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The Adverse Effects of Maternal Depression and Poverty on Child Development

Courtney A. Nyseth
Portland State University

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The Adverse Effects of Maternal Depression and Poverty on Child Development

by

Courtney A. Nyseth

An undergraduate honors thesis submitted in partial fulfillment of the

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Thesis Adviser

Chris Carey, PhD

Portland State University

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Abstract

This thesis examines the issues of maternal depression and poverty, their connection, and the overall adverse effects on child health, behavior, development, and school achievement.

Poverty and maternal depression are ongoing social issues in the United States. They are both influenced by several factors such as socioeconomic status, maternal health, and family instability. These factors all directly relate to childhood health and social inequalities.

Poverty, maternal depression, substance abuse, and domestic violence are known to be the most common factors that place young children at high risk for poor health (Azzi-Lessing, 2013). Some of the health outcomes from poverty and maternal depression include high rates of insecure attachment among infants, higher risk of slower cognitive child development, and higher risk of children growing up with behavioral issues including symptoms of depression, placing children at risk of being victimized (Wachs, 2009).

Maternal depression factors include age, education status, employment status, and marital status, yet when poverty is also prevalent in a mother's life, the risk of damage to the mother as well as her child increases greatly (Wachs, 2009). In this project, I take a look at treatment programs that are already in place such as home-visitation services to improve the quality of mother-child interactions, (Lyons-Ruth, 1990), and infant massage to help mothers recognize signals of pleasure and discomfort to reduce negative consequences of depression (Wachs, 2009), and the need for improved maternal health programs (Santoro, 2010) - all of which can potentially help mitigate these two issues and their proceeding adverse effects on children in America.

Keywords: poverty, maternal depression, child development, health, treatment

The Adverse Effects of Maternal Depression and Poverty on Child Development

Introduction

Poverty is a continuing and intensifying problem in the United States. It is a cycle with various factors involved that has yet to see large scale change for the better. One perhaps unexpected component in studying how poverty is inherited is the increasing prevalence of maternal depression. There is an urgent, substantial relationship between poverty and maternal depression. Further, both poverty and maternal depression have negative effects on children, which are exacerbated when both components are present in a given child's life. The purpose of this study is to examine maternal depression, poverty, the connection between both, and to look at the grave adverse effects on child development, health, behavior, and school achievement. I will also examine impacts and review potential solutions.

Poverty, maternal depression, substance abuse, and domestic violence are the most common factors that place young children at high risk for poor health, development, behavioral outcomes (Azzi-Lessing), and education disparity issues in children (Griggs, 2008). Depression and poverty both are accounted for by several factors such as socioeconomic status, individual health, and family instability. It is those same elements that are responsible for depression and poverty that directly impact a given child's health and development. How this happens is through an unfortunate systematic routine that is constantly happening in this country, furnishing inequality for millions of young children.

Overview of Literature

Defining Maternal Depression

Maternal depression is a growing concern in America, with prevalence rates increasing at steady rates. The condition of maternal depression is that of depression affecting mothers and mothers-to-be. Some of the most common symptoms of depression include fatigue, difficulty concentrating, and losing interest in daily activities (Turney, 2011). Moreover, there are various sub-types of maternal depression with more specific, potentially severe symptoms that can have harsh adverse impacts on the children of depressed mothers.

Firstly, there is prenatal depression which occurs during pregnancy for expectant mothers. Prenatal depression affects 10-20 percent of pregnant mothers. Some specific symptoms include anxiety, sleep problems, poor fetal attachment, and irritability. Beginning during the first few weeks after birth, “baby blues” depression affects up to 80 percent of new mothers and usually lasts about two weeks before being resolved. The symptoms include sadness, irritability, anxiety, insomnia, frustration, and feelings of being overwhelmed (Santoro, 2010).

The next level is postpartum depression, which affects 10-20 percent of new mothers and typically starts two to three months after birth, but lasts much longer than two weeks, distinguished from “baby blues.” Postpartum depression has a very long list of symptoms that torment the new mother including persistent sadness and crying, poor concentration and indecisiveness, feelings of worthlessness, inadequacy or guilt, loss of interest in caring for herself, hyper-insomnia, significant decrease or increase in appetite, poor bonding with the baby

or complete lack of bonding altogether, and biological symptoms such as headaches, chest pains, heart palpitations, and numbness (Santoro, 2010).

Lastly, postpartum psychosis depression disorder impacts one to two per 1,000 new mothers, usually starting within two to four weeks after birth. Agonizing, severe symptoms include hallucinations and delusions, both auditory and visual, insomnia, hopelessness, anger, anxiety, paranoia, confusion, mania (elated mood, restlessness, hyperactivity), “bizarre delusions and commands to harm the infant,” and suicidal or homicidal thoughts (Santoro, 2010).

