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Ethnically Diverse Mothers' Views on the Acceptability of Screening for Maternal Depressive Symptoms during Pediatric Well-Child Visits

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Abstract

The under-identification of depressive symptoms among low-income, minority women contributes to disparities in mental health outcomes. Pediatric visits offer a new venue for the identification of such symptoms. We explored women's views related to depression screening during pediatric well-child visits in interviews conducted with 42 mothers of diverse ethnicities. Women considered their child's pediatric provider to be an appropriate person with whom to discuss their emotional health and were aware of the inter-relationship between their mood and their child's well-being. Thus, they felt discussing their emotional health was an acceptable component of pediatric health care. Stigma and fear of child protective services were concerns. Women articulated strategies to improve acceptability of screening, including providing a clear rationale for screening, services available, and child protective service involvement. The perspectives of women of diverse ethnicities provide information that may improve identification of mothers with depressive symptoms and potentially reduce disadvantages in mental health outcomes in minority populations.

Keywords

Maternal depression; disparities; parenting stress; qualitative research; screening; well-child care

Depressive disorders affect between 5% and 17% of the American population.^{1,2} The rates of depression are twice as high in women as in men.^{3–5} Known social risk factors for depression among women include financial hardship, single marital status, adolescent parenting, and minority status.^{6–9} The childbearing years represent a time of high risk for the onset of depression in women.^{10,11} The postpartum period, defined as the first year after the birth of a child, is a time of particular risk, with rates of a depressive disorder in this period ranging from 6–13%.^{12,13} Among mothers of young children with high levels of social risk,

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up to 50% report depressive symptoms.^{14–16} Depression in the postpartum period and among mothers of young children, in general, has been shown to affect children adversely across multiple domains, from infancy through adolescence, affecting infant and child mental and physical health, emotional and behavioral development, educational achievement, and health service utilization.^{17–24}

Based on the prevalence of depression and the existence of easily administered, validated screening tools^{25–29} and efficacious treatment, in 2002, the United States Preventive Services Task Force (USPSTF) recommended screening adults for depression in clinical settings that have systems in place to assure accurate diagnosis, effective treatment, and follow-up.^{30,31} They found that screening improves the accurate identification of depressed adults and that appropriate treatment of adults identified this way decreases morbidity.³²⁻⁴⁰ Despite the USPSTF recommendations, depression remains under-identified and undertreated.^{40,41} Research suggests disparities exist in both the identification and the treatment of individuals with mood disorders, with Hispanics and African Americans with depressive symptoms less likely to be identified than Whites.⁴² Even among those with identified mood disorders, racial or ethnic minorities are more likely to experience delays in obtaining treatment or to fail to obtain treatment altogether.⁴¹ While women are more likely to obtain professional help than men, low-income minority women, who develop symptoms at younger ages, are less likely to receive needed care and more likely to receive poor quality care than their White counterparts.^{43,44,45} Recent studies have documented a positive effect on child outcomes from remission of a mother's depressive symptoms,⁴⁶ further highlighting the importance of identifying affected women. The Surgeon General's Mental Health Report and its supplement, which focuses on mental health, culture, race, and ethnicity,^{47,48} emphasize the need to address the disproportionately high burden of disability from mental health disorders experienced by racial and ethnic minorities. Building upon the Surgeon General's findings, the report of the New Freedom Commission on Mental Health, Transforming Mental Health Care in America,⁴⁹ specifically identifies access to quality screening and early intervention at low-stigma settings, such as primary care practices, as one of its six major goals.

A fundamental barrier to detection and treatment of depression among low-income mothers of diverse ethnicities is their fragmented contact with the health care system.¹⁰ After giving birth, mothers often end their relationships with obstetrical providers without reestablishing primary care for themselves; in fact over 40% of low-income postpartum mothers did not see any type of medical provider for a postpartum visit.⁵⁰ In contrast, women do bring their infants for pediatric care.⁵¹ The pediatric setting, therefore, may be these mothers' only regular contact with health professionals, and offers an opportunity to identify women with depression. Thus, screening women during routine pediatric well-child visits has the potential to reach large numbers of women who otherwise have no regular contact with a health care provider during a vulnerable period in their lives. Improved identification provides an opportunity to link women with mental health services and thereby reduce disparities in access to care and time to treatment.

