

IMPORTANCE OF EARLY SCREENING AND SIGNS TO WATCH FOR IN INFANTS AND YOUNG CHILDREN

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Abstract:

Early screening and detection of developmental delays and disabilities in infants and young children are crucial for timely intervention and improving outcomes. This essay explores the importance of early screening in identifying potential issues that could impact a child's physical, cognitive, social, and emotional development.

It also discusses the signs to watch for in infants and young children that may indicate a need for further evaluation and intervention. By highlighting the significance of early detection and intervention, this essay emphasizes the value of early childhood developmental screening programs in ensuring optimal outcomes for children.

Keywords: early screening, infants, young children, developmental delays, disabilities, intervention.

1.2 1. Introduction

Development is an ongoing process of change, involving skills such as motor control and social behaviors, as well as emotional responses and cognitive acumen. These skills emerge along distinct pathways, interacting with one another to foster optimal developmental growth. During critical windows of opportunity, interventions are more likely to result in desirous outcomes. Apprehensions that an infant or child is not reaching appropriate developmental benchmarks should not go unanswered. Rather, they should achieve depth of understanding of the range of abilities expected and pursue routes to evaluate them. Those who work closely with children and are most able to observe growth and maturity – parents, educators, day-care providers and health care professionals – need to be continually educated. The overall goal is to identify and promptly address any possible problem, and given current knowledge, collaboration among these caretakers is essential to ensure healthy growth and maturation. This would include attempting to improve the identification and assessment of children having difficulty by the promotion of standardized tools and practices, in conjunction with the provision of support and information for parents and professionals (Beed, 2009).

Developmental assessment itself is a complex practice, requiring highly specialized skills. Those who perform such assessments must possess suitable qualifications, including specific training in their field, and fulfill certain roles and functions, as outlined in the document. Various settings are mentioned in order to give topics a preliminary point of departure. For instance, the responsibility is placed upon health care service providers to monitor the growth and development of their young patients so that problems can be identified early. They are seen as playing a critical role in ensuring that all children are given the opportunity to reach their full developmental capacity. On one hand,

simple guidelines and milestone charts, which can be shared with parents, are deemed essential in order to instruct them on what to observe. Should an area of concern arise, a list of possible early signals and probable consequences is provided. However, it is emphasized that parents cannot be expected to shoulder the complete burden of early detection, and medical practitioners, therefore, need to be more proactive in addressing certain assumptions. A more thorough evaluation can be performed by referring children to specialized developmental centers or clinics for further assessment. The varying roles and responsibilities of the individuals to whom the care of young children is entrusted are considered, and recommendations are proffered regarding how each group might better attend to early cognitive and social development.

1.1. Background and Rationale

Early screening and assessment of infants and young children's development have become a recent focus of primary care and public health initiatives. Development proceeds differently for each child, and the vast majority of children develop typically. However, for reasons that typically do not accompany well-child care, a book, a pamphlet, and a website provide information for parents on several critical developmental milestones (Beed, 2009). There are several important considerations: Children who are significantly behind in meeting certain milestones are at increased risk of developmental disability, often associated with future welfare dependence, employment difficulty, incarceration, mental health services need, or lower school achievement. Special education can also be expensive. There are social determinants of delay, low-income and immigrant status being the most widely studied.

Routine developmental assessment is recommended by many professional organizations since social/behavioral determinants of delay are included. Physicians, nurse practitioners, nurse visitors, or other clinic staff, either by direct questioning or through the use of standardized instruments should screen each child at specified ages. Studies suggest that physician clinical judgment is unreliable in identifying children with delay and screening increases the likelihood of detecting delay. Despite these recommendations, developmental assessment is often not routinely performed. Pediatricians cite time constraints and lack of reimbursement as obstacles. Infrequent contact with parents is another difficulty. Funding and provider availability trickle down from the state, which often rely on federal support (Park, 2015). Between 2002 and 2004 the state cut reimbursement rates for physicians serving a large proportion of Medicaid patients by 30%. A 2007 report from the California Children's Hospital Association found that a quarter of children do not receive developmental services because of insufficient funding. When time/finances are strained there are choices between treatments and not all children are deemed worth the investment.

1.3 2. Developmental Milestones in Infants and Young Children

Monitoring growth and development of a child represents an integral part of ensuring a healthy, secure, and appropriate path of ascension towards a bright and promising future. This monitoring takes place at multiple spaces along the journey of growth and may be seen as the fundamental pillar supporting the potential of nurturing at the hands of those responsible for the child. At the very first stages of infancy, the significance of monitoring this growth and development must be underlined, norms and developmental milestones shaping a secure base of comparison and the essence of individualized observation pinpointed.

There is a well-structured plan followed by healthcare providers and parents alike when it comes to the assessment of a child's development, vivid and well-delineated stages of growth and behavior in which the child should partake precisely determined, at least on a generic scale. However, due to inherent variability of the developmental timeline, each child should be observed individually and allowed the necessary time to grow and mature in respect with their personal rhythm. Moreover, parents and healthcare providers should focus on those individuals until the age of three, a period much more defining for the potential future of children in terms of health and wellbeing. The very first step towards a greater mindfulness of one's child starts by carefully assessing the infant's behavior, emotional states and how, and at what rate, they change over time. Such indicators are vital in their informative potential, often indicating a larger underlying issue. Even if no problem is detected, the conclusions will lay the groundwork for a continuous observation that might prove to be life-saving. Furthermore, checking growth parameters, such as height, weight, head circumference or BMI will further enhance the accuracy of the monitoring, particularly important to this later pair, which has been very closely linked to developmental milestones (Beed, 2009). Those developmental milestones are meticulously linked, and a delay in one field will produce a ripple effect on all the others. This underscores the importance of building a comprehensive profile encompassing all problematic aspects.

