Presentation and Management of Childhood Psychosocial Problems

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BACKGROUND. Between 15% and 25% of children who visit primary care physicians have emotional, behavioral, or psychiatric problems that affect their functioning. The majority of these children are treated by primary care physicians. The purpose of this study was to examine the presentation and treatment of children's psychosocial problems in primary care and to investigate ways in which physician management of a problem is related to parent-physician agreement that the problem exists.

METHODS. Twenty-six physicians at an ambulatory care center of a community-based, university-affiliated family medicine training program collected data during outpatient visits of 898 children aged 2 to 16 years. The physicians used a checklist to collect data on children's developmental problems, parents' concerns about the psychosocial functioning of their children, whether physicians and parents were in agreement about these concerns, and the parents' influence on physicians' management of the problems.

RESULTS. Family physicians and parents agreed that 10% of the children were experiencing psychosocial problems. For 5% of children, physicians recorded emotional or behavioral concerns when parents did not disclose any such concerns. For only 1.8% of children, parents raised psychosocial concerns while physicians did not. Physicians diagnosed and managed psychosocial concerns during both acute-care and well-child visits. When parents and physicians agreed on the presence of pediatric psychosocial problems, referral to a mental health professional was more likely than when they disagreed (60% vs 16%).

CONCLUSIONS. Pediatric psychosocial concerns are raised by parents during acute-care and well-child visits. Family physicians identified and managed these problems at rates consistent with past research. Management strategies appeared to differ as a function of agreement between physicians and parents on whether a problem existed.

KEY WORDS. Child behavior; mental health; primary care; physicians, family. *(J Fam Pract 1997; 44:77-84)*

Epidemiologic studies indicate that 15% to 25% of children presenting to primary care physicians have emotional, behavioral, or psychiatric problems.[1] Only 2% of children, however, receive care for psychosocial problems from a mental health specialist.[2,3] The majority of children with psychosocial problems are treated by primary care physicians.[4-6] The psychosocial problems with which children and adolescents present to primary care physicians are often serious and long-term and can interfere with functioning.[6-8] These children are likely to have difficulties in multiple aspects of their life, such as school, family, and peers.[9] Goldberg and colleagues[6] reported that psychosocial problems among children seen in pediatric outpatient settings persisted for the 2 years of their study and that one half of the children or families were rated by the physicians as moderately or severely affected by the problem. McConaughy and associates[10] reported similar findings, indicating that children with psychosocial problems had a 5 to 17 times greater chance of having a disorder at the 3-year follow-up than control children without psychosocial problems at the beginning of the study.

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Healthy People 2000 has set the goal of increasing the rate at which physicians screen and identify psychosocial problems in children.[11] Policies intended to increase identification and treatment of pediatric psychosocial problems in primary care require empirical primary care practice data. Few studies are available to provide information for the development of clinical practice guidelines. For instance, little is known about how parental discussion of their child's psychosocial functioning affects physicians' management of these problems. Similarly, it is unknown whether management strategies are related to whether parents and physicians agree or disagree about the presence of a psychosocial problem.

The purpose of the present study was to describe the identification and management of psychosocial problems in children. The study also compared physicians' appraisal and management of children's psychosocial problems with their perception of parents' concerns about these problems. Management of psychosocial problems was examined in relation to physician perception of the psychosocial functioning of the parent and family as well.

METHODS

Twenty-six faculty and resident physicians at a community-based, university-affiliated family practice residency training program collected data during outpatient visits. Physicians reported (1) whether parents expressed concerns about the psychosocial functioning of 898 children, aged 2 to 16 years, (2) whether physicians had concerns about the psychosocial functioning of the child, parent, or family, and (3) how physicians managed the psychosocial problems that they identified.

The instrument used was the Physician Checklist, a form modified from a checklist the authors have used in prior studies[3,14] and based on a World Health Organization classification scheme for description of psychosocial problems.[2] It is relatively simple and is completed quickly. Physicians categorize childrens' psychosocial functioning using classifications familiar to family physicians. The checklist also asks the physicians whether they have concerns about the psychosocial functioning of the parent or family, whether the parent expressed concerns about the psychosocial functioning of the child, and how psychosocial problems were managed.

