Published in final edited form as:

Child Adolesc Ment Health. 2022 November; 27(4): 328–334. doi:10.1111/camh.12515.

Parental Perception of Mental Health Needs in Young Children

Ellen W. McGinnis, PhD¹, William Copeland, PhD¹, Lilly Shanahan, PhD², Helen L. Egger, MD³

¹University of Vermont Medical Center

²University of Zurich, Psychology & Jacobs Center for Productive Youth Development

³Department of Child and Adolescent Psychiatry, Hassenfeld Children's Hospital at NYU Langone, New York, NY

Abstract

Background: There is evidence of unmet psychiatric needs in children under 6. These young children are dependent on their parents to identify their mental health needs. This study tested child and parent factors associations with Parent perception of mental health need in their young child.

Method: Parents of 917 children (ages 2–6 years) completed a structured diagnostic interview about their child assessing depression, anxiety, ODD/CD, ADHD and impairment. Parents were surveyed about their own depression, anxiety and asked about their psychiatric impairment. Parents were also asked whether they perceived their child as having a mental health need.

Results: Only 38.8% of children who met criteria for a diagnosis were perceived by their parent as having a need, similar to previously studied rates in school-aged children. Perception of need was associated with higher levels of symptoms and impairment. Thresholds for at least half of parents perceiving their child as having a need were relatively high: 19 or more symptoms, or 4 or more impairments. There was also evidence of specificity: children with depressive disorders were more likely to be perceived as in need (OR: 6.53) compared with children with no disorder. In terms of parent factors, moderate-high parental depressive symptoms was associated with higher perception of child need when the child had a diagnosis than parents with no or mild depressive symptoms.

Conclusions: Most preschool children that meet criteria for a psychiatric disorder are not perceived as needing help by their parents. Parent perception of need is dependent on both child and parent factors.

Corresponding author: Ellen W. McGinnis PhD, Vermont Center for Children, Youth, and Families, Department of Psychiatry, 1 South Prospect Street, Floor 3, Burlington, VT 05401, ellen.mcginnis@uvm.edu. Ethical Information:

Conflict of Interest Statement:

Authors state they have no conflicts of interest to disclose that are relevant to this manuscript.

i. The study was approved by Duke University School of Medicine Institutional Review Board (IRB) and study recruitment took place January of 2007 to October of 2010.

ii. All parent/guardians involved provided written consent.

Keywords

early childhood; parents; perception; mental health

Young children meet criteria for psychiatric disorders at similar levels as is seen in middle childhood and adolescence (Egger & Angold, 2006), and yet children under 6 have the highest rate of unmet mental health needs (Kataoka et al., 2002). In many parts of the world, including the United States, access to mental health services depends on a having a formal diagnosis. Thus, early identification of mental health disorders and subsequent intervention are critical for maximum benefit (Fox et al., 2010). Young children are particularly vulnerable to unmet treatment needs, as they have to primarily rely on caregivers not only to navigate logistical treatment barriers, but also to identify mental health needs that merit intervention (Kataoka et al., 2002). As parents are the primary referral source for young children it is imperative to understand how parents perceive child mental health needs.

Most parents of school-aged children with mental health diagnosis do not perceive their child as having a problem (Teagle, 2002), which may be due to low child mental health literacy and/or unintentionally overlooking unobservable symptoms (Mesman & Koot, 2000). Parents of young children face additional challenges in identifying mental health needs as children under 8 are unreliable at understanding their own complex emotions and thus are unable to effectively communicate their symptoms (Chansky & Kendall, 1997). Additionally, parents of young children may have had few opportunities to compare their children's behavior to peer groups to determine what is normative, or may hold the belief that the child is young and will 'grow out of it' on their own (Reardon et al., 2020). As such, young children may be at higher risk for unidentified mental health needs. However, to date there has been no study of parent perception of mental health needs in young children.

Studies in school-aged children suggest that parent perception of their child's mental health (MH) need for treatment is affected by a number of factors. Unsurprisingly, parents are more likely to view children with more symptoms (Verhulst & Der ende, 1997) and more impairment (Teagle, 2002) as in need. Additionally, specific types of symptoms are more likely to be noted by parents such as more observable (externalizing) symptoms (Grills & Ollendick, 2003; Richters, 1992). For example, in school-aged children 70% of parents who had a child with ADHD viewed their child's symptoms as a problem compared to 37% of parents who have a child with anxiety (Teagle, 2002). Teachers reported twice as many behavioral problems in children referred to mental health services as untreated children, despite similar prevalence of clinical symptom levels in each group (Costello & Janiszewski, 1990). These results support Reardon et al.'s (2020) suggestion that observable, disruptive symptoms are more likely to be perceived as problematic in young children.

