

Parental Disclosure of Child Psychosocial Concerns: Relationship to Physician Identification and Management

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BACKGROUND. Physician identification and management of psychosocial problems in children is related to parental disclosure. The purpose of this research was to evaluate a method of prompting parental disclosure of such problems and to determine the impact of parental disclosure on family physicians' identification of and intervention for childhood psychosocial problems.

METHODS. Participants were parents and physicians of 60 children between the ages of 3 and 10 years attending an ambulatory care clinic of a community-based, university-affiliated family medicine training program. Parents completed the Child Behavior Checklist and also indicated whether psychosocial problems were discussed or managed. Physicians completed a checklist about the psychosocial status of the child and potential interventions for identified problems. One half of the participating parents formed the experimental group and were also asked to note their concerns on a Psychosocial Checklist for Children and to discuss these concerns with their child's physician; the other half of parents received no such checklist and acted as the control group. All interactions between parents and physicians were videotaped.

RESULTS. The number of parental psychosocial disclosures, but not the number of parents who disclosed them, was significantly higher for the experimental group. Physicians were three times as likely to identify a psychosocial problem and 10 times as likely to intervene when parents discussed psychosocial concerns.

CONCLUSIONS. Parents' disclosure of psychosocial concerns to their child's physician increases the likelihood of physicians identifying and intervening for these problems. The finding that physicians intervened for psychosocial problems even when they failed to record these problems suggests that research needs to focus on measuring both intervention and identification.

KEY WORDS. Child behavior disorders; mental health; pediatrics; patient care management; family physicians.
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Epidemiological data suggest that approximately 20% of children seen by primary care physicians either meet criteria for psychopathologic disorders or can be considered subsyndromal and at risk for psychopathologic disorders and disturbance of role functioning.¹⁻⁶ Physicians appear to identify approximately one half of these children as having psychosocial problems.¹ Among the obstacles to identification and man-

agement of children's mental health problems by primary care physicians may be lack of time for lengthy psychosocial interviews and lack of disclosure by parents about their psychosocial concerns. Interventions that facilitate physician identification of psychosocial problems within the context of routine care would help meet the goals of *Healthy People 2000*⁷ by improving the rate at which physicians identify and manage psychosocial problems in children. According to a recent report by Wildman and associates,⁸ physicians are likely to identify psychosocial problems in children whose parents have told them about their concerns.

Other research also suggests that physician identification of psychosocial problems can be

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improved by parental disclosure of concerns about the psychosocial functioning of their child to their child's physician. Wildman, Lynch, and Smucker⁹ reported that parents of children identified with psychosocial problems by family physicians were over four times as likely to have reported discussing psychosocial issues with their child's physician than parents of children not identified by their physician. Dulcan et al¹⁰ found that physicians were over 13 times as likely to diagnose a child's disorder as described in the *Diagnostic and Statistical Manual of Mental Disorders, Third Edition*¹¹ (DSM-III) when a parent discussed psychosocial concerns with the physician.

Research to improve diagnosis and management of children's psychosocial problems by primary care physicians has frequently targeted changing physician behavior (eg, improving psychosocial education).^{12,13} Altering physician behavior has not succeeded, however, in substantially improving rates of diagnosis or management of psychosocial problems in children.¹⁴

An alternative to modifying physician behavior is to modify parents' behavior. Dulcan et al¹⁰ reported that pediatricians failed to identify a psychosocial problem in 83% of children with such problems, but when parents reported consulting with their child's pediatrician about their concerns, missed diagnoses fell to 67%. Interventions designed to increase parental disclosure of information to their child's physician have resulted in improved medical outcomes.^{10,15,16} In one of the few studies that evaluated an intervention designed to improve communication between parents and physicians about the psychosocial functioning of children, Triggs and Perrin¹⁶ found that parents who completed a checklist designed to increase communication between themselves and pediatricians reported having more discussion about psychosocial issues with their child's pediatrician than did those parents who did not receive the checklist. A checklist designed to increase parental disclosure has potential advantages beyond physician education. A checklist can be brief, and it can be used consistently if the office staff administers it to waiting parents.

