Capstone Title
Impact of Hospitalization on Pediatric Patient’s Mental Health

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Abstract

Hospitalization during childhood can interfere with a child’s progression through the developmental milestones resulting in poor mental and emotional health. Healthcare workers are able to provide care in such a way that supports healthy development if they have proper knowledge regarding the normal stages of development and how hospitalization impacts them. This review will explore the normal stages of development in children from birth until six years of age as well as various elements of hospitalization that interfere with them. Emphasis will be made on specific stressors associated with hospitalization as well as their influence on development and mental health. Literature was reviewed and analyzed to conclude that major hospital stressors such as separation, loss of control, bodily injury and pain interfere with develop and result in heightened anxiety, depression, aggression, and irritability. In response to this information, healthcare works should be able to make adjustments that ensure children experience hospitalization in the least detrimental way.
Impact of Hospitalization on Pediatric Patient’s Mental Health

The number of children diagnosed with chronic medical conditions is alarmingly high. Approximately 27% of children in the United States have a chronic medical condition that requires continual medical attention; some even prolonged hospitalization (Focus for Health, 2019). Hospitalization disrupts the typical routine of a child’s life. It requires them to stay in an unfamiliar place with unfamiliar medical staff and equipment and endure painful procedures. This is particularly traumatic to a child. A study shows that children who had been hospitalized are more likely to show symptoms of mental health conditions than non-hospitalized children and hospitalized adults (The Effects of Prolonged Hospitalization, 2020). Children, birth through six years of age, are particularly vulnerable because they are progressing through various developmental milestones. In fact, “adverse childhood experiences such as hospitalization can interfere with a child’s ability to reach some milestones and can lead to mental and emotional health problems” (Malik & Marwaha, 2020). If this problem is not addressed, children with continue to suffer from the symptoms of mental health conditions. Symptoms include: irritability, aggression, stress, self-doubt, restlessness, sleeping disturbances and more (Hockenberry, 2019).

The purpose of this paper is to explore how hospitalization interferes with the developmental milestones of children from birth to six years of age and makes them more vulnerable to various emotional and mental problems.

Research Problem

The rate of children hospitalized with chronic medical conditions is continuously increasing, thereby increasing their risk of acquiring mental health problems (Vinall et al., 2016). Although the number of children being diagnosed and hospitalized may be challenging to reduce,
the mental health effects of hospitalization may be minimized. There needs to be more education for healthcare workers regarding development milestones and the threat that hospitalization has upon them.

**Developmental Milestones**

Several different theorists have developed age-specific milestones representing the physical, cognitive, emotional, and social tasks and abilities a child should achieve. These milestones form the basis for personality, behavior including coping mechanisms, relationships, and boundaries, among other things. This includes their ability to handle stressful situations such as hospitalization and illness.

Sigmund Freud developed the psychosexual theory of development, which claims that personality and behavior develop as children pass through five different stages (Cherry & Gans, 2019). An individual’s sexual drive defines each stage, or libido, as Freud calls it, concentrates on a specific area of the body (Cherry & Gans, 2019). The stages being discussed are the oral, anal, and phallic stages. If the child fails to resolve the conflict at a certain stage, the child experiences trauma and cannot progress to the next. It is suspected that failure to progress results in fixations at that specific stage, which might include dependencies, addictions, or depression (Cherry & Gans, 2019). Freud also proposed that there are three elements that makeup one’s personality and influence human behaviors (McLeod, 2019).

The first element, the id, is the unconscious part of our mind that drives us to respond immediately to our basic needs, such as food, water, and comfort. The id is irrational and illogical (McLeod, 2019). The unconscious mind is also where memories from childhood are stored that can affect adult life (McLeod, 2019). The ego is the part that operates to seek the desires of the id in a way that is realistic and socially appropriate, even if that means delaying
gratification. The superego forms our values, morals, and judgments (McLeod, 2019). This development is influenced by proper nurturing and the ability to detach one’s own body from that of the caregiver.

