Brief Report: Parent Report About Health Care Use: Relationship to Child’s and Parent’s Psychosocial Problems

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Objective: To investigate the potential utility of asking parents about health care utilization as a means of identifying individuals at risk for psychosocial problems.

Method: Parents of 366 children ages 2 to 16 completed questionnaires about their own, their child’s, and their family’s psychosocial functioning and health care utilization.

Results: Children and parents with high health care utilization were more likely to have psychosocial problems than those with low health care utilization. Sensitivity and specificity of health care utilization as a marker for psychosocial problems ranged from 43.8% to 68.8%.

Conclusions: Although high rates of child health care utilization are related to the presence of psychosocial problems, use of this measure alone could result in many false-positive and false-negative identifications. Rather, use of health care utilization data in conjunction with other screening measures may be useful for alerting physicians to the possibility of both child and parent psychosocial problems.

Key words: health care utilization; psychosocial problems; primary care, parent report.
Burns, 1986). Unfortunately, although well validated for their utility, such measures are not always used routinely in the course of an office visit. A supplemental approach to improving physician identification rates could be to identify information that physicians can readily access that might be associated with psychosocial problems. The association between health care use and psychosocial problems may be useful for this purpose. Because physicians often lack accurate information about health care use because patients may have been seen in a variety of medical settings and by different physicians, they may find it useful to ask the parent for such information. Even though this information may not be entirely accurate, if a reliable relationship exists between parental report of health care use and child psychosocial problems, the information provided by the parent could be used to signal the need for further evaluation. The purpose of this study was to examine the relationships between parent and child psychosocial functioning and parental report of health care utilization.

Method

Participants

Participants were 366 adult patients of a community-based, university-affiliated family practice residency training program who were the parents or guardians of a child between the ages of 2 and 16 with whom they lived. Patients who were pregnant or had given birth in the past year were excluded due to increased health care use as a result of their pregnancy. Participants were recruited by research assistants in the waiting area of the clinic. Research assistants explained the study and obtained written consent to participate. In order to obtain the sample of 366 participants, 452 consecutive parents were approached; 42 refused to participate, 19 of whom had completed the instruments during a previous visit, and 44 potential participants returned incomplete data.

Measures

The Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978) is a parent-completed instrument that measures the intensity or frequency of the behavior and whether the behavior has been a problem for the parent. Both scores must be above the cutoff (127 on the Intensity Scale and 11 on the Problem Scale) for a score to be considered in the clinical range.

The Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979) was used to assess parental distress. Because research has supported the use of the BDI as a measure of psychological distress, rather than exclusively as a measure of depression (e.g., Baker & Jessup, 1980; Gotlib, 1984), Kendall and colleagues (1987) have suggested that individuals identified as experiencing psychological distress by the BDI exclusively should be considered dysphoric rather than depressed. This study used a score of >10 to indicate psychological distress.

The McMaster Family Assessment Device General Functioning Subscale (GFS; Epstein, Baldwin, & Bishop, 1983) was used to assess family distress. The GFS has been found to discriminate between families identified as healthy or unhealthy by a mental health clinician (Miller, Epstein, Bishop, & Keitner, 1985). As suggested by Byles, Byrne, Boyle, and Oxford, 1988), this study used a cutoff of ≥26 to indicate familial distress.

The Family Demographic Questionnaire contained basic demographic questions including the child’s race, parental income and education, parental marital status, and previous usage of mental health care. In addition, parents reported about their own and their child’s health care utilization.

Procedure

Written consent was obtained from parents who were recruited by undergraduate research assistants using a standard protocol approved by the human subjects review boards of both Kent State University and Summa Health Systems. Parents who agreed to participate were asked to complete the ECBI and health care utilization information about their child, ages 2–16 years. Parents completed the ECBI for the child scheduled to see the physician, or if parents were attending their own appointment, for the child about whom they were most concerned. Parents were instructed to complete the BDI in relation to how they had been feeling for the past week, including the day of the appointment. The GFS was completed for the family currently living in the home with the informant.
Results

Of the 366 parents who participated, 88.0% were mothers and 68.0% were currently married. Parents’ ages ranged from 22 to 53 years, with a mean age of 36.0 years. Caucasians and African Americans comprised 70.5% and 26.0% of the sample, respectively. Among those participants reporting type of medical insurance (98.4%), 46.2% used private insurance, 45.1% used Medicaid, and 7.1% had no insurance. The median educational level attained by the parents was completion of some college courses without a degree attained. The mean age of the child about whom parents completed questionnaires was 7.1 years; 57.1% of the children were boys and 42.9% were girls.

Health care use was divided into two mutually exclusive groups: high and low. The high health care utilization group included those who reported more than four visits to the physician, more than one visit to urgent care or emergency room, or spent more than one day in the hospital in the past year. Individuals were classified as low health care users if they did not meet requirements for the high utilization group. High users of health care consisted of 35.5% (n = 130) of the children and 45.9% (n = 168) of the parents. The low health care utilization group consisted of 64.5% (n = 236) of the children and 54.1% (n = 198) of the parents.