A growing body of evidence supports the feasibility of identifying women with depressive symptoms in pediatric settings.^{8,15,52–56} Dubowitz et al.⁵⁷ and Kemper and Babonis⁵² have reported on the use of brief (two or three questions) depression screening tools, documenting adequate sensitivity when used during routine pediatric visits. Chaudron et al.⁵³ describe their experience implementing universal screening for depressive symptoms among mothers using the Edinburgh Postnatal Depression Scale. They focused on children under one year old in a busy urban primary care setting and found documentation of screening in almost half of the targeted visits. Olson et al.⁵⁸ also reported on the feasibility of routine screening during pediatric visits. In community practices located in small towns, approximately 70%

of targeted women were screened during their children's visits. Studies investigating the role of pediatric providers in identifying mothers with depressive symptoms suggest that pediatric providers feel screening protocols can be successfully implemented in a range of practice settings with minimal time burden.^{53,58–60} However, less is known about the experiences and perceptions of low-income, minority women who have been screened for depressive symptoms in pediatric settings. Such women are more likely to report stigma and barriers to engagement in care than their White counterparts.⁶¹ Specifically, there is limited evidence regarding women's views about the acceptability of such screening and how the screening process can be made acceptable to mothers of young children such that it improves patient-provider communication and trust and fits within expectations of what occurs during a pediatric visit. Research by Kahn et al.,¹⁵ which surveyed mothers of children up to 18 months old about unmet health needs (including depression), suggest that women are open to discussing their emotional health with their children's pediatric providers. Kahn's study found that 85% of women would welcome referrals from their child's pediatrician to address their unmet needs. In contrast, a study by Heneghan, Mercer and Deleone,⁶² which describes findings from focus groups largely of African American women, found that women were more hesitant to discuss parenting stress and depressive symptoms with their children's pediatric providers, particularly if they did not have an ongoing and trusting relationship with the pediatric provider. However, neither study examined the views of women in settings where maternal depressive symptom screening had been integrated into routine well-child visits. While women may be willing to discuss their concerns in theory, they may have very different reactions after having been screened. Furthermore, to our knowledge, none of the studies on screening for maternal depression in a pediatric setting included women of Southeast Asian heritage, whose cultural beliefs regarding the acceptability of mental health screening appear to be unestablished in the public health literature, and which may differ from those of other ethnic and racial minorities.

To address these gaps, this study explored ethnically diverse women's views regarding the identification and discussion of maternal depressive symptoms within the context of pediatric care. A qualitative methodology was used to accomplish this aim, because it afforded the best possible means for in-depth inquiry into areas that were little known, culturally variant, and potentially sensitive. The approach also allowed us to elicit rich information about how the screening process could be constructed to maximize its cultural acceptability. The study's goal was to inform the development of acceptable, family-centered interventions that improve identification of depression in mothers of young children, by providing new information from the viewpoint of ethnically diverse women who, themselves, had undergone depression screening.

Methods

Background and setting

We conducted in-depth interviews with 42 mothers of young children who received care at one of two Boston-area community health centers, where a quality improvement project focused on the detection and management of maternal depressive symptoms during pediatric well child visits was ongoing.⁶³ The project involved screening all mothers of children ages birth through four years for depressive symptoms using the Patient Health Questionnaire-2 (PHQ-2), a validated two-question depression screener.⁶⁴ We selected this age group because of the frequency of recommended well child visits⁶⁵ and the availability of community-based programs that serve mothers of young children. Screening was performed at routine well-child visits either with a self-administered form, which the provider reviewed with the mother during the visit (one site) or by direct questioning from the health care provider (medical doctors and nurse practitioners) (one site). At both sites, positive screens

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were followed by a brief assessment conducted by the child's health care provider; referrals for behavioral health and other community-based social services were made in consultation with the mother.