Over the better part of the past two decades maternal depression has been increasingly recognized as a worldwide public health issue, especially with the Surgeon General’s Report on Mental Health in 2000, which “was followed by a rise in media attention on postpartum depression and postpartum psychosis” (Santoro, 2010). Furthermore, the prevalence has been growing, with an estimation that of one in five women in the U.S. will develop depression at some point in their lifetime, with the risk peaking during childbearing years. Veritably, women in their childbearing years make up the largest society of Americans with depression (Santoro, 2010).

Obtaining a clear picture of the various, torturous symptoms mothers deal with when suffering from maternal depression, it is not difficult to imagine the impacts on an individual’s life. There are various levels of adverse effects including work, family, health, and the health and development of the child (Santoro, 2010). Moreover, the consequences of maternal depression on the child are not restricted to infancy, but can extend into toddlerhood, preschool age, and even school age (Maternal Depression, 2004).

To comprehend maternal depression, maternal health must be taken into account. There are several risk factors of maternal health to consider including maternal age, race, lack of social

support, marital status, unemployment, education, and overall general health. Study results show that younger maternal age, prevalence of poverty, lower education levels, and lack of social support were most significantly associated with increased maternal depression. Lower education and poverty, as demonstrated earlier when discussing the overlapping social determinants of health, are interconnected. For instance, in the concern of higher education for mothers, it was found that those without a college degree had a higher prevalence of depression than mothers with a college degree (Wang, 2011). Unfortunately higher education in the United States is not a right, but a privilege for those who can access it and afford it financially as well as in time spent. If a young, single mother needs to work around the clock to care for herself and her baby on a basic level, she is automatically placed in disadvantage, missing a proper chance at gaining a college education. Therefore, the majority of these factors for maternal depression are directly related to socioeconomic status, especially whether or not a mother has been able to pay the inflated costs it requires to be highly educated.

Maternal depression has an infectious and chronic nature to it, making it even more difficult for mothers and their children to escape the strong grasp and inevitable adverse outcomes. It is this infectious nature of maternal depression that creates potential for long-term risks. When a woman expecting a child suffers from prenatal depression, her risks for postpartum depression after giving birth are greatly increased. In a rippling effect, women who suffer from postpartum depression are at increased risk for chronic depression, and children of depressed mothers are at increased risk for behavioral issues throughout childhood, as well as experiencing symptoms of depression themselves (Wachs, 2009).

Defining Poverty

Poverty is a word commonly used in our society, yet its true definition is not necessarily general knowledge. There are numerous periodicals, peer reviewed pieces, news and media pieces, and books on just the attempt to fully define poverty and its impacts on individuals and communities. Poverty does have a technical definition in terms of the poverty “line” or “level” of income rate ratios, which is the money that an individual or a family lives off per year. Currently, the Department of Health and Human Services defines poverty in numbers as the following: \$11,770 for individuals, \$15,930 for a family of two, \$20,090 for a family of three, \$24,250 for a family of four, \$28,410 for a family of five, \$32,570 for a family of six, \$36,730 for a family of seven, and \$40,890 for a family of eight (“United States,” 2014). These numbers are determined by the United States Census Bureau by using a “set of money income thresholds that vary by family size and composition to determine who is in poverty” (“United States,” 2014). The Census is able to identify different possible poverty thresholds, or the measure of need for daily living basics, by assessing family and household size and the age of the family members. What this all means is that people who earn equal to or less than the amounts listed per individual or family are living in poverty because their money income is less than their threshold (“United States,” 2014).

Though the United States is the wealthiest nation in the world, 14.5 percent of U.S. households- nearly 49 million Americans- live in poverty. This means that 49 million Americans struggle daily without the basics needed to live a standard life. As previously discussed, those who live in income poverty are dealing with the daily “condition of not having enough income to meet basic needs for food, clothing, and shelter,” (Brooks-Gunn, 1997). Of that 14.5 percent of American households, children make up 19.9 percent of those living in poverty, which equates to about 10 million children (“United States,” 2014). Income poverty for the near 10 million

American children that live in it each day can mean a variety of different things in addition to the lack of basic needs, having various consequences. These additional potential outcomes include inadequate nutrition, fewer learning experiences, instability of residence, lower quality of schools, exposure to environmental toxins, family violence, homelessness, dangerous streets, less access to friends and services, and, for adolescents, less access to jobs (Brooks-Gunn, 1997).

