Will consistent assessment of risk and protective factors in maltreated children

under the age of ten years promote resiliency?

A Master's project submitted in partial fulfillment of the requirements for the degree of

MASTERS OF NURSING
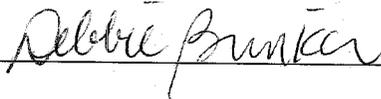
By

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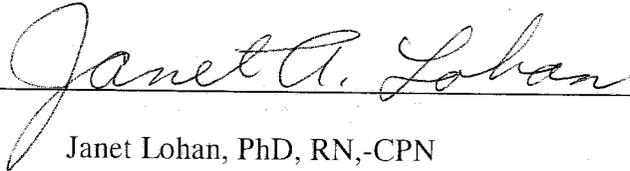

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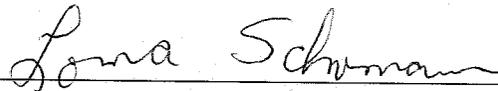To the Faculty of Washington State University:

The members of the Committee appointed to examine the master's project of

JOAN MARIE AMISTOSO find it satisfactory and recommend that it be accepted.

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Abstract

Children should not be exposed to any form of maltreatment whether it is physical, emotional, verbal, sexual abuse or neglect. The number of reported maltreatment cases by the United States Census Bureau (2012) for 2009 was an astounding 762,940 cases. The United States Department of Health and Human Services 2009 report of child maltreatment estimated that 1,770 children died as a result of injuries sustained from maltreatment (Centers for Disease Control and Prevention, 2010, p. x). The statistics obtained for these reports were from the Child Protective Services of reported and confirmed cases of child maltreatment. The actual number of unreported cases of child maltreatment may be greater than what has been previously reported.

Child maltreatment is a preventable occurrence that requires the combination of assessment of risk factors and protective factors to develop interventions that will promote resiliency. Careful assessment of risk and protective factors needs to include those involving the child, the family, and the environment in which the child lives. The consequences of child maltreatment can be a continuous cycle that involves future generations with a large economic impact on society.

As healthcare providers, it is crucial that knowledge of the statistical risk variables and identification for child maltreatment is current. Assessment of children at risk for maltreatment needs to be consistent and thorough. Collaboration is needed with other professionals such as educators, daycare providers, religious communities and the government. Child maltreatment and the consequences of the maltreatment are preventable with continued awareness, education, guidance and support of children, families and communities. Breaking the cycle of abuse is necessary to protect future generations of children.

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INTRODUCTION

Child maltreatment is a reality for many children on a daily basis. This reality may be the fear of reoccurrence of maltreatment or living with the negative consequences related to the maltreatment. The Center of Disease Control and Prevention (CDC) defines child maltreatment as any act or series of acts of commission or omission by the parent or other caregiver that causes harm, is a risk of harm or threat of harm to a child. The CDC (2010) stated that acts of commission are deliberate and intentional acts that involve physical, sexual or psychological abuse, while acts of omission involve acts of failure to provide for the child's physical, emotional and/or educational needs (CDC, 2010).

The Department of Health and Human Services (HHS) defines child abuse at the minimum federal level following the Federal Child Abuse Prevention and Treatment Act of 2010, which states child abuse and neglect is "any recent act or failure to act on the part of a parent or caregiver which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act of failure to act which presents an imminent risk of serious harm" (Department of Health and Human Services, 2008).

According to HHS, most states recognize four major types of maltreatment that include physical abuse, neglect, sexual abuse and emotional abuse. HHS further reports that many states also include abandonment and parental substance abuse as forms of child maltreatment. HHS suggests that a child may have been subject to only one type of maltreatment, however, more often, there are multiple types that occur concurrently (Department of Health and Human Services, 2008).

The American Academy of Pediatrics (AAP) defines child abuse as various forms of maltreatment that include physical, emotional, verbal or sexual abuse. Neglect of the child, also defined as maltreatment, by the parent or caregiver involves the inadequate provision of the basic

needs of the child. These needs include education, nutrition, medical care, shelter and nurturance. Neglect is a form of child maltreatment that may not pose an immediate threat to the child, but over time can cause negative consequences in the child's physical, social, developmental and emotional growth (American Academy of Pediatrics, 2012).

An understanding of the risk factors associated with child maltreatment is crucial for a medical provider to accurately assess for maltreatment and develop a treatment plan that will not only prevent maltreatment, but also strengthen families and enhance child development.

