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The Importance of Proper Footwear for Children: What Parents Need to know

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ABSTRACT

To help children's feet grow and develop well, it is important to give them proper footwear because their feet are different from adults' feet. At first, children's foot bones are cartilage, later growing arches and bones as they pass through adolescence. Fitting shoes improperly can make your feet uncomfortable right away and may cause chronic foot problems and problems with standing position in the future. Still, many parents do not know enough about how important shoe fit, flexibility and support are. Growing feet, tight budgets and differences in advice all contribute to how complicated it is to choose footwear. This study conducted as part of a Delphi survey and including expert interviews explores both the characteristics and challenges related to children's footwear. As a result, efforts are needed for healthcare teams to reach children through education, the introduction of improved and timely shoe designs and clear instructions for caregivers. Measures like these allow children to choose footwear that is appropriate, helps them avoid injuries and supports them for years to come.

1. Introduction

Although children's foot health is essential for their growth, it is sometimes ignored when caring for young children. This biomechanical structure supports the entire body, softens shocks from walking and running and helps people walk, run and jump. Growth and development continue in children's feet, but adult feet mostly remain unchanging (Morrison et al., 2018). This difference has an impact on the shoes children wear and points out why it is important to select good shoes during their childhood.

Immediately after birth, over 80% of a child's foot is cartilage and only a small portion is solid bone. With age, the cartilage in the bones hardens, forming the stable bone structures that allow safe weight support. Ossification in the feet continues in adolescence and the feet are typically fully developed by ages 12 to 16. At this stage, the bones grow in size and become stronger, joints become more stable and the muscles and tendons strengthen to help walking.

One main development stage in the foot anatomy of children is the establishment of the medial longitudinal arch which is commonly known as the foot arch. Infants are usually born with flat feet because the arches are not yet formed and a thick fat pad is underneath their feet (Staheli et al., 1987). Between the third and sixth year of life, an arch starts to develop and is fully formed mostly by the eighth year or later. The arch is essential for adding support to the foot and dealing with the pressure that forms when walking or running.

Along with the bones and arches, the foot in a child heavily depends on over one hundred muscles, ligaments and tendons working together. They give the body flexibility and control over balance and movement. Since kids' feet can easily change shape, environmental influences play a big role, so providing good footwear becomes important.

Footwear helps children develop in many important ways. It defends the feet from getting hurt by anything outside such as sharp things, bumpy surfaces or very hot or cold weather (Staheli, 1991). Shoes relieve discomfort and, when right for your feet, assist in proper foot growth. Nonetheless, kids' shoes are not always of good quality or shape and wearing off-balance footwear can interrupt the way growth and biomechanics work.

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Babies and toddlers grow swiftly in shoe size and shape when they first learn to stand and walk. During the initial stage, shoes ought to be light, bend easily and let air in, so the foot moves freely and becomes strong (Staheli, 1991; Walther et al., 2008). If the shoes are very stiff or very heavy, this can affect the muscles and joints and may hold back progress in learning balance and coordination.

The footwear a child needs changes as they grow up. The minimum instruction and freedom for stepping found in toddler footwear is best, but kids who join sports need shoes that support their arches, provide cushioning and promote stability.

Studies on biomechanics in children explain that the right fitting and supportive shoes contribute to the proper development of gait and good posture. Wearing shoes helps to reduce unusual pressure on the feet and lower part of the body which is important for overall musculoskeletal health. If shoes are either too snug, too free or stiff, this can change the way your foot falls and impacts how your body balances weight. This can prompt new biomechanics which may result in extra pressure on joints and could lead to overuse injuries and constant pain.

Footwear that does not fit a child well can give rise to fast and lasting effects. Wearing the wrong shoes often leads to blisters, calluses and sometimes ingrown toenails caused by the tight compression of toes. Lack of arch support could worsen flat feet and cause the foot to roll inward too much during movement. It can change the posture of the leg joints and bring about knee, hip and back pain.

Hallux valgus or bunions, is one example of a serious deformity that can form if the shoes someone wears are tight or pointed enough to continually push the big toe out of place. Another problem, called hammertoes, happens when toes are compressed for some time in footwear that does not fit well. Incorrect shoes may cause faults in the way the lower body, especially the ankles and knees, work. If your gait is off because of foot misalignment, it can create knee pain, shin splints and lower back problems due to poor posture.