Parents' perceptions of child MH need may also be affected by the parent's own knowledge, beliefs, and experience. Families of racial/ethnic minority, those with lower levels of education, and those living in poverty have been found to have higher unmet MH needs (Ngui & Flores, 2007; Zwaanswijk et al., 2003). In addition to demographics, a parent's own MH problems can impede concordance of parent and child-reports of child MH symptoms

(Richters, 1992). Parents with psychopathology are more likely to identify their children as having mental health needs regardless of the child meeting criteria for a disorder (Teagle, 2002). However, others have found notable exceptions when examining parents with past and/or less severe psychopathology suggesting these parents may have better child MH literacy than parents with current and/or more severe psychopathology (Mendenhall & Frauenholtz, 2015; Richters, 1992).

The goal of these analyses is to investigate which child factors (diagnosis, symptom count, and impairment), familial demographics (race, education, income), and parent psychopathology (anxiety symptoms, depressive symptoms, and psychological impairment) are associated with parent perception of child MH need in a community population of young children. We hypothesize that children perceived as having a MH need by their parents will be more likely to have behavioral problems (externalizing diagnoses), more symptoms and more impairment, that families will be more educated, and less likely to be of racial/ethnic-minority, or in poverty. Based on the literature, we also explore the role of parent psychopathology on perception of child MH need and whether their perceptions are more or less aligned with clinician rated child MH diagnosis without apriori hypotheses.

METHOD

Herein, we conduct a secondary analysis of data from the Duke Preschool Anxiety Study (DPAS). The DPAS was originally conducted to investigate the prevalence and comorbidity of anxiety disorders in early childhood (Franz et al., 2013), thus children with anxiety were over-recruited. In the current analysis, data have been weighted (inversely proportional to their probability of selection to account for anxiety) to represent a community sample. The DPAS was a cross-sectional, screen-stratified study of children ages 2 to 5 attending primary care pediatric clinics in Central North Carolina for either a well-child or sick visit. Primary care pediatric clinic samples have a number of important advantages: 1) rates of psychiatric disorder in randomly selected general pediatric primary care samples have been found to be similar to general population prevalence rates (Horwitz et al., 1992); 2) most preschool children see a pediatrician at least annually; and 3) pediatricians see a large number of children per day. The study was approved by Duke University School of Medicine Institutional Review Board (IRB).

Sampling

Children attending the Duke Children's Pediatric Primary Care Clinics in the southeastern region of the United States were screened for study eligibility from January of 2007 to October of 2010. These clinics provide care to children who were covered by private insurance and Medicaid or are uninsured. Children were eligible for inclusion in the study if they were between 2 and 5 years of age and attended the pediatric clinics during the screening period. Exclusion criteria were as follows: (1) the child was not accompanied by a parent/legal guardian who could provide consent, (2) the parent/legal guardian did not have adequate fluency in English to complete the screen, (3) the index child was known to have intellectual disability (IQ<70), autism, or another pervasive developmental disorder due to significant differences in anxiety disorders in these populations, (4) a sibling was

participating in the study, or (5) the study nurse believed that the child was too medically ill at the visit for the parent to be approached about the study. Additional details of study flow can be found in our online supplement and previous works (Franz et al., 2013).

The current sample consists of 917 children (52% female) aged 2–6 (M:3.4, SD=1.26) whose primary caregiver (96.2% biological parents of whom 87% were mothers) was administered the diagnostic interview (Preschool Aged Psychiatric Assessment (Egger & Angold, 2004)). As such, primary caregivers will be herein referred to as 'parents'. This sample of children were 51% White, 37% African American and 7% Hispanic. Twelve percent of families fell at or below the federal poverty level (Bureau, n.d.). Of parents, 54% had at least a bachelor's degree and 75% of parents were married. Thirty percent of children whose parents were enrolled in Medicaid, a similar rate of coverage for children under the age of 18 in both North Carolina and the United States (Bureau, n.d.).

Measures

Parent perception.—Parent perception of MH need was assessed toward the end of the PAPA interview with the following items: "Are there any things that you think s/he needs help with?", and "You have told me about many different things. Do you think any of them are problems for him/her?" The administering clinician would only code the presence of a need or problem if the parent endorsed either item with a response that pertained to one of the following categories: school non-attendance, separation anxiety, worries/anxieties, obsessions/compulsions, depression, mania, physical symptoms, food-related behavior, hyperactivity, conduct, psychosis, relationship with a parent, other adults, sibling or peer, life events/post-traumatic stress and/or alcohol or drugs.