Moreland Begle, Dumas and Hansen (2010) reported that 30% of caregivers with a personal history of child maltreatment will go on to abuse their own children. These authors further stated that child maltreatment is correlated to a variety of negative child outcomes which include significant long-term emotional, cognitive and physical complications. Along with the decrease of quality of life for these children as they move forward into adulthood, there is an enormous economic burden placed on society. Decreasing the rate of child maltreatment by reducing risk factors and increasing protective factors by promoting resiliency of children who have been maltreated is crucial to ending the cycle of child maltreatment.

The number of children who are maltreated annually is staggering. The United States Department of Health and Human Services 2009 report of child maltreatment identified that an estimated 1,770 children died as a result of maltreatment (Centers for Disease Control and Prevention, 2010, p. x). The United States Census Bureau (2012) reported the total number of children who survived their maltreatment in 2009 was reported to be an astounding 762,940. These statistics were based on reported and confirmed cases of maltreatment provided by Child Protective Services (CPS) and the number of unreported child maltreatment cases is unknown. The most common form of maltreatment was neglect, capturing 71% of the total of reported

cases of maltreatment. Sixty seven percent of these victims were under the age of ten. Female victims were slightly more likely to be abused than male victims.

Sadly, child homicide is the worst consequence of physical abuse. Barber, Fujiwara, Hemenway, et al (2009) concluded that 83% of infants under the age of two that fell victim to child homicide, had been a result of abuse by the infant's father or mother's boyfriend. The majority of deceased victims died as the result of beating, shaking, pushing, slamming and/or choking by the caregiver. Over 83% of the caregivers were under the age of twenty five and male. In most cases, the infant was home alone with the caregiver, had been abused previously and was crying.

Amaya-Jackson and Stirling (2008) reported that children who suffered early maltreatment may later suffer from significant emotional instability, depression and have a tendency for aggression and violence. A disruption in the parent-child relationship was noted to have a substantial relationship to risk of stroke, cancer and heart disease that resulted in an increase of use of health care resources in the adult years of the previously maltreated child. Early childhood maltreatment was found to deny the child the ability to adjust to a larger social environment. Without these social interactions, neural physiology is altered, changing the ability of the child to respond to stress effectively. Amaya-Jackson and Stirling (2008) further suggested that primary health care providers hold the most critical link in helping caregivers understand the maladaptive response to stress in children who have been maltreated. By providing healthy strategies and interventions to reduce stress, resumption of normal development can be promoted.

According to Windle (2011) the word resilience originates from the Latin word 'resilire', meaning to leap back. The word resilience as a noun is a derivative of the adjective resilient

with the applied meaning as a quality or a person who has been able to withstand or recover from a difficult situation or misfortune. The most easily understood and common definition defines resilience as a positive adaptation despite adversity (Fleming & Ledogar, 2008). Resilience has also been defined as a process, rather than an innate trait, of effectively negotiating, adapting to or managing significant sources of stress or trauma. The American Psychological Association views resilience as a "process" of adapting well in the face of adversity, tragedy, trauma, threats and compelling stress (APA, 2009). Basically, resilience is one's ability to "bounce back" following difficult incidents (Windle, 2011).

Windle (2011) summarizes resiliency as a process of effectively adapting to, or managing substantial amounts of stress or trauma. The concept of resiliency concentrates on healthy development in spite of risk and on strengths rather than weaknesses. Protective factors have been identified over three levels of functioning which include individual, social and community/society as being necessary for resiliency to be achieved.

Understanding the risk factors for maltreatment of children and the concept of resiliency as a protective factor in children will assist in designing individualized prevention and intervention strategies. The goal of the plan is directed at decreasing the rate of maltreatment and ultimately decreasing the rate of fatalities related to maltreatment of children.

Purpose Statement

The purpose of this review of literature is to determine the protective characteristics of children who have been maltreated and demonstrated resiliency, while also identifying the risk factors that place children at risk for maltreatment. The question used to direct this literature review is "In children who have experienced maltreatment, what are the risk factors that led to the experience of maltreatment and what are the positive characteristics that have allowed for

resiliency"? Children as a population are defined as an individual age 1 day to 10 years of age.

As medical providers involved with the care of children, especially after they have been

maltreated, it is important to promote the concept of resiliency. A provider's complete

understanding and identification of the positive characteristics and negative risk factors

associated with resiliency or lack of resiliency related to the risk of maltreatment, will be the

foundation for a plan that promotes resiliency/recovery to occur for children who have been

maltreated.