Sample

A woman was eligible for the interviews if she spoke English, Spanish, or Vietnamese, provided written informed consent, and was the mother of a child four years of age or younger, who had had a well child visit since the onset of the screening protocol at each site. To include the perspectives of the range of mothers whose children are seen in communitybased, primary care pediatric practices, the study employed a purposive sampling strategy, which is common in qualitative research.^{66,67} Mothers were identified through referral from staff and self-referral from flyers posted at participating sites. Twelve women (29%) were from the site where screening was conducted with a self-administered form and 30 women (71%) were from the site where screening was done by direct questioning from the child's health care provider. This group included 10 Vietnamese mothers who were recruited through staff at a Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) office, which was located at the site, to ensure adequate representation of this key target population. Additionally, two grandmothers who were the primary caregivers of children seen at participating sites and had been screened for depression as part of the child's well child visit were included in the sample. We included the two grandmothers in this sample because it is not uncommon for grandmothers to be the primary caregivers of young children,⁶⁸ the ages of the grandmothers did not make them outliers in our sample, and as primary caregivers, grandmothers would be screened for depression and referred in the same manner as a child's mother.

Mothers of diverse ethnicities who had reported depressive symptoms as well as mothers without symptoms were included in the sample. Interviews were conducted over an 11-month period, October, 2005–August, 2006.

Procedures

Procedures for data collection and analysis were approved by the Boston University Medical Center Institutional Review Board. Interviewers used a semi-structured discussion guide to query mothers' views and experiences regarding depression screening conducted during their children's pediatric visits (Box 1). Demographic information related to family composition and maternal age, race, ethnicity, nativity, language preference, and insurance status was obtained prior to the interview. Two master's level, bicultural, bilingual (Spanish/ English and Vietnamese/English) research staff members conducted interviews in English, Spanish, or Vietnamese based on respondent preference. Interviews were conducted in locations selected by the respondents, generally either the mothers' homes or locations in their communities. The average interview was approximately one hour long. Interviews were audio-taped, translated, and transcribed *verbatim*. Participants received \$25 as compensation.

Data analysis

Codebook development and coding were guided by recognized standards for qualitative research.^{67,69} To begin, all transcripts were read in their entirety by four members of the research team. We used a two-pronged approach to code development, identifying *a priori* codes based on the study's research questions and emergent themes from inductive techniques. Using an iterative process, four versions of the coding scheme were tested before the final codebook was agreed upon by all members of the study team. Subject accrual ended after 40 interviews when thematic saturation was reached.⁷⁰ Two research associates used the established codebook to independently code all (40) interviews. When

two reviewers disagreed over coding classifications, the reviewers reread the entire transcript and discussed the code with the aim of reaching consensus. In cases where consensus was not reached between the two reviewers, another member of the research team familiar with the transcripts and coding mechanisms was added so the group could render a final decision agreeable to all three of the reviewers. The software package Atlas.ti version 5.2^{71} was used to manage data. A kappa coefficient of 0.78 was calculated based on a 10% sample of interviews, indicating *substantial agreement*, and validating the consistency and reliability of the analysis.⁷² Codes were included in the final iteration if endorsed by a minimum of five women. In total, 91 codes (available upon request) were included in the codebook; the codes were organized into the three domains and eight themes (Box 2).

Results

Demographic characteristics

The maternal and child demographic characteristics of the sample reflected the diversity of the urban community health center practices where the study was conducted. Sixty-two percent of the women were born outside of the U.S. and 78% were covered by public insurance or were uninsured. At the time of the interview, 66% of the women recalled being asked about depressive symptoms during their child's most recent visit. Fifty-two percent acknowledged a history of or current depressive symptoms either at the time of the interview or at the time of the screening (Table 1).

Appropriateness of pediatric settings to address women's emotional health concerns

The pediatric provider: a suitable confidant—The interviews of 34 mothers included positive comments about being screened for depression in the pediatric setting. This view most often reflected a strong perception of the child's provider as a trustworthy and suitable confidant, who had a consistent presence in the lives of their families. Mothers also valued the provider's interest in their personal well-being and the capacity to link them and their families with appropriate health-related services, social services, and community-based programs.

