Depression in Parents, Parenting, and Children: Opportunities to Improve Identification, Treatment, and Prevention.

1. Introduction and Magnitude of the Problem

SUMMARY

Prevalence

- In the United States, 16.2 percent of adults reported major depression in their lifetime, while another 4.1 percent reported meeting a milder but chronic form of depression.
- Certain subpopulations of adults defined by selected population characteristics—such as sex, age, ethnicity, and marital status—indicate disparities
 in prevalence rates of depression. Female, younger, and divorced adults have higher rates of lifetime depression than their male, older, or married
 adult counterparts. In general, a positive association has been found between social disadvantage and depression prevalence, except in the case of
 first generation immigrants.
- Many adults in the United States are parents. Parents (with at least one child under age 18) have similar rates of depression compared to the entire U.S. adult population, including similar disparities in depression rates for selected population characteristics.
- Depression rarely occurs alone; 75 percent of individuals with lifetime or recent major depression also had at least one additional mental health or substance abuse diagnosis.

Impact

- · Depression, due to its recurrent nature, leads to sustained individual, family, and societal costs.
- 15.6 million children under 18 years of age are living with an adult who had major depression in the past year.
- Depression in parents can have serious biological, psychological, behavioral, and social consequences especially for children who rely on a parent for caregiving, material support, and nurturance.
- · Despite this impact, depression is perhaps one of the most effectively treated psychiatric disorders, if recognized and treated early in its onset.

Barriers

- Individual-, provider-, and system-level barriers exist that decrease the access to and quality of care for depressed adults. These institutional, sociocultural, and linguistic barriers are responsible for causing and maintaining existing disparities. Without a system of care that is culturally and linguistically sensitive and supports a family's environment, economic resources and relationships with family, coworkers, the community, and society, such disparities may increase. Improving provider-patient-family communication is an important component of addressing differences in quality of care that are associated with patient race, ethnicity, culture, and language.
- The current policy environment does not encourage a two-generation (i.e., parent, child) identification, treatment, and prevention strategy for adults with depression.

Depression is a common, universal, and debilitating public health problem. The Global Burden of Disease study by the World Health Organization (WHO) determined that depression accounts for more disability worldwide than any other condition during the middle years of adulthood (Murray and Lopez, 1996). In fact, major depressive disorder is now the leading cause of disability worldwide (World Health Organization, 2001). For some with depressive episodes, periods of depression may resolve in a few weeks or months. However, it has been estimated that, for 30 to 50 percent of adults, depression is recurrent or chronic or fails to resolve completely (e.g., Depue and Monroe, 1986; Judd et al., 1998; Solomon et al., 2000). Ironically, de pression is perhaps one of the most effectively treated psychiatric disorders and, if recognized early, it can be prevented.

International surveys attest to the universality of depression across cultures. A WHO-based study (using the Composite International Diagnostic Interview1) of 10 countries in North America, Latin America, Europe, and Asia reported a range of lifetime major depression from 3 percent in Japan to 16 percent in the United States (Andrade et al., 2003). More recently, the WHO World Health Surveys, a cross-national study comprised of nearly 250,000 participants in 60 countries across all regions of the world, estimated the overall 1-year prevalence of depressive episode (using criteria of the *International Statistical Classification of Diseases and Related Health Problems*, 10th revision) alone to be 3.2 percent (Moussavi et al., 2007).

Depression can be disabling for anyone, but the extent of its impact goes beyond the affected individual to the broader family context and especially to the depressed person's children, who are dependent on their parent for their care and support of their development. Under these circumstances, depression becomes a multigenerational disorder that can have serious biological, psychological, behavioral, and social consequences, especially for children who rely on a parent for caregiving, material support, and nurturance. Effective treatments aimed at reducing or eliminating depression among parents or caregivers may therefore also constitute a significant preventive intervention for children.

Expressed in purely monetary terms, the economic burden of depression is a serious global public health problem as well (Luppa et al., 2007; Moussavi et al., 2007). Estimated costs related to depression in the United States increased in the past decade from \$77.4 billion dollars in 1990 to \$83.1 billion in 2000 (Greenberg et al., 2003). Of the estimated total amount in 2000, direct treatment costs were \$26.1 billion, workplace costs were \$51.5 billion (e.g., absenteeism, reduced productivity), and suicide-related costs were \$5.4 billion (Greenberg et al., 2003; Muñoz, 2003). There exists, moreover, a strong association between

depression and non-adherence to treatment of such medical conditions as diabetes or coronary heart disease, leading to higher treatment costs for their medical care than patients with medical conditions who are not depressed (DiMatteo, Lepper, and Croghan, 2000).