Methods

Literature search was conducted by accessing the Washington State University online

library and initially using the following key words to cross search for articles: " child

maltreatment," "childhood maltreatment," "resiliency," "resilience," "resilient," "risk factor,"

"non-resilient," "promotion of resiliency," "protective," "adaptation," and "adversity." The

health science data bases that were accessed for journal articles include: Pubmed, American

Medical Association, CINAHL (EBSCO), MEDLINEplus (NLM), OVID Full Text Journals,

psycINFO and Google Scholar. Results were up to nearly 4000 articles.

The most successful and condensed search was performed by using Pubmed, psycINFO

and Google Scholar. Keywords that produced the most relevant articles include "child abuse,"

"child maltreatment," "childhood maltreatment," "risk factors," "resilience," "resiliency," and

"resilient". Five hundred and five articles total were found and were further reduced by using the

criteria of "journal articles". Fifty five articles were reviewed and 13 were selected and

organized into categories that include articles that addressed: child maltreatment and risk factors

(6 articles); child maltreatment and resilience (4 articles); child maltreatment, risk factor and

resilience (3 articles).

Theoretical Framework

A significant amount of research has been done over the years to better explain why people abuse children. Research has also explored the consequences of the abuse that has led to problems in school, delinquency, violence, adult criminality and recovery from abuse. Several theories have been found useful in understanding the causes and consequences of abuse while also understanding how recovery from abuse can occur. These theories include Social Learning Theory, Ecological Theory, Self- Efficacy Theory, Attachment Theory, and Resiliency Theory.

Social Learning theory infers that an individual learns in two ways. The way one learns is by being rewarded for behavior or imitating the behavior that is observed. This is important in the situation where a child has observed or been involved with aggression. A large percentage of abusers were maltreated as children and an even larger number of maltreated children exhibited delinquent behaviors and aggression. The social learning theory accurately demonstrates the cycle of violence (We Are Survivors, 2009). Social Learning Theory was constructed by Bandura on the basis that social stimuli impacts learning. People learn from one another by observational learning, imitation, and modeling (McEwen & Wills, 2011, p. 361-362).

Maltreatment, in terms of the Ecological Theory, reflects that the maltreatment is the result of one or more systems: individual, family, community and/or culture. Interventions should consider all four systems (We Are Survivors, 2009). This model represents how parents care for their children reflecting the influences of the social environment in which they live. When negotiating interventions with the family, taking into consideration the relationship with other family members, friends, community, and culture will result in higher degrees of success (Nurse-Family Partnership, 2012).

Self-Efficacy Theory places a focus on the characteristics of the child and the perception of effectiveness of interventions the parent may have when caring for their child. It is believed that perception of "expectations" will dictate if one will start and/or continue a particular behavior to attain a particular goal (We Are Survivors, 2009). For a parent who has a child with aggressive behavior, the parent may know that a situation is beginning to spiral out of control and they need to give themselves a time out but it may be difficult to walk away. Helping the parents to set realistic goals thus allowing for an increase in confidence, should be incorporated in the interventions developed with the health provider. If the parent believes that a preferred behavior will produce the positive anticipated outcome, they will more likely participate in the prescribed behavioral intervention (Nurse-Family Partnership, 2012).

Attachment Theory pertains to the type of bond that a child and caregiver share that ultimately affects later interactions. There are four different types of attachment: secure, pre-occupied, dismissive and fearful. Secure attachment is the goal, where the child is free to explore their world and is comforted easily. Nearly 80% of maltreated children exhibit "insecure attachment" as a result of neglect and abuse. Children with pre-occupied attachment will attempt to find comfort in a caregiver or stranger, but will not be comforted. The child with dismissive attachment is unable to be comforted and is distrustful. Fearful attachment is demonstrated by unpredictable and disordered behavior (We Are Survivors, 2009). If a child receives responsive and sensitive parenting, they are more likely to become responsive and sensitive parents. Hardy (2007) suggests that attachment theories are in-depth and as interventions are developed, consideration needs to be made after determining the child's early attachment interactions and prospective future relationships. Attachment Theory best predicts the consequences of child maltreatment.

Understanding the resiliency theory is critical to the health care provider's assessment and intervention plan. Resiliency theory focuses on understanding healthy development regardless of risk, and on strengths versus weaknesses. Some consider resiliency a process one goes through to successfully navigate through and adjust to a substantial amount of stress (Windle, 2011), while others consider resiliency as an innate quality possessed by individuals that arises from normal processes of human adaption systems that include the individual, family and community (Henderson, Gillespie & Grafton, 2010). A child who has been maltreated has not had the opportunity to mature in a way that is considered a form of healthy development. Early assessment and intervention is required to direct the child towards the path of recovery, thus breaking the cycle of abuse. (Fig. 1)

There are various causes of child maltreatment that can be better understood when considering the Social Learning Theory, Ecological Theory and the Self- Efficacy Theory. The consequences of the maltreatment are best understood when considering the Social Learning Theory and the Attachment Theory. The recovery of the child is most correlated with the Resiliency Theory. The path to resiliency is a complex journey that the health care provider must by assessment, determine the causes and the consequences of child maltreatment to better formulate interventions that will lead to recovery thus ultimately breaking the cycle of maltreatment.