Child Factors.—The structured Preschool Age Psychiatric Assessment (PAPA)(Egger & Angold, 2004), was used to assess demographics (age, sex and ethnicity/race) and status of common psychiatric disorders (depressive, anxiety, and behavioral) based upon parent report. This interview is adapted from the Child and Adolescent Psychiatric Assessment and is the first published diagnostic interview to assess parent reported psychiatric disorders in preschoolers according to DSM criteria. It exhibits test-retest and diagnostic reliability (kappas .36–.79) on par with diagnostic interviews for older children and adults (Angold & Costello, 2000; Egger et al., 2006; Egger & Angold, 2004). Interviewers were certified by a qualified PAPA trainer after 1 to 2 weeks of classroom didactics and 1 to 2 weeks of PAPA administration training. Diagnoses from the PAPA included the following DSM-IV disorders: 1) depression, persistent depressive disorder, 2) anxiety disorders including separation anxiety, general anxiety, social phobia and specific phobia, 3) externalizing behavior disorders including attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD) and conduct disorder (CD). Symptom count consisted of the total number of unique symptoms across disorders. At least 3 symptoms is necessary to meet a diagnosis threshold (i.e., specific phobia), with other diagnostic thresholds being significantly higher. Impairment was based on World Health Organization's International Classification of Functioning, Disability and Health and included assessment of symptomrelated disruptions in 17 important life areas (e.g.,, school, family, peer functioning). Impairment in at least one area is necessary to meet diagnostic criteria. In the current

analyses, child impairment and symptom counts were winzorized at 95% resulting in an average of 1.40 impairments (SD: 1.45, Range: 0–4) and an average of 11.07 symptoms (SD: 7.58, Range: 0–27). Symptom count was then tiered into 5 levels to improve interpretability.

Parent factors.—Sociodemographic information included family income, parent relational status, and education level from the PAPA. Parents also self-reported whether or not they had a lifetime history of psychological impairment by responding to the question, "Have you ever had any problem which has affected your ability to work or your ability to look after X (or other children)?". The presence of a psychological impairment was only coded by the administering clinician if it fit the following description: "Psychological, nervous, or psychiatric problems, which have either caused a parent to seek treatment, or led to family or social disruption or impaired performance in a major life role (e.g. inability to care adequately for children, loss of job, etc.)". Parent self-reported depressive symptoms were assessed using the Mood & Feelings Questionnaire – Short Form (MFQ-SF)(Angold et al., 1995) which includes 13-items with scales from 0-2 (Range: 0-26; alpha=.854), where 8 or more symptoms indicate moderate to high depressive symptoms (Turner et al., 2014). Parent self-reported anxiety symptoms were assessed using the Beck Anxiety Inventory (BAI)(Beck et al., 1988) which includes 21 items with scales from 0 to 3 (Range: 0–63; alpha=.881), where 16 or more symptoms indicate moderate to severe symptoms of anxiety (Beck et al., 1988). There is 12.5% missingness for self-report surveys of parents who completed the PAPA.

Statistical Analyses

All analyses were conducted in IBM's SPSS 27 using weighted variables. First, independent sample t-tests and chi square statistics were conducted on child and parent factors by Parent perception of need. Significant variables were entered into simultaneously logistic regression models for child and parent factors, separately. A single model tested all significant child and parent factors simultaneously. Participants were assigned a weight inversely proportional to their probability of selection to account for anxiety screen-stratification. Thus, results reported here are intended to represent unbiased estimates for the original primary care population from which the sample was drawn. All results report weighted percentages and unweighted sample sizes.

Results

Prevalence of Parent perception of mental health (MH) need

One of every seven parents (14.5%; n=132) reported either that their child had a problem or that they needed help, which hereafter will be referred to as a parent perception of child MH need. Parents of children with a diagnosis were much more likely to report that their child had a need compared to parents of children without a diagnosis (38.8% vs. 7.2%, X^2 (1, N = 75) = 0.89, p < .001). Three hundred ninety (23.3%) had a MH diagnosis of depression, anxiety, ADHD or ODD/CD. For parents, 6.4% (n=105) had moderate-severe depressive symptoms and 2.9% (n=66) had moderate-severe anxiety symptoms.

Associations with child factors

Parent perception of child MH need was not associated with child age, race/ethnicity or sex. The perception of need was significantly higher for each type of childhood diagnosis as well as for those with more psychiatric symptoms and psychosocial impairment (see Table 1). Comparing among disorders, children with externalizing disorders were similarly as likely to be perceived as having a MH problem as children with anxiety disorders $X^2(1, N=211) = 2.32$, p = .127, and less likely than children with depressive disorders $X^2(1, N=101) = 8.67$, p = .003. Post-hoc analyses revealed that within externalizing disorders, there was no difference between those with ADHD as compared to ODD/CD $X^2(1, N=84) = 0.001$, p = .97. Thresholds for at least half of parents perceiving their child as having a need were relatively high: 19 or more symptoms, or 4 or more impairments.