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STUDY CHARGE, APPROACH, AND SCOPE

In May 2006, with support from the Annie E. Casey Foundation, the National Research Council and the Institute of Medicine convened a two-day planning meeting to explore the need for and focus of a future study on maternal depression. Researchers from a variety of disciplines, including pediatrics, policy, and community health, reviewed a small set of studies from the research literature and explored whether the quality of the work was sufficient to support a future comprehensive analysis of the evidence base surrounding maternal depression as well as an exploration of how to improve the application of this knowledge to policy, practice, and program development.

The presentations and discussion resulted in a few key conclusions. The research literature on the treatment and prevention of depression among adults and children is rich with findings about effective interventions. More importantly, there exists a sound knowledge base about the effects of depression in families, the mechanisms of transmission of illness, and the risk and protective factors that either trigger or prevent onset or reduce severity of the disorder. The last 10 years have witnessed an increase in evidence-based prevention in general and the development of promising approaches specific to the identification, treatment, and prevention of depression in families. Aside from presenting and assessing the existing evidence, the meeting also shed light on serious gaps in the synthesis and application of extant findings and interventions in the family setting because of the diffuse and disjointed nature of the prevention, identification, and treatment literatures. Specifically, there exists a need to identify approaches that can highlight ways to translate research knowledge into effective interventions in a broad range of parental support and child health and development strategies.

Study Charge

Concerned about these complex issues, the National Academies' Board on Children, Youth, and Families formed the Committee on Depression, Parenting Practices, and the Healthy Development of Children, with funding from the Robert Wood Johnson Foundation, the Annie E. Casey Foundation, The California Endowment, and the Substance Abuse and Mental Health Services Administration and the Health Resources and Services Administration of the U.S. Department of Health and Human Services. The National Research Council and the Institute of Medicine appointed the 17-member committee in October 2007 to review the relevant research literature on the identification, prevention, and treatment of parental depression, its interaction with parenting practices, and its effects on children and families. The committee was asked to

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2.

clarify what is known about interactions among depression and its co-occurring conditions, parenting practices, and child health and development;

identify the findings, strengths, and limitations of the evidentiary base that support assessment, treatment, and prevention interventions for depressed parents and their children;

3.

highlight disparities in the prevalence, prevention, treatment, and outcomes of parental depression among different sociodemographic populations (e.g., race/ethnicity, socioeconomic status);

4.

examine strategies for widespread implementation of best practice and promising practice programs, given the large numbers of depressed parents; and 5.

identify strategies that can foster the use of effective interventions in different service settings for diverse populations of children and families.

Study Approach

A variety of sources informed the committee's work. Five formal committee meetings and one public workshop were held during the course of the study. The workshop explored innovative strategies and models that integrate mental health services for depression, parenting, and child development services within various settings for diverse populations of children and families; explored strategies that insure interventions are appropriate for diverse populations; and explored existing opportunities for interventions as well as existing barriers to implementation or replication of promising programs or best practices at regional, state, multi-state, or national levels in a variety of settings.

The committee also reviewed literature from a range of disciplines and sources. Technical reviews were commissioned by experts on a variety of topics including: genetics and the environment; integration and implementation of services and models of care; the economic burden of depression; public-health policy; and vulnerable populations. Data and research on depression in adults, specifically parents, were analyzed. The committee considered research on the causes, comorbidities, and consequences of depression in adults (including parenting and child health outcomes), various health and support services for depression care, the features of interventions and implementation strategies for depression care in diverse populations, and public policies related to implementing promising interventions.

Additionally, the committee visited programs focused on providing mental health services in substance abuse settings to underserviced populations. The limited evaluation of these programs and the lack of a standard against which to study them make it impossible to designate any of them as exemplary models of care. However, these visits provided examples of health services being delivered specifically to vulnerable and underserviced parents, and they helped the committee gain insight into various services, partnerships, approaches, and care models that are used. The sites visited were Entre Familia Program of the Boston Public Health Commission and PROTOTYPES Women's Center in Pomona, California. Both visits encompassed a tour of the program site and meetings with leaders of the sponsoring institution and other staff and partnering programs.

Study Scope

The committee was charged broadly with an examination of depression in parents and its effects on parenting practices and child development. However, the charge did not specify what "depression" or "parents" should encompass. Therefore, one of the committee's early tasks was to reach consensus on how to define these terms in reviewing the literature.