The difficulties of living in daily poverty in the world's wealthiest country are challenging enough for any individual, yet when children are directly impacted early in life, they are placed at higher risk for chronic poverty and intergenerational poverty. Intergenerational poverty is the transmission of poverty from one generation to the next. This happens constantly and easily in poverty stricken families because "most people remain in the same quarter of the income distribution as their parents" (Griggs, 2008). Large bodies of literature link childhood poverty with negative impacts on later employment and poor educational outcomes, which directly contribute to placing those children into poverty as adults. When those adult individuals struggling with such adverse impacts have children themselves, the cycle therefore has perpetuated (Griggs, 2008).

When poverty is passed from one generation to another, it is extremely challenging for the individuals involved to break out of the cycle, especially for children and youth who are chronically environmentally surrounded by the adverse impacts of poverty. Studies that have focused on the intergenerational transmission of poverty find that "while individuals can break out of intergenerational cycles of poverty, they are less likely to do so than is commonly thought" (Wagmiller, 2009). On top of that, when generations do escape poverty, it is likely they will only move into other levels of "poor." The challenge of exiting intergenerational poverty is the dependence on numerous circumstances such as educational and employment opportunities,

accessibility of role models, child and parent goals, child birth order, and timing of occurring poverty in the child's life (Wagmiller, 2009).

Poverty, Depression, and the Social Determinants of Health

Poverty is a main underlying contributor or risk factor of depression. Risk factors can be defined as “characteristics, behaviors or experiences that increase the probability of developing a negative health status” (Patten, 1991). It is crucial to analyze risk factors to gain an understanding of the etiology of disease and for proper planning for intervention and prevention strategies. Low income families that suffer from the stresses of poverty are more likely to become depressed than those who do not experience poverty (Patten, 1991). A critical factor in many health, social, and behavioral issues, poverty, when combined with depression, adds higher risk to individuals for lowered quality of life.

In order to fully understand the concept of poverty and its impacts on individuals and communities, the social determinants of health must be considered. The social determinants of health are “the conditions in which people are born, grow, live, work and age” (“What Are,” 2013). These conditions vary, and all have substantial impacts on an individual's life. The World Health Organization states that the social determinants of health are “mostly responsible for health inequities - the unfair and avoidable differences in health status seen within and between countries” (“What Are,” 2013). Looking at America, the social determinants of health can “explain in part why some Americans are healthier than others and why Americans more generally are not as healthy as they could be” (“Social Determinants,” 2014).

There are five key areas to examine when talking about the social determinants of health. These vital sectors include economic stability, education, social and community context, health and health care, and neighborhood and built environment (“Social Determinants,” 2014). Each of

the five determinants reflect numerous crucial issues that are the underbelly of the inequity that the social determinants of health are responsible for. Under the economic stability factor lives poverty, employment, food security, and housing stability (“Social Determinants,” 2014). What makes the unavoidable social determinants even more complicated to battle is that many of the key issues and factors overlap and directly influence one another.

For example, someone who is of low socioeconomic status is more likely to live in a neighborhood lacking infrastructure that is conducive for healthy behaviors. This can be seen physically by residing in an area with no full service grocery stores nearby, otherwise known as a “food desert”, and no sidewalks, and no parks. An inadequate built environment is not only an issue in these types of neighborhoods, but safety is likely to be one as well. This can be observed by the social norms and attitudes of the area, including discrimination, racism, and distrust of the government, exposure to crime, violence, and social disorder including the presence of garbage in the streets, displaying a lack of cooperation in the community. As well, there are less likely to be quality schools nearby or other educational or recreational resources in the community. The results of living in such an area could be that a person is not able to easily access fresh produce for a healthy and balanced diet, not able to take safe walks in their neighborhood or enjoy peaceful greenspace settings, likely to lack a sense of community and social cohesion, miss out on civic participation opportunities, and lack the resources for a thorough education (“Social Determinants,” 2014). All of these factors directly influence a given person’s physical and mental health, placing them directly into inequality and inequity, including a grave vulnerability to depression (Katz, 2007).

How Poverty and Maternal Depression Connect

There exists a significant connection between poverty and maternal depression (Katz, 2007). One of the major risk factors of maternal depression is low socioeconomic status. Mothers who live in lower socioeconomic status are at a higher risk for depression than mothers who live in middle or higher socioeconomic status (Katz, 2007). Furthermore, community studies show that poor women with young children are particularly more likely to experience psychological problems compared with women without young children (Pettersen, 2001).