In a logistic regression testing all significant child factors simultaneously, only having a depressive disorder (b = 1.65, SE = .48, CIs = .71–2.59, p = .001), and higher number of impairments (b = .47, SE = .17, CIs = .15–.78, p = .004) were significantly associated with Parent perception of MH need.

Associations with parent factors

Parents who perceived their child as having a MH need were more likely to have lower levels of educational attainment, be a single parent, and be impoverished (see Table 2). They also had more current depressive and anxiety symptoms as well as more likely to have experienced impairment of their parenting or work due to psychological problems. We conducted post-hoc analyses on perception of child MH need by parent mental health status within child diagnostic status (see Table 3). Parents with no or mild depressive symptoms (94%, n=694; R: 0-7; M=1.66, SD=1.81) were equally as likely as parents with moderate/ high depressive symptoms (6%, n=104; R: 8-26; M=12.11 SD=3.5) to perceive their child as having a MH need when their child did not have a diagnosis. However, for children with a diagnosis, parents with moderate/high depressive symptoms were over 2 times as likely to perceive their child as having a MH need when their child. Parents with lifetime psychological impairment (33%, n=386) were over 8 times more likely as parents without psychological impairment (67%, n=526) to perceive their child as having a MH need when their child did not have a diagnosis. However, for children with a diagnosis, parents with psychological impairment were no more likely than parents without psychological impairment to perceive their child as having a MH need.

In a logistic regression testing all significant parent factors simultaneously, only current parent depressive symptoms (b = 1.23, SE = .04, CIs = .044–.20, p=.002) and lifetime psychological impairment (b = 1.06, SE = .35, CIs = .37–1.74, p = .002 were significantly associated with Parent perception of MH need.

Associations with child and parent factors

All individual significant child and parent factors continued to be significantly associated with parent perception of child MH need in a model testing significant child and parent factors: child depressive disorder (OR: 6.5), impairments (OR: 1.72), parent lifetime

psychological impairment (OR: 3.01) and current depressive symptoms (OR: 1.10) (see Table 4).

Discussion

In this sample of preschool children, one in seven (14.5%) parents perceived their child as having a mental health need, and only 38.8% of parents whose child fulfilled criteria for a diagnosis perceived their child as having a mental health need. In contrast with our hypothesis, parent perception of mental health need in young children in this study is similar to parent perception of mental health need in school-aged children in previous studies (13% overall, and 39% in children with a MH diagnosis (Teagle, 2002)). Alternatively, it may be that young children are less likely to receive MH services than school-children due to higher levels of poverty in families with children under 6 (Bureau, n.d.) and thus additional logistical barriers to treatment and/or parent beliefs about treatment. For instance, parents of young children may take a "wait and see" approach to their child's mental health (Pavuluri et al., 1996) which may change once they see their child struggle more in contexts when parent scaffolding is unavailable (i.e., school) (Godoy & Carter, 2013).

The childhood factors most associated with parent perception were a diagnosis of depression and number impairments. Young children with depressive disorders were more likely to be perceived as in need than children with externalizing disorders – disorders that are often considered most disruptive to others. Depression has only recently been recognized in early childhood even among developmental psychologists (Digdon & Gotlib, 1985) thus symptom distinctiveness (i.e., anhedonia, depressed mood) in early years may be especially alarming to parents. Such symptoms which are developmentally atypical have been found to be associated with greater impairment (see (Loeber et al., 2000)) and thus may be more easily detectable by parents. It was not surprising that symptom-related impairments were related to parent perception of child need, but the threshold was quite high. The thresholds for at least half of parents to perceive a need (19 or more total symptom and 4 or more impairments) were much higher than the clinical threshold for a diagnosis (as few as 3 symptoms and impairment in at least 1 functional category). In addition to perceptions of what is developmentally typical, there may simply be a mismatch between parent thresholds for what constitutes a need and the thresholds of the DSM. This is consistent with the longstanding observation that clinical samples are much worse off - both in term of symptoms and impairments - than children with the same diagnoses in the community (Goodman et al., 1997). This could be a reason why parent perception was low (38%) relative to DSM diagnostic thresholds.