Review of Literature

Child Maltreatment and Risk Factors

MacMillan (2000) performed a systematic and critical evaluation of the evidence based methodology of the Canadian Task Force on Preventative Health Care to review the efficacy of interventions designed to prevent child maltreatment. Before interventions were employed,

assessment of risk indicators was necessary. The term risk indicator was used rather than risk

factor due to the method of obtaining research material mostly from cross-sectional surveys. Risk

indicators for physical abuse included male sex of the child, recent life stress, maternal

psychiatric impairment, low maternal education level, lack of attendance to prenatal classes,

substance abuse and low religious attendance. Risk indicators for neglect included parental

sociopathic behavior and substance abuse. Risk indicators for sexual abuse in children were low

maternal age and parental death. After predicting or determining the risk indicators of the

targeted (high risk) group, interventions were employed including perinatal and early childhood

programs and home visitation programs. All were designed to prevent physical abuse and

neglect. These programs were proven effective in the reduction of reported child maltreatment

(MacMillan, 2000).

Flaherty, Stirling, et al (2010) identified factors and characteristics that placed a child at

risk for maltreatment. These characteristics were divided into categories involving the child,

parent and environment. A child who had emotional/behavioral difficulties, chronic illness,

physical disabilities, developmental disabilities or was unplanned or born prematurely was at

greater risk of maltreatment. A parent who had certain attributes and history including, low self-

esteem, poor impulse control, substance/alcohol abuse, mental illness, history of being abused as

a child, along with young maternal/paternal age and an inadequate knowledge of normal child

development placed the parent at risk of abusing. Poverty, social isolation, unemployment, low-

educational accomplishment, single parent home, domestic violence, and having a non-biological

male living in the home are additional risk factors for child maltreatment.

Barth (2009), through his work with the Triple P Program, has defined risk factors for

child maltreatment. The four most common parental risk factors included substance abuse,

mental illness, domestic violence and child conduct problems. Poverty was later defined as the fifth risk factor. Substance abuse had the most impact on neglect. Domestic violence was associated with more severe punishments. High rates of child behavior problems were found among children who were abused, not necessarily related to a consequence of being abused but rather as a cause of abuse. The Triple P program was designed to help parents deal with the expanding children's health and behavioral issues through a campaign that included five levels of intervention. The Triple P program was designed based on the social learning theory with the concept that the parent must be "self–regulatory" by believing that they can improve the behavior of their own child through their actions.

Dubowitz, Kim, Black, et al (2011) used data from a longitudinal study of 332 low-income families recruited from urban pediatric offices to identify risk factors for child maltreatment with a goal to better assist professionals identify families at risk. Their objective was to build preventive interventions based on a complete understanding of risk factors and causes of maltreatment. From this study, consistent with the ecological theory, risk factors were placed in three categories that included child, parent and family levels. Maltreatment could be predicted based on these levels within the first several years of life. The researchers felt that this study added to the literature by defining risk factors early in life, prior to a report of maltreatment to Child Protective Services. The most common risk factors included low maternal education, depression, substance abuse and families that had more than four children. Following a large sample group without prior CPS involvement over a ten year span adds validity and strength to the report.

Mersky, et al. (2009) focused on the study of risk factors for maltreatment of children who reside in the inner cities. This study was based on an ecological-transactional approach that

viewed child maltreatment as a result of multiple factors that included the characteristics of the child, the parent and the community in which they resided. Higher rates of maltreatment were found in children of minority groups who had behavioral problems and disabilities. Large family size, single parenthood, presence of a non-biological caregiver, social isolation, lower levels of social support, unemployment, and high population density were also found to be common risk factors. The most reliable predictors of potential child maltreatment were a young mother who was single, poor and undereducated. The authors also noted that adults who had been maltreated as children were at a higher risk of maltreating their children.

Moreland Begle, Dumas and Hanson (2010) investigated two theoretical risk models that are currently being used to predict child maltreatment potential. These were the developmental-ecological model and the cumulative risk model. Their sample group consisted of 610 caregivers (49% African American, 46% European American; 53% single) with a child between the age of three and six years of age. The developmental-ecological model was found to be inferior to the cumulative risk model, which significantly predicted child abuse potential. The ability of the health care provider to more accurately predict the potential of abuse and decrease the accumulation of risk markers that occur within families, the more likely there was a reduction of the risk for maltreatment. The risk markers used in this study were viewed by the authors as the most common that have been found thus far in research. The point authors noted that it was rarely just one or several risk indicators that increased maltreatment potential; it was the accumulation of multiple risk indicators that best predicted maltreatment potential.