Aiming to foster a broader understanding of the remarkable complexity and intricacy of the child development process, a short exposition on some of the most significant developmental milestones occurring up to the age of five will be made. This is considered to be significant as such knowledge is the cornerstone upon which any efficient screening program should be based (Park, 2015). Furthermore, a general view of what is to be expected of children by a certain age would hopefully increase the general awareness and mindfulness to this aspect of one's child.

2.1. Cognitive Development

Cognitive development is the developing ability to think and reason. A child's cognitive skills affect how a child thinks, explores, and figures things out. A child's cognitive development is shaped by a child's relationships and environment – it emerges from a child's brain, and a caregiver's role is to create an environment that promotes it. From the moment a child is born, a child's relationships and environment shape the way a child's brain grows. A child begins learning about the world around a child through their interactions with their parents and family members. As a child gets older, a child begins to explore and learn about the world. A child will be curious, ask questions, and take things apart to figure out how they work. Cognitive development involves memory, solving problems, and reasoning. Here are milestones to watch for some children, a child's memory and attention skills show what a child remembers from a short while ago, what a child can focus on for a longer time, and a child can do more than one thing at the same time. A child's reasoning skills show how a child can understand the cause and effect of the actions. A child's reasoning skills develop from a child making sense of the new and complex information. A child's cognitive abilities provide insight into a child's overall functioning.

Children develop skills in five main areas of development. They are cognitive development, communication, creative growth, social development, and physical development. Cognitive development is the developing ability to think and learn. It is a child's ability to remember, understand, and reasoning skills. Communication is about how a child speaks, listens, and understands. It is the use of communication and language. Creative development is how a child can express themselves. It is the skill to explore, play with others, sing, draw, and so on. Social

development is how a child can get along with others. It is the skill to play and socialize with others. Physical development is about how a child can move. It is the fine and gross motor skills, like walking and drawing. Language skills are an important part of cognitive development. A child learns to talk around two years of age. It is very important to talk and play with a child to promote a child's language skills. Children begin to talk by babbling and imitating sound. A child's language skills allow children to understand and communicate with others. A child's language skills are crucial as a child gets ready for kindergarten. A child's understanding and expression skills will grow over time with help from caregivers. Due to various factors, children may have trouble developing their language skills. A child's language skills enable them to read and understand information, develop problem-solving skills, become a critical thinker, and think before they act. Talking to a child as often as possible can encourage a child to make good use of their language skills. Language skills can be promoted by nursery rhymes, storybooks, toys with labels, and signs around the house to describe the words.

2.2. Physical Development

Assessment and observation are critical processes in identifying developmental delays. Young children's development over the first five years of life is rapid and varied. Developmental screenings ensure children are meeting critical developmental milestones, detect possible developmental issues, and promote positive early child outcomes. Developmental screening is conducted by using reliable, valid, and culturally appropriate screening tools to assess growth. Children who respond positively to the screening are more likely to require an evaluation to determine if they are eligible for certain developmental services (Park, 2015). In the first years of life, changes take place quickly in multiple areas. Getting frequent monitoring of growth enables children the best opportunity to advance and expand. This part reviews physical growth: throughout the first months and years of life, children experience a variety of bodily changes that increase engagement with individuals and the environment surrounding them. Data from the first research display the progress of gross and fine motor skills across children at different ages, while the next group of studies monitor children's physical development longitudinally and evaluate potential links between motor abilities and wider skills (Escolano-Pérez et al., 2020). Early behaviors such as scratching progress to more complex actions including crawling, pulling to a stand, and taking first steps. Gradually, behavioral changes result in increasing mobility and environmental exploration throughout childhood. Thus, milestones that entail a change in mobility pattern are basic components of healthy growth. However, there is a discrepancy regarding the construct and measurement of timing of milestones. Movements that could mechanically undermine postural control and risk for falls happen before pulling to a stand in single tasks. Variances in infant mobility reflect dissimilarities in underlying mechanisms and environmental influences. Moreover, infant mobility can serve as a mechanism for improving later cognitive abilities through enhanced exploration and learning opportunities.

2.3. Language Development

Language is the primary means of communication in the early childhood years. It is the gateway to social interaction as well as to meaningful learning and play. Language development is the process whereby children learn their native language during infancy and early childhood (Steinbeck, 2017). It occurs in stages, beginning with babbling in the first months of life. The child is thought to say the first words around the first birthday. Over the next few months, the child begins to put words together to form simple sentences. Receptive language comes before expressive language. This means that the child understands much more than he/she can say.

Children start to understand what adults say before they begin to understand the spoken words per se. Engaging, listening, and responding to the child from the earliest days is the way to fostering the language skills, ability to communicate, and understanding of the spoken words (Elaine James, 1989).