As with older children, parent perception of need in preschool children was also associated with parent psychological factors (Teagle, 2002; Verhulst & Der ende, 1997). The findings here were mixed: parents with moderate/high depressive symptoms were more likely to perceive their diagnosed child as having a mental health need, whereas parents with a lifetime history of psychological impairment were more likely to perceive their child as having a need regardless of them having a diagnosis. Experiencing depressive symptoms may aid parents in recognizing their child's mental health need problems by appropriately sensitizing them such symptoms and/or having greater mental health literacy based on

their own experiences. Having a child with a diagnosis may also increase a parent's depressive symptoms. Prior literature has observed this pattern with continuous measures of maternal depressive symptoms in which severity is lower (Richters, 1992) and/or if the psychological disorder is in the past (Mendenhall & Frauenholtz, 2015). In our sample, the average number of symptoms in the moderate/high threshold was relatively low, thus herein current depressive symptoms may be representative of "low severity" psychopathology. Lifetime psychological impairment, in contrast, may be representative of "high severity" psychopathology. Such high severity psychopathology may limits the parent's emotional resources to cope with their child's challenges regardless of intensity (Mendenhall & Frauenholtz, 2015).

There were a number of study limitations. First, due to the cross-sectional nature of these analyses, the direction of effects cannot be determined. Multi-method/informant assessment could have increased objectivity of diagnostic and family information. Also, mental health problems and need were asked about 1) using only 2 items, and 2) near the end of the diagnostic interview. Future studies could explore these two items in more detail, adding qualitative data. The item timing may have inflated identification of child need as the parent had just reviewed all aspects of child mental health. Our sample excluded families without English fluency, and with autism spectrum disorder and intellectual disability. Marginalized groups and subgroups with different rates MH disorders may be more or less likely to perceive child mental health needs, thus these exclusions may have affected our results.

Parent perception of child MH problems is low relative to child MH diagnoses, suggesting that supplemental assessment is needed, perhaps via pediatric well-visits (Weitzman et al., 2015). As brain plasticity is highest in early childhood (Fox et al., 2010), evidence suggests the highest rate of economic return of intervention investment occurs in early childhood (Heckman, 2006) and that the most effective MH interventions involve parents (e.g., Comer et al., 2013; Lenze et al., 2011). As parents are crucial to preschooler mental health, it follows that parent mental health is crucial to preschooler mental health. These results provide additional efforts to support a shift in clinical practice including both assessment (Vidair et al., 2011) and intervention (Ivanova et al., 2019) from the individual child to the family.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

References

Angold A, Costello E, Messer S, & Pickles A (1995). Development of a short questionnaire for use in epidemiological studies of depression in children and adolescents. Development of a Short Questionnaire for Use in Epidemiological Studies of Depression in Children and Adolescents, 5(4), 237–249.

Angold, & Costello EJ (2000). The Child and Adolescent Psychiatric Assessment (CAPA). Journal of the American Academy of Child & Adolescent Psychiatry, 39(1), 39–48. 10.1097/00004583-200001000-00015 [PubMed: 10638066]

Beck AT, Epstein N, Brown G, & Steer RA (1988). An inventory for measuring clinical anxiety: Psychometric properties. Journal of Consulting and Clinical Psychology, 56(6), 893–897. 10.1037/0022-006X.56.6.893 [PubMed: 3204199]

