SELECTIVE PROPOSAL

I TITLE

Identification of Adolescent Depression in Primary Care: A National Survey of Pediatricians and Family Practitioners

II SPECIFIC GOALS

1) To assess whether primary care physicians inquire about depression and suicide as part of their general examination of adolescents

2) To identify symptoms and signs which may trigger physicians to inquire more about depression in adolescents

3) To assess whether certain problems which have been found to be correlated to adolescent depression such as substance abuse, school drop out, family history of depression, and attempted suicide will lead physician to ask about depression in adolescents

4) To assess the general comfort level of pediatricians and family practitioners in diagnosing and treating adolescent depression

5) To identify specific factors such as knowledge base, time constraint, and availability of financial and mental health resources which may influence physicians' level of comfort, identification, and treatment of adolescent depression

6) To compare pediatricians and family practitioners and evaluate for possible differences in the identification of adolescent depression in primary care

III BACKGROUND

Over the past few years there has been increasing concern about adolescent depression in the medical literature. Reported prevalence rates of depression in adolescents have varied between 2.9% to 20%. One study found that 22.1% of adolescents reported symptoms indicative of depression with 8.6% eventually diagnosed with major depressive disorder (Kandel and Davies. 1982). The public health importance of depression in adolescence is furtherunderlined by the finding that over the past decade rates of suicide in the young have increased steadily (Harrington and Dyer, 1993). In addition to suicide, adolescent depression is associated with other substantial impairment in functioning including drug and alcohol abuse, school drop-outs, and problems with the law. In terms of economic burden, studies have shown that patients with depression have an increase frequency of office visits and emergency room visits compared to non-depressed controls. Long term studies have shown that undiagnosed and untreated cases and cases of diagnosed severe depression have high risk of recurrence extending into adult life. It is well documented that neurobiological changes occur in patients with long-term untreated depression with the overall effect that the longer depression remains untreated, the harder it is to cure and the higher the risk of recurrence in the following years (Harrington, 1990). However, a disease cannot be treated if it goes undetected.

The phrase "hidden psychiatric morbidity" has been used to refer to the substantial number of adult cases of psychiatric illness that go unrecognized in primary care practices (Goldberg and Blackwell, 1970). New medical literature is developing concerning the same problem of underdiagnosis in the pediatric population. In a study of 64 children (ages 6-12), 21 children scored in the depressed range, but only 2 had any indication of depression anywhere in their charts, revealing that 90% of the morbidity in these cases remained "hidden or overlooked" (Davies, 1987). If depression is underdiagnosed in all age groups, the period of adolescence is of particularly importance since the incidence of depression greatly rises from childhood to adolescence and the first episode of depression often occurs in adolescence (Weller and Weller, 1989). Therefore, the primary care physician who is the first line of defense in providing medical care for adolescent patients play a vital role in the detection and diagnosis of depression. We are not aware of reports in the literature concerning physician related factors which may influence the underdiagnosis of depression in adolescents. The goal of this study is to survey how physician go about assessing for depression and how factors such as physicians' comfort level, knowledge base, time constraints, and availability of financial and supporting mental health resources influence the assessment, identification, and treatment of adolescent depression.

Iv METHOD

This study is a random survey of pediatricians and family practitioners located throughout the United States. A list of randomly selected pediatricians and family practitioners (about 600 in each group) will be mailed a survey with returned stamped envelopes. The survey includes questions on physicians' demographics, level of comfort, and assessment, identification, and treatment of adolescent depression. (A copy of a preliminary survey is attached to this proposal.) A second mailing will be done approximately five weeks after the first mailing to physician who have not responded to the first mailing. Approximately half of the questions in this survey have been pilot tested several years ago by Dr. Aric Schichor at St. Francis Hospital. This version of the survey will likely be piloted tested to a small number of physicians at St. Francis Hospital and possibly at the Connecticut Children's Medical Center with minor modifications prior to final distribution. The survey data will be entered into computer tiles and analyzed with statistical software SPSS-Statistical Package for Social Scientists.

V GUIDANCE/SUPERVISION/FACILITIES

Drs. Aric Schichor and Bruce Bernstein at St. Francis Hospital will serve as my selective advisors for this project. Dr. Schichor has initially written part of the survey several years ago. His past experience on this project and his clinical knowledge of adolescent medicine will be a great asset to this current project. Dr. Bruce Bernstein as director of pediatric research with his experience in research and conducting prior surveys will be a valuable resource for knowledge and methods of statistical analysis. I also have access to Medline, the Internet, the medical libraries at John Dempsy, Hartford Hospital, St. Francis, and computers at St. Francis to conduct statistical analysis.

VI OUTCOME/ANALYSIS

1) Descriptive statistics will be used to estimate the percentage of pediatricians and family practitioners who actively inquire about depression and suicide as part of the adolescent general examination. We will also explore statistical comparisons between pediatricians and family practitioners and their medical practices concerning depression as well as associations between physicians' comfort level, training, time constraints, availability of financial and mental health care resources, assessment and treatment practices.
2) We anticipate a response rate of 30 - 35 % or about 200 (180-210) per group, which will be sufficient for statistical analysis and significance.

VII REFERENCES

Davies TC, Hunter JH, et al. Childhood depression: An overlooked problem in family practice. J Family Practice, 25 (5): 451-7, 1987.

Goldberg DP, Blackwell B. Psychiatric illness in general practice: A detailed study using a new method of care identification. Br Med J, 2:439-43, 1970.