Looking at factors that fall under poverty, it is clear that they are quite complex. They include various elements such as timing, depth and duration of poverty on a child, and policies that impact family income such as Early Head Start programs, food stamps, and welfare. Study results have showed that timing of poverty played a big role. Children who experienced poverty during preschool and early school age years were less likely to complete school than children who experienced poverty later in life (Brooks-Gunn, 1997). In addition, because poor maternal health in the form of depression is found to be associated with impaired parent-child interactions, the outcome results in less learning experiences in the home. Furthermore, family income is very closely related to children's overall ability and achievement (Brooks-Gunn, 1997).

In a classic study by Brown and Harris in 1978, depressed women in urban and rural areas were studied to identify the two primary causes for maternal depression- “vulnerability factors” and “provoking agents” (Patten, 1991). Vulnerability factors were defined as “social/personal factors which increase the likelihood of developing depression when there is severe life stress” (Katz, 2007). Provoking agents were defined as the “severe life stress” that contributes to the vulnerability factors, which are events and situations with extremely threatening long-term or long-standing difficulties, such as job loss (Katz, 2007). With extensive research, four vulnerability factors were identified as the main culprits of depression in women.

First of the four vulnerability factors is “social class”. Social class is the status of a person based on social and economic class. In the Brown and Harris study it was found that 39 percent of women from lower social classes suffered from maternal depression, while only six percent of women from middle-class status suffered from depression (Katz, 2007). The other three vulnerability factors were determined as “absence of a confiding relationship, three or more children at home, and loss of own mother at age 11 or under” (Katz, 2007). The study also concluded, with stress, that it is not necessarily the individual provoking agents or vulnerability factors that cause depression, but their combined effect. It is a complexity of united circumstances that places mothers at high risk for maternal depression.

Not only is poverty a risk factor for maternal depression, poverty in combination with maternal depression can have harsher effects on children than if the two matters were isolated. The consequences of poverty are compounded by lost work and treatment costs of maternal depression, which adds to economic stress, which also may increase the risk of domestic violence in the home (Wachs, 2009). The robust link between poverty and maternal depression is urgent as it exists in many critical facets.

Adverse Child Outcomes: Physical Health

After careful examination of the social determinants of health and the connection between poverty and maternal depression, there are various effects that impact child health, development, behavior, and quality of life. First, pregnant mothers who suffer from maternal depression are at risk for costly complications during birth, placing her and her child at health risks (Santoro, 2010). Health risks include low birth weight, growth stunting, and infant mortality rates (Brooks-Gunn, 1997).

Low birth weight is defined as an infant who is born at 2,500 grams, or five pounds and eight ounces, or less. Serious physical disabilities and learning disabilities are more prevalent in children who were low birth weight. As well, low birth weight is strongly associated with infant mortality, which is the rate of child deaths under one year of age per every 1,000 live births. Low birth weight is a key factor, particularly for deaths in the first 28 days of life (Brooks-Gunn, 1997). Infant mortality is a widely accepted, well proven indicator of the health of a country. With maternal depression and poverty both being urgent issues in our country, and both having such heavy impacts on child health, it is sadly not surprising that America's current infant mortality rate is 6.17, placing the U.S. at number 55 on a list of the 224 countries on this planet ("The World," n.d.). This means that 54 countries have better rates of infant mortality than America does, even though we are the wealthiest country in the world.

In addition, children born into poverty are at higher risk for growth stunting, or low height for the child's age. Stunting is a well-known measure of nutritional status in children. Although conspicuous malnutrition and starvation are rare among poor children in America, "deficits in children's nutritional status are associated with poverty," and growth stunting "is more prevalent among poor than non-poor children" (Brooks-Gunn, 1997). Furthermore, lead-poisoning, another health risk for children stricken by poverty and maternal depression, also has potential to cause growth stunting with young exposure. Yet growth stunting is not the only health concern for early exposure to lead. Hearing loss, vitamin D metabolism damage, and toxic effects on the kidneys are also concerning adverse impacts. Additionally, even slightly elevated blood lead above the Centers for Disease Control Prevention's intervention threshold can lead to lowered IQ (Brooks-Gunn, 1997). Unfortunately, currently four to five million children in

America live in homes filled with deteriorating lead based house paint, placing them at very high risk for these health issues (Brooks-Gunn, 1997).

It has also been discovered that children of mothers who suffer from maternal depression are more likely than children whose mothers are not depressed to have asthma attacks, respiratory allergies, and skin allergies. Those children are less likely to have been to a dentist for a regular checkup in the past year, and less likely to receive primary physician care (Turney, 2011). Some of the reasons why children of depressed mothers are at such high risk of health complications are part of the consequences from the classic symptoms of depression that the mother experiences. This includes difficulty concentrating and loss of interest in daily activities. These depression features may influence a mother's ability to make and keep doctor appointments for her children, comply with treatment regimens for sick children, or to even notice health difficulties as they arise (Turney, 2011).