- Bureau UC (n.d.). Historical Poverty Tables: People and Families 1959 to 2019. The United States Census Bureau. Retrieved November 5, 2020, from https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-people.html
- Chansky TE, & Kendall PC (1997). Social expectancies and self-perceptions in anxiety-disordered children. Journal of Anxiety Disorders, 11(4), 347–363. [PubMed: 9276781]
- Comer JS, Chow C, Chan PT, Cooper-Vince C, & Wilson LAS (2013). Psychosocial Treatment Efficacy for Disruptive Behavior Problems in Very Young Children: A Meta-Analytic Examination. Journal of the American Academy of Child and Adolescent Psychiatry, 52(1), 26–36. 10.1016/j.jaac.2012.10.001 [PubMed: 23265631]
- Costello EJ, & Janiszewski S (1990). Who gets treated? Factors associated with referral in children with psychiatric disorders. Acta Psychiatrica Scandinavica, 81(6), 523–529. 10.1111/j.1600-0447.1990.tb05492.x [PubMed: 2378243]
- Digdon N, & Gotlib IH (1985). Developmental considerations in the study of childhood depression. Developmental Review, 5(2), 162–199. 10.1016/0273-2297(85)90008-5
- Egger HL, & Angold A (2004). The Preschool Age Psychiatric Assessment (PAPA): A Structured Parent Interview for Diagnosing Psychiatric Disorders in Preschool Children. In DelCarmen-Wiggins R & Carter A (Eds.), Handbook of infant, toddler, and preschool mental health assessment. (pp. 223–243). Oxford University Press.
- Egger HL, Erkanli A, Keeler G, Potts E, Walter BK, & Angold A (2006). Test-Retest Reliability of the Preschool Age Psychiatric Assessment (PAPA). Journal of the American Academy of Child and Adolescent Psychiatry, 45(5), 538–549. 10.1097/01.chi.0000205705.71194.b8 [PubMed: 16601400]
- Fox SE, Levitt P, & Nelson CA (2010). How the Timing and Quality of Early Experiences Influence the Development of Brain Architecture. Child Development, 81(1), 28–40. 10.1111/j.1467-8624.2009.01380.x [PubMed: 20331653]
- Franz L, Angold A, Copeland W, Costello EJ, Towe-Goodman N, & Egger H (2013). Preschool anxiety disorders in pediatric primary care: Prevalence and comorbidity. Journal of the American Academy of Child and Adolescent Psychiatry, 52(12), 1294–1303.e1. 10.1016/j.jaac.2013.09.008 [PubMed: 24290462]
- Godoy L, & Carter AS (2013). Identifying and addressing mental health risks and problems in primary care pediatric settings: A model to promote developmental and cultural competence. American Journal of Orthopsychiatry, 83(1), 73–88. 10.1111/ajop.12005 [PubMed: 23330625]
- Goodman SH, Lahey BB, Fielding B, Dulcan M, Narrow W, & Regier D (1997). Representativeness of clinical samples of youths with mental disorders: A preliminary population-based study. Journal of Abnormal Psychology, 106(1), 3–14. 10.1037/0021-843X.106.1.3 [PubMed: 9103713]
- Grills AE, & Ollendick TH (2003). Multiple Informant Agreement and the Anxiety Disorders Interview Schedule for Parents and Children. Journal of the American Academy of Child & Adolescent Psychiatry, 42(1), 30–40. 10.1097/00004583-200301000-00008 [PubMed: 12500074]
- Heckman JJ (2006). Skill Formation and the Economics of Investing in Disadvantaged Children. Science, 312(5782), 1900–1902. 10.1126/science.1128898 [PubMed: 16809525]
- Horwitz SM, Leaf PJ, Leventhal JM, Forsyth B, & Speechley KN (1992). Identification and management of psychosocial and developmental problems in community-based, primary care pediatric practices. Pediatrics, 89(3), 480–485. [PubMed: 1371342]
- Ivanova MY, Dewey L, Swift P, Weinberger S, & Hudziak J (2019). Health Promotion in Primary Care Pediatrics: Initial Results of a Randomized Clinical Trial of the Vermont Family Based Approach. Child and Adolescent Psychiatric Clinics of North America, 28(2), 237–246. 10.1016/ j.chc.2018.11.005 [PubMed: 30832955]
- Kataoka SH, Zhang L, & Wells KB (2002). Unmet Need for Mental Health Care Among U.S. Children: Variation by Ethnicity and Insurance Status. American Journal of Psychiatry, 159(9), 1548–1555. 10.1176/appi.ajp.159.9.1548 [PubMed: 12202276]

Lenze SN, Pautsch J, & Luby J (2011). Parent-child interaction therapy emotion development: A novel treatment for depression in preschool children. Depression and Anxiety, 28(2), 153–159. 10.1002/da.20770 [PubMed: 21284068]