Defining Depression

The available literature on depression in adults—and, more specifically, on parents and its effects on parenting practices and children and families—has not measured depression in a consistent manner; it is therefore important to consider these varied approaches. In general, there is continual debate on how to define mental disorders, and specifically for depression there are many tools used in the literature to assess adults for depression.

A review by Frank and Glied (2006) on mental health policy in the United States describes three ways in which epidemiologists generally define who has a mental disorder: (1) those who have *symptoms and signs* of a particular disorder, (2) those who have mental health-related *impairment* in daily life, and (3) those who have sought *treatment* for a mental health condition. A combination of these three is generally preferred over a single one because each selects a distinct subgroup of the population, usually with small overlap. In addition, experts continue to argue about the specific combination of signs and symptoms on which diagnoses should be based.

A variety of methods are used to screen for or diagnose depression, which is reflected in the literature that the committee reviewed. The use of diverse methods for defining depression is a result of restrictions on time and cost, study populations' sociodemographic characteristics (e.g., race/ethnicity, socioeconomic status), and differences in provider training. Research that defines parental depression by symptoms is more common in the literature than a clinical diagnosis. Literature that discusses effects of depression on parenting practices is based mostly on depressive symptoms or "distress." In addition, defining depression using symptoms may be more efficient overall from the provider's perspective but may complicate detection in a person also experiencing conditions resulting from substance use or trauma. For example, substance abuse greatly influences symptoms of mental illness and vice versa. Further, using methods that define depression by symptoms may lead to higher rates among one group over another, for example women compared to men.

The problem with using a clinical definition of parental depression is that it generally identifies only those who are active in the mental health system; people who are isolated or who are disadvantaged are less likely to have access to mental health services and hence are more likely to go undiagnosed. And methods used for clinical diagnosis may vary by type of provider. Generalist physicians provide most of the depression screening and care to the general population, whereas the limited number of available specialty mental health providers (i.e., those with advanced mental health training) may see a more severely ill population.

Given these considerations, in describing this literature on depression in adults who are parents and its effects on parenting practices, children, and families, the committee chose to use both symptoms and a clinical diagnosis of depression whenever the data were available. However, due to the concerns described above, it may be important to distinguish the use of methods that use self-report symptoms compared to clinician-rated depression diagnosis because the method could highlight different outcomes seen across studies of depression, parenting, and child outcomes.

Defining Parents and the Family Unit

Family composition is marked by increased diversity and change. It has been estimated that less than 50 percent of children in the United States live in traditional nuclear families, in which two biological parents are married to each other with full siblings (Brandon and Bumpass, 2001). Instead, children's living arrangements increasingly include unmarried parents, step-families, foster parents, and multigenerational households. For example, the proportion of cohabitating same-sex and opposite-sex couples who have children is increasing (Bengtson et al., 2005). In addition, the number of grandparents who are raising their grandchildren has increased dramatically over the past few decades (Casper and Bryson, 1998). However a family unit is composed, it still holds true that 70 percent of children under the age of 18 live in two-parent households (Federal Interagency Forum on Child and Family Statistics, 2007).

The committee focused its search of the impact and prevalence of depression, interventions, and strategies of implementation on depression in parents on all individuals who take care of a child or children in a variety of family structures. This definition of a parent allows discussion to include a variety of caregivers of children. However, having decided to focus the study on a variety of caregivers in a variety of family structures, we found limited literature specifically on parents with depression and even more limited information regarding specific groups of caregivers, including fathers and grandparents. The little information that is available for these other caregivers is highlighted throughout the report when available.

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STUDY CONTEXT

Parents and Their Children

In 2004, it was estimated that approximately 148.8 million parents live in the United States (U.S. Census Bureau, 2005a, 2005b). The Current Population Survey, through its household survey data, helps to track the number of mothers, fathers, and other caregivers who take care of children under the age of 18 in the United States. In 2007, it was estimated that there were 36.5 million married parents, single fathers, and single mothers (i.e., households) who care for their own children under the age of 18—that is, approximately 47 percent of households (U.S. Census Bureau, 2008b). Together, these parents take care of approximately 96 percent of almost 74 million children under age 18 in the United States. The remaining 3 percent of children (2.5 million) do not live with either of their parents, but with a grandparent, other relative, or nonrelative or are in the foster care system (U.S. Census Bureau, 2008a).