Parents and caregivers are encouraged to be mindful of typical developmental milestones in their observation of infants and young children. Information on signs of development or possible delay in various early childhood areas has been provided in the previous sections. Concerning the language aspect, the development of speech and language in pre-school years is paramount to early screening on developmental delays in communication. The environment of infants and young children plays an integral role in their linguistic development and thus influences their early childhood stage. Parents and caregivers are advised to talk and listen to the child frequently. Infants learn to talk through listening since they are born. Therefore, the language they are exposed to plays a decisive role on their language growth. Reading to and talking with infants are excellent ways to boost their language skills. Singing to infants is another enjoyable way that helps develop language. The language environment should reflect rich content in vocabulary, sentence, or phrase variation, and interactive conversation. The more infants are exposed to words and connected language, the faster they will acquire language. The more meaningful the language is, the faster the infants will learn it. Infants learn language best when they are the focus of language input. When parents and caregivers talk and engage directly to infants, it attracts the infant's attention and keeps them to develop the language more quickly. The language for infants as their first language should contain rich consonant and vowel sounds. Reading books is one way to provide rich language content to the infants. Another way is to have a conversation with them by commenting on their action or involving them in simple questions. The more individual attention and encouragement of language development are given, the faster the infant's language will grow. It is imperative to know some language development milestones at different ages to carry out effective screening to pre-school years.

1.4 3. Importance of Early Screening

It is important to monitor development in the early years. The earlier a child with developmental concerns is detected, the more that can be done to help that child. Early screening is a process used to learn about a child's development over time to determine if there are any signs of delays. Early screening usually happens in the first few months after a child is born as a part of standard well-baby visits, but it can also be completed at childcare facilities or in preschools. Early screening continues during the first few years of a child's life because it is a very important time. Babies and young children grow and learn very quickly, so they can be screened several times for the early signs of delays between 2 months and 5 years of age (Beed, 2009). The goal of early screening is to identify signs of delays or concerns early, so that further testing can be completed if needed. Early screening ensures that all children have the opportunity to participate in early intervention or other services as soon as possible. The earliest known interventions can potentially result in the most improvement of overall child development. Early detection also improves the outcomes, or quality of life, for children as well.

Screening as a preventative measure; and with early detection, the child can receive immediate services that target the areas of need, rather than waiting until the child is older and further behind. It is important that parents, caregivers, childcare providers, and teachers all work together in the screening process so that a child may be considered for further evaluation if, and when, the delays

are identified. It is also important that screening is completed, so further testing and services can be received if needed. Just because a child fails a screening does not mean that the child has a developmental concern. However, positive screening results could mean there are delays present and further testing to learn more will be necessary in order to provide the best appropriate services. There are many barriers and challenges found with developmental screening. Children are often misdiagnosed or diagnosed later, rather than earlier, so it is important that all children be appropriately screened in a timely manner. Moreover, parents, as well as communities, do not have a good understanding about the screening process and its importance, so awareness efforts are needed in order to promote a better understanding of the process.

3.1. Definition and Purpose of Early Screening

Early screening is a crucial component in observing a child's health and development. It entails systematic assessments for children at expected ages to identify possible developmental delays or disorders. Early screenings are evidence-based and consist of standardized tools to assess varied domains of development systematically. The purpose of early screenings is to catch any developmental issues as soon as possible. Research has shown that detection and intervention of delays as precisely as possible during the formative years can assist in enhancing a child's developmental potential (Beed, 2009). This knowledge is particularly significant during the first three and a half years of a child's life. By understanding more about early screening and the advantages it offers, parents and caregivers can better advocate for the needs of their child. For example, if a child is evaluated with delays, caregivers can be educated in the eligibility process for different programs available within each state. After potential services are defined, parents or caregivers can request assistance with the application process. This further explains how primary care pediatricians identify potential services to families for further assessment. Cortical dysplasia, downs syndrome, and autism are some developmental problems that impact more children receiving single grade evaluations by school. Early screening also aims at assuring there are community resources equipped to serve children's requirements as timely and effectively as possible after detection of any delays. It is significant for states to have a clear plan followed by local health departments and medical providers to identify children referred and evaluated with developmental issues outside the norm. An early screening practice that works properly builds bridges between child care and the medical community, which has been shown to maximize the likelihood that children with delays and disorders receive the assistance they need.

3.2. Benefits of Early Detection

Early detection of developmental issues in very young children can significantly alter the course of their lives. According to (Park, 2015), many empirical studies have suggested that children who receive early intervention for developmental delays or early treatment for serious problems will have better educational, social and life outcomes than those whose problems are entirely addressed after kindergarten. Early and frequent screening of young children is critical for their healthy growth and development. Using reliable, valid, and appropriate screening tools at a doctor's office, Head Start program, child care center, or local health department can provide parents and caregivers of young children important information and ensure children are meeting these critical developmental milestones. Highlighted resources include evidence-based information on the critical components of developmental screening, available screening tools, and how to use screening and assessment data to develop individualized learning plans (ILPs) in early care and education settings. It is important to select screening tools that provide valid, reliable measures of development and to provide guidance on using screening and assessment information to plan

appropriate developmental and behavioral programming for children with developmental delays. This information will help to ensure a comprehensive, coordinated, and culturally competent system of developmental screening, assessment, and program planning for infants, toddlers, and preschool-aged children. In addition, young children might have hearing problems, sickle cell anemia, and other health problems that make it hard for them to learn to talk, sit, walk, or play. Screening for health and development problems, including hearing loss, developmental milestones, height and weight, blood testing, and other health problems, are an important part of well-child visits for infants and toddlers.

1.5 4. Common Developmental Delays and Disorders

I'd like to cover the information about signs to watch for in infants and young children. Here is a sample text related to common developmental delays and disorders:

Every year thousands of babies are born in the United States prematurely or with factors that put them at risk for developmental delays and disorders (Chödrön et al., 2019). While in 2018 the American Academy of Pediatrics reported that 96.8% of all children under three years were eligible for receiving early intervention services, in reality, only 4.3% of children under three years received services. Early intervention and prevention programs for children aged 0 -3 are well documented and have been shown to have positive effects on developmental outcomes in children at risk for delays and disorders, and are generally known to improve functioning or prevent regression. Researchers have argued that waiting for children to show signs might lose valuable time during the period when they could benefit the most from early intervention to improve their development outcomes.