- Loeber R, Burke JD, Lahey BB, Winters A, & Zera M (2000). Oppositional Defiant and Conduct Disorder: A Review of the Past 10 Years, Part I. Journal of the American Academy of Child & Adolescent Psychiatry, 39(12), 1468–1484. 10.1097/00004583-200012000-00007 [PubMed: 11128323]
- Mendenhall AN, & Frauenholtz S (2015). Predictors of mental health literacy among parents of youth diagnosed with mood disorders. Child & Family Social Work, 20(3), 300–309. 10.1111/cfs.12078
- Mesman J, & Koot HM (2000). Child-reported depression and anxiety in preadolescence: II. preschool predictors. Journal of the American Academy of Child & Adolescent Psychiatry, 39(11), 1379–1386. 10.1097/00004583-200011000-00012 [PubMed: 11068893]
- Ngui EM, & Flores G (2007). Unmet Needs for Specialty, Dental, Mental, and Allied Health Care among Children with Special Health Care Needs: Are There Racial/Ethnic Disparities? Journal of Health Care for the Poor and Underserved, 18(5), 931–949. 10.1353/hpu.2007.0102 [PubMed: 17982216]
- Pavuluri MN, Luk S-L, & McGEE R (1996). Help-Seeking for Behavior Problems by Parents of Preschool Children: A Community Study. Journal of the American Academy of Child & Adolescent Psychiatry, 35(2), 215–222. 10.1097/00004583-199602000-00015 [PubMed: 8720631]
- Reardon T, Harvey K, & Creswell C (2020). Seeking and accessing professional support for child anxiety in a community sample. European Child & Adolescent Psychiatry, 29(5), 649–664. 10.1007/s00787-019-01388-4 [PubMed: 31410579]
- Richters JE (1992). Depressed mothers as informants about their children: A critical review of the evidence for distortion. Psychological Bulletin, 112, 485–485. [PubMed: 1438639]
- Teagle SE (2002). Parental Problem Recognition and Child Mental Health Service Use. Mental Health Services Research, 4(4), 257–266. 10.1023/A:1020981019342 [PubMed: 12558014]
- Turner N, Joinson C, Peters TJ, Wiles N, & Lewis G (2014). Validity of the Short Mood and Feelings Questionnaire in late adolescence. Psychological Assessment, 26(3), 752–762. 10.1037/a0036572 [PubMed: 24749755]
- Verhulst FC, & Der ende JV (1997). Factors Associated With Child Mental Health Service Use in the Community. Journal of the American Academy of Child & Adolescent Psychiatry, 36(7), 901–909. 10.1097/00004583-199707000-00011 [PubMed: 9204667]
- Vidair HB, Reyes JA, Shen S, Parrilla-Escobar MA, Heleniak CM, Hollin IL, Woodruff S, Turner JB, & Rynn MA (2011). Screening parents during child evaluations: Exploring parent and child psychopathology in the same clinic. Journal of the American Academy of Child and Adolescent Psychiatry, 50(5), 441–450. 10.1016/j.jaac.2011.02.002 [PubMed: 21515193]
- Weitzman C, Wegner L, & the SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS, C. on P. A. of C. and F. H. (2015). Promoting Optimal Development: Screening for Behavioral and Emotional Problems. Pediatrics, 135(2), 384–395. 10.1542/peds.2014-3716 [PubMed: 25624375]
- Zwaanswijk M, Van der ende J, Verhaak PFM, Bensing JM, & Verhulst FC (2003). Factors Associated With Adolescent Mental Health Service Need and Utilization. Journal of the American Academy of Child & Adolescent Psychiatry, 42(6), 692–700. 10.1097/01.CHI.0000046862.56865.B7 [PubMed: 12921477]

Key Practitioner Message:

 Despite children relying on their parents to refer them to psychological treatment, we do not know what contributes to a parent's perception of their child's mental health needs.

- In a study of 917 young children, we find Parent perception of need is multifactorial and is dependent on both child and parent factors.
- Parents' perception of child mental health need has a high threshold of child symptoms (19+) and impairment (4+) compared to those necessary for diagnosis (i.e., 3+ and 1+, respectively).
- Depressive disorders, and not externalizing disorders, were most likely to be perceived as a mental health need by parents of young children.
- Parents' perception of child mental health need is dependent on parental
 mental health: moderate/high depressive symptoms helped parents observe
 child diagnoses as a need, whereas severe impairment results in reporting of a
 child need even in the absence of a diagnosis.
- Clinicians have the opportunity to discuss parental mental health during child mental health assessment and treatment.

McGinnis et al. Page 12

Table 1.

Child Factors by Parent perception of Need

| | M(SD) or % Perceived as having a Need | n | t or X ² | p |
|----------------------------------|---------------------------------------|-----|---------------------|-------|
| Child Demographics | | | | |
| Age (R: 2-6) | 91214 | | 146 | .884 |
| Need | 3.96(1.21) | 670 | | |
| No Need | 3.94(1.27) 242 | | | |
| Sex | | 913 | .037 | .847 |
| Male (48%) | 14.7% | 133 | | |
| Female (52%) | 14.3% | 109 | | |
| Race/Ethnicity | | 802 | .672 | .412 |
| White (62%) | 15.0% | 113 | | |
| Minority (38%) | 12.9% | 89 | | |
| Child Mental Health Diagnosis | | | | |
| Depressive | | 913 | 58.66 | <.001 |
| Depressive Diagnosis (2%) | 81.3% | 40 | | |
| No Depressive Diagnosis (98%) | 13.3% | 202 | | |
| Anxiety | | 913 | 77.36 | <.001 |
| Anxiety Diagnosis (19%) | 35.9% | 142 | | |
| No Anxiety Diagnosis (81%) | 9.6% | 100 | | |
| Externalizing | | 913 | 81.21 | <.001 |
| Externalizing Diagnosis (10%) | 45.3% | 97 | | |
| No Externalizing Diagnosis (90%) | 10.9% | 145 | | |
| Child Mental Health Severity | | | | |
| Impairment Count | | 913 | 174.13 | <.001 |
| 0 (41%) | 6.6% | 27 | | |
| 1 (16%) | 13.8% | 33 | | |
| 2 (19%) | 14.7% | 48 | | |
| 3 (10%) | 28.1% | 38 | | |
| 4 (14%) | 70.9% | 96 | | |
| Symptom Count | | 913 | 161.68 | <.001 |
| 0–3 (14%) | 3.8% | 5 | | |
| 4–7 (25%) | 12.8% | 29 | | |
| 8–11 (22%) | 21.4% | 43 | | |
| 12–18 (22%) | 34.4% | 63 | | |
| 19–27 (17%) | 61.6% | 93 | | |