In addition, if the depressed mother and child are living in poverty, they may not even have access to health care. Considering that people in lower socioeconomic groups are less likely to have access to health care, the relationship between poverty and health is bidirectional, meaning that "poverty contributes to ill-health and ill-health contributes to poverty" (Griggs, 2008). Therefore, children of poverty are more likely to experience health complications from birth. Poverty stricken children are also more likely to accumulate more health risks as they grow older than children from higher socioeconomic groups (Griggs, 2008). As mentioned above, asthma and poor dental health are a couple of the dangerous outcomes for children of depressed mothers. When considering children of poverty, especially because poverty and maternal depression often overlap for the majority of women and children experiencing one or the other, the same adverse health outcomes are prevalent, and more. Additional negative health problems

for those children at risk include anemia, diabetes, cancer, and neuro-development issues (Griggs, 2008).

Adverse Child Outcomes: Behavior

Behavioral outcomes for children of poverty and depressed mothers has been widely surveyed and documented. Evident from an early age, parent-reported behavioral outcomes for these disadvantaged children are more likely to occur than more affluent children. Emotional behavioral consequences are categorized as two varieties, external and internal. Externalizing behaviors include aggression, fighting, and acting out. Internalizing behaviors include social withdrawal, anxiety, and depression. Studies show that children who have been poor, whether short-term or long-term persistent, have much higher rates of reported behavioral issues than children who have never been poor (Brooks-Gunn, 1997).

More concerning, children who age through the years in persistent poverty are at high risk for “later outcomes” such as risk-taking behaviors, participation in crime and crime activities, poor health related behaviors, and suicide (Griggs, 2008). Though, there is a bit of a debate on whether or not crime can be considered a direct product of childhood poverty. In regards to this debate, American studies on this subject have shown to be more likely to identify a direct relationship, while the United Kingdom’s research on this subject addresses the complexity of the association, which should not be dismissed. Though most children who are raised in poverty do not become involved in crime, “there are higher victim and fear of crime rates in disadvantaged areas”, which does contribute to higher risks for children to become tangled in crime (Griggs, 2008) This makes sense since environment plays a huge role in such issues, as stressed previously when discussing the social determinants of health.

In addition, there is substantial literature on patterns of attachment in non-depressed mothers and depressed mothers. Factors such as bipolar, major unipolar (major depressive disorder), minor depression, no clinical disorder, self-reported moods, and behavioral interactions with the child have all been considered. It was found that a mother's expressed emotions, whether negative or positive, in interactions with their children, predicted patterns of attachment. Secure and confident attachments were found significantly more often in stable families with no diagnosed disorders. Therefore, the transmission of inequality also includes biological disadvantages such as mental and emotional disorders related to depression. Further, significantly higher frequencies of psychopathology have been reported among children of parents with the mentioned disorders than among children of parents who do not suffer from a disorder (Radke-Yarrow, 1985).

Adverse Child Outcomes: Cognitive Development

Evidence proves that early brain development is impacted greatly by caregiver variables. One of the most concerning variables is depression. Numerous studies conducted with "highly disadvantaged samples found pronounced disturbances in mother-infant interactions" (Petterson, 2001). Such disadvantages as poverty and maternal depression can specifically influence cognitive development. Now that it has been established clearly that one of the main pathways of poverty in effect to child well-being is parental mental health, the connection is obvious. If poverty relates to depression and depression is a pathway to poverty, the cycle clearly portrays how maternal mental health can impact such a thing, for example, as vocabulary development on a significant level (Chapin, 2010). Moreover, studies have shown that of the many harmful consequences of poverty and maternal depression on child development, there was a greater impact on cognitive development rather than motor development (Petterson, 2001).

The general relation between poverty and cognitive development is prevalent in many studies. It has been shown that even by the incredibly young age of two years, children from low socioeconomic backgrounds score lower on standard infant intelligence tests. Furthermore, examinations of poverty's impact on cognitive development on children ages two to eight years using the Infant Health and Development Program and the Children of the National Longitudinal Survey of Youth found that children in families with incomes less than .5 of the poverty line had IQ scores six to thirteen points lower than children with family income 1.5 to 2.0 times above the poverty line (Brooks-Gunn, 1997). Children with family income closer to, yet below the poverty line, also fared worse than young children in higher income groups. For example, nearly 81% of young children from more affluent backgrounds compared with nearly 70% of poor children were able to identify at least four colors. Furthermore, 60% of more affluent children could count to ten, compared to only 45% of poor children (Petterson, 2001).