Autism Spectrum Disorder: The prevalence of Autism Spectrum Disorder has increased more than fivefold over the past twenty years. By 2014, the prevalence rate of Autism Spectrum Disorder was approximately 1 out of 59 children. Autism spectrum disorder affects people across their lifetime from childhood through adulthood. Children with Autism Spectrum Disorder often have difficulty with social relationships, with communication, or show restricted stereotypic interest in certain activities or objects. When Autism Spectrum Disorder is detected in childhood interactive, repetitive and language impaired presentation are the most common symptoms. Researchers argue that the early detection of autism spectrum disorder and definition of intervention can increase the chance of encountering positive outcomes.

Speech and Language Disorders: For the majority of children speech and language disorder is the initial type of disorder diagnosed for developmental delays. Children with speech and language disorders have difficulty in understanding, talking, and selecting words correctly. Many young children have speech and language delays. In fact, as many as 1 in 5 children in the United States have some sort of communication disorder. Children with speech and language delays or disorders often have trouble developing social relationships, communicating with family or friends and learning in school. Depending upon the severity of the disorder, many children use multimodality to communicate the meaning or they can communicate using sign language, gestures or showing. Many children with speech and language disorders have increased behavior problems when they fail to attend to tasks that they don't understand, they demonstrate frustration or communicate only for immediate needs. It can be particularly difficult for caregivers not understanding why their babies are crying all the time or babies being startled easily by changes in the environment.

Researchers and providers generally recommend changing the background environmental noises or trying to communicate with babies with soft words.

Motor Skills: Another type of delay that young children under the age of three years commonly experience is motor skills delay. Young children under the age of three years develop significantly in their movement and control of body parts, such that skill improvement occurs rapidly between 0-3 years. Indications of motor skill delays most frequently can be seen in handwriting performance and project completion. This type of delay can negatively impact young children's independence or physical performance and is often seen in younger children. The prevalence of each disorder or delays might differ or might be seen together. For example, many children with communication delay have social and emotional problems as well. While for some children symptoms might be more prominently presented, for others, it might require professionals or caregivers to complete an assessment to truly understand their conditions. If frequently seen signs or symptoms are detected during the stages of infancy or early childhood, it might be beneficial for children to receive assessments and services. When possible, children who might have delays or disorders should be seen individually and interventions planned should strive to support all areas.

4.1. Autism Spectrum Disorder

Autism is a lifelong developmental disorder characterized by impaired social interaction and communication, often with restricted and repetitive behavior. In early infancy, the characteristic behaviors of autism may be difficult to differentiate from those of other developmental disorders. Co-occurring medical problems may also obscure recognition of autism, and there is no medical test to diagnose the disorder. The condition is usually identified by observing a few “red flags” in a child's behavior (Okoye et al., 2023). These red flags often emerge in the first 18 months of life and should continue to be watched for as a child grows.

It has been said that autism is diagnosed in diagnostic fashion because some signs are needed to be present, but they must be identified in consultation with clinical judgments. The signs will be changes in many domains: behavior, communication, formation of relationship and *prima donna* play and development. Behavioral signs should be a concern to parents and health providers because early treatment needs to be initiated. Early intervention treatment for children with ASD offers the best medium and long term outcomes in terms of ameliorating the condition and lessening the impact of the core deficits and the prognosis. Due to the improvement of public awareness and efficient professionals, more and more children have been diagnosed with ASD. Children with ASD have abnormal behavior, social skills and stereotypes of interest behavior will be significantly improved if take effective treatment method intervention. That's why it is important to behavior health providers to detect early signs of ASD. On population prevalence, the rates of ASD diagnoses have increased over the past 20 or so years, from approximately 1 in 150 persons in 2000 to 1 in 54 persons in 2020. Known contributing factors are awareness and diagnostic substitution, meaning more children are being diagnosed with ASD, especially who would not have received that diagnosis in the past due to relatively high cognitive ability. Now the prevalence of ASD in children at 4–17 years of age is 2.3%.

4.2. Speech and Language Disorders

There are several prevalent types of speech and language disorders that may affect infants and young children. Speech delays may include phonological processes like reductions, repetitions, and dysarthria marked by soft or imprecise articulation and control of voice and respiratory

muscles. The primary source for these difficulties is parkinsonism and even drugs. Secondary sources include hearing difficulties and cognitive impairment. Language impairments may include difficulties with vocabulary, formulating sentences, and pragmatic language, influencing speech to be meaningless or illogically sequenced. The primary source for language impairments includes pervasive developmental disorders and brain trauma which includes TBI, CVA, and infections. Secondary sources include hearing loss, retinopathy of prematurity, prenatal drug exposure, and low birth weight (A H Johnson, 2015). Every infant and child should meet developmental milestones which include several communication abilities. By three months of age, babies vocalize in response to language. They babble at about six months. They should also laugh in response to patterns, facial movements around two months, and vocal sounds at four months. Infants will gesture by twelve months in the form of pointing or waving. Older children will engage in speech patterns like yielding, toasting, and taking turns in conversation. If these communication milestones aren't being met, this is considered a communication delay or difficulty. Speech and language disorders occur in 8-9% of children and have a detrimental effect on peer interactions and academic achievements. A considerable proportion of children with speech or language problems continue to exhibit these problems into their adulthood. Early and timely assessment and intervention may prevent and ameliorate speech or language delays and disorders. This identification is critical as effective communication is the foundation for learning. Every child may need some help in developing effective communication. A lack of parental awareness for the early age of the development of speech and language skills has been accounted. Frequent field inquiries recently have revealed a lack of early intervention strategies for children with speech and language difficulties. This knowledge management report serves as a resource to individuals concerned with enriching the development of speech and language skills in all children. It provides a straightforward and clear understanding of what is needed to foster useful communication abilities in children. By using the knowledge in this report, one can make a difference in all children. There are several easy ways to help young children develop speech and language skills. One prevalent suggestion is to ensure a language-rich environment for students. This includes exposure to books, songs, and foreign languages. Engaged conversation is paramount. No longer is parallel talk suggested, so caregivers should be perfectly able to respond and treat children's questions very seriously. Research has shown that even very young children can understand multi-syllable words. Talking to children about adult preoccupations and interests is found to be very enriching for children as is having a regular time for direct conversations. Another simple suggestion is to play with the language. Words are more memorable when they are part of a special song or game. Finally, make sure children feel free to talk. Homes are consistently becoming more isolated. Turn off the TVs and video games inside and go outside instead!