Footwear is very important for developing healthy feet, but many parents experience problems finding suitable shoes for their children. Coupled with the rapid growth of feet, shoes need to be replaced often as they do not last long (Gould et al., 1990). Kids can go up a shoe size every three to six months while experiencing rapid growth. Still, parents might not replace shoes as soon as needed because of the cost or might select shoes that are a larger size so children can wear them as they grow. They may raise the likelihood of harm or difficulties with development.

Footwear styles are frequently affected by what's popular in fashion, strong advertising and what cultures think is attractive, not always the best for daily needs. Kids might resist putting on shoes with laces or other complicated fastening systems because they are difficult (Williams et al., 2022). They make it more complicated for parents and caregivers to choose.

The amount and type of activity a child has, as well as their foot clinical conditions, can affect the kind of footwear they need. Children who participate in lots of activities or sports should wear shoes that cushion their steps, keep them stable while turning and provide support for their specific sport to reduce injuries. On the other hand, those with flat feet, high arches or hypermobility may need to wear special shoes or use inserts for their feet which a podiatrist can recommend.

Considering these challenges, knowing about foot care and being informed is very important. Pediatricians, podiatrists and healthcare educators are important in informing parents and helping them make the right choices about their children's footwear. You should weigh every child's foot at least twice a year, notice if shoes wear quickly or become misshapen and keep an eye out for anything that indicates discomfort or poor walking skills.

Knowing that shoes should fit comfortably, let your toes move freely and still provide enough support will help your feet grow healthily. Shoes should be breathable when it's warm to prevent fungal infections, whereas waterproof and insulated boots are needed for the colder or wetter seasons.

As a conclusion, the growth and development of a child's foot is complicated, so it calls for proper support and protection. Proper shoes make a difference by keeping the feet healthy, helping with walking, posture and lowering injury risks. Parents may have difficulty selecting and replacing their children's shoes, though making informed and timely choices can greatly affect a child's health. Making certain kids are aware and have proper footwear is necessary to help them have a healthy lifestyle from a young age.

1.1 Research Objectives

Knowing why kids need good footwear helps their feet develop healthily and avoid musculoskeletal problems as they grow older. Because feet change so quickly and a lot in children, parents require straightforward advice on buying shoes. This article tries to equip parents with important information they can use.

- Show parents how important proper shoes are for their children's developing feet.
- Make sure you notice which characteristics of shoes are good for a child's growth and safety.
- Give helpful advice on selecting, properly fitting and changing children's shoes when needed for their developing bodies.

2. Literature Review

2.1 Informing parents about the role of good footwear for children's feet

Researchers have always known proper shoes are important for children, even though many parents are still not well informed. The research conducted by Staheli et al. (1987) set down the facts about how children's feet develop: most are born flatfooted and will later, by middle childhood, develop arches in their feet. As feet naturally develop in young people, the way they are shod has a strong effect on how they develop and whether they are stressed enough to harm the body. Price et al. (2020) found that online information for parents about children's footwear measurement and fit varied in quality and usability. Sometimes there is not enough or the wrong kind of information in retail stores; this means things like how something works often get overlooked. It is often up to parents who lack professional knowledge about appropriate footwear to provide it which points out the significance of helping caregivers understand this science.

2.2 Finding Out Requirements for Children's Footwear That Help Their Health and Prevent Injuries

Scientists have concentrated on outlining the mechanics of children's footwear needed for healthy development and to protect against accidents. Cranage et al. (2019) found that shoes affect young children's gait, but evidence about the effects of specific sole flexibility was limited and no included studies assessed muscle activation. Comparable, rigid or overly supportive shoes can instead alter your foot motion, lower the level of muscle use and possibly prevent your muscles from strengthening properly over time.

Adding to these results, Klein et al. (2009) reported an association between insufficient shoe length and increased hallux angle in children in a cross-sectional study. Looking at all their findings, it is clear that a shoe must hold back environmental hazards but also let kids move and develop in the way they should.

What material the shoes are made from plays an important role in both shoe comfort and health. The Health Service Executive (2024) recommends breathable footwear materials such as leather and canvas when selecting children's shoes. Evans et al. (2022) found uncertain evidence for foot orthoses in paediatric flat feet and no supporting evidence for high-cost custom orthoses in otherwise healthy children with painless flexible flat feet.