The first stage, from birth to one year, is the oral stage. During this stage, the desires are associated with the infant’s mouth and include sucking, swallowing, and breastfeeding in which the infant relies on the caregiver. To progress through development, the child must learn to become less dependent on the caregiver to meet these desires. The anal stage takes place from one to three years of age, during which the desires are focused on controlling bowel and bladder movement (Cherry & Gans, 2019). At this time, the ego develops, and the child is aware that they are their own person and that their desires can interfere with the outside world's demands. They know this because adults restrict them when and when they can defecate as they learn to potty train. Proper parenting and nurturing guide them through this stage of development. The last stage being discussed is the phallic stage, which takes place from ages three to six (Cherry & Gans, 2019). The desires here are associated with their genitals, and they become aware of sex differences. The child must overcome feelings of jealousy and fear by identifying their gender and adopting the characteristics of the same sex parent (Cherry & Gans, 2019).

Erik Erikson described the psychosocial theory of development, which, similar to Freud’s theory, explained personality development (Cherry & Susman, 2020). Erikson’s theory focuses on the impact of social interactions (Cherry & Susman, 2020). Each different stage presents a different conflict; if the conflict is resolved, then a particular strength is gained; if not, then the child lacks this quality and may struggle with future relationships. The first stage consists of developing a sense of trust versus mistrust between birth and one year of age. During this stage, the infant relies on the caregiver to provide for his/her basic needs to feel safe and cared for.
However, a balance must occur in which the needs are met but not too quickly; the child must learn to test their ability to control their environment and tolerate delay in gratification (Hockenberry, 2019). Success in this stage leads to feeling a sense of security and comfort that allows them to experience unfamiliar situations with minimum fear (Hockenberry, 2019).

The next stage occurs from age one until three, in which the child faces developing autonomy vs. shame and doubt. As the child gains trust in the caregiver and environment’s reliability, they begin to discover that their actions are their own and can affect the environment. They must choose to exert their autonomy and independence or remain dependent on their caregiver, resulting in self-doubt and shame (Hockenberry, 2019). This stage requires encouragement and limit-setting, and discipline to provide guidelines for what is acceptable behavior or not; it also requires ritualism so that they feel secure to test their independence (Hockenberry, 2019). Preschool children from ages three to six are faced with developing initiative vs. guilt. As they become more active, they often assert themselves through social interaction and play (McLeod, 2018). The initiative allows the child to feel more capable of leading others and making decisions; however, at this age, they may become too forceful in controlling or leading others, which requires punishment leading to feelings of guilt. There needs to be a balance between the two (McLeod, 2018).

The last theory of development being discussed in Piaget’s theory of cognitive development. Piaget’s theory explains that children acquire knowledge through biological maturation and interact with the world to add and build upon current knowledge continuously. The first stage is called the sensorimotor stage and exists from birth until two years of age. In this stage, infants and toddlers acquire knowledge through their senses and motor movements. During this time, they learn that they are separate from other objects in the world and control
their environment. They also learn the concept of object permanence, which is that objects that leave their visual field still exist; this is important for parent-child attachment. The next stage is the preoperational stage, which consists of ages two to seven. During this time, the child can use an object to symbolize something evident as they play pretend (Hockenberry, 2019). At this time, they aren’t able to view situations from other’s perspectives aside from their own, this is termed egocentric. They also cannot mentally manipulate information to make it logical; instead, they think primarily based on what they hear and see and their perception of the object or event (Hockenberry, 2019).

**Impact of Hospitalization**

Researchers have made efforts to explore how hospitalization threatens the mental health of pediatric patients. As children move through each stage of development, they acquire skills that allow them to function within the world. If stressors occur before a child has achieved the skills necessary to deal with them, the stressor becomes a traumatic experience. Findings suggest that stressors may interfere with the ability to follow the expected trajectory of development (Malik & Marwaha, 2020). The inability to reach age-appropriate milestones can manifest as mental and emotional problems (Malik & Marwaha, 2020). The following explains how and why stressors negatively impact children of different ages at different stages of development. The most common stressors associated with hospitalization are separation, loss of control, bodily injury, and pain; however, some are more specific to each age group.