... she did provide certain information ... like help for food and food pantries, and she told me about the after-school program they have there ... like they have a good dentist program there. So she tries to make my life easier and let me know all the services that are given. ... (Cambodian mother, age 34)

... I'm ... pretty glad when [the doctor] asks me [about my well-being] because I'm able to ... speak out and say exactly how I feel, how I'm doing, whereas if it's not asked, I wouldn't actually just sit down and talk to someone about it. But by asking me, it makes me feel good that ... here's somebody I could speak to about certain things. (African American/Native American grandmother, age 41)

[A] mom feels happy that [providers] ask her about her and not just the children. She likes it that they put an effort into her. (Cambodian mother, age 32)

A minority of mothers (n=8) felt that the pediatric provider's role should not involve attending to the health concerns of mothers. These mothers endorsed views that the mother's health came second to the child's health, and providers would not have the time, interest, or capacity to help them.

Imagine, if I told the provider and he might say "Why are [you] telling me this? What for? There's nothing I can do because I am not in the field, so why are you telling me?" Imagine, if they said that to me, then that would be embarrassing. (Vietnamese mother, age 35)

Everything that they do is about children, so we feel like, "Oh, I don't think he'll know anything about moms or adults because all he deals with is children." (Puerto Rican mother, age 21)

The inter-relationship between maternal and child well-being—A realization that depression affects parenting capacity and subsequently affects children's development can provide a rationale for addressing maternal emotional well-being in pediatric visits. A number of participating mothers (n=16) acknowledged the significance of this relationship, describing how they viewed the influence of a mother's mood on a child's well-being.

I think that if I didn't feel comfortable with [my son] or was stressed or did have depression and didn't want to be with him I think [he] would sense that. And I just think [about] development and all. He wouldn't be as bright. He wouldn't be as stimulated probably. (White mother, age 31)

For some mothers, this inter-relationship served as the basis for depression screening by pediatric providers, since they saw it as a sensible and appropriate component of the well child visit.

I often do say that a mother's no good if she's not doing well. She can't do well for her children or her family, so I think that is a really good idea, that the mothers [are asked] these questions at the provider's office about the mother's well being. (Multi-racial mother, age 31)

I think [maternal depression screening is] totally appropriate because the pediatrician is interested in the child's well being, and for you to really cover the child's well being, you need to cover all avenues related to the child. (Caribbean mother, age 33)

Promoting disclosure of depressive symptoms

A number of women articulated potential barriers to discussing their own health or emotional concerns with their child's pediatric provider. This group included women who were receptive to screening and felt pediatric visits were an appropriate setting for such screening.

Stigma and cultural considerations—Some women discussed how their identification with cultural beliefs and norms discourages them from sharing their symptoms of depression.

I think it's just that you're not allowed to have depression in Vietnamese culture ... that you're supposed to be happy at all times. If you're not happy, that's just too bad. Deal with it, learn how to deal ... and if you are depressed, you're looked at as you're weak and you can't do anything and you're not supposed to be weak. (Vietnamese mother, age 35)

If you belong to church, have someone pray for you and that's it. But therapy, no, I think [it's] really American, so you [don't] tell anyone or talk to anyone about it, if you talk to someone, they say like you are crazy, go to church. (Haitian mother, age 30)

Eleven women discussed the role of stigma, more generally, as a factor underlying their reluctance to discuss their own mental health concerns with their children's pediatric providers. The presence of stigma surrounding depression became apparent as women shared their fears of being judged as bad or incompetent mothers.

I didn't want to be judged, thinking I was crazy or anything like that. So for the longest time, I didn't tell anybody about my depression or me feeling bad. (Multi-racial mother, age 19)

Okay if something's wrong with me then they're going to question whether I can ... take care of the baby. (White mother, age 31)

Child protective services involvement—Concerns about being judged were often linked to even graver fears about the possibility of being reported to child protective services and subsequently losing custody of children. This opinion was common; 14 women, representing all ethnic groups, expressed views that they, personally, or mothers in their communities, in general, believed disclosure of depressive symptoms could trigger child protective service involvement.