With child intelligence testing proving a strong association between poverty and maternal health, it has also been proven in various studies that "the effects of long-term poverty on measures of children's cognitive ability were significantly greater than the effects of short-term poverty" (Brooks-Gunn, 1997). This evidence draws attention to the concern of long-term impacts that these two critical issues have on any given child, especially with cognitive development being such a delicate aspect for the young. Though, "it is not yet possible to make conclusive statements regarding the size of the effects of poverty on children's long-term cognitive development," creating a need for further research (Brooks-Gunn, 1997).

Adverse Child Outcomes: School Achievement

Educational achievement is well recognized as a dominant predictor of subsequent life experiences. With differences in health outcomes relying much on family income and

background, it should not come as a surprise that educational experience is correlated as well. Children from disadvantaged backgrounds are nearly expected to receive lower quality schooling simply from the access and nature of the infrastructure of their residing community. Because of this, disadvantaged children are more likely to have worse educational outcomes than their more affluent peers, and more likely to be excluded from school (Griggs, 2008).

There are studies which suggest that just a “10% increase in family income is associated with a 0.2% to 2% increase in the number of school years completed” (Brooks-Gunn, 1997). This difference is quite significant for young developing minds. Youth from low income households are much more likely to leave school without the qualifications that those from higher income households leave with (Griggs, 2008). These differences are also reflected by parental occupation. Adults from lower socioeconomic status are more likely to work manual labor. Children of parents who do not work manual jobs are nearly three times more likely to attend higher education via university than children of manual laborers (Griggs, 2008).

Yet, there are long term studies that show poverty status alone has a smaller adverse impact on high school graduation and total years of schooling actually obtained. A large amount of the observed relationship between income and schooling appears to be related to various confounding factors, which, as discussed with the social determinants of health can also directly relate to low income, such as parental education, family structure, and neighborhood characteristics, proving once again that there are many layers involved with these issues (Brooks-Gunn, 1997).

This predictive nature for poor educational outcomes is seen through many facets. When parents are “unable to meet the costs of tips, uniforms, musical instruments and after-school clubs,” children are unable to receive the entire, unimpaired benefits of schooling (Griggs, 2008).

Not only are these disadvantaged children missing out on educational and social opportunities, they are more likely to require corrective aid or special educational assistance. With expense and access being visceral issues in poverty stricken families, underprivileged children start off their education with shorter time periods in preschool, which impacts later academic fulfillment.

Though this can be seen in infant intelligent testing for the poor, it can also be seen in adolescents who attend impoverished schools, where children are less than half as likely to reach endemic literacy standards by age eleven, than more privileged students (Griggs, 2008).

Treatment Solutions: Home-Visitation Programs

With the growing prevalence of maternal depression's impacts on children, and the ongoing concerns for children of poverty, there is substantial literature on the factors mentioned throughout this paper in categorizing high risk families and high risk children, and finding proper solutions. There is a dire need for increased social workers to address the various family needs and adversities that hinder a family's ability to participate in a given intervention program, and to focus greatly on the developmental needs of the child. The families of the most need are experiencing multiple stresses, whose infants are at the greatest risk for developmental complications, and in the greatest need of developmentally oriented programs (Lyons-Ruth, 1990).

One treatment strategy that is fairly new and has proven to significantly decrease child depression from being passed from the mother is the use of home-visitation treatment services to remedy many of the child developmental issues that come with maternal depression and poverty. Home-visitation programs can have a variety of models, yet the basic function of all are to "deliver services through regularly scheduled visits to the homes of families with young children" (Azzi-Lessing, 2013).

Researchers have singled out maternal depression as a critical factor in the well-being and healthy development of children (Azzi-Lessing, 2013). As established clearly throughout this thesis, this risk factor is not unique to families living in poverty. The stress of being poor exacerbates detrimental impacts on young children (Azzi-Lessing, 2013). With recent productive ongoing research, at-home treatment programs have been found to improve the early stages of development, the structure of the brain, social and emotional development, and long term capacity for learning for high risk children who would otherwise be destined for negative outcomes. Home-visitation services have become more popular in recent years, and continue to grow in popularity, proving to be very effective and successful in improving the well-being and life chances of vulnerable young children (Azzi-Lessing, 2013).