The criterion for diagnosis of a psychosocial problem was the physician's affirmative answer to the question "Are you concerned the child might have any type of psychosocial or developmental problem?" The criterion for parental concern was the physician's indicating that the parent expressed concern about such a problem. Management choices included scheduling follow-up appointment, referral to mental health professional, prescribing medication, giving advice, providing reassurance or support, and planning to continue to monitor symptoms (Figure).

Physicians typically completed the Physician Checklist immediately after or within 24 hours of seeing each child. They reported on consecutive visits of children. Data were analyzed for the first reported visit of each child. Additional visits were not included in the data analyses.

Data from the Physician Checklist were entered, verified, and analyzed in a PC database using EPI INFO.[15] All data were entered twice, by two independent assistants. Confidence intervals were calculated by an approximate binomial algorithm.[16]

RESULTS

Between January 15 and December 31, 1994, 2937 age-eligible pediatric patients visited the family practice center that was the site of the study. Twenty-six physicians reported on 1374 of these visits. Only data from a child's first visit were used, resulting in a final sample of 898 visits. The sample size for each analysis varies because of missing data for certain cells.

Physicians at all levels of training participated in the study. Attending physicians saw 20% of the patients, each averaging 69 patients (range 42 to 135). Third-year residents saw 49% of the patients, each averaging 134 patients (range 73 to 142). Second-year residents each averaged 78 patients (range 20 to 72), accounting for 23% of the potential sample. The remaining 8% of the patients were seen by first-year residents, who averaged 36 patients each (range 2 to 22).

Demographic information was obtained by matching patient chart numbers on the Physician Checklist with the automated billing system. Age and sex were obtained for 508 children. Ages

FIGURE

Checklist used by 26 family physicians to develop data on children's developmental problems, parental concerns about their children's psychosocial functioning, and physician plans for managing these problems.

Physician Checklist

Pt Chart # ________ **Date** ________ **Physician Name** ________

CHILD

Y	N	Does this child have any chronic medical illness? If yes, asthma, diabetes mellitus, respiratory Illness, chronic otitis media, other ________
Y	N	Do you feel that you know this family well?
Y	N	Did child's parent raise any psychosocial concerns he/she had about this child?
Y	N	Do you think the parent might be experiencing a mental health disorder?
Y	N	Do you have any concerns about the psychosocial functioning of the family?
Y	N	Do you think there might be problems with violence in the family?
Y	N	Are you seeing this child today for assessment/treatment of a psychosocial problem?
Y	N	Are you concerned the child might have any type of psychosocial or developmental problem? IF NO, STOP HERE
Y	N	If yes, is this a preexisting condition?
Y	N	PHYSICAL GROWTH & DEVELOPMENT - Slow weight gain, nonorganic failure to thrive, obesity
Y	N	SLEEP - Trouble sleeping, sleepwalking, night terrors
Y	N	MOTOR - Hyperactivity, gross motor delay, fine motor delay
Y	N	COGNITIVE/LANGUAGE - Mental retardation, learning disability, language delay, attention problems, speech problems
Y	N	SCHOOL - School failure, school refusal, truancy
Y	N	BEHAVIOR - Discipline, toileting, temper, tics, lying, stealing
Y	N	PSYCHOPHYSIOLOGICAL - Recurring stomach pain, headaches, recurring knee/leg pain
Y	N	FEELINGS - Anxiety or nervousness, low self-esteem, excessive irritability, depression
Y	N	THOUGHT - Delusions, hallucinations, incoherence
Y	N	PEER ACTIVITY - No confidence, social isolation, fighting and bullying
Y	N	PARENT-CHILD - Problems separating, physical abuse, sexual abuse, physical neglect
Y	N	SOCIAL - Lack of housing, frequent moves, financial problems, sexual abuse (other than parent)