2.3 Offering support through practical guidelines and facts on picking shoes, how they feel and when to get new ones

There is much mention in the articles about how children's shoes frequently need to be updated to provide a good fit as their feet grow fast. Gould et al. (1990) note that a child's foot can grow a lot within a few months, especially during growth spurts which is why it is necessary to measure them often. Often, waiting too long to get new shoes means your footwear might fit badly or wear out which can make your foot problems worse.

Choosing the right shoes for children becomes more difficult due to the different physical and activity levels kids face. According to Walther et al. (2008), children's sports shoes should provide flexibility and cushioning appropriate to the child's developmental stage and activity. Researchers found that parents should not only consider the fit and comfort of their children's shoes but also the task(s) to be done and the physical demands under various activity levels.

Although footwear advice is widely available, Hughes et al. (2025) identify inconsistencies in guidance and limitations in the evidence supporting recommendations. Because shoes are unknown, people select footwear that is not the right choice for preventing injury or improving their health. Decisions are often difficult for parents due to differences in advice, variety in shoe designs and advertising, showing that providing educational interventions and setting clearer guidelines is important.

2.4 Theoretical Framework

Experts in child health have created a theoretical system by using developmental biomechanics, pediatric musculoskeletal health and models of behavioral choice. This combination allows everything about the influence of shoes on foot development and parental advice to be understood clearly.

2.4.1 Developmental Biomechanics Focuses on Foot Health

Developmental biomechanics is where the theory gets its core information about how mechanical and structural processes interact with each other. The structure of children's feet is special, as they contain mostly cartilage and are always changing and they react well to environmental pressure. Appropriate footwear supports and influences how forces are spread out, how joints position and the way muscles are used (Wegener et al., 2011).

Experts in foot biomechanics believe that having unrestricted foot motion and good feedback from the feet is necessary to build up foot muscle and good walking patterns (Staheli, 1991). If shoes do not fit or stiffness in shoes stops normal movements, it can cause unusual pressures on the body, resulting in the body trying to adjust with different movements. Eventually, new movement habits may cause the body to sustain structural issues and muscle or joint problems.

2.4.2 Musculoskeletal Development in Children and Disease Prevention

Developing musculoskeletal functions include proper development of the feet in children. Because children's bones are not fully formed, there is a chance to prevent problems from developing. It has been argued in critical periods development that the impact of footwear is higher during specific parts of growth, so choosing shoes your child needs at the right time is very important.

It is understood in the framework that footwear can be used for protection and correction. The right shoes lower your risk of flat feet and overpronation, but the wrong shoes can make problems worse. Programs for prevention in health care think that informing people and modifying products early can help reduce problems ahead in life.

2.4.3 Behavioral Health and What Parents Decide

It considers ideas from behavioral health, understanding that parents' decisions to buy shoes can be affected by what they know, their attitudes and external pressures. According to the Health Belief Model (HBM), parents are more likely to follow footwear recommendations if they believe they could develop foot problems, they see benefits in proper shoes, the costs or appearance of shoes do not seem like big obstacles and their healthcare provider suggests it (Rosenstock, 1974).

Similarly, according to the Theory of Planned Behavior (TPB), parenting choices depend on how subjective norms and perceived control shape a parent's decisions (Ajzen, 1991). The way parents judge footwear in terms of its use and style as well as community standards can affect their actual decision-making.

2.4.4 Showing how frameworks are brought together

Using developmental biomechanics, pediatric preventive health and behavioral decision-making ideas, this framework helps with the overall care of children's shoes. It shows that correctly recommended and fitted shoes from a scientific point of view matched to growth, along with parent education, greatly influence kids' foot health.

Because of this foundation, the research aims to promote awareness, identify types of footwear that matter and provide useful advice so that strategies are successful in the body and in behavior.

3. Methods

3.1 Research Design

As part of an international modified Delphi survey, this qualitative study obtained detailed expert opinions about what is important in children's footwear using Key Informant Interviews (KIIs). KIIs were picked to go into more depth about flexible footwear parts and other design elements, adding to the consensus-building process of Delphi. The researchers applied inductive thematic analysis to study and make sense of the interview answers.