The risk markers identified by Moreland Begle, Dumas and Hanson (2010) included: lower parenting satisfaction and having a sense of less control over difficult child behaviors were also described as caregiver risk factors. Children who had disruptive behaviors, poor health or

were between the ages of three and eight years were more likely to be abused. Increased family

size, ethnicity, poor family economic status and single marital status were factors that were

linked to potential of child maltreatment. (Table 1)

Child Maltreatment and Resilience

Henry (1999) identified five resiliency factors by using a qualitative study based on the

grounded theory method. Seven Caucasian adolescents were the participants. Data was collected

over three interviews. The five emerging themes that arose included loyalty to parents,

normalizing the abusive environment, invisibility to the abuser, self-value and future vision. The

future view of life and self-value were considered to be the best indicators that resilience had

been achieved, as this suggested that the maltreated child had come to some resolution regarding

the past and was optimistic about the future.

Successfully having the ability to overcome negative thoughts about themselves along

with a positive attitude and a sense of being valued (loved, respected and belonging) was found

to be instrumental in resiliency. At times children appeared to have a "toughness" about them,

which indicated that these children did not show their weaknesses, but rather reinforced their

strengths to better enrich their self-value. The capability to visualize one's future with the

approach of hopefulness, dreams, goals and initiative was seen as achieving resiliency; as

resiliency was ingrained in hope and the power to imagine what is not seen, which can be better

than what is known (Henry, 1999).

Afifi and MacMillan (2011) performed a review of literature that focused on the

protective factors related to child maltreatment to help aid in the promotion of resilience in

children who have been maltreated. Consistently, the association of resilience with a stable

environment and supportive relationships appeared. Also, resilience was noted to develop over

time in a supportive environment. Protective factors were categorized into individual, family and community levels. Individual protective factors that led to resiliency included personality, intellect, self-efficacy, coping, appraisal of maltreatment, and life satisfaction. Family protective factors were defined as family coherence, stable caregiving, parental relationships and spousal support. Community level protective factors were found to consist of peer relationships, non-family member relationships and support, and religion. Resiliency was found in children who had been maltreated when competence was achieved behaviorally, socially, emotionally, and academically. Stable family environment and supportive relationships were found consistently in individuals that demonstrated resilience.

Flores, Cicchetti, and Rogosch (2005) examined the effects of maltreatment and processes that influenced maladaptation and resilience in Latino children that allowed for a better understanding of resilience promotion in maltreated and non-maltreated Latino children. Ego-resiliency, ego over-control and positive self-esteem were found to be predictors of resilience. The authors pointed out that if a child has the ability to establish and seek out emotional support systems beyond the family, that child had a greater chance of demonstrating resiliency as an adult. Some important results of the study were found to include being female and having a "compliant", "calm/relaxed" and/or "empathetic personality", as these traits increased the ability to achieve resiliency. The traditions, beliefs and attitudes of a culture were found to be contributors in the promotion of resilience in this study.

Walsh, Dawson, and Mattingly (2010) reviewed research to describe the variability on how resilience was measured, to present results on resilience using the National Survey of Child and Adolescent Well-Being, to describe practice suggestions and policy implications regarding how resilience is measured, while also providing proposals for further research preceding

childhood maltreatment. Across many of the articles reviewed, researchers found that peer attachment, academic achievement, and behavioral and emotional regulation were evidence of resilience. The authors felt that there was an inadequate amount of information that allowed for a comparison between informants. A disconnect was also found between the relevance of maltreatment and self-esteem. A significant obstacle was the process by which resilience was measured, as it did not provide clear criteria to define resilience.

Walsh, Dawson, and Mattingly (2010) recommended that future research studies include the developmental stage the child is/was in at the time of the maltreatment, along with the capabilities, activities and the various environments during those times. Other important factors they recommended included how the type of maltreatment contributes to the differences in competence and understanding how co-occurring maltreatment affects outcomes. They concluded that the significance of studying resilience is to gather a better understanding as to why it is achieved for some but not for others.