We assessed agreement between parent self-report of child health care utilization and the measures of psychosocial status using sensitivity and specificity data and odds ratios (ORs). With the ECBI as the criterion for psychosocial problems, high parent health care utilization had a sensitivity of 55.2% and specificity of 55.0%; the positive predictive power was 13.1% while the negative predictive power was 90.9% (χ² [1, N = 366] = 1.50, p < ns). With the GFS as criterion, sensitivity was 51.0% and specificity 55.9%, while the positive predictive value was 29.2% and the negative predictive value was 76.3% (χ² [1, N = 366] = 1.39, p < ns). Sensitivity of high parent health care utilization was 55.7% and specificity was 56.8% when the BDI was the criterion for parent psychosocial distress. The positive predictive value was 26.1% while the negative predictive value was 82.3% (χ² [1, N = 366] = 1.50, p < ns). Parents were almost twice as likely to report personal psychosocial distress when they evidenced high health care utilization compared to when they reported low health care utilization (OR = 1.65; 95% CI = 1.00, 2.72). High parent health care utilization failed to identify 44.3% of the parents, 45.0% of the children, and 49.0% of the families with elevated scores on the measures of psychosocial distress.

Discussion

Children whose parents reported frequent use of office-based care for their children were more likely to have psychosocial problems than were those children whose parents reported infrequent use of child health care services. However, parental report of health care utilization rates lacked the sensitivity and specificity necessary to selectively identify those children who may be experiencing a psychosocial problem. Thus, although eliciting information about the child’s health care use may be useful to supplement routine practice, it should not...
replace the use of other brief screening measures. Rather, in the context of a brief office visit, information about health care utilization could be used in combination with other inquiries exploring social and emotional functioning in order to identify the many children at risk for psychosocial problems who may otherwise go undetected. Because psychosocial problems in children persist over time and impair role functioning, early identification and management of potential psychosocial problems is extremely important (Byles et al., 1988; Costello, Burns, et al., 1988; Goldberg et al., 1984; McConaughy, Stanger, & Achenbach, 1992) and could potentially reduce overall use of health care services, as well as improve the general functioning of children.

The findings of the current research also indicated that parents who report that they or their children are high users of office-based care are more likely to report psychosocial distress than those who do not report high personal or child health care utilization. Utilizing information about the child may be one method of identifying parents who are experiencing psychosocial distress even when they are not the identified patient. This identification of the parent may be particularly important given the documented relationship between parent psychosocial and child psychosocial problems (Downey & Coyne, 1990; Gelfand & Teti, 1990; Jensen, Bloedau, & Davis, 1990; Phares & Compas, 1992; Rae-Grant Offord & Boyle, 1989; Turner, Beidel, & Costello, 1987). As with the use of reports of child health care utilization, use of parent health care utilization as a marker for psychosocial problems would result in many false-positive identifications. However, this question could elicit additional information that may assist physicians in accurately identifying, treating, or referring the children and families who may not be identified without reliable screening procedures. For pediatric psychologists in the primary care setting, such information may be useful when determining treatment plans and monitoring progress (e.g., has the amount of health care utilization decreased as the child or parent has evidenced improvement in therapy).

Like all research, this study has several limitations. It was conducted at a training facility. Users of a training facility may be different from those individuals who utilize community practices. However, Gilchrist, Miller, and Gillanders (1993) found that patients using community-based family practice training clinics were similar in composition to a national sample of patients visiting family practices. Also, families who use family physicians to provide primary care for their children may differ from families who utilize pediatricians to care for their children. A second potential limitation of this study is the use of only maternal report. While parental report may not provide a precise measure of health care utilization or a clinical diagnosis of psychosocial problems, such information is most easily accessible to a physician during an office visit and is typically the only information on which a decision to further assess psychosocial functioning is made. In addition, previous research has suggested that parent report of psychosocial concerns may be the best predictor of physician identification (e.g., Goldberg et al., 1984). In spite of these limitations, the results of this study suggest that simply asking parents about their and their child's use of health care may be useful as an indicator to identify children and their parents at risk for psychosocial problems. Use of this information should not be seen as a substitute for more reliable means of identifying patients at risk for psychosocial problems. Rather, inquiries about health care utilization should be seen as a way of using information that is easily and routinely obtained to quickly flag patients at risk for psychosocial problems.

In the course of a physician's busy practice, many patients do not receive effective screening for psychosocial problems. Reports of health care utilization, although elevated among individuals with psychosocial problems compared to those without, do not effectively select those children who are currently experiencing psychosocial problems. However, the potential usefulness of the child's health care utilization rates as an indicator of parental distress suggests that such a report could be a useful tool when used in conjunction with other questions or screening measures.

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Dr. Kinsman is now at University Affiliated Cincinnati Center for Developmental Disorders at Children's Hospital Medical Center.

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