A literature search using the NCBI, CINAHL, Research Gate and American Academy of Pediatrics databases using keywords *mental health, pediatric, chronic illness, development, and hospitalization* was run. Over one hundred articles were identified. Eleven were used for review. Articles that focused only on specific pediatric diseases, and articles that discussed children older
than age six were excluded. Level I through V evidence was used as well as level VII. A common theme included that hospitalization exerts a great amount of stress on a pediatric patient and can interfere with normal child development; the experience increases anxiety, depression, and symptoms of mental and emotional disorders that can persist into adulthood if not resolved.

Hospitalization between birth and one year of age can interfere with an infant’s ability to progress through the oral stage, trust vs. mistrust, and sensorimotor stage of development. During times of illness, an infant may need a feeding tube, to be placed on an order to receive nothing by mouth or be mechanically ventilated; these may prevent the infant from being breastfed, bottle-fed, or sucking on a pacifier. All of which can interfere with Freud’s oral stage of development in which the infant is unable to receive pleasure and comfort from oral stimulation (Hockenberry, 2015). Since pleasure from consistent oral stimulation was neglected, the child may be fixated at this stage; this manifests as aggression, addictive personality, and others’ manipulation.

In reference to Erikson’s theory of development, infants should be developing a sense of trust in their caregiver and their environment. This is especially crucial because, during times of increased fear and stress. Children are particularly dependent on the safe and stable environment of their home and the support and love of their family members to cope and feel strong and capable. Infants limited cognitive and emotional are not designed to handle this type of stress, so they become increasingly dependent (Rokach, 2016). However, separation may be necessary for procedures, tests, or while the mother is away at work or care for other children. This can impede the child’s ability to trust that the caregiver will consistently provide for their needs; as a result, doubt and mistrust develop (Hockenberry, 2019). Part of fostering trust also includes providing a safe and pain-free environment, which may not be feasible due to the effects of the illness or
treatment and the unfamiliarity of the environment. (Mauldin, 2013). This corresponds to Piaget’s sensorimotor stage of development, which explains how children are exploring their environment using their basic senses and developing object permanence. The overwhelming stimulus of the hospital environment, such as bright lights and loud sounds, may cause a child to feel unsafe exploring their unfamiliar environment, which impedes their cognitive development (Case, 2014). Upon exploration, infants develop object permanence. If separation occurs during this time, separation anxiety will be increased (Case, 2004). The anxiety produced by separation from loved ones can cause symptoms of physiologic arousals, such as autonomic hyperactivity and increased motor tension (Case, 2004).

From ages one to three, the toddler is in the anal stage. During this time, the toddler should develop a sense of self-control as they learn to potty train. Amongst the development of self-control, the ego is also being developed. In The Role of Bodily Illness in the Mental Life of Children, Anna Freud explains how the experience of being nursed or a weakened body can be harmful to ego development. Freud (1952) states:

“the gradual mastering of various bodily functions, such as independent eating, independent bowel, and bladder evacuation, the ability to wash, dress, undress, etc., mark for the child highly significant stages in ego development as well as advances in detaching his own body from that of the mother and possessing it at least in part. When occasioned by the nursing procedures (or by the weakened bodily condition itself), a loss of these abilities means an equivalent loss in ego control”.

This results in rebellious, defiant, or over-controlling behavior (Hockenberry, 2019). Erikson noted that the developmental tasks consist of autonomy vs. shame or doubt in which the toddler becomes increasingly more independent in their sense of control (Mauldin, 2013). Unfortunately,
during hospitalization, it may not be possible to provide many choices for a toddler in the face of necessary treatment. This hinders their self-confidence.

Along with that, the toddler may need to be physically restricted for healing purposes or less mobile due to illness. Anna Freud explains that this blocks their ability to mobilization their emotions as well, and in response, a build up of aggression occurs (Freud, 1952). They may end up feeling shameful, defiant, or lack self-esteem. Piaget explains that thought processes are still concrete at this age, so the toddler cannot adequately infer the true causes of their hospitalization and might instead interpret their hospitalization as a punishment for something they have done wrong (Rokach, 2016). Also, it is often challenging for children to feel confident and reassured that their treatment is actually to help them and make them feel better in the long run (Rokach, 2016). An example of this is provided in the *Role of Bodily Illness in the Mental Life of Children*; it explained that according to the child’s immature conscious reasoning, the bad taste or side effects of medications could be perceived as punishment for something (Freud, 1952).