Harrington RC, Dyer L. Suicide and attempted suicide in adolescence. Current Opinion in Psychiatry, 6:467-9, 1993.

Harrington RC, Fudge H, Rutter M, Pickles A, Hill J. Adult outcomes of childhood and adolescent depression: I. Psychiatric status. Arch Gen Psychiatry, 4:465-73, 1990.

Kandel DB, Davies M, Epidemiology of depressive mood in adolescents-An empirical study. Arch Gen Psychiatry, 39:1205-1212, 1982.

Weller EB and Weller RA. Pediatric Management of Depression. Pediatric Annals, 18 (2): 104-13, 1989.

PRELIMINARY ADOLESCENT DEPRESSION SURVEY

1) Gender: Male-,,..- Female___

2) Specialty: Pediatrics___ Family Practice___ Subspecialty: _____
What percentage of your practice is primary care: _____%

3) Number of years in practice:-

4) Type of practice:
Solo___ Group___ Hospital-based___ H M O -
Multispecialty___ Other _____

5) Location of medical practice: State _____
Rural___ Suburban- City- Inner City___

6) Patient background:
___% Afro-American ___% Caucasian ___% Asian ___% Hispanic ___% Other

7) Hours per day for direct patient care (does not include paperwork): ____

8) Average number of patients (all age groups) seen in a typical day: ____

9) Average amount of time spent for general physical exam for an adolescent: ____minutes

10) Number of adolescents seen in a typical week: -

11) Have you received any formal training in how to assess and deal with depression in adolescents?
N o - Yes-

If yes, check all that applies:
A. Training format:
Lecture- Patient care with direct supervision___ Other: _____
B. Setting of formal training:
Medical school___ Residency___ Fellowship- Continuing Ed___
Other: _____
C. Do you feel this training prepared you to deal with this subject?
No___ Somewhat___ Yes___

12) How comfortable are you in identifving depression in adolescents? (Please circle one number)
Very Uncomfortable . ..1 2 3 4 5 6 7 8 9 10... Very Comfortable

13) Please check all that may relate to you.
-Uncomfortable asking questions about depression
___Do not know what questions to ask
___Do not want to ask because may not know what to do with the answers
___Do not ask about depression because of time constraints
___Not the right time to ask because have not yet developed close mutual rapport
-Uncomfortable dealing with depression because of lack of available support resources
-Uncomfortable medicating adolescents for depression
-Uncomfortable asking questions **about** suicide
-Worried that **asking** such questions may lead patients to hurt themselves
___Other comments: _____
_____

14) If you do feel comfortable identifying patients with depression, please indicate what has contributed to this comfort level.
___Training
-Patient care experience
-Personal experience
-First hand experience (family member)
-Other: _____

15) How often do you ask questions about depression in your adolescent patients (ages 12-19) when doing a general examination?
Rarely- Sometimes___ Most of the time-

16) Under what circumstances do you ask about depression?
Only when indicated*- As a routine part of the examination-

* What does "when indicated" mean to you? _____

17) List and rank five signs or symptoms which may lead you to question more about depression:

Signs/Symptoms	Rank
_____	____
_____	____
_____	____
_____	____
_____	____

18) If you are a family practitioner, do you approach an older population any differently than you do with adolescents when dealing with the issue of depression?
No___ Yes___

If yes, what is the difference? _____

19) In your practice, what priority do you give to depression and suicide among the other medical issues during a adolescent general examination?

Top priority . ..1 2 3 4 5 6 7 8 9 10... No priority

20) a. How often do you ask questions about these problems when doing a general adolescent examination?
b. How often does a positive finding lead you to ask about depression?

PROBLEM	Rarely	Sometimes	Most of the time		**DEPRESSION**	Rarely	Sometimes	Most of time
Alcohol abuse	__	___	___	---------->		___	___	---
Drug abuse	__	__	___	---------->		__	___	---
Failing school	___	---	___	---------->		---	--	--
Suicide	---	---	___	------------>		___	---	--
Family dysfunction	___	___	___	---------->		___	---	--
Family history of depression	___	___	___	---------->		___	___	--

21) In one typical year, how many adolescents have you identified as being clinically depressed? __

22) What percentage of teens in the U.S. do you think are clinically depressed sometime during their adolescence?-%

23) How comfortable are you with your knowledge base and experience on the issue of depression?

Very __Uncomfortable . ..1 2 3 4 5 6 7 8 9 10... Very Comfortable

24) What percentage of depressed adolescents do you treate yourself and what percentage do you refer?
Treate patient myself-% Refer-%

25) If you do refer, to whom do you refer?
Another pediatrician or family doctor-% Adult psychiatrist-%
Psychologist-% Child and adolescent psychiatrist-%
Social worker-%

26) Please check all the following concerning the availability of resources.

-General lack of available financial resources for treatment of adolescent depression
-Managed care does not provide adaquate resources for treatment of depression
___The managed care approval process for acquiring services is too complicated
___The length of care approved by managed care is inappropriate
-There is an overall insensitivity of managed care for outpatient mental health services
-There is a lack of available psychologists
-There is a lack of available adult psychiatrists
-There is a lack of available child and adolescent psychiatrists

27) Payment mix: 1) ___% Insured 1a) ____% Managed Medicaid
1b) ____% Privately Insured

2) ___% Uninsured

28) Are you interested in continuing education courses dealing with adolescent depression?
No___ Yes-

THANK YOU VERY MUCH FOR YOUR TIME AND CONTRIBUTION