I think [mothers] probably don't want to explain to the child's doctor their situation because ... maybe [the doctor will] think that the parent is [not] able at that moment to take care of the child and [the mothers] probably think that social services will step into the situation because that's what [the doctors are] there for, to report any concerns that they think will be a danger to the child. (Cape Verdean mother, age 28)

One woman offered ways to discuss this difficult topic:

You know, letting me know openly that just because I'm feeling a certain way does not mean that the Department of Social Services is going to get involved in it and they are going to come into my home. And my physician had to explain that to me, that it's okay. ... (Multi-racial mother, age 31)

Views on improving acceptability of depression screening: Implementation

Women offered a number of insights for improving the acceptability of screening for depressive symptoms in pediatric settings.

The importance of the primary care provider relationship—Having a longstanding, trusting relationship with the screener was overwhelmingly noted as the most important factor in creating the safe and non-threatening environment women considered necessary for disclosure. Interviews of 27 women included comments related to this theme. Women generally suggested that the pediatric provider, rather than other support staff, conduct the screening.

... like the nurses, if they don't know the person that well, I think they should leave it up to the doctor to ask the questions because if you don't have the comfort level between you, you're going to ... I don't know if scare's a good word, but worry them. (White mother, age 24)

Some women offered additional suggestions about how to make the conversation with their pediatricians more comfortable; specifically, they felt that screening should not be conducted in the presence of a third party (husband, child, or interpreter).

Of course husband and wife do share problems but if you really want to understand the women then you should ask the husband to leave to talk to the patient in private. (West African mother, age 17)

Provide context for maternal depression screening: It's what you say and how you say it—Over half of the women (n=22) commented on the importance of providing a context for screening. They felt strongly that providers should introduce the screening by explaining why the depression screening questions are being asked. They suggested that

providers inform them about the availability and benefits of receiving treatment through counseling or other community-based programs and offer assurance of their intention to help. In particular, women wanted more information about depression in general, including assurance that it is "normal" and common.

By asking the moms and telling them that the provider is there to help, then that would help these moms to open up and talk about their feelings. (Vietnamese mother, age 31)

[Providers should] ... let [mothers] know ... the positive side of getting the help, you know, the child [and] you would be happy, you would be comfortable, that depression state you're in, you won't be in it for long. It's normal, you'll go through it. ... If you get it out, then you get past it [and] you can live your life and enjoy your child instead of being depressed and missing out on a lot of things you could be enjoying. (Caribbean mother, age 33)

Women stressed a desire for the providers to demonstrate a genuine concern for their wellbeing and suggested the types of questions, beyond depression screening questions, that would exemplify such concern.

I want the doctor to ask me how am I feeling, how is my health doing, am I getting out more often, exercising, am I eating properly now? How's the mother doing with the stress, how am I coping with my stress, if I do get stressed out. (Cape Verdean mother, age 23)

Universal and repeated screening: Tell me I'm not alone and keep asking—A few women expressed a strong need for reassurance that all mothers were being screened for depression and that they were not being singled out for any reason. Women also emphasized that the provider should be persistent when asking mothers about their well-being, both during the course of one visit as well as over time.

Always [ask] me at every visit, no matter how many times he has to ask me, because some people, usually they don't like opening up to anybody. They really have to break the ice, you know what I mean? (Puerto Rican mother, age 21)

Well, the provider should just continue to ask the women even though she'd say, "I am fine." I think the women would talk about her feelings if the provider would continue to ask about it. (Vietnamese mother, age 32)

Creating an environment that supports maternal emotional well-being within the health care setting and the community—Women identified two ways that pediatric settings could create an environment that would make it more likely for them to disclose depressive feelings. The first was through the presence of informational materials posted in waiting areas and available in exam rooms.

Like I see things posted all the time where I'm waiting ..., I'm sitting there waiting, stuff's posted. Like the Reach Out and Read, and that's how I called. (Caribbean mother, age 33)

I come here and see all the information on the board and I count all the phone numbers to get help ... so I know where to call to get help ... I can get the cards that are hanging up. (Multiracial mother, age 19)

The second was through support groups offered at the health centers on an ongoing, drop-in basis.

I think they should have like an AA program set up ..., you know, maybe like one a month or twice a month ... like they have AA meetings, they should have something set up like that once a month ... a time where everyone can come in ... maybe a weekend or a Friday evening. (Cape Verdean mother, age 23)

Discussion

This qualitative study elicited the views of low-income women of diverse ethnicities in order to inform health care providers in underserved communities about those views. Our findings, which provide insight into minority women's attitudes regarding receptivity to mental health screening, may help to support increased screening of at-risk women. Improved identification of depressive symptoms in this vulnerable population has the potential to reduce disparities in mental health outcomes that arise from delays in care and elevated symptom burden.