Prevalence of Depression

In the United States, the 2001 National Comorbidity Survey-Replication (NCS-R) revealed that the prevalence of major depression (defined by syndrome features, impairment, and duration of at least two weeks) in adults in their lifetime was 16.2 percent (over 3 million adults), while another 4.1 percent met the diagnostic criteria for dysthymic disorder, a milder but chronic form of depression (The ESEMeD/MHEDEA 2000 Investigators, 2004; Kessler et al., 2003). Overall, both international and national data support the universal nature of depression. While many studies do not specifically investigate parental depression or even note parental status among their samples, a few national surveys help give insight into the prevalence of depression among adults who are also parents in the United States. For example, a subsample of the National Comorbidity Survey Replication in 2002 reported that 17 percent of parents (with at least one child) had major or severe depression in their lifetime, a prevalence similar to that of the entire U.S. population of 16.2 percent (see <u>Table 1-1</u>). Examining rates

of parental depression in the past year, the NCS-R found that approximately 7 percent of parents (with at least one child) had major or severe depression in the last 12 months and did not differ by the age of the child (see <u>Table 1-1</u>). The Pregnancy Risk Assessment Monitoring System (PRAMS), another national data set that collects self-reported data, offers further insight on the scope of depression, specifically in postpartum women. The survey found that 11 to 20 percent of new mothers were affected by depressive symptoms following childbirth (Centers for Disease Control and Prevention, 2008). One important longitudinal study in the United Kingdom of parents and child outcomes, the Avon Longitudinal Study of Parents and Children, was used to do secondary analyses of paternal peripartum depression (Ramchandani et al., 2008). Father's depression correlated strongly with maternal depression scores, suggesting that, when fathers are depressed, there may be a high prevalence of both parents being depressed.

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TABLE 1-1

Prevalence of Major Depressive Disorder with Hierarchy for Adults with at Least One Child Under the Age of 18 Years, 2002.

Disparities and Vulnerable Populations

Despite its prevalence across cultures, sexes, income strata, and age groups, tremendous differences in depression rates in particular sociodemo graphic categories is noteworthy. For example, women are about twice as likely to be diagnosed with depression as men in nearly all cultures (Andrade et al., 2003; Kessler, 2003; Riolo et al., 2005). Among adults overall, rates of depression are higher among single or divorced people than among their married counterparts (e.g., The ESEMeD/MHEDEA 2000 Investigators, 2004; Kessler et al., 2003). Stratified by age, depression is more common among teenagers and younger adults than among older adults, with apparently increasing rates in more recently born cohorts (e.g., Cross-National Collaborative Group, 1992; The ESEMeD/MHEDEA 2000 Investigators, 2004; Kessler et al., 2005). Similarly, a subsample of the NCS-R reports significant differences in lifetime and past year major depression prevalence rates among parents by gender, marital status, if English was their primary language while they were growing up, if they were born in the United States, and by race/ethnicity (see Tables 1-2 and 1-3). Mothers have almost double the prevalence of lifetime major depression than fathers. Parents overall and especially mothers who were divorced, widowed, or separated reported higher lifetime prevalence of major depression than those who were married or never married. Also, parents and mothers born in the United States and raised with English as their primary language report lifetime major depression significantly more than those who were not born in the United States or if English was not their primary language. Unlike the general population of parents and mothers, fathers reported significant differences in lifetime depression rates by current work status. Fathers not in the workforce at all have almost double the prevalence of lifetime depression than fathers who are employed or currently unemployed. Among the general population of parents, poverty status, and educational attainment did not significantly affect the prevalence of lifetime major depression. Although differences in rates by gender and marital status were similar as for prevalence of lifetime major depression, reports of major depression in the past year also found additional differences by current work status. Parents, and in particular fathers, who were employed had approximately half of the prevalence of major depression in the past year compared with parents who were unemployed or not in the workforce (see Table 1-3). Finally, similar to the general adult population and specific to the parent population, the Medical Expenditure Panel Survey in 2004 found gender disparities in the prevalence of poor mental health. A total of 4.5 percent of households reported that the mother was the only adult with fair or poor mental health, compared with 2.6 percent of households who reported that the father was the only adult affected. Around 1 percent of households report that both adults (mother and father) had fair or poor mental health (personal communication, Stephen Petterson, Robert Graham Center, February 13, 2008).



TABLE 1-2

Lifetime Prevalence of Major Depression with Hierarchya by Selected Demographic Characteristics for Adults with at Least One Child Under the Age of 18 Years, 2002 (taking into account weighting and complex survey design).

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TABLE 1-3

12-Month Prevalence of Major Depression with Hierarchy by Selected Demographic Characteristics for Adults with at Least One Child Under the Age of 18 Years, 2002 (taking into account weighting and complex survey design).