Management

Y	N	Scheduled follow-up appointment with me or usual primary physician
Y	N	Referred to mental health professional or social service agency
Y	N	Gave prescription or managed current medication
Y	N	Gave direct advice
Y	N	Provided reassurance and support
Y	N	Plan to continue monitoring symptoms
Y	N	No management needed

TABLE 1

Children Identified with Psychosocial Problems on Physician Checklists, by Age

Age, y (No.)*	Children Identified No. (%)
2 (50)	4 (8.0)
3 (47)	6 (12.8)
4 (45)	5 (11.1)
5 (55)	7 (12.7)
6 (37)	5 (13.5)
7 (30)	6 (20.0)
8 (32)	9 (28.1)
9 (32)	6 (18.8)
10 (49)	12 (24.5)
11 (24)	7 (29.2)
12 (30)	9 (30.0)
13 (34)	9 (26.5)
14 (28)	5 (17.9)
15 (33)	8 (24.2)
16 (21)	3 (14.3)

*Number of children in age group

NOTE: Percentages are based on the number of actual responses by physicians. Therefore, the denominator used for each percentage varies, depending on whether data were missing for a particular item.

ranged from 2 to 16 years, with 35.2% aged 2 to 5 years, 42.9% aged 6 to 12 years, and 21.9% aged 13 years and older. The sample was evenly divided between boys and girls, with 49.4% girls and 50.6% boys. The age distribution of the subsample of 508 children did not differ from that of the 2937 pediatric visits that occurred at the family practice center during the time data were being collected.

Concordance Between Physicians and Parents

Physicians expressed concerns about the psychosocial functioning of 15.0% (n=134) of the children. Table 1 shows the percentage of children, by age, about whom physicians indicated concern about psychosocial functioning. The data presented in Table 1 are based on the subset of children for which age information was available. As can be seen, the rate at which physicians identified psychosocial problems was lowest among preschool and kindergarten-aged children, and higher for school-aged and adolescent children. Physicians reported that parents expressed concern about the psychosocial functioning of their children approximately 12% of the time. As can be seen in Table 2, physicians and parents agreed in the course of approximately 93% of visits. In 5% of visits, physicians identified a problem when parents did not. For 1.8% of visits, parents discussed psychosocial concerns about their child but physicians did not categorize the child as having a psychosocial problem. The majority (59.7%) of the children whose physician diagnosed a psychosocial problem had not presented for evaluation of a psychosocial problem but were seen either for treatment of a medical problem or for well care.

Management of Psychosocial Problems

Family physicians provided treatment for 89.2% of the children in whom psychosocial problems were identified. The most frequently used management strategies were continued monitoring of the problem (92.7%), scheduled follow-up appointments (84.7%), and advice or support (84.3%). Other management strategies included referral to a mental health professional (46.3%) and prescribing medication (41.0%).

Relationship Between Parent-Physician Agreement and Physician Management

Children in whom psychosocial problems were diagnosed (n=134) were divided into two groups: (1) those children for whom both physicians and parents were concerned about psychosocial functioning (n=89), and (2) those children about whom physicians had concerns but parents did not (n=45). Table 3 shows the number and percentage of children in each group about whom physicians

TABLE 2

Agreement Between Physician and Parental Concern about Psychosocial Problems

		Physician Concern: Yes	Physician Concern: No
Parental Concern	Yes	89 (10.0%)	16 (1.8%)
	No	45 (5.0%)	748 (83.3%)

perceived parent or family problems, whether the physician knew the family well, whether the child had a chronic illness, and whether the appointment was for evaluation or management of a psychosocial problem. The only significant difference between the groups was whether the appointment was for evaluation or management of a psychosocial problem (χ^2=11.60, P< .001). Physicians were over twice as likely to diagnose a psychosocial problem in a child if the visit was specifically scheduled for evaluation of a psychosocial problem (RR=2.53, 95% CI, 1.36 to 4.70).