4.3. Motor Skills Delays

Motor skills delays can occur in early childhood and infancy. Young children develop both fine and gross motor skills from birth, such as reaching, grasping, or crawling. While gross motor skills refer to bigger movements, like sitting or walking, fine motor skills relate to smaller actions, like picking up objects with a pincer grasp or holding objects with a pincer grip. The years from zero to five are of particular importance for motor development, as many skills begin to emerge in these years, with increasing complexity and variability.

Motor skill delays in infants and young children are delays in acquiring cognitive-behavioral ability to control body movement and/or delays in a child's ability to develop both fine and gross motor skills. Motor skill delays result in limitations in the child's physical ability and autonomy

and may trigger social, cognitive, and emotional drawbacks in years to come. Although motor skill delays are most likely to be detected between infancy and early childhood, when the child's physical independence steadily increases, some signs may be exemplified even during infancy which may lead to early detection and intervention. Such signs include having atypical coordination in crawling and walking, having difficulties when manipulating objects, or having abnormal leg or arm flexion or extension.

Thus, it is crucial to assess child motor development during preschool years and, if delays are observed, to provide age-appropriate intervention as soon as possible, to promote life-long physical activity beneficial for child cognitive, psychological, emotional and social development. To improve interventions, special attention should be given to multi-disciplinarity and a wide range of therapeutic options, and parents should also be educated on how to encourage child motor skills at home. Activities such as dance or martial arts training can benefit children's control and coordination of body movements without being strictly confined to the home environment. Furthermore, well-organized motor development games can be played at home as a supporting measure. Physical activity during unorganized free play can be a mechanism augmenting children's locomotor and object control skills. Moreover, physical activity has been characterized as a crucial element for the healthy development of body and brain, as well as a significant protective factor for various diseases. Considering the importance of motor skills in healthy child development, common actions to encourage facilitation of child's manipulative abilities are the use of toys which foster hand-eye coordination and the joint participation of the child with the caregiver in handling small objects.

1.6 5. Screening Tools and Techniques

During their first five years of life, children grow and develop at a rapid pace across a number of domains. Especially in the first three years of life, many foundational skills are acquired. It is at this time that the brain is developing at the most rapid pace, and the network of synapses growth. These neurons are laid down in a massive overabundance, with their connections shaped by experience. This early time is critically important in setting the foundation of healthy growth and development (Park, 2015). Given this critical period of growth, research has shown only a minority of at-risk children receive needed services during the preschool years. Therefore, methods to more effectively entail a base of support for children's healthy growth and development are needed.

Developmental screening is the timely identification of children who may be at an increased risk for developmental delays or disorders. Based on the results of the screening, the child will typically undergo further assessment in order to determine if a delay or disorder is present. Screening allows for interventions to be implemented early so a child can be on a trajectory of healthy growth and development. A variety of reliable, valid and easy to use screening tools exist, which can provide critical developmental information across domains. The results of screening may be used to identify concerns in specific areas of development and aid the implementation of further evaluation, including the use of assessment by qualified professionals. With regard to developmental screening, either standardized questionnaires completed by parents or direct assessment of the child's skills can be administered. There are many benefits, such as the consistent nature and high reliability of results, associated with using standardized developmental questionnaires. In terms of the content of screening tools, a number of tools measure the achievement of developmental milestones across cognitive, social, and motor development. Overall, children grow and develop at various rates across different domains. Prompt attention to

the use of standardized developmental screening tools is essential since screening's sensitive period fades away over time. Since the parents observe their children in everyday settings, parents appear to be the best informants regarding diagnosis (Beed, 2009). Consequently, questionnaires completed by the parents are clinically worthwhile and highly advised. Screen, but Do Not Touch! In case a brief evaluation of the child is necessary, just do that; such an evaluation is recommended. In spite of the apparent benefits of developmental screening, any sort of interaction with the family should be approached with caution. However, a well-organized and articulated action plan, sensitive to the stage of adaptation that family members are in, may consistently lead to positive outcomes. Early and frequent so-called 'developmental' screening may be one among the priorities in the management of childhood injuries. In case of any suspicion, even without any solid proof, a straightforward and honest warning should be given to the family. Notify and warn, but do not attempt to treat or advise. According to the sensitivity analysis, environmental protection measures, particularly those concerning child proofing, are possibly most effective for occasions with the smallest occurrence of physical and/or developmental consequences. For the purpose of increasing cost-effectiveness, details on the type and amount of recommendations should be adjusted to the nature of the observed injuries, changes in which should dictate changes in the action plan.