It is not clear whether certain subgroups of the population are disproportionately affected by depression. For example, differences in (particu larly chronic) depression are reported along the lines of race and ethnicity. However, there seem to be some inconsistencies about whether the prevalence rates for depression in the general adult as well as in the parent population in racial/ethnic minority groups is higher or lower than their white counterparts. Existing national surveys2 report lower rates in *life-time* prevalence for adults in these racial/ethnic minority groups (e.g., Asian Americans, African Americans) and similar prevalence rates *in a given year* to that of non-Hispanic whites (Takeuchi et al., 2007; Williams et al., 2007). The limited available evidence suggests the need for research on this topic (Jackson and Williams, 2006). The subsample of the NCS-R specific to parents shows the highest rates of lifetime and past year major depression specifically among parents who are black immigrants from the Caribbean (about 30 percent), followed by non-Hispanic whites (around 20 percent), African Americans (around 12 percent), non-Mexican Hispanics (around 15 percent), and Mexicans (10 percent). Asians report the lowest prevalence (around 9 percent) (see Tables <u>1-2</u> and <u>1-3</u>).

A number of studies have examined depression among groups that are disadvantaged for a variety of reasons, such as poverty. While these studies differ in terms of design, sample size, and specific findings, they all document the same trend: a positive association between depression and *social disadvantage*, except in the case of first generation immigrants. For example, studies of low-income women found depression rates nearly double those in the general population, ranging between 12 and 27 percent for current (Bassuk et al., 1998; Jesse et al., 2005; Lanzi et al., 1999) and 43 percent for lifetime prevalence (Bassuk et al., 1998). A longitudinal population study showed a clear relationship between worsening socioeconomic circumstances and depression, and a meta-analysis of 51 studies found compelling evidence for socioeconomic inequality in depression (Lorant et al., 2003, 2007). Among women participating in state welfare-to-work programs, Siefert and colleagues (2000) recorded current depression among more than a quarter of them. A national survey found homeless women with lifetime prevalence rates of depression around 45 percent and current (i.e., past month) prevalence rates of roughly 10 percent (Bassuk et al., 1998). In their research with incarcerated women, Bloom and colleagues found that 13.7 percent of their sample had been diagnosed with a current episode of depression (Bloom et al., 2003). Research indicates that immigrants from Mexico, the Caribbean, and Africa have lower rates of mental health disorders than their U.S.-born counterparts (Miranda et al., 2005; Vega et al., 1998); however, recent surveys also indicate the mental health status of immigrant populations has been found to deteriorate with the time of tenure in the United States (Grant et al., 2004; Vega et al., 1998).

The scientific literature classifies many of these groups as "vulnerable populations." The notion of vulnerability is based on the epidemiological concept of risk, which is used to quantify the probability that an individual will become ill or suffer adversity in a given period of time. According to this definition, vulnerable populations are comprised of individuals who have a higher probability of experiencing poor physical, psychological, or social health than others at any point in time due to shared sociodemographic or environmental circumstances (Aday, 1994). Social vulnerability affects health in general and depression specifically via several pathways. For example, such factors as limited access to knowledge and resources as well as increased exposure to such social stressors as marginal neighborhoods, community violence, and discrimination directly affect the genesis, progression, and treatment of depression. In addition, the stigma associated with belonging to a disadvantaged group may increase individuals' isolation, thus causing or exacerbating depressive symptoms, and it may affect their treatment-seeking behaviors. More generally, the stigma of having a diagnosis of depression among certain disadvantaged and cultural groups may impede depression-related research endeavors (U.S. Surgeon General, 1999).

The concept of vulnerability has important research and policy implications for two main reasons. First, risks may accumulate additively or multiplicatively, depending on the number of high-risk groups to which an individual or family belongs. Second, compared with their normative counterparts, vulnerable populations may require additional medical and social services to meet their multiple, coinciding physical and mental health needs, as well as their children's developmental needs.

Bearing in mind such vulnerability-related considerations is of particular importance in the context of depression because it is precisely those social environments and characteristics in which depression most commonly occurs—such as poverty, marital status, or disadvantage due to gender, race and ethnicity —that are themselves factors likely to exacerbate or prolong depression. Because of their typically stressful and enduring nature, these conditions may create a constellation of vulnerabilities that overwhelm the person's coping capabilities and diminish the effectiveness of treatments that have proven successful under less challenging circumstances. Moreover, given the disproportionate incidence of depression among women, particularly those who are poor and single, as well as those who are young and in their prime childbearing and child rearing years, depression poses a concern because of its potential for impairing parenting.