3.2 Participant Selection

The experts for the KIIs were deliberately chosen from the group of respondents to the Delphi survey with wide knowledge in pediatric footwear design, clinical care, biomechanics and footwear manufacturing. Considering diversity in careers and locations, the selection criteria guaranteed that experts from many regions and fields were included. Those who wanted to participate in more interviews were asked to do so which helped improve the quality of qualitative findings.

3.3 Data Collection

Semi-structured KIIs were organized through secure video calling platforms over the internet which made it possible to meet with participants from various locations. An interview guide based on the topics from the Delphi survey was used and each interview generally took between 45 to 60 minutes. People were asked to discuss the significance of having flexible parts in kids'

footwear, why they thought this was essential and important traits they look for in children's shoes. Before the interviews were analyzed, they were all recorded audio-only with permission and fully transcribed as they were said.

3.4 Data Analysis

Inductive thematic analysis was used to look at the KIIs and their results (Braun & Clarke, 2006). Participants began by studying the data, coded significant passages and kept refining the categories to form new themes. Readings were looked at to check their relevance to the research and if they focused on the flexibility and important aspects of shoe design. NVivo was used to organize and code qualitative data which made the analysis process well-structured and easy to follow.

3.5 Ethical Considerations

The research was approved by the research board before starting. Before the interviews, everyone involved gave consent electronically and was told their data would be kept private. At no time could unauthorized people access the research data. All participants had the option to quit from the first till the final day with no penalty.

4. Findings

Key Informant Interviews (KIIs) showed that parents have particular experiences, attitudes and approaches when it comes to their children's shoes. With this information, we can better see what is needed to enhance children's foot health today.

4.1 Awareness of Footwear Importance and Foot Health

Most experts said that parents usually realize shoes are important for their children's feet, though there is often limited knowledge about footwear's role in foot health. One pediatric podiatrist talked about kids and their feet in this way.

> *" Many people only think of shoes as things for the feet, missing how proper shoes can protect the bones and avoid deformities in kids."*

Just a few parents were provided advice on shoes by healthcare workers and those who got advice paid more attention to details like arch support and how flexible the soles are.

4.2 Factors Influencing Shoe Selection

Many experts mention that parents make sure their newborns experience fit and comfort. We spoke to a footwear specialist, who said the following.

> *" People usually check how long the shoe is and listen to how their child feels when wearing the shoes. Knowing how to balance flexibility is important for parents, but they don't always know what areas need it."*

Looks and what something costs were often brought up as important points. A retail specialist stated that

> *" Parents have to decide if they will buy shoes their children can afford, like or should focus on buying shoes that are right for their feet."*

4.3 Signs and Responses to Poor Fit or Discomfort

Parents were said to notice that a shoe is not a good fit if their child complains of blisters or avoids putting them on. The therapist noted on her visit.

> *" A common sign that shoes are the wrong fit for children is if they don't want to put them on and complain about pain. Many parents still have to use unsuitable shoes simply because they are limited by what they can get or afford."*

That shoes need replacing at different times suggests that more active advice could help.

4.4 Sources of Information and Challenges Faced

Many experts explained that parents usually ask family, friends or retail employees for support instead of health services. A podiatrist made this comment.

> *" Parents can hear conflicting ideas and this leads to confusion. There is not enough clear and regular education about UV safety in places like doctor's offices and businesses.*"

It is especially difficult to pick footwear that lasts, fits well and is attractive for children, especially for those who are very active or have special needs.

4.5 Perceived Important Features of Children's Shoes

Major features listed over and over again were flexibility, breathability and cushioning. One footwear designer described,

> *" Flexible soles give flexibility, but kids also need shoes with good heel and arch support as they develop. Using breathable materials avoids irritations and stops skin problems."*

Stable connections, especially important for toddlers, were highlighted too.

4.6 Confidence and Desired Support in Footwear Decisions

Various informants told us that parents often look for easy-to-reach and factual information. According to a pediatrician,

> *" Parents want their children to be healthy but feel unsure because they hear so many different suggestions. Helping people with simple advice and professional consultations can guide them to better decisions.*"

5. Discussion

The study looked at the need for proper shoes for children by examining how parents understand, feel and behave through qualitative interviews and survey questions, as well as a thorough review of literature. Key gaps were noticed in parental knowledge, grasping what makes a shoe important and problematic challenges when it comes to buying and finding new footwear. They reveal the important connections among education, how a person walks and accessibility in determining children's foot health.