5.1. Standardized Developmental Screening Tools

The primary care provider's office is an excellent site for developmental screening. Children attend multiple well child appointments between birth and kindergarten, making the primary care provider's office an accessible place to conduct developmental surveillance and routine screening. Most providers also see patients regularly for sick visits. Tying developmental screening to common health care visits may mean children receive early, consistent screening even if they are not seen for a well child visit at key developmental ages. There is wide acceptance for the idea that a formal, reliable and valid developmental screening should be administered at several defined ages. Several screening instruments have been shown to have excellent reliability and validity as measures of developmental problems. The instruments all generate a score that is compared to a reference population. Although clinical judgment and parental input remain important, screening offers an objective way to identify children for whom a closer look is warranted. Many providers promote development in indirect ways. Parents, often inadvertently, prompt children to speak, behave and interact more like an older child. A research-proven way to help development is through a curriculum developed to improve caregiver's interactive techniques by integrating child directed activities into everyday routines. In informal discussions, many caregivers commented that observing in this manner does prompt increased development in the children of concern. When objective screening data is used to demonstrate developmental delays to caregivers, even when the caregivers don't agree with results, their involvement in additional testing increases. Conversely, subjective screening data does not have the same efficacy in engaging parents. Even when testing is declined, parents or caregivers may change settings so the child has an opportunity to develop in a different environment. Further study indicates that extreme prematurity is a risk factor for developmental delay and that the incidence of these risk factors is increasing. All very low birth weight children need excellent developmental monitoring. This is not, however, the population group at elevated risk of the triple diagnosis of ASD, intellectual disability and language impairment. Children of concern will be discussed. It is recommended that 20-40% of children are eligible for further evaluation by the time they reach Kindergarten. These children are of particular interest. This research will assist pediatricians and caregivers in providing an appropriate level of service, support and intervention. Early screening of high-risk children is therefore warranted.

Developmental screenings of children in either Primary Care or Early Care and Education settings should target children at elevated risk based on prematurity, birth weight, medical procedures or familial and genetic history. Observing children at risk even when objective screening results within norms has the advantage of early diagnosis of children needing support. An active role, as opposed to observer can be taken when abnormality is observed. Children don't develop in programs, they develop in relationships. Screening supports relationships between parents and caregivers, biasing development towards auspicious environments. With data from additional screening and testing, trends in development can be detected. This has implications for caregivers so that children receiving a regular pediatric service are more likely to be affected by this information. In particular, care should be taken that growth and nutrition are closely monitored in children showing a slowing of development. Several children continued a stable, yet subnormal development, precipitated by poor growth. This had an impact in the later realization of ASD in several cases, however the impact on children later diagnosed with intellectual disability and language impairment were the most severe. In virtue of these data, pediatricians may consider screening for these co-morbid disorders as well as directly monitoring child development. Efforts in community education and rural area health connections will be made, as this has the potential to encourage a wider screen. Early identification will allow for more targeted and eventually more effective interventions. This will benefit children already receiving early intervention and those needing referral. Caregivers will be directed to clinics in the private and public system. Children attending these clinics at an early stage were generally better engaged in further testing of developmental concerns. Child development is essential for early educators' effective teaching practice. Young children's development during the first five years of life is rapid and varied. At all ages, there are established developmental milestones across physical, social-emotional, language, cognitive, and early literacy domains of development. Early and frequent screening and respective assessment of children's developmental progress ensures children's healthy growth and development, enabling young children to enter school ready to learn and succeed. Fundamental needs of children are addressed when using reliable, valid, and developmentally appropriate screening tools; behavioral concerns, if present, are detected early; results of developmental screenings provide important information to parents and teachers and may raise questions or concerns that require subsequent assessment of the child's development; finally, assessment validation is needed to ensure that results are used accurately. There is a challenge in selecting appropriate tools and conducting developmental screenings and subsequent assessments. This publication is organized into three sections that cover the critical components of developmental screening, categories of available resources in the Center and its partners, and additional resources to support further research. This Topic of Interest provides research-based information on: the critical elements of developmental screening and detailed information on the types of tools that are available; policy strategies to support developmental screening, emphasizing the need for professional development on the selection and use of screening tools and data with families; and use of screening and assessment data in early care and education settings to inform individualized learning plans, particularly when developing a systematic early childhood comprehensive assessment program to improve young children's school readiness.

1.7 6. Role of Healthcare Providers

1. Introduction The role of healthcare providers in the early screening and intervention of infants and young children is vital to the child's development. As the primary source of healthcare for many young children, pediatricians are at the frontline of early detection and intervention in