The data from the NCS-R specific to parents reveal similar prevalence rates of depression compared with adults in general, including disparities in gender, race/ethnicity, and marital status, and employment status for fathers. Other demographic disparities that are generally considered a contributor to depression, i.e., income level, was not seen to *significantly* contribute to depression in parents in this particular subsample of one study (although a difference is still seen). More longitudinal and cross-sectional data are needed to further document and clarify the prevalence, incidence, disparities, causes, and consequences of depression in adults who are parents.

Comorbidities and Correlates of Depression

According to the National Comorbidity Survey, approximately 75 percent of individuals who had lifetime or recent depression also had at least one additional mental health or substance abuse diagnosis (Kessler et al., 2005), as did 60–65 percent of those with current major depression, as reported in both U.S. and international studies (e.g., De Graaf et al., 2002; Rush et al., 2005). Often the depression occurs in part because of difficulties caused by the other disorders, principally substance abuse, anxiety disorders, and conduct and antisocial disorders. In addition, depression is often comorbid with other chronic medical conditions, such as diabetes, hypertension, and arthritis, and can worsen their associated health outcomes (Ciechanowski, Katon, and Russo, 2000; Katon, 1998, 2003; Moussavi et al., 2007). Individuals who are depressed are more likely to amplify physical symptoms and to develop catastrophic ideas about the causes and consequences of their symptoms (Barsky, 1979; Edwards et al., 2006). The social and physical functioning of depressed individuals often is poor, and they are hospitalized more frequently than people with other major chronic medical problems. Such comorbid conditions may greatly complicate the severity, duration, and recurrence of depression and diminish the effectiveness of treatments for it. The reverse is also true: depression may impede individuals' efforts to find effective treatments or coping strategies for dealing with their co-occurring disorders.

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IMPACT OF DEPRESSION

Adding to the problem that depression rarely occurs alone, a further complication is the recurrent nature of depression as well as its impact on individuals, their families, and society. Although depressed mood or sadness are normal human experiences associated with loss of treasured relationships, disappointments, and failures, most people who experience such states recover quickly within hours or a few days. However, clinically significant depression not only persists but also has detrimental effects on intellectual processes and attitudes about the self, the world, and the future; impedes adaptive behaviors and family and social interactions; erodes en ergy; and disrupts bodily processes—in addition to its effect on mood and emotions.

Individual

The National Institute of Mental Health Collaborative Health Program on the Psychobiology of Depression found that, over a 5-year period, depressed persons had lower educational achievement, lower income levels, fewer periods of employment, and decreased occupational status than nondepressed persons matched for age and gender (Coryell, Endicott, and Keller, 1990). The multisite WHO study on the effects of depression on social functioning found that, after 10 years, 25 percent of depressed patients showed poor functioning and about 40 percent exhibited moderate impairment (Thornicroft and Sartorius, 1993). Even with appropriate treatment, depression has the tendency to be episodic and recurrent; that is, after a person has been depressed once and recovers, he or she is likely to experience one or more subsequent episodes; single episodes of depression are the exception (Andrews, 2001; Solomon et al., 2000). This recurrent pattern of illness leads to sustained individual, family, and societal costs.

Consequently, individuals with depression often cannot function in optimal ways in their close relationships or in work, social, and leisure activities. Thus, depression is associated with decrements in work attendance, work quality, and productivity (Kessler et al., 2006; Wang et al., 2004); with unresponsive, harsh, or rejecting parenting (Cummings and Davies, 1999; Goodman and Gotlib, 1999); with dissatisfaction or conflict in close relationships (Kessler, Walters, and Forthofer, 1998; Whisman, 2001); and with medical problems due both to poor self-care and to the effects of depression on neurobiological and immune functioning (Evans et al., 2005; Katon, 2003). Even depression that is considered "subclinical" in severity may, if sufficiently enduring, predict impaired functioning in important roles or disproportionate use of services (Johnson, Weissman, and Klerman, 1992; Wells et al., 1989).

Family and Society

Addressing the charge to the committee, this report describes a large number of traditional clinical and epidemiological approaches documenting the negative impact of depression in parents on parenting and children's health and development. Using the prevalence data presented above, the number of children under the age of 18 in each household from the NCS-R (i.e., 2.07172), and applying it to U.S. Census data from 2001, the committee estimates that 15.6 million children under 18 years of age are living with an adult who had major depression in the past year (note: the NCS-R public use data does not provide data on depression diagnosis on both parents in a household, so this may be an underestimate of the number of these children). Yet few opportunities currently exist to identify this vulnerable population or to offer prevention and treatment services that can also enhance the parenting practices of a depressed parent in a framework that also offers services for children.

