents' marital status, parents' number of marriages, parents' education, parents' social class, parents' diagnostic group, or child's religion. Twenty children are from classes I and II, Hollingshead Scale; 22 are from class III; and 42 are from classes IV and V.

Thirty-one (36%) of the 85 questionnaires and charts received from the physician were positive for some evidence of potential psychological problems in children. Such problems included notations about academic or developmental difficulties, social problems, weight disturbances, and somatic complaints with negative organic workups. None of the physicians used DSM-III diagnoses.

Compared with the 54 children without psychological problems by physician report, the 31 children with positive physicians' reports did not differ significantly on the following variables: children's age (14.09 ± 8.85 years vs 13.94 ± 4.02 years); parents' marital status and number of marriages; or parents' age, education, socioeconomic status, and diagnostic group.

Table 1 compares the physician's report of any psychiatric or behavioral problem in the child, with any DSM-III diagnosis derived from the three other sources—the parent's interview about the child, child's interview, and the child psychiatrist's best estimate based on all available data. The \( \kappa \) values for Table 1 range from -1 to 1, suggesting that the strength of agreement between physicians and any of the three other sources of information about the children was poor.

Sensitivity and specificity of the physicians' observations as compared with the DSM-III diagnoses derived from the three sources were also cal-

<table>
<thead>
<tr>
<th>Table 1. Agreement Between Physician's, Parent's, and Child's Report of Child's Psychopathology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician's Report of Any DSM-III* Disorder in Child by Informant</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Parent's report Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Child's report Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Child psychiatrist's best estimate Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
</tbody>
</table>

*DSM-III indicates Diagnostic and Statistical Manual of Mental Disorders, ed 3.

<table>
<thead>
<tr>
<th>Table 2. Agreement Between Child Psychiatrist's Best Estimate of Child's Psychopathology and Physicians Observations of Psychological Problems in Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Psychiatrist's Best Estimate of DSM-III* Diagnosis in Child</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Depression Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Attention deficit disorder Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Conduct disorder Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Anxiety Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Substance use Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
<tr>
<td>Alcohol use Present</td>
</tr>
<tr>
<td>Absent</td>
</tr>
</tbody>
</table>

*DSM-III indicates Diagnostic and Statistical Manual of Mental Disorders, ed 3.
Physicians were not in two cases, child.
five, distinct yielded but the child's interview
was ders. In 12 cases, was diagnosis
by either parent or child report. Physi-
cians reported the cases of 11 children
with social or psychological prob-
lems. Of these seven, four did not have
any DSM-III diagnosis by either parent
or child report. In the other seven
cases, the physicians' findings were
supported by child and parent inter-
view results.

Physicians did report psychological
problems in 31 children (36%). Seven
children were identified by their phy-
sicians to have developmental or aca-
ademic problems. Of these seven, four
did not have any DSM-III diagnosis
by either parent or child report. Phy-
sicians reported the cases of 11 chil-
dren with social or psychological prob-
lems. Of these 11, four did not have
any DSM-III diagnosis by either parent
or child report. In the other seven
cases, the physicians' findings were
supported by child and parent inter-
view results.

Physicians reported weight prob-
lems in seven children with no other
psychological disorder. Five of seven
parent interviews resulted in no psy-
chiatric diagnosis for these children,
but five of seven child interviews re-
sulted in DSM-III diagnoses.

Six children were reported by phy-
sicians to have somatic complaints
without organic causes. For each of
these six children, either the parent
or child interview resulted in at least
one DSM-III diagnosis, and in one
child both parent and child interviews
yielded one diagnosis each.

**COMMENT**

The major finding is the low recog-
nition of serious and minor psychiatric
disorders by pediatricians in their
child and adolescent patients. These
findings are surprising since the pe-
diatricians were interested and coop-
erative in participating. Thirty-five
(71%) of the 49 pediatricians re-
sponded to the request for information
about the children under their care.
These findings suggest that additional
training in the detection of psychiatric
problems for nonpsychiatric physi-
cians is necessary.14

Our findings that physicians do not
detect different patterns of psychopa-
thy in children based on age or socio-
economic status contrast with other reports.15,16 Goldberg et al16 and
Starfield et al14 found that the preva-
ience of emotional, behavioral, or ac-
demic problems as reported by pedia-
tricians was higher in children from
poorer families.