healthy development (Beed, 2009). Pediatricians, family doctors, and advanced nurse practitioners can play a critical role in the successful health and development outcomes of young children and their families. It is likely that the child's primary healthcare provider may be the first place parents bring up concerns about their child's development. It has been made clear that the earlier a child is referred the earlier the issues can be addressed. The American Academy of Pediatrics (AAP) recommends regular developmental check-ups with the child's healthcare provider in addition to well-child visits at ages 9, 18, and 30 months. It is important to educate families in the importance of the checks, and that it is a standard part of well-child visits. It has been suggested that when implement developmental surveillance and screening into practice, it is beneficial to invite Early Intervention (EI) specialists to come give inservices and have some of their literature and referral forms available in the office. When looking at surveillance and screening findings and it is found that a child is displaying a potential concern or warning sign, it is best to engage the parent(s) in a dialogue about it. Development is marked in many ways and there is a wide range of typical development for the children of the same age. No one knows a child better than his or her parent(s). This is why open communication with the parent(s) about developmental concerns or not is so important. Upon referral, providers may continue to follow up with the parent(s) about the child's progress, to make new or updated referrals as needed, and to share relevant information with the child's healthcare provider. Collaboration between professionals regarding a child's development can lead to the most comprehensive treatment of a child. By attending inservices and continuing education, healthcare providers can stay informed on best practices for the processes of developmental surveillance and screening, as well as be made aware of helpful and available resources for the Team to refer parent(s) (Chiaventone Lopez, 2019). It is important to open dialogue with parent(s) about anything remotely looking like potential concerns, answer questions, and provide resources or a referral in a timely fashion. Middleware between professionals allows providers to share information back and forth in a more efficient manner than simply using fax. Using telepractice, parent(s) can have a video conference with specialists. The specialist will facilitate the team-based meeting with healthcare providers and EI staff. Specialized equipment will be set up in doctor offices and parents can have the option to meet with various therapists or educators while teleconferencing with the provider.

6.1. Pediatricians and Family Doctors

Professionals in several fields have the ability to formally screen young infants and children for developmental delays. Pediatricians and family doctors are most often a parent's or caregiver's first source of information regarding a child's development. They frequently perform routine developmental assessments during well child visits and have the opportunity for weekly contact with parents shortly after a child is born, which brings early screening possibilities. The American Academy of Pediatrics recommends that pediatricians learn the tools of routine surveillance of developmental milestones. At the two, four, and six month visits pediatricians should ask "whether the baby is making vowel sounds or cooing by two months, smiles socially by three months, laughs by four months, or seems interested in other children by five months." They suggest the use at the nine, 18, and 24 month visits of standardized developmental screening tests (Beed, 2009). Pediatricians are also instructed to provide education on what parents can expect from their children's development in the first year and how to determine if delays might be a concern. Despite these guidelines, studies have reported low rates of formal developmental screening by general pediatricians. In light of expanded knowledge on early childhood development, pediatricians are urged to take a more active role in promoting the importance of early detection and intervention both in their practices and within the community.

Pediatricians and family doctors are well positioned to provide families vital information on early detection. Health care providers should provide families information on screening tests and suggest what they ought to do based on the screening outcomes. Also, physicians have the opportunity to build relationships of trust and mutual care with families or caregivers. Recommendations from a knowledgeable, respected health care provider will likely carry more weight than those from a social worker or similar provider because of the doctor's knowledge of the child's health history. Physicians who notice potential signs of developmental delays should refer the family to a specialist for proper diagnosis. These factors highlight pediatricians' crucial influence in early detection and intervention.

6.2. Early Intervention Specialists

Early intervention specialists are equipped to address and meet the unique needs of young children and their families in the wake of developmental delays. Beyond addressing noticeable developmental concerns in very small children, early intervention specialists provide numerous services for both the children and their families. By way of example, specialists have the ability to conduct thorough assessments to highlight a child's particular strengths and difficulties in the course of their development. When it is thought to be helpful, specialists are able to lend support or administer therapy. At the same time, specialists can supply care to parents or guardians, imparting the information and resources vital in helping them to successfully look after and care for their child. Great emphasis is also put on establishing a plan tailored to the specific needs of the child, family, and community, whilst also striving to secure services and supports that are best able to realize the goals laid out in the aforementioned plan. In this role, specialists assist in monitoring and keeping track of the outlined objectives, adapting plans to meet changing circumstances, and providing instruction and knowledge to parents and caregivers related to the child's needs and progress.

In the context of working with a young child with remarkable needs or burgeoning services, there is an explicit duty to engage with the family and other essential caregivers in order to lend pertinence to the services provided. Beneath legislation such as Part C of IDEA, early intervention services are sought to be characterized as those that include the child's family or caregivers as playing an essential role in the provision of services. Early intervention specialists work closely as a multi-professional team with the child and the child's family or other caregivers. In addition to providing direct services to the child, the team of specialists will also work to educate and support family members. Moreover, the team will work collaboratively with other individuals such as healthcare providers, relatives, friends, and other childcare providers in order to apply the most comprehensive services to the child and his or her family. Because every child and its family are unique and distinct, this approach is characteristically quite individual and may change over time or as family situations change (Chödrön et al., 2019). As such, the services provided by early intervention are intended to address a broad range of concerns that a family might have regarding the development and well-being of their child. Early intervention specialists can play a crucial role in working with families of children exhibiting noticeable developmental delays as a method of ensuring that the essential resources, supports, and services are being made available to them. Given the intricate nature of promoting a child's health and well-being, this role is executed most effectively when there is a multi-disciplinary approach. Bearing this in mind, specialists of early intervention are trained to address the various aspects of child development in promoting healthy and comprehensive development in young children. These specialists may include practitioners such as educators, social workers, or speech therapists, who are able to provide wide-ranging

assistance to a child and its family. In the scenario that there are considerations that a child may have developmental delays, early intervention specialists can perform assessments to ascertain if a child is eligible for services. Following the child's third birthday, the experts provide supported transitions to further services, such as those available through local public schools. Specialists of early intervention may also work as a child's advocate, especially if there are issues with obtaining recommended services through healthcare providers, for example. Finally, the significance in intervening and providing for children who present noticeable developmental delays during their infant or toddler years is underscored by the potential for more favourable outcomes as the child matures.