A Harvard Medical School study from the early 1990's on home-visitation treatments for parent-child issues related to depression provided positive results. The study involved infants at high risk for developmental issues from combined effects of poverty, maternal depression, and caretaking inadequacy. Weekly home-visitation services were assigned to the families of these infants to gauge treatment success. It was found that babies with depressed mothers who were served with the home-visitation services showed significant performance results compared to similarly at-risk babies with depressed mothers who were not served by home visits (Lyons-Ruth, 1990).

The detailed results of this study were exceptional. The infants treated with home-visitation services compared to socioeconomically similar infants who were not served outperformed on determinants of infant development, infant attachment, and mother-infant interaction. Cognitively, "home-visited infants of depressed mothers performed much better than untreated infants of depressed mothers by an average of 10 points on the Bayley Mental Scale

and were twice as likely to be classified as securely attached, with unserved high-risk infants showing a high rate of insecure-disorganized attachments” (Lyons-Ruth, 1990).

One of the most important aspects of intervention for children of poverty and maternal depression is starting early. Home-visitation treatments have been gaining acknowledgement as a dominant strategy for early intervention to improve school readiness and other factors related to child well-being and future success (Azzi-Lessing, 2013). This recognition has been so profound that the 2010 passing of the federal Patient Protection and the Affordable Care Act included “approximately \$1.5 billion over a 5-year period for significant expansion of home-visitation programs across the country” (Azzi-Lessing, 2013).

Most home-visitation programs have common goals including nurturing early learning and optimal development in young children and improving parent competency in caring for their child, which also encourages better child learning and development outcomes. Moreover, minimizing the risk of neglect and potential child abuse, two probable risks of maternal depression and poverty, is a staple objective for several of these programs. With an intention to improve parental capabilities, home-visitation programs educate parents on child development and efficient parenting skills. As well, most of these programs work to connect families with additional resources in their communities, including childcare and healthcare, for an overall comprehensive effort in solving the various adverse impacts on disadvantaged children (Azzi-Lessing, 2013).

One of the main challenges in implementing home-visitation services is engaging the high risk families that need it most. The difficulty lies in “family engagement, matching services to families’ needs, and staff capabilities” (Azzi-Lessing, 2013). Families at higher risk levels generally cooperate in home-visitation treatment programs at minimum levels and/or withdraw

prematurely from treatment services than do families at lower risk levels. This could be as a result of the overwhelming living condition stresses of these vulnerable families. In addition, minimum levels of treatment could be due to a response of adverse experiences in the past with service providers, especially regarding mandated child protective services (Azzi-Lessing, 2013).

Given the elevated stress levels, social isolation, and adverse interactions with service providers that highly vulnerable families oftentimes experience, it is necessary to promote treatment methods that encourage these families to fully participate in home-visitation services. For starters, such strategies should be culturally appropriate, “include increasing attention to the formation of close relationships between home visitors and families, and employ engagement strategies that emphasize families’ strengths and family empowerment” (Azzi-Lessing, 2013). Another urgent strategy in engaging high risk families is for home visitor professionals to convey respect for parental competence levels, especially in the face of observing incompetent parental skills, and when attempting to implement educational techniques to improve those skills (Azzi-Lessing, 2013). By working on these areas of concern, home-visitation treatment services can be increasingly successful.

Treatment Solutions: Infant Massage

Another form of treatment that is proven to cure many adverse impacts related to poverty and maternal depression is infant massage. The power of touch is undeniable. Touch is the only fully developed sense by the seventh week of pregnancy (Wachs, 2009). One of the simplest, most viably accessible treatments for high risk children of poverty and depressed mothers is infant massage. Infant massage treatment is an intervention that can be implemented prior to or at birth, meeting the urgency for early solutions for vulnerable children. Infant massage can help mothers to recognize signals of pleasure and discomfort in their babies. By doing this, negative

impacts of maternal depression for both mothers and infants can be greatly reduced (Wachs, 2009).

Infants repeatedly participate in interactive routines with their mothers. Maternal depression compromises a mother's capacity to regulate interactions, "through two interactive patterns, intrusiveness or withdrawal" ("Maternal Depression," 2004). Intrusive mother interactions display an inhospitable affect, interfering with the infant's activity levels. From this, the infants can experience anger, turn away from the mother, and "internalize an angry and protective style of coping" ("Maternal Depression," 2004). Withdrawn mothers tend to be very "disengaged, unresponsive, affectively flat and do little to support the infant's activity" ("Maternal Depression," 2004). In response, the infants are unable to cope or self-regulate this negative state, and, in turn, develop passivity, withdrawal ("Maternal Depression," 2004).