This study supports the suggestion
of Costello and Edelbrock17 that phy-
sicians are more sensitive to parents' 
reports than to those of children. The
sensitivity and specificity of the phy-
sician's vs parent's report (.43 and .68)
were greater than those for physician
vs child (.30 and .55). Although the
strength of agreement between phy-
sician and parent is not impressively
greater than between physician and
child, the possible tendency for phy-
sicians to rely on parent reports of
the child's psychiatric problems is a cause
for concern in light of numerous stud-
ies showing poor agreement between
mothers and children on the degree
and nature of the child's psychiatric
disorder.17

A limitation of this study may be
that physicians were not directly in-
terviewed about their diagnostic im-
pressions of the patient and the data
were derived from a questionnaire
they completed. However, the nine
charts that were submitted by the
physician did not contain information
about the children that resulted in
better agreement. Perhaps the physi-
cians might hesitate to record their
impressions on a chart18 so as to avoid
future stigmatization of the child.
Also, it is not possible to assess the
impact a questionnaire from psychi-
atric researchers might have on how
physicians might complete the form.
It seems unlikely, however, that phy-
sicians would purposefully withhold
psychological information under such
circumstances, although we cannot be
certain that direct confidential inter-
views with the physician might not
have resulted in more information.

Obstacles to physicians' awareness
include the frequently cited explana-
tion of time constraints.19 The mean
duration of all visits to pediatricians
is 11 minutes and the mean duration
of visits when "psychotherapeutic" lis-
tening is provided is 26 minutes.20
An examination that includes under-
standing a child's emotional problems
cannot be adequately performed in a
limited period of 30 or even 40 min-
utes.14

The difficulty in making a diagnosis
is further exacerbated since patients,
and particularly children, do not com-
plain to their physician about psychological symptoms and seek help for a coexisting physical illness or somatic manifestation of their psychiatric disturbance.\textsuperscript{1,2} For example, an 8-year-old child was brought to the physician because of obesity. She was found to have condyломata accuminata. Genital warts in children indicate the possibility of sexual abuse.\textsuperscript{3} Sexual abuse was “not discussed,” but the child was referred to a dermatologist. Although there is no necessary correlation between such a problem and subsequent psychopathology, this child’s interview yielded five definite DSM-III diagnoses: separation anxiety disorder at age 4 years, minor bereavement at age 12 years, overanxious disorder and major depression at age 17 years, and obsessive-compulsive disorder at age 19 years.

While some of the diagnoses made by direct interview of the children may have only minor consequences, there is an accumulating literature that suggests that there is a tendency for the disorders of childhood to persist over time and to be accompanied by other types of difficulties, such as poor school performance or poor peer relationships.\textsuperscript{4,5} For example, antisocial behavior is one disorder that has its roots firmly set in childhood with repeated and widespread antisocial behavior in early life often leading to persisting disorders of personality.\textsuperscript{6}

The barriers to making a psychiatric diagnosis in children by their primary care physicians notwithstanding, some other form of psychological assessment is needed. Although the Schedule for Affective Disorders and Schizophrenia for School-Aged Children, Epidemiologic version, has been administered by highly trained personnel, it is possible to modify certain aspects of its administration and interpretation so that subprofessionals may be able to question children and parents effectively and efficiently. Moreover, this assessment can be administered by nonmedical mental health professionals such as nurses, social workers, or psychologists. A psychological assessment of children by the pediatrician or staff should be considered as necessary and reimbursable as any other diagnostic laboratory procedure.

References


New technologies and diagnosis of specific psychiatric disorders will provide tools for early case finding of at-risk populations, and among youth, psychological disorders and suicide are major problems.\textsuperscript{7} The body of recent epidemiologic data suggests that there has been an increase in the rates of major depression and drug abuse in children and adolescents. In addition to the coalitions between the specialists called forth recently by the American Medical Association,\textsuperscript{7} improved dialogue between physician and patient will be invaluable in identifying and reducing the psychic distress of children and adolescents.

This investigation was supported in part by Alcohol, Drug Abuse, and Mental Health Administration grant MH 56197 from the Affective and Anxiety Disorders Research Branch, National Institute of Mental Health, Bethesda, Md; the John D. and Catherine T. MacArthur Foundation Mental Health Research Network on Risk and Protective Factors in the Major Mental Health Disorders grant 86-213; Child and Adult Depressive Disorders: A Test of Continuities Using Family Genetic Data, Chicago (Dr Weissman); and the Veterans Administration Robert Wood Johnson Clinical Scholars Program, New Haven, Conn (Dr Chang).

Mary Louise Mesquita reviewed the preliminary findings of this work.