The present study evaluated the use of a simple checklist by (1) assessing the impact of a checklist on parental discussion of their children's psychosocial problems, and (2) determin-

ing the effects of parental disclosure on the identification of and intervention for children's psychosocial problems by family physicians. We hypothesized that parents who were prompted by the checklist to discuss psychosocial problems would be more likely to disclose their concerns to their child's physician than parents who were not prompted to do so; and that parental disclosure of such concerns would increase the identification of and intervention for psychosocial problems by physicians.

METHODS

PARTICIPANTS

The participants in this study were a convenience sample of parents and physicians of 60 children between the ages of 3 and 10 years, recruited at the Family Practice Center of Akron City Hospital during the spring of 1993. The Family Practice Center is an ambulatory care clinic of a community-based, university-affiliated family medicine training program. To obtain the final sample of 60 parent-physician pairs, all parents of children whose well-care or acute-care examination was not specifically for psychosocial reasons were approached for participation in the study (N = 231); 19 refused. Because of limitations in the availability of video cameras, the visits of only 60 of the 212 parent-child pairs who consented to participate were actually videotaped. All data presented in this article are based on these 60 parent-child pairs. All 32 family practice physicians, ranging in experience from intern to faculty (median, 3rd year resident), agreed to participate in the study.

INSTRUMENTS

Child Behavior Checklist. Parents completed the age-appropriate form of the Child Behavior Checklist (CBCL), a standardized, parent-completed measure of child psychopathologic behavior with good reliability and validity.¹⁷ The CBCL contains 118 behavior problem items and 20 social competence items. A total score can be obtained to identify children likely to have psychosocial problems. An accepted research criterion indicating probable child pathopsychology represents the 90th percentile for nonreferred children (sum T > 63).¹⁷

Psychosocial Checklist for Children.*

Parental concerns were prompted and assessed by means of the Psychosocial Checklist for Children created specifically for this study. This instrument was designed to increase parent-initiated disclosure by providing parents with 30 commonly asked psychosocial questions, and instructing them to check items of concern and bring them to the physician's attention. Questions for the checklist were derived from the Child Behavior Checklist, the Physician Checklist-Revised, the Guidelines for Health Supervision II, and the DSM-III.^{9,11,17,18}

Family Demographic Questionnaire. Demographic data included questions concerning family income, parental education, and age.

Parent Questionnaire. Parental satisfaction with the office visit, concerns related to child and family psychosocial health, and beliefs regarding psychosocial problems were assessed by the Parent Questionnaire. This questionnaire was developed by modifying the Parent Questionnaire used by Wildman et al.⁹

Physician Checklist. Physician identification, perception of discussion, and planned interventions for psychosocial problems were measured using the Physician Checklist, a modification of the Physician Checklist used by Wildman et al.^{8,9} Physicians were asked to check whether the child seen displayed evidence of psychosocial problems requiring further treatment; whether any interventions were planned; whether there were concerns regarding the functioning of the family; and whether the parent raised a psychosocial issue.

VIDEOTAPE DATA COLLECTION

Only one visit of each parent and child pair ($n=60$) was videotaped. Each physician was eligible to be videotaped more than once, and the frequency of repeated physician videotaping ranged from 0 to 8 (median, 1).

Roter's interaction analysis system for coding audiotapes¹⁹ was modified and used as a model in developing a videotape coding scheme to describe psychosocial communication between parents and physicians. Communication units were defined as the smallest discriminable speech segment to which a category could be assigned. Three cate-

gories were developed to describe parents' psychosocial verbalizations about their child, and seven categories were developed to describe physicians' psychosocial verbalizations and interventions on behalf of that same child (Appendix 1).

All videotapes were coded by one of the co-authors (T.L.). Inter-coder agreement was assessed by randomly selecting 20% of all videotapes for coding by two research assistants. To ensure an accurate assessment of reliability, 60% of all physician interactions with a low frequency of occurrence (mean number of occurrences less than .94) were also randomly assigned for agreement checks. Raters were blind to the treatment condition of the participants.

A Pearson product moment correlation coefficient was obtained for all comparisons of coded pair data. The minimum r obtained for video codes used for analysis was .59 (for physician psychosocial follow-up recommended), and the maximum was .98 (for prescription medication management).