Child Maltreatment, Risk Factors and Resilience

Wilcox, Richards, and O'Keefe (2004) performed a review of literature to examine the defects of the "victim-offender" model used for children who have been sexually abused. Personal reliance as a way of empowering damaged young people to transition into healthy adults by understanding risk factors and promoting resilience was investigated. Findings concluded that personal reliance as a protective factor along with flexibility, benevolence and understanding was needed in the treatment of sexually abused children. The authors found that adult survivors had a higher self-esteem and quality of life, if they did not blame themselves for the sexual abuse.

Iwaniec, Larkin, & Higgins (2006) conducted a review of literature to determine the relationship of risk and resilience in connection with emotional abuse. Risk factors were categorized into predisposing, precipitating, intrinsic and external factors. Predisposing factors were defined as the early experience with caregivers. Precipitating factors involved the type, duration and intensity of the abuse. Intrinsic factors involved the child, reflecting disposition, behavioral and emotional approaches, and self-esteem along with internal and external qualities. Availability of supportive relationships and school were considered external factors. To promote resilience, protective factors needed to be assessed and encouraged. Although emotional abuse did not have immediate or visible outcomes, emotional abuse did reflect the most negative effect on adjustment as compared to other forms of maltreatment, and was connected with long term developmental, psychological, social and behavioral problems.

Jaffee et al (2007) had three goals in their research. First, was to develop a definition of resilience that involved positive adjustment over time and across participants. Second, was to investigate whether individual, family or environmental characteristics distinguish resilient from non-resilient maltreated children. Thirdly, was to combine how all factors: individual, family or relationships outside the family could distinguish between resilient and non-resilient children.

Interestingly, the participants were all members of the Environmental Risk (E-Risk) Longitudinal Twin Study, which studied how genetic and environmental factors guide a child's development. The results of the study determined that children who had been maltreated prior to the age of five years with positive features that involved individual, family, and environment were associated with "behavioral resilience". Boys with higher IQs and parents that did not display antisocial behavior were more likely to be resilient. Parents who lived in low crime areas and were drug free had children who were found to be more resilient. Resiliency was challenged

when children were exposed to multiple family and neighborhood stressors. A child who was found to be resilient at the age of five years was also found to be resilient at the age of seven years. The authors believed that the dilemma for researchers and providers will be to discover what combination of individual, family and environmental resources that are available for maltreated children, how promotion of the positive factors found within these resources can be effective and, most importantly how to sustain resilience over time (Jaffee et al, 2007).

Guidelines for the Prevention and Assessment of Child Maltreatment

Flaherty et al, (2010) summarized the pediatrician's role in child maltreatment prevention with the support of the American Academy of Pediatrics (AAP). New guidelines were developed with the goal of strengthening families, preventing child maltreatment and improving normal child development. As a health care provider, it is critical to have an understanding of the triggers, risk factors and the protective factors that the child and family possess. Several normal child developmental components are considered triggers for abuse. The "7 deadly sins" include colic, awakening at night, separation anxiety, normal exploratory behavior, normal negativism, normal poor appetite and toilet training resistance.

Crying is the most common trigger that causes the most severe consequences. The most common reason a child suffered an abusive head trauma was related to crying. Crying increases and peaks between the age of two and four months. Parents of children who suffered an abusive head trauma admitted to seeking help from their primary care provider prior to the incident. Toilet training and toilet accidents are other common triggers for child maltreatment that result in immersion burns and genital bruising (Flaherty et al, 2010).

Prevention and intervention programs were designed on the basis of an ecological model that encompassed risk and protective factors. Programs have been developed to address crying

in the pediatric patient by teaching new parents about the consequences of violent infant shaking and alternative methods of dealing with the crying infant. Studies in New York resulted in a 47% reduction of head injuries in the first five years of the program. The Period of PURPLE Crying, also demonstrated a reduction in abusive head trauma (as cited in Flaherty et al., 2010). The Connected Kids program, developed by the AAP, uses a resilience based approach to anticipatory guidance that a healthcare provider can use. Practicing Safety is another program developed by the AAP that provides anticipatory guidance to assist parents to better cope with a child's crying, toilet training, sleeping, and eating, while also guiding parents with topics of parenting, child safety, discipline and improving the family environment (Flaherty et al, 2010).

Flaherty, et al (2010) suggested other programs such as home visitation programs that target families at greatest risk potential of child maltreatment. The Nurse-Family Partnership model has displayed a reduction of child mortality from preventable causes. The Task Force on Community Preventative Services found that with the data provided from the 21 home-visitation programs that are available, there was a reduction of more than 50% in child maltreatment (as cited in Flaherty et al., 2010). School-based child-parent centers that focus on family education also had a 50% reduction in child maltreatment. Parent-training program such as the Triple P program demonstrated a positive reduction of child maltreatment (as cited in Flaherty et al., 2010).