But the focus of the current research literature primarily on symptoms and diagnosis of depression in an adult does not do justice to the larger possible impacts on family development. It is essential to consider both in terms of either difficulties or opportunities for prevention, not just the individuals in the family but the family as a whole. A much broader definition of effects on the family is needed, which the committee introduces here in this report.

This conceptualization considers broadly the environment, economic resources, and relationships with family, coworkers, the community, and society (see Figure 1-13). The community environment may either contribute to the impacts of parental depression in a family or help to mitigate them. Costs to families are much greater than individual economic costs for the depressed person. The burden of suffering is large for the depressed individual and frequently for other family members as well. The community environment is also likely to directly influence child outcomes. And a family's current characteristics and financial resources are likely to affect the economic impact of a depressive episode on the family. Once depressed, parents have an effect on their own potential human capital (i.e., decreased employment, earnings, productivity), social capital (i.e., skills, abilities, knowledge, relationships), and their decisions on allocating their resources (i.e., time, money). These characteristics and decisions affect the well-being of family members in both the short term and the long term. They can include the maintenance and development of their children's physical and mental health (e.g., they cannot take them to the doctor for well-child visits), their development of human capital (e.g., their child dropping out of school, achieving poorer academic performance), and their development of social capital (e.g., their child's impairment in marital and work relationships). Taking a developmental approach that addresses long-term possible negative consequences of parental depression emphasizes both the magnitude of the costs and the need for action.



FIGURE 1-1

Conceptual model of the economic impact of depressed parents on children. NOTES: Employment = unemployment, reduced productivity; Environment = physical—housing quality, rural versus urban; social—crime rates, racial/ethnic representation, (more...)

A parent is central to the family's functioning. His or her impairments can have dramatic effects on their children and the family. These patterns of impairment in depressed parents and the risks to their families offer natural targets for preventive and treatment interventions at various levels, including, for example, making sure that families with depression have health insurance or recognizing that, with depression, parents will need additional support to get tasks done.

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BARRIERS TO CARE

Like a variety of other health services, access to care for depression may be influenced by geographic, physical, financial, sociocultural, and temporal barriers. Such barriers include transportation issues, physical disabilities, language barriers, cultural customs and beliefs, and health insurance coverage. Furthermore, an individual's ability to access and use care may be affected by demographic characteristics (i.e., age, gender, education level, occupation, race/ethnicity), need (i.e., perceived health) and enabling characteristics (i.e., language, income, convenience, transportation, health system characteristics like infrastructure, linkages to a variety of providers). Stigma is a major barrier to seeking mental health treatment. Both self-stigma (people's own responses to depression and help-seeking) and perceived stigma (perceptions of others' negative responses) partially account for people's reluctance to seek treatment (Barney et al., 2006; Halter, 2004). Many people are not familiar with treatment options, there is stigma associated with mental health treatments, and many providers are not aware of their patients' preferences (Dwight-Johnson et al., 2000; Givens et al., 2007; Jaycox et al., 2006).

A number of institutional and sociocultural barriers are responsible for causing and maintaining existing disparities in access to and quality of mental health services received by minority groups. A succinct summary of the complex constellation of barriers is that "disparities result from ongoing interactions among factors at the levels of the health care environment, health care organization, community, provider, and person throughout the course of the depression development and treatment-seeking process" (Chin et al., 2007; Van Voorhees et al., 2007, p. 1617). Social marginalization, which has played a key role in rendering some populations disproportionately vulnerable to and affected by incidence of depression, extends its adverse impact by limiting the engagement of and treatment in historically underserved communities (Aguilar-Gaxiola et al., 2008). These groups' isolation from mainstream society because of linguistic barriers, geographic isolation, a history of oppression, racism, discrimination, poverty, and immigration status plays a key role in creating and perpetuating many of the barriers to treatment.

In addition to individual and provider barriers to care specific to depression in adults, a body of literature continues to document the system-level limitations in mental health care generally. As described in a 2006 Institute of Medicine report entitled *Improving the Quality of Health Care for Mental and Substance-Use Conditions*, the "inadequacy of [mental health and substance use] health care is a dimension of the poor quality of all health care" (Institute of Medicine, 2006, p. 8). However, it also points out that care for mental health and substance use problems is also distinct from health care generally. The distinctive features they describe include greater stigma associated with diagnoses, a less developed infrastructure for measuring and improving the quality of care, a need for a greater number of linkages among multiple clinicians, organizations and systems providing care to patients with mental health conditions, less widespread use of information technology, a more educationally diverse workforce, and a differently structured marketplace for the purchase of mental health and substance use health care (Institute of Medicine, 2006). With this in mind, the report recommended using the strategy set forth by another Institute of Medicine report

(2001), Crossing the Quality Chasm, as a basic framework to achieve substantial improvements in quality of care, but to tailor it to the distinctive features of mental health and substance use care.