At ages three to six, the preschooler makes way through the phallic stage associated with aggression, jealousy, or fantasies involving the opposite sex parent. An operation or procedure implemented at this stage is interpreted based on the fantasies that surround it. For example, if the child’s thoughts consist of what occurs between the parent in intercourse, with the child being in the role of the passive sexual partner, then the child may perceive the operation as mutilation or as punishment for thoughts, masturbatory practices, and opposite-sex jealousies (Freud, 1958). Guilt and anxiety are already naturally increased during this stage of development; therefore, the individual’s understanding of the procedure further heightens anxiety, guilt, and fear (Rokach, 2016). According to Erikson’s theory, the preschooler explores to seek answers and interacts with others their age to learn cooperation and sharing skills (Case,
Problems occur here when there are no limits or discipline to guide them, which is typically lacking during hospitalization times. For starters, they lack socialization with peers their age due to containment within the hospital (Case, 2014).

Additionally, Anna Freud explains that a child’s mother may neglect some of her parenting duties during times of illness (Freud, 1952). She states, “The mother owing to her anxiety for the child's health, may suspend all considerations of discipline and good behavior and indulge the child's wishes to the extreme,” upon discharge this leaves the child unable to make sense of emotional experiences due to lack of moral standards and guidance (Freud, 1952, p.70). Piaget insists that at this age, the child must interact with other children through various types of play. Failure to do this is thought to be damaging since an important coping mechanism for children with a stressful environment such as the hospital is playing. It helps alleviate their anxiety and increase their adjustment. It is also thought to be their means for making sense of the world (Rokach, 2016). The article, Psychological, emotional, and physical experiences hospitalized children include that “as can be seen in any pediatric hospital, hospitalized children tend to engage in less play activity, and when they do engage, their play is characterized by repetitive, solitary themes” rather than interactive play among others (Rokach, 2016).

After evaluation of the literature, it would be ignorant to conclude that hospitalization during childhood only prevents children from progressing through the normal pattern and stages of development; it is far more than that. Failure to achieve the physical, cognitive, emotional, and social gains from various stages of developmental can greatly interfere with the child’s mental and emotional health. Potential effects include depression, reactive attachment disorder, social anxiety disorder, generalized anxiety disorder, attention-deficit hyperactive disorder, bullying, oppositional defiant disorder, conduct disorder, post-traumatic stress disorder, and
many others (Case, 2014). While not all children develop mental disorders due to the consequences of hospitalizations, the child may suffer from an abundance of symptoms which were previously listed. Others include failure to thrive, avoidance, fear, mistrust, withdrawal, clinging behavior, guilt, and loss of self-control (Rokach, 2016).

**Conclusion**

The findings above provides knowledge regarding the normal stages of child development to help health care staff recognize deviations from them. It also seeks to provide examples of how various hospitalization consequences can impact the expected course of development. Since each stage of development exists to support health development, failure to reach or surpass each stage results in unhealthy behaviors or feelings. Failure in certain stages can have the following results: anxiety, depression, self-doubt, clinging behavior, regression, angry, hyperactivity, irritability, sleep disturbances, and a plethora of others. A limitation within the information is that not all of the theories discussed are fully accepted today. However, they do all at least partially aid in the understanding of child development. While not every child follows the same order at the same age, the theories correspond with the vast majority. This information concludes that hospitalization can interfere with the expected trajectory of child development and result in mental and emotional problems. Knowing this information should encourage medical staff to make necessary adjustments to ensure that the child experiences hospitalization in the least detrimental way. This can be accomplished by limiting separation from parents and peers, allowing for exploration in a developmentally friendly environment if appropriate, giving the child choices, among many other things. Healthcare providers must be attending to a child’s mental health just as they attend to their physical health.
References


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