Scheduled routine health visits recommended by the AAP allow the health care provider multiple opportunities to assess for risk factors for maltreatment. The third edition of Bright Futures offers healthcare providers guidelines recommended by the AAP for anticipatory guidance through various stages of pediatric development (as cited in Flaherty et al., 2010). The recommendations provided by the AAP include: obtain a thorough social history periodically,

use the parenting-screening tools provided in the Bright Futures tool kit to screen for risk factors

and also acknowledge the frustration that comes along with parenting and provide anticipatory

guidance regarding the upcoming developmental stages; discuss infant crying and how to better

cope with it; watch for signs of maltreatment specifically in children with disabilities; for a

parent of a disabled child, validate parental stressors and be aware of resources for respite care;

be alert to signs and symptoms of intimate partner violence and postpartum depression; guide

parents on the use of effective disciplinary techniques; discuss with parents about normal sexual

development and sexual abuse prevention; advocate for continuation and development of

community resources; support positive behavioral interventions and support in the schools; be

able to recognize the signs and symptoms of maltreatment and report suspected maltreatment to

the appropriate local authorities (as cited in Flaherty et al., 2010).

Significance to Nursing

Primary prevention is the basis of successfully addressing health conditions in nursing. In

regards to child maltreatment, primary prevention needs to be the goal to prevent child

maltreatment prior to it occurring. Secondary prevention is where most interventions begin for

child maltreatment as a provider assesses for risk factors, identifies "trigger" conditions and

clinical presentation of maltreatment (Theodore & Runyan, 1999). Assessment of risk factors

and protective factors is imperative to designing and implementing interventions that would

prove to produce effective outcomes that will benefit, most importantly, the pediatric patient, but

also the family, the community, and future generations. Theodore & Runyan (1999) believe that

breaking the cycle of violence by using secondary prevention interventions could be consider

primary prevention for the next generation. Having specific knowledge of common risk factors

and the use of assessment tools provided by the AAP through the Bright Futures program will

reduce the incidence of child maltreatment (as cited in Flaherty et al., 2010). Assessment needs

to include the child, family and the environment in which they reside. The greater the number of

risk factors, the greater the increase of the risk of child maltreatment potential. Thirty percent of

parents who abuse their children have been abused themselves as children. The most significant

finding is that up to 70% of people who abuse children regardless of parental status had also

been abused as a child (Moreland Begle, Dumas, & Hanson, 2010).

Breaking the cycle of abuse is essential in reducing the staggering numbers of confirmed

child maltreatment that are reported annually. The Child Protective Services data of reported and

confirmed cases of child maltreatment, do not include unreported cases. Potentially, the number

of actual child maltreatment cases could be more than double than what has been reported. The

significance of health care providers in the role of assessing both risk factors and protective

factors is imperative to the absolute need of promoting resiliency and decreasing the astounding

number of child maltreatment cases that occur annually.

Recommendations for Future Research

The review of literature reveals that assessment of risk and protective factors both play a

significant role in the development and implementation of prevention interventions designed to

decrease the number of child maltreatment cases and the sequelae that disrupts the process of

resilience. As demonstrated by the report that the United States Census Bureau (2012)

completed, the reduction of reported cases of child maltreatment has decreased from the year

2000 to 2009 just over 100,000 cases. Child maltreatment is an unnecessary act against a

vulnerable population. Research must continue to optimize child maltreatment assessment,

prevention interventions and resiliency development strategies that can be used within the health

care setting. Walsh, Dawson, Mattingly (2010) indicate that future research needs to consider the

child's developmental stage when considering the stage the child was in at the time of the abuse and what stage the child is at when considering potential interventions.

Assessment of risk and protective factors along with the promotion of resilience in maltreated children needs to be considered a collaborative effort involving healthcare professionals, educators, daycare providers, religious communities and the government. (Table 1 and 2). The use of tools and programs that have already proven effective needs to continue. Supporting and participating in new research that will better address child maltreatment topics needs to be a collaborative effort of all involved in the care of children. Awareness of the general public to the amount and impact of child maltreatment needs to be openly addressed. Child maltreatment and the consequences of the maltreatment are preventable with continued awareness, education, guidance and support of children, families and communities. The pathway to resilience is a journey that can break the cycle of abuse and violence with the combined efforts of various professions.

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Pathway to Resilience

Causes → Attachment Theory / Social Learning Theory → Consequences

Social Learning Theory / Ecological Theory / Self-Efficacy Theory

Maltreated Child

Abusive Parent ← Non-Resilient Child ← Interventions

Medical Provider

Assessment

Non-abusing Parent ← Resilient Child ← Recovery ← Resiliency theory

Figure 1: Pathway to Resilience: Breaking the cycle of maltreatment.