Knowing these and other various child behavioral consequences of maternal depression and poverty, it is clear that vulnerable babies can suffer from stress, just like anyone else. Through infant-parent touch programs, massaging babies not only comforts, but enables babies to release tension and is proven to reduce stress hormones for babies, quiet crying, and improve sleep patterns (Wachs, 2009). As for depressed mothers, engaging in infant massage treatment can help reduce maternal stress with the encouragement of bonding and positively interacting with the child (Wachs, 2009).

Treatment Solutions: Improved Maternal Health Plans

Though there are indisputable troublesome risks and adverse effects of maternal depression, the potentially dangerous condition is actually highly treatable. In going to the source of this condition, negative effects on young children can be prevented. Early detection is especially important for treatment. When identified early during the pregnancy or the postpartum

period, health professionals are able to begin treatment services immediately that can prevent future and chronic issues for both the mother and baby (Santoro, 2010).

Improving maternal health plans and incorporating simple screening for maternal depression could potentially save vulnerable children from the various sufferings and difficulties covered here. Unfortunately, screening is not standard. Even when maternal depression is diagnosed, treatment does not always follow. Several studies among obstetrician-gynecologists and pediatricians have taken place to assess maternal depression screening. One study addressing obstetrician-gynecologists found that only 44 percent “often or always screen for depression,” 41 percent “sometimes screen for depression,” and 15 percent “never screen for depression” (Santoro, 2010).

Even when health care professionals were claiming to screen, not all of them were actually using proper depression screening tools. A study of pediatricians found that only eight percent regularly inquired mothers about maternal depressive symptoms. Furthermore, 81 percent of pediatricians reported relying only on their own observation to assess and diagnose maternal depression. Of all the pediatricians in the study, none reported to using a screening questionnaire (Santoro, 2010). This narrow reliance on observation and a lack of routine screening are quite possibly contributing to missed opportunities to diagnose and treat maternal depression. This lamentable fact can be seen in another study that found “pediatricians have been shown to fail to diagnose more than half of mothers who are depressed” (Santoro, 2010).

Early diagnosis of maternal depression could be one of the most important solutions in preventing adverse impacts on children. By starting at the root, maternal health care plans can play an important role in the opportunity to identify this condition and coordinate management of care. Through promoting obstetricians, pediatricians, primary care physicians and other health

care professionals who treat mothers and expecting mothers to screen for maternal depression, health plans can readily pinpoint those at highest risk (Santoro, 2010). Furthermore, “raising awareness of maternal depression through patient education in maternity programs and offering access to nurse case management during the pregnancy and postpartum period could have a substantial impact on the number of maternal depression diagnoses and would aid in the prevention of further complications and unnecessary costs” (Santoro, 2010).

Discussion: Breaking the Stigma

With a higher infant mortality rate than 54 other countries in the world (“The World,” n.d.), an exhausting list of adverse child outcomes for those babies who do live, and evidence of various difficulties in treatment results, poverty and maternal depression in America are in desperate need for real, working solutions. Despite the growing prevalence of the health risks associated with maternal depression, “pregnant women and new mothers experiencing depression often do not get the treatment they need due to fear of discussing mental health concerns with their providers or a lack of education about depression” (Santoro, 2010). Advocacy and education on maternal depression and poverty is pertinent for people in our society to be empowered by knowledge and well equipped to implement strategies and education in a comprehensive effort to lower the negative impacts of these overlapping issues. Breaking the social stigma on these topics can greatly improve intervention and treatment program prevalence, raising the quality of life and health for mothers and children.

Method

The method used for this project was an intensive, thorough literature review. I sourced literature on the topics of poverty, maternal depression, adverse child effects, and treatment solutions through online database research and professional internet searches. I was able to base

my topic and research methods off information and skills that I have learned through my time as a community health education student at Portland State University. As for the discussion section, I included my personal opinion of a basic, beginning point to lead the pathway for improvement on these issues.

Conclusion

Separately, maternal depression and poverty are concerning issues in America, having various, potentially dangerous and long lasting negative effects on children. Exacerbation and compounding of adverse effects almost always occurs when maternal depression and poverty are combined in families. Through this project, it has been made clear that maternal depression and poverty do overlap the majority of the time, creating an urgent, substantial relationship between poverty and maternal depression. With the list of manifested negative outcomes in children such as the various physical health, cognitive development, behavior, and school achievement problems, the urgency for solutions are undeniable. By drawing increased attention to these issues, advocating for breaking the social stigmas of both poverty and maternal depression, and implementing proper interventions and prevention strategies, the prevalence of disadvantaged children in America can begin to decrease.