Table 4 shows the number and percentage of children in the two groups for whom physicians reported the use of the various management alternatives. Physicians managed both groups of children similarly, except for the likelihood of referring a child to a mental health professional. Physicians were almost four times as likely to refer a child to a mental health professional if both they and the parent were concerned about the child's psychosocial functioning (χ^2=20.72, P<001; RR=3.82, 95% CI, 1.79 to 8.12). There was no difference in the overall rate with which physicians managed children whom both they and the parent agreed had a psychosocial problem and those children whom the physician identified but the parent did not.

TABLE 3

Physician Information on Two Groups of Children Presenting with Psychosocial Problems

	Problem a Concern to:	
Physician Information	**Parents and Physicians Group 1, n=89 No. (%)**	**Physicians Only Group 2, n=45 No. (%)**
Child has chronic medical illness	15 (25.4)	9 (30.0)
Physician knows family well	40 (45.4)	29 (44.4)
Parent has mental health disorder	29 (33.0)	13 (28.9)
Physician concerned about family	65 (73.0)	31(68.9)
Visit for evaluation of psychosocial	45 (50.6)	9 (20.0)
Preexisting child psychosocial problem*	65 (80.2)	33 (78.5)

*χ^2 = 11.60, P <.001; RR = 2.53, 95% CI = 1.36 to 4.70.

NOTE: Percentages are based on the number of actual responses by physicians. Therefore, the denominator used for each percentage varies, depending on whether data were missing for a particular item.

DISCUSSION

Commensurate with previous research, the family physicians in the present study identified psychosocial problems in 15% of the children and adolescents presenting for care.[12,13] This finding, like previous epidemiologic research with pediatricians, indicates that family physicians identify a large percentage of children with psychosocial problems. When given a checklist with terminology familiar and useful to them, family physicians identify approximately the same number of children with psychosocial problems as are identified with standardized instruments.[12,13] Study physicians provided management, including referral, medication, advice, and follow-up, whenever problems were identified. Identification and management of psychosocial problems occurred during visits scheduled for medical disorders and well care, as well as those specifically scheduled for assessment and treatment of psychosocial problems. These findings suggest that family physicians take advantage of all types of child contacts for assessing and managing psychosocial problems.

A unique aspect of this study was the comparison between physicians' identification of psychosocial problems and their perception of parental concern about these problems. In contrast to the majority of previous literature, which has implied that physicians underreport psychosocial problems in children, the present study supports the position that parents and physicians identify approximately the same percentage of children with psychosocial problems. The physicians in the present study identified approximately the same percentage of children with psychosocial problems

TABLE 4

Management Alternatives for Two Groups of Children Presenting with Psychosocial Problems

	Problem a Concern to:	
Management Alternatives	**Parents and Physicians Group 1, n=89 No. (%)**	**Physicians Only Group 2, n=45 No. (%)**
Follow-up	72 (85.7)	33 (82.5)
Referred*	50 (60.2)	6 (15.85)
Medication	37 (44.6)	13 (33.3)
Advice	73 (85.9)	27 (69.2)
Reassurance and support	77 (92.8)	31 (81.6)
Continue monitoring	79 (95.2)	35 (87.5)

*$\chi^2 = 20.72$, $P<.001$; RR = 3.82, 95% CI = 1.79 to 8.12.

NOTE: Percentages are based on the number of actual responses by physicians. Therefore, the denominator used for each percentage varies, depending on whether data were missing for a particular item.

as has been reported in previous epidemiological research based on evaluation of children-or parent-completed instruments.[1-3,5,6,9,12,13,17-20] These findings suggest that physicians are very likely to manage psychosocial problems when these problems are told to them. Similar to previous work, this study indicates that parents and physicians disagree on only a small proportion of children.[12] In the present study, physicians identified 5% of the children with psychosocial problems when parents did not indicate concerns about the psychosocial functioning of their child. A possible explanation for this finding may be the focus of the visit. Perhaps these children were seeing the physician for acute care or well-child care but had been previously identified as having psychosocial problems that were currently well managed. Parents may not have raised psychosocial concerns at the study visit, but physicians may still have recorded them on the checklist.