Risk Factors for Child Maltreatment

Table 1 Findings from papers reviewed

Author	Child	Parent	Environment
MacMillan and the Canadian Task Force on Preventive Health Care (2000)	Male sex.	Recent life stressors, maternal psychiatric impairment, lack of attendance to prenatal class, substance abuse, low religious attendance, parental sociopathetic behavior, low maternal age and parental death.	Low maternal education.
Flaherty, Stirling, et al (2010)	Emotional/behavioral difficulties, chronic illness, physical disabilities, developmental disabilities, preterm birth, unwanted/unplanned.	Low self-esteem, poor impulse control, substance abuse/alcohol abuse, young maternal or paternal age, abused as a child, depression or other mental illness, lack of knowledge regarding child development, unrealistic expectations for child, negative perception of normal child behavior.	Social isolation, poverty, unemployment, low-educational achievement, single parent home, non-biologically related male living in home, family or intimate partner violence.
Barth (2009)	Child conduct problems, age of child.	Substance abuse, mental illness.	Domestic violence, poverty.
Dubowitz, Kim, Black, et al (2011)	Disabilities, cognitive impairment, failure to thrive.	Maternal depression, young maternal age, parental drug use, single parent home, large number of children in the family.	Poverty, low levels of involvement in formal and informal community agencies.
Mersky, et al. (2009)	Children of minority, difficult temperament/behavioral problems, premature/low birth weights, disabilities.	Large family size, single-parenthood, presence of a non-biological caregiver, young maternal age, undereducated, parents with history of abuse.	Poverty, social isolation, low levels of social support, high local unemployment levels, high population density.
Moreland Begle, Dumas and Hanson (2010)	Child's age (most abuse between ages 3 and 8 years), physical health, disruptive behaviors.	Parental history of abuse, lacked control of their difficult child, negative thoughts about their caregiver style and actions of their children, maternal ethnicity, marital status, low educational achievement, large family size.	Poverty, lack of social support, decreased satisfaction of social support.

Protective Factors for Children Who Have Been Maltreated

Table 2 Findings from papers reviewed

Authors	**Child**	**Family**	**Environment**
Henry (1999)	Loyalty to parents, ability to normalize the abusing environment, invisibility from the abuser, self -value, future view of life,		
Afifi and MacMillan (2011)	Personal traits and characteristics, resources, intellect, self-efficacy, coping, appraisal of maltreatment, life satisfaction.	Resources, supportive relationships, family coherence, stable caregiving, parental relationships, spousal support.	Peer relationships, non-family member relationships, nonfamily member social support and religion.
Flores, Cicchetti, and Rogosch (2005)	Ego-resiliency, ego-overcontrol and positive self-esteem, female sex, compliant attitude, relaxed/calm, empathic nature		
Wilcox, Richards, and O'Keefe (2004)	Ability to blame the offender rather than themselves, positive self-esteem and social characteristics	Positive family characteristics	Positive external supports
Iwaniec, Larkin, & Higgins (2006)	Positive relationships and activities, easy temperament, outgoing, resourceful, ability to problem solve, academic attainment,	Positive family relationships	Positive school environment, community resources
Jaffee et al (2007)	Male sex with higher IQ's,	Parents that were not anti-social, decreased family stressors, maternal warmth, lack of domestic violence/substance abuse/mental illness	Decreased neighborhood stressors, high levels of neighborhood cohesion, high levels of informal social control
Flaherty, et al (2010)	Above average cognitive ability, high impulse control, belief in one's ability to control own destiny, external attribution of blame, presence of spirituality, high self-esteem or sense of self-worth	Positive family changes, presence of a caring and supportive adult	Structures school environment, involvement with a religious community, involvement in extracurricular activities or hobbies, access to good health, educational and social welfare services

Risk Factors for Child Maltreatment

Table 1 Findings from papers reviewed

Jaffee et al (2007)		Multi-problem families, inter-parental violence, parent psychopathology, criminality, substance abuse.	Poverty, dangerous neighborhood conditions, social deprivation.
Iwaniec, Larkin, & Higgins (2006)	Ethnicity, age, birth defects, premature birth, temperamentally difficult, physical/intellectual disability.	Emotional disturbances, aggression, hostility, low self-esteem, social anxiety, low verbal reasoning, illness, personal history of abuse, domestic violence, large family size, early parenthood, decrease quality of family relationships.	Poverty, lack of social involvement.