A second reliability observer was used to rate the variable parent psychosocial questions ($r = .97$). The average of all computed correlation coefficients for video codes used for analysis was $r = .80$. A correlation coefficient for the code "physician referral to an agency" could not be calculated, since this behavior was rated only one time for all 60 physician-parent pairs.

DESIGN

This study consisted of two groups. Parents in the experimental group were given the intervention (Psychosocial Checklist for Children) designed to prompt discussion of psychosocial issues and psychosocial questions while in the waiting room. Parents in the control group did not receive the intervention.

PROCEDURE

Parents in the experimental group were informed by a research assistant that their child's physician was interested in psychosocial issues. They were asked to complete the Psychosocial Checklist for Children and other questionnaires (the CBCL and the Family Demographic Questionnaire) in the waiting room before their child's visit with the physician. Parents checked off the question(s) on the Psychosocial Checklist for Children they want-

*Copies of this instrument and the Parent Questionnaire and Physician Checklist may be obtained from co-author Beth G. Wildman, PhD.

ed to discuss with the physician. The checklist took less than 5 minutes to complete. Parents were encouraged to carry the checklist with them into the examining room as a reminder to ask their questions. The remaining questionnaires took approximately 20 minutes to complete and were always completed before participants left the Family Practice Center.

Parents in the control group were given the CBCL and Family Demographic Questionnaire, but were not given the Psychosocial Checklist for Children. At the end of the office visit, both groups of parents completed the Parent Questionnaire in 5 minutes or less, and the physician completed the Physician Checklist attached to the patient's chart.

RESULTS

Eighty-two percent of the questionnaires were completed by mothers, 10% by fathers, 2% by guardians, and 6% by others, such as grandparents and other caregivers. Table 1 includes the demographic characteristics for the whole sample, and for each of the two groups. Fifty-seven percent of

the children were male and 43% were female. Seventy-four percent of the study visits were for care of acute conditions, and 52% of the children saw their usual primary care physician. Since years of education and yearly income were categorical rather than continuous, medians are reported as measures of central tendency for these variables. The median duration of contact between the physician and child in the examination room for all visits was 11 minutes (range, 4 to 35 minutes). The experimental and control groups were the same with regard to demographic variables such as age, number of visits in the past year, education of parent, and family income (Table 1).

There was no significant difference between the experimental and control groups on the number of children whose scores on the CBCL fell within the clinical as opposed to the nonclinical range (ie, children with sum T total scores above the 90th percentile are likely to have psychosocial problems and were classified as *clinical* as compared with those with sum T total scores below the 90th percentile who were considered *nonclinical*): $\chi^2(1) = 0.67, P < .41$. Fifteen percent of the experimental group and 25% of the control group scored within the clinical range on the CBCL. Data were analyzed for this study, in part, using the variables defined in Appendix 2.

Videotape Analysis. For combined groups, videotape analysis revealed that parent psychosocial questions occurred in 13% of the visits, parent-initiated disclosure of negative psychosocial information occurred in 40% of the visits, and physician-initiated parental disclosure of negative psychosocial information occurred in 38% of the visits (Table 2). In 56% of the incidents in which parents initiated negative psychosocial discussion or questions, at the physician's request they also gave negative information regarding their child. In 31% of the office visits, psychosocial reassurance was given by the physician. The most frequently used active intervention was psychosocial advice, which occurred in 25% of the visits (Table 2).

Intervention Effect. The number of parents actively disclosing negative psychosocial information was not significantly different between groups: $\chi^2(1) = 1.71, P < .2$

TABLE 1

Demographic Variables for Experimental and Control Groups of Parent-Child Pairs

Variable	Total Sample (n = 60)	Experimental Group (n = 30)	Control Group (n = 30)
Number of visits in the past year*	3.7	3.7	3.7
Mean age of child, y	6.0	6.2	5.9
Race/ethnicity, %			
White	67	75	59
African-American	30	21	38
Other	3	4	3
Parent years of education*	Some college	Some college	Some college
Yearly income,\$*	10,000- 20,000	10,000- 20,000	10,000- 20,000

*Medians.

Parents in the experimental group, however, disclosed negative information more frequently than did those in the control group, $t(58) = 183, P < .05$. The mean number of parental disclosures was 2.26 for the experimental group and .93 for the control group.