Note: Percentages are weighted, Ns are unweighted; impairment and symptom counts were winzorized at 95%

McGinnis et al. Page 13

Table 2.

Parent Factors by Parent perception of Need

| | M(SD) or % Perceived as having a Need | n | t or X ² | p | |
|--------------------------------|---------------------------------------|-----|---------------------|-------|--|
| Parent Demographics | | | | | |
| Age (R:16–67) | | 911 | 375 | .708 | |
| Need | 33.79 (7.15) | 242 | | | |
| No Need | 33.55 (6.66) | 669 | | | |
| Education | | 910 | 9.54 | <.001 | |
| No College Degree (46%) | 18.4% | 149 | | | |
| College Degree (54%) | 11.2% | 92 | | | |
| Relational Status | | 913 | 21.30 | <.001 | |
| Single (25%) | 24.0% | 88 | | | |
| Married (75%) | 11.4% | 154 | | | |
| Economic Status | | 841 | 20.39 | <.001 | |
| In Poverty (12%) | 29.1% | 56 | | | |
| Not in Poverty (88%) | 12.5% | 171 | | | |
| Parent Mental Health Diagnosis | | | - | | |
| Depressive Symptoms (R: 0–26) | | 799 | -6.76 | <.001 | |
| Need | 4.54 (4.02) | 211 | | | |
| No Need | 1.94 (2.91) | 588 | | | |
| Anxiety Symptoms (R: 0-63) | | 803 | -5.25 | <.001 | |
| Need | 7.51 (8.01) | 211 | | | |
| No Need | 3.53 (4.97) | 592 | | | |
| Psychological Impairment | | 913 | 65.34 | <.001 | |
| Impairment (33%) | 28.0% | 147 | | | |
| No Impairment (67%) | 7.9% | 95 | | | |

Note: Percentages are weighted, Ns are unweighted.

 Table 3.

 Parent Perception of Child Mental Health Need by Parent Mental Health Status within Child Diagnostic Status

| | Child Diagnosis | | | |
|-----------------------------------|--|-------------|--|--|
| Parent Mental Health | No Diagnosis | Diagnosis | | |
| Depressive Symptoms | % (n) Parents Who Perceive their Child as having a MH Need | | | |
| None-Mild Depressive Symptoms | 6.8% (44) | 32.8% (120) | | |
| Moderate-High Depressive Symptoms | 6.9% (5) | 73.1% (42) | | |
| X^2 | 00.001 | 15.61 | | |
| p | .982 | <.001 | | |
| Lifetime Psychological Impairment | | | | |
| No Impairment | 2.5% (28) | 38.1% (67) | | |
| Impairment | 20.7% (31) | 39.3% (116) | | |
| X ² | 66.35 | 00.03 | | |
| p | <.001 | .861 | | |

Note: Percentages are weighted, Ns are unweighted.

Table 4.

Significant Child and Parent Factors Predicting Parent perception of Need in a Simultaneous Regression Model (N=799)

| Parent Perception | В | SE | CI (| 95%) | p | OR |
|-----------------------------------|------|------|------|------|------|------|
| Child Factors | | LL | UL | | | |
| Depressive Diagnostic Status | 1.88 | 0.49 | .93 | 2.83 | .000 | 6.53 |
| Number of Impairments | 0.54 | 0.14 | .28 | .81 | .000 | 1.72 |
| Parent Factors | | LL | UL | | | |
| Current Depressive Symptoms | 0.10 | 0.04 | .03 | .17 | .006 | 1.10 |
| Lifetime Psychological Impairment | 1.10 | 0.37 | .37 | 1.83 | .003 | 3.01 |

 $Note: B = estimate, SE = standard \ Error, CI \ (95\%) = 95\% \ Confidence \ Intervals, LL = Lower \ limit \ UL = Upper \ Limit, p = p \ value, p = p \ valu$

OR=Odds Ratio

^{*=} < .05,

^{**=} <.01,