1.8 7. Educational and Support Resources for Parents

This section describes resources and organizations that are valuable to support parents in seeking educational services to process information. It also indicates how information about classes or workshops may appear. The joy of watching an infant grow and meet milestones during their first few years of life is tempered by the fear that something can go wrong. Fortunately, parents have access to information on what to watch for in children through the developmental milestones and screening process. Sources of information help parents navigate several educational services to do this. Although going to the hospital ER might be good in an emergency, the medical attendant will not provide any early developmental screening. One source is a class or workshop; some hospitals and many community programs offer them. The hospital or clinic staff can provide information on what services are being recommended and how to access them. While taking advantage of free parenting resources, community programs can be more daunting. The intent behind this, as well as the intent by others, aims to foster knowledge of parental involvement and the interest of children in fostering development. Another source that can be very helpful is online resources and support groups. Watching at a child's own pace and in the morning, at the workplace, or other "odd" hours is something that can be done at any time; it can be good in hanging out before bed. Early screening provides information on their child's early childhood stages. Healthcare professionals conducting early screening should also encourage parents to play an active part in their children's growth. Regular educational workshops outlining ages and stages to watch out for the normal growth processes of infants and young children will improve the knowledge of parents and guardians. In turn, they can better ensure that the kid should meet all of its achievements. By watching early screening, as well as all different facets of growth, a healthy upbringing can begin off.

7.1. Parenting Classes and Workshops

Parenting classes and workshops are valuable resources designed to support parents. In attending these classes, parents may be empowered with skills, knowledge, and techniques to support themselves as they rear healthy children. Typically, parents learn about child development, and how to recognize important developmental milestones, possibly leading to the identification of developmental delays. In this context, parents may become knowledgeable about networks and professionals who can provide future support, such as hearing and vision specialists. A range of effective techniques can be learned to encourage healthy social, emotional, and language development. By attending a community of other caregivers attending a parenting class, parents may learn from each other's experiences and consequently feel less isolated, possibly reducing parental stress. There are many models of parenting classes, ranging from an informal drop-in group to a more intensive curriculum with a reduced staff-to-parent ratio, which can be adapted depending on the resources and needs of the community. Efforts to assist parents are varied: from

workshops providing just one class to a more in-depth session, possibly spread out over a few weeks, and can take the form of a lecture, a group discussion, or in-home visitation from a trained facilitator. When discussing the importance of mental health, parenting classes and workshops may be a means of support as they emphasize the necessity of early intervention. As early developmental problems can be treated more effectively when acted upon early, parents should be knowledgeable about what to expect during the developmental course of their child. Therefore, attending parenting classes early in their child's life may lead to the matching of needs with services, making children more successful along their developmental trajectory. Workshops in particular may empower participants to actively engage in the learning process and to collaborate with others in a productive manner. Opportunities to role-play can be scheduled so participants can better understand a child's perspective or simply to practice a new technique discussed during the workshop, thus reinforcing concepts.

1.9 8. Conclusion

The session has focused on five areas: the importance of early screening, developmental milestones, parents' observations, a visit to the health care provider, and signs to watch for in health development. Early screening helps to monitor a child's growth and development and to identify problems early. It helps to get the right help for a child when needed, which can make a big difference in the healthy development of children. Developmental milestones are signs of what a child is developmentally expected to do at a certain age (Beed, 2009). They can help to tell if a child is on track or if a child may need extra help.

Parents know their child best. Parents are with their child every day and are the people who know their child the longest. This unique perspective of children positions parents well in observing what their children are doing every day. If there is a concern, talking to a health care provider is a good idea (Park, 2015). Healthcare providers can give help and support for parents who may have concerns about their child's development. At the same time, healthcare providers can refer parents to a specialist or the right person who can assess their child's development. In the end, an early visit for any concerns about a child's development can make great difference in providing help a child need. Observation and monitoring a child's growth and development are critical in ensuring children are meeting critical developmental milestones. There are several signs children should be doing by the time they are a certain age. Since all children are different in developing, past characteristics of their siblings should not be used as a reference to compare their development or growth. Some concerns happen only in single pregnancy or in multiple pregnancies. There are many ways supporting healthy development for young children. Listening, modeling, setting limits, and talking to children are good ideas. Dealing with a nurse or an early intervention specialist can help a child's development. Finally, it is important to remember to always trust intuition as a parent. It is always a good idea to consult a healthcare provider for any concerns about child's growth and development.

8.1. Summary of Key Points

Significance of Early Screening and The Identification of Developmental Milestones. Screenings occur during well child check-ups and are used to determine how a child is developing. Developmental milestones are the skills and activities that a child should master by a certain age. Healthcare professionals use a screener at each checkup to help keep track of the child's development and to show if he or she needs to be referred for more evaluation (Beed, 2009). Reasons that a child may need more evaluation could be: having low birth weight, being born

prematurely, family history concerns, if he or she has siblings with conditions, or just a parent's intuition. Research has proven time and time again that early detection is key. The earlier a developmental delay is caught, the better the chances are of child's improvement.

Common Developmental Delays and What To Watch For. Autism Spectrum Disorder (ASD) has been on the rise over the past few decades. 1 in every 59 children have been identified with autism, and the disorder is more prevalent in boys than in girls. 9.4% of kids 2-17 years of age were diagnosed with ADHD in 2016. Another common delay is speech and language development. Signs to look for are if at 12 months he/she is not babbling in some form, makes only a few vocalizations, or is not responding to their name. A delay in Physical Development would be if at 15-17 months the child cannot walk after holding onto furniture, or if he/she is walking exclusively on his/her toes. Another category of delays would be Social/Emotional Development. For example, if by 12 months the infant seems indifferent to social activities or avoiding eye contact.

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