Physician Identification vs Parental Disclosure. The intervention had no impact on physician identification of psychosocial problems, as indicated by the psychosocial problems checked off on the Physician Checklist: $\chi^2(1) = 0.00, P < 1.0$. Physicians were over three times as likely, however, to identify a child as having a psychosocial problem when parents were determined to have initiated disclosure of negative psychosocial information or asked psychosocial questions: $\chi^2(1) = 9.87, P < .002$; RR = 3.64, (95% confidence interval [CI] 1.48 to 8.90). When a physician indicated on the Physician Checklist that a child had a psychosocial problem, 72% of the parents of those children had been observed on the videotape as having initiated negative psychosocial disclosure or psychosocial questions.

Parents needed to disclose negative psychosocial information at least four times to their child's physician for physicians to diagnose a psychosocial problem on the Physician Checklist: $\chi^2(1) = 3.95, P < .05$; RR = 2.16 (95% CI 1.0 to 4.65).

Physician Intervention vs Parental Disclosure. Physicians were over 10 times as likely to actively intervene if the parent initiated disclosure of negative psychosocial information or asked psychosocial questions: $\chi^2(1) = 21.16, P < .001$; RR = 10.5 (95% CI 2.63 to 41.87). Sixty percent of parents who initiated disclosure of negative psychosocial information or asked questions received active physician psychosocial intervention, as opposed to 6% of the parents who did not initiate such disclosures. Physicians interacting with parents in the experimental group were no more likely to intervene than those interacting with parents in the control group: $t(57) = .46, P > .10$. Parents had to initiate a negative psychosocial disclosure only once to receive active physician intervention $\chi^2(1) = 5.30, P < .03$; RR = 2.7 (95% CI 1.3 to 5.62).

TABLE 2

Results of Assessing 10 Categories of Videotaped Parent-Physician Interviews for All Parent-Child Pairs (n = 60)

Category	Percent of Visits in Which Behavior Occurred	Mean No. of Occurrences (SD)
Parent asked psychosocial questions	13	0.20 (0.58)
Parent initiated negative psychosocial information	40	1.40 (2.68)
Parent gave negative psychosocial information, initiated by physician	38	1.25 (2.63)
Physician asked psychosocial questions	68	2.97 (3.59)
Physician gave psychosocial reassurance	31	0.76 (1.67)
Physician gave psychosocial advice	25	0.93 (2.46)
Physician recommended psychosocial follow-up	11	0.22 (0.72)
Physician made referral to mental health professional	10	0.15 (0.55)
Physician initiated prescription medication management	8	0.17 (0.65)
Physician made referral to social agency	1	0.00 (0.00)

SD denotes standard deviation.

DISCUSSION

The findings of the present research suggest that the use of a parent checklist as a prompt for parental disclosure increased the number of parental disclosures but not the number of parents disclosing, nor the number of children identified by the physicians, nor the number of children for whom physicians provided intervention for psychosocial problems. The present study supports previous research that found that parental disclosure to the child's physician of psychosocial concerns about the child increases the likelihood that physicians will identify these problems.^{10,16} The

present findings indicate that parental disclosure of psychosocial problems is also related to physician intervention for these problems. Similar to previous research that found that primary care physicians are hesitant to label patients with psychiatric disorders, the present study found that physicians required four times as many disclosures about psychosocial concerns to *record* a psychosocial problem for a child as the number of disclosures required to *intervene* for a problem.¹ Parents needed to disclose only one concern for physicians to provide some type of intervention for their concern.

Parent behavior in this study confirmed previous findings by Korsch et al²⁰ and Reisinger and Bires²¹ that parents may not freely share important personal information with physicians. The relatively poor rate of parent-physician discussion of psychosocial concerns in the present study was similar to that reported by Sharp et al¹⁵ and Marvel.²²

Findings that parents fail to disclose psychosocial concerns to physicians, even when they are asked by the physicians, support the importance of improving physician-parent communication. Previous research has emphasized the role of the physician in the elicitation of psychosocial information from patients.^{23,24} The findings of the present research, that a simple checklist given to parents before their child's office visit increased the number of psychosocial disclosures, indicate that it is possible to modify parents' behavior through brief interventions that can be readily implemented in waiting areas. It was surprising to find that prompting parent disclosure of psychosocial concerns to their child's physician through the use of a checklist increased the number of disclosures, but not the number of parents disclosing such concerns. Many of the parents who endorsed concerns on the checklist failed to disclose these concerns to their child's physician. Further research is needed to understand the causes of these findings. These findings, in conjunction with those of Korsch et al²⁰ and Hickson et al,²⁵ suggest that many caregivers refrain from discussing psychosocial issues, even when such discussion is specifically sanctioned.