Depression presents a fundamental paradox: it is one of the most prevalent of psychiatric conditions but also one that is highly amenable to treatment, at least in the acute phase. The U.S. Surgeon General, the National Institutes of Health, the Substance Abuse and Mental Health Services Administration, and many others continue to document advances in the understanding of depression, the identification and assessment of depressed individuals, and the development of efficacious treatments, as well as strategies for delivering these interventions effectively. Yet despite recent scientific advances, in 2007, only 64 percent of adults in the United States who had a major depressive episode in the past year received some form of treatment (Office of Applied Studies, 2008). Only approximately 30 percent of depressed adults in community samples reportedly will receive any treatment (Simon et al., 2004). Further, depression in adults is typically discussed as an isolated problem. The focus is rarely on how depression affects parenting and child outcomes; how often it occurs in combination with other parental risks, like substance abuse and trauma; or what kinds of strategies can help to identify, treat, and prevent these negative consequences for parents and their children (Knitzer, Theberge, and Johnson, 2008). The current policy environment does not encourage an identification and treatment strategy with this kind of two-generation developmental lens, nor does it support the dissemination or implementation of the growing body of knowledge about effective interventions.

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CONCLUSION

National surveys exist that describe the rates of depression in adults and indicate disparities as defined by selected population characteristics. A subsample of one such survey specifically identified the parental status of these adults. Parents (with at least one child under age 18) have similar rates of depression compared to the entire U.S. adult population, including similar disparities in depression rates for selected population characteristics such as sex, age, and marital status. In general, social disadvantage has been positively associated with higher prevalence rates of depression in adults except in the case of newly arrived immigrants. Further, a majority of individuals with major depression also had at least one additional mental health or substance abuse diagnosis. Thus, comorbidity between mental disorders tends to be the norm rather than the exception.

Depression, due to its recurrent nature, leads to sustained individual, family, and societal costs. Furthermore, depression in parents or other caregivers can have serious biological, psychological, behavioral, and social consequences especially for children. More longitudinal and cross-sectional data are needed to further document and clarify the prevalence, incidence, disparities, causes, and consequences of depression in adults who are parents. Individual-, provider-, and system-level barriers exist that decrease the access to and quality of care for depressed adults. These institutional and sociocultural barriers are responsible for causing and maintaining existing disparities. Without a system of care that supports a family's environment, economic resources and relationships with family, coworkers, the community, and society, such disparities may increase.

Ultimately depression is a good and effectively identified indicator of a problem that could trigger a system of care (if it is in place) that intervenes not only by treating depression in the parent but also by enhancing parenting skills and alleviating other stresses, co-occurring conditions, and social contexts, as well as identifying children at risk.

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ORGANIZATION OF THE REPORT

Following this introduction, <u>Chapter 2</u> describes new approaches to tackling parental depression as well as issues and standards in evaluating this literature. <u>Chapter 3</u> reviews the causes of depression, and <u>Chapter 4</u> reviews the effects of depression on parenting and child health and psychological functioning. <u>Chapter 5</u> reviews strategies to identify and assess depression, and <u>Chapter 6</u> reviews strategies for the treatment of depression in parents and their families. <u>Chapter 7</u> reviews strategies for preventing depression in parents, with a special emphasis on the prevention or reduction of adverse outcomes in children of parents who are depressed. <u>Chapter 8</u> describes an ideal vision of a depression care intervention system, highlighting important components of this system that are emerging in selected service settings as well as through state and European initiatives, and reviewing federal-level initiatives that have supported this knowledge base. <u>Chapter 9</u> describes systemic, workforce, and fiscal policy challenges that have emerged from current initiatives associated with implementing innovative evidence-based strategies in addressing depression in parents and its impact on children. <u>Chapter 10</u> describes next steps that can be taken to help contribute to the design and implementation of the ideal prevention and depression system for parental depression, which includes knowledge development and the creation of an organizational culture receptive to new research. To aid the reader, the committee's summary of the literature is presented at the beginning of the chapter and the conclusions, research gaps, and committee's recommendations are presented at the end of each chapter, where appropriate. Finally, the role of culture, language, and social determinants of health were identified across the chapters when literature was available when describing vulnerable populations who experience mental health disparities. A list of acronyms is provided in <u>Appendix A</u>. The agenda and participants of the c

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