In general, study findings, which are consistent with the results of other researchers,^{15,58,62,73} suggest that women are willing to discuss parenting stress and emotional health concerns with their children's pediatric providers. Women recognized the inter-relationship between their emotional health and their children's health and development; they felt that addressing their concerns was an important component of pediatric health care. Mothers considered their children's pediatric providers to be appropriate people with whom to discuss their emotional health. They appreciated the pediatric providers asking about their well-being and felt it showed that the provider cared about the entire family. Women who viewed their children's providers as capable of helping them often based their judgment on their experience of receiving helpful referrals to community-based services, such as Head Start and food assistance programs, that might be thought to lie beyond the confines of traditional pediatric care.

Consistent with the Institute of Medicine's seminal report on confronting racial and ethnic disparities in health care,⁷⁴ which highlights the critical role that improving patient-provider interactions can play in reducing disparities, women in our study cited the importance of her relationship with her child's health care provider. They discussed how the provider's communication style influenced her decision to disclose personal information, a finding also reported by Heneghan's study of parenting stress.⁶² Women had concrete suggestions about how to conduct the screening so that it promoted open and honest communication between themselves and their children's health care providers. Their responses suggest strategies that could address their concerns: conducting universal screening at all visits; strengthening the role of the child's primary care provider in the screening process; and providing a clear explanation of the rationale for screening and services available.

A particular area of concern to the mothers interviewed was that disclosure of depressive symptoms would lead providers to report affected mothers to child protective services, which would remove their children from the home. In our multi-ethnic sample, stigma and fear of child protective services involvement extended to mothers in all ethnic groups, indicating the pervasiveness of this concern in low-income communities. Our findings suggest that these issues suppress open communication and decrease a woman's likelihood of accessing services, thereby contributing to disparities in identification of symptoms and engagement in care. Frank discussion about what happens when a mother reveals depressive symptoms—that disclosure is not in and of itself a reason for child protective service involvement and that mothers retain their right to choose whether to engage in mental health services—should be an integral component of depression screening protocols.

In addition to suggestions related to the conduct of screening for depressive symptoms in pediatric settings, women identified modifications to the environment, through posters and informational materials, that could normalize depression and demonstrate that pediatric providers were interested and qualified to assist mothers with their own emotional health issues. Federal agencies and nonprofit organizations have developed such materials in a range of languages and literacy levels and they are easily accessed via the Internet.* Similar educational and social marketing strategies have been used effectively to increase awareness and decrease stigma related to depression^{75–78} and other sensitive topics, such as sexual assault.⁷⁹

The majority of the suggestions about how to conduct depressive symptom screening in pediatric settings could be implemented easily through quality improvement initiatives, within the context of promoting *family pediatrics*.⁸⁰ The implementation manual developed by Olson and Gaffney⁸¹ provides one example of a structure for such an initiative. Such a quality improvement focus is supported by the IOM disparities report, which recommends rewarding screening and preventive clinical care as potential strategies to address disparities in mental health outcomes.

There are limitations to the study. The sample was purposively selected from two health centers in the Boston metropolitan area to maximize ethnic diversity and include mothers who did and did not endorse depressive symptoms. Therefore, the study findings are not generalizable. However, we were careful to use procedures to enhance the quality of data analysis,⁸² examining the details of negative cases and minority views—e.g., mothers who were not comfortable with pediatrics-based depression screening, considering alternative explanations, and integrating investigator triangulation into coding procedures. We were unable to document whether depressive symptom screening led to increased referral and service use, information that could help determine the utility of such screening. Comparisons among participants based on ethnicity, level of depressive symptoms, screening method, and concordance of provider/patient characteristics that would be possible in a quantitative study are not feasible in a small qualitative sample. However, we did not identify any uniform divisions in participant response based on any of these characteristics. Participant responses grouped under themes described in Box 2 consistently represented a range of participant characteristics.