In 1.8% of the cases, physicians reported that parents voiced concerns about the psychosocial functioning of their child when the physicians did not indicate the presence of a psychosocial problem. Several explanations are possible for this small percentage of disagreements, other than physician error and chance. For example, it is possible that some of these parents may have been concerned about behaviors that were developmentally appropriate but worrisome to the parent. Lack of objective data concerning the psychosocial functioning of the children precludes analysis of the nature of the disagreements between parents and physicians. It is also possible that some of the parents who raised concerns during the visit had their concerns allayed by reassurance and information from the physician. Data concerning parents' concerns after their child's encounter with the physician will be necessary to understand whether parents' expression of concern remains after contact with the physician.

The findings of the present study suggest that family physicians identify and manage more children with psychosocial problems than they have been credited with in the past. It is unclear which children targeted in the *Healthy People 2000* goals of increased physician detection of pediatric psychosocial problems are not currently identified.[11] The results of the present research, in conjunction with the findings of Wildman et al,[13] raise the possibility that physicians may be doing a good job of identifying and managing psychosocial problems, but they may not be documenting what they are doing. In the present study, physicians indicated concerns about the psychosocial functioning of substantially more children than the less than 1% typically documented in charts.[21]

Physicians in the present study indicated that they managed psychosocial problems in children when they identified these problems. They used an array of management alternatives, typically combining several approaches. Whether parents expressed concerns about their child's behavior or not, physicians used all management alternatives. When parents and physicians agreed about the presence of psychosocial problems, children were more likely to be referred to mental health professionals than when only the physician was concerned.

As with any research, there are limitations to the data from the present study. Data were not

obtained from all visits in the target population. Possible explanations for physicians' failing to complete checklists include: (1) misunderstandings concerning whether checklists should be completed for 2-year-olds, (2) low rates of compliance by some physicians, (3) completion of the checklist once even though multiple visits occurred during the study period, and (4) decreased compliance by physicians toward the end of the study. In spite of these problems, the identification rate of psychosocial problems by physicians match those reported in previous research, suggesting that physicians did not systematically report on children with or without psychosocial problems.[1,2,4,12,18] The sex and age distributions of our sample are statistically similar to the sex and age distributions of all children visiting our family practice center. In addition, the prevalence of childhood psychosocial problems identified by physicians for the current sample was similar to the prevalence of those found in previous epidemiologic data derived from other sites and our family practice center.[12,13] These similarities suggest that the present results were not likely to have been distorted by selection bias.

The use of a residency training facility for data collection may raise concerns about the generalizability of results to other family practices and other primary care settings. The distribution of visits at the family practice center matches national samples of visits to family physicians.[22]

All data for the present study came from a single source, the physicians. It is unknown whether physician reports of parental concerns are an adequate proxy for parental concerns; however, the frequency with which physicians in the present study reported parental concern about child psychosocial problems matches the frequency reported in previous research.[13] Further, the findings of Wildman et al[13] and Lynch et al[23] that physicians responded to parents' expressions of psychosocial concerns with support or advice as well as more active interventions suggest that physicians are aware and responsive to parents when they express concerns.

The present study was cross-sectional. Longitudinal data would be helpful to further understand patterns in physicians' use of various management strategies, as well as the effects of these strategies.

Most of the children identified by physicians had preexisting psychosocial problems. Because of the nature of the Physician Checklist, it is unclear whether the physicians had previously identified these problems or whether they were merely indicating that the problems identified did not have a sudden onset. The percentage of children identified by physicians, however, matched epidemiological data concerning rates of physician identification of psychosocial problems using similar checklist procedures.[12,13]

CONCLUSIONS

The findings of the present study indicate that family physicians identify and manage psychosocial problems in children and adolescents at rates consistent with the frequency with which these problems occur in the population. They identify and manage problems even when parents fail to talk about psychosocial concerns and when the focus of the visit is for a medical problem or well care rather than for evaluation or treatment of psychosocial problems. Physicians tended to be concerned about the functioning of the families of children with psychosocial problems. These findings indicate that family physicians, consistent with their training, consider the context of the family in their evaluation of children and appear to be sensitive to the comorbidity of child and family problems. The physicians used an array of strategies to manage pediatric psychosocial problems.

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