The finding that prompts increased the number of disclosures suggests that the checklist facilitated disclosure by those parents who were already predisposed to discuss their psychosocial concerns about their child with their child's physician.

The checklist may have either reminded parents of relevant concerns or reassured them of the appropriateness of this type of disclosure, resulting in disclosure of more complete information to the child's physician.

The failure of the checklist to increase the number of parents who disclosed relevant psychosocial information to their child's physician may be due to the need to teach patients how to interact with their physicians. Kaplan et al²⁶ found improvements in communication and outcomes for adult patients who were taught to increase their assertive skills with their physicians and decrease their anxiety and timidity.

The findings from this study build on research by Wildman et al^{8,9} and Dulcan et al¹⁰ by confirming their findings that physicians are more likely to indicate the presence of a psychosocial problem in a child, and intervene for that problem, when a parent shares information about psychosocial concerns.

The finding of the present research that physicians intervened for child psychosocial problems even when they failed to indicate the presence of these problems on the Physician Checklist suggests that future research about childhood psychosocial problems needs to focus on measuring physician intervention as well as diagnosis, rather than diagnosis alone. The results of the present research suggest that the rate of physician diagnosis is not a proxy for the rate of intervention.

The present study has several limitations. First, the sample studied was a convenience sample, and only a relatively small percentage of the potential participants actually completed all the questionnaires and videotaping. A second limitation of the study was restriction of data collection to a single university-affiliated residency training program. The nature of the problems and the demographic characteristics of the patients seen at family medicine training programs, however, show no significant differences from those of persons who present to family physicians in other community settings.²⁷ A third limitation of the current research is that the process of completing the Physician Checklist and the physicians' awareness that they were being videotaped may have increased physicians' attentiveness to developmental and behavioral issues. The Physician Checklist has become part of routine practice at the Family Practice

Center, and videotaping of office visits is also part of routine practice at the data collection site. The percentage of psychosocial problems identified by the physicians match those reported in previous studies.^{9,28,29} In addition, physicians were blind to the intervention, and the detection rate did not vary as a function of which group parents were assigned to.

CONCLUSIONS

The findings of the present study emphasize the importance of examining whether physicians intervene for psychosocial problems, rather than whether they record the diagnosis of such problems. The findings also highlight the importance of focusing on parent behavior, rather than on physician behavior alone, as a means to improve physician-parent communication and physician rates of identifying and intervening for pediatric psychosocial problems. The findings from this study also continue to point to the robustness of parent reluctance to discuss psychosocial concerns, even when prompted.

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Appendix 1

Videotape Coding Scheme

Parent Codes

- (1) Parent psychosocial questions
- (2) Negative psychosocial information (parent-initiated)
- (3) Negative psychosocial information (physician-initiated)

Physician Codes

- (1) Physician psychosocial questions
- (2) Psychosocial interventions
 - a. Prescription medication management
 - b. Referral to a mental health professional
 - c. Referral to an agency
 - d. Advice giving
 - e. Scheduled follow-up
 - f. Reassurance

Appendix 2

Definitions of Variables for Analysis

Parent Disclosure. Included the initiation of one or more negative psychosocial disclosures and/or one or more psychosocial questions per videotaped analysis.

Parent Concern. Using data from the Parent Questionnaire, this variable included parent responses that they wondered whether their child had a psychosocial problem and/or report that they were not sure or certain whether their child had a psychosocial problem.

Physician Identification. This variable was defined by physician report of either a severe or nonsevere psychosocial problem on the Physician Checklist.

Physician Active Intervention. Active interventions required the parent or child to perform or change a behavior (eg, take a medication, use a time-out procedure). Owing to relatively low intervention frequencies, the videotaped intervention variables were collapsed into one variable. This variable included: (1) medication prescription management, (2) referral to a mental health professional, (3) referral to an agency, (4) advice giving, and 5) scheduled follow-up.