Despite the screening being standard protocol at the participating sites, it is also possible that a small number of the women may not have been screened. Such women, as well as those who were screened but could not recall the event, were asked how they would feel if asked the screening questions. We believe that the likelihood that a woman who was not screened for maternal depression participated in the study is low. We examined the records of 534 infants who were born in the two-year period after the screening protocol had been implemented (6/1/2004 through 5/31/2006) and had at least one well child visit during their first year of life. We found that 75% of caregivers, including those whose children had limited visits, were screened at least once.

^{*}National Institute of Mental Health (NIMH), the Maternal and Child Health Bureau (MCHB) of the Health Services Research Administration (HRSA) (http://www.mchb.hrsa.gov/pregnancyandbeyond/depression/) and Postpartum Support International (http://www.postpartum.net) have materials available through their websites. State health agencies have developed additional materials for providers and patients through MCHB's grant program (See State of Illinois website, http://www.hfs.illinois.gov/mch/, and Massachusetts' Department of Public Health Perinatal Connections Project's low literacy, multi-lingual materials (http://www.mass.gov/?pageID=eohhs2terminal&L=5&L0=Home&L1=Consumer&L2=Community+Health+and +Safety&L3=Family+and+Community+Health&L4=Pregnancy+and

⁺Newborn&sid=Eeohhs2&b=terminalcontent&f=dph_com_health_prego_newborn_c_maternal_depression&csid=Eeohhs2) and the University of Michigan's website (http://www.med.umich.edu/depression/brochures.htm).

Screening that is conducted in a manner that supports patient-provider communication and trust can increase identification of depression and has the potential to improve access to care. The diversity of the study population and the relative consistency of responses presented should help health care providers to feel maternal depressive screening during pediatric well child visits is acceptable to a wide range of mothers of children seen in their practices and, ultimately, to promote effective interventions to assist women who are experiencing depressive symptoms.

Box 1 VIEWS ON MATERNAL DEPRE SSION SCREN ING: SAMPLE QUESTIONS FROM INTER VIEW GUIDE

What do you think about mothers being asked about their well-being during their child's appointments?

Think back to your child's last check-up/physical. Do you remember being asked about how you were feeling? [Interviewer reads the list of the modified PHQ-2 questions⁶⁴ which were included as a part of well child visits to respondent]. How did you feel about being asked these questions?

Some women have told us that even if they were feeling stressed or sad or depressed they would not want to talk to their child's doctor about it. Why do you think women might feel this way?

Box 2 KEY DOMAINS AND THEMES	
Domains	Themes
The appropriateness of pediatric settings to address maternal emotional health concerns	Pediatric provider as a suitable confidant Inter-relationship between maternal and child well-being
Promoting disclosure of depressive symptoms	Cultural considerations and stigma Child protective service involvement
Improving acceptability of depression screening: implementation issues	Strengthening the primary care provider relationship Providing context for screening Creating supportive environments

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Table 1

MATERNAL AND CHILD DEMOGRAPHICS

	N(N=42)	%
Race		
White/Caucasian	5	12
Black	11	26
Asian	15	36
Hispanic	7	17
Multiracial	4	ç
Nativity		
U.Sborn	16	38
Non U.Sborn	26	62
Language preference		
English	18	43
Other language ^{<i>a</i>}	14	33
Bilingual-English	10	24
Mother's insurance		
Public	27	64
Private	9	22
No insurance	6	14
History of or current depressive symptoms	22	52
Recalled being assessed for depressive symptoms	28	66
Range and mean age of mothers ^b	17-43 years, mean 28.8 years	
Range and mean length of time in U.S. among non-U.S. born mothers	2-22 years, mean 10.1 years	
Mean number of children	2.5	
Mean age of child at time of maternal screening	1.7 years	

Note: Interviews of subjects whose preferred language was Portuguese, Khmer, Haitian Creole, or Cape Verdean Creole were conducted in English

 $^a\mathrm{Spanish},$ Portuguese, Khmer, Vietnamese, Haitian Creole, Cape Verdean Creole

 $b_{\mbox{Excluding grandmothers (N=2)}}$ who were 41 and 45 years of age at the time of the interview