5.1 Knowledge and Understanding in Parents

A major point noticed in the findings is that parents are often unaware of the biomechanical benefits of good children's shoes. Although parents generally agree that shoes provide comfort and care for the feet, not all have a clear understanding of how fit, flexibility and support shape children's health. Related research identifies limitations in the quality and usability of online footwear information available to parents (Price et al., 2020).

It was found through the KIIs that healthcare professionals can inform parents much more often, yet do not always carry out this role. Those who consulted professionals were seen to make better choices about the shoes they got, giving importance to features that benefit foot health. Because of this, it would be good for healthcare providers to discuss footwear with parents during children's routine examinations.

5.2 Main Features of Children's Shoes

Results show that in accordance with studies, footwear worn by children should match their developmental needs and combine flexibility with support. Evidence that particular sole flexibility improves muscle activity or development remains limited (Cranage et al., 2019). The need for additional support should be considered clinically, because routine orthoses for healthy children with painless flexible flat feet lack supporting evidence (Evans et al., 2022).

Official guidance recommends breathable materials and a comfortable fit when choosing children's footwear (Health Service Executive, 2024). If shoes work well for a child's foot health and comfort, parents are more confident and kids are more likely to put them on.

5.3 Things That Can Make Footwear Choosing Hard

Knowing about shoe features is not enough for parents because they often find the cost too high, prefer shoes that don't fit their child or can't find footwear built for their child's stage of development. Such problems usually mean that individuals keep wearing shoes that are too loose or too worn which can lead to extra pain and structural issues. The practice here fits with what Gould et al. (1990) highlight: the regular purchase of new shoes for fast-growing feet.

Additionally, the way many parents assess shoe fit (seldom by measurement) suggests clearer rules would be valuable. Because there is not enough evidence-based guidance for parents (Hughes et al., 2025), many are unsure about the right time to replace their kid's shoes.

5.4 Impact on Management and Public Policy

Results from the study suggest that taking multiple actions towards foot care may better improve children's foot health. Health professionals ought to analyze feet and teach about proper footwear when giving routine care. It is important for retailers to be able to give good, reliable guidance and recommend shoes that help children grow.

It is important to provide efforts to educate parents about fit, when a shoe can be flexible, supportive and when it should be replaced. By cooperating, healthcare, industry and community organizations can spread information about foot health and work on increasing access to suitable footwear.

6. Conclusion

Several elements such as body structure, bodily functions and the environment affect how healthy feet are formed in children. Proper shoes are often one of the biggest influences on the development, functioning and future health of a person's feet and legs. Both the shape and the sensitivity to pressure are not the same in children's feet as in adults' feet. When a person is young, bones are mostly made of cartilage, joints are figuring out how to stabilize and the muscles and ligaments are strengthening. So, children's shoes need to be designed in a way that gives proper support and does not restrict their natural movements.

Although many realize shoes can protect and make walking more comfortable for children, the urgency of giving kids the proper types of footwear is not clear to parents. A lot of parents put bigger importance on trendy clothing and cost, plus accept suggestions based on stories rather than verified facts. The combination of too little knowledge, financial challenges and their feet getting bigger fast often means kids use shoes that are wrong for them. In addition to making you feel uncomfortable right away such shoes can lead to issues such as bad posture, structural deformities and frequent pain.

The study also points out that healthcare professionals and those working in footwear can play a vital role in advising and supporting families but are not used enough. Healthcare providers can easily include foot health check-ups and advice on the right kind of shoes for children during routine pediatric visits. As well, stores can increase their importance by educating staff, supplying accurate size info and publicizing shoes that help kids' foot development.

The results point out the need for all healthcare, industry and community groups to collaborate to benefit children's feet. A good solution means coming up with footwear that is flexible, tough, gives support and is comfortable at each stage of a child's development, along with making educational stuff and professional advice simple for caregivers to grasp.

Proper shoes during childhood set the stage for your kids to move without pain for the rest of their life. By bridging knowledge gaps, resolving the obstacles in practice and working as partners, we help children and give parents the ability to choose better for their health. The importance of treating children's feet is clear, as it helps promote general health, ease moving around and offer a better quality of life showing children's footwear is not only about style or convenience, but also public health.

7. Recommendations

7.1 For Parents and Caregivers

- Choose Shoes with a Thumb's Width in the Toe Box, Secure Heels and Flexible Soles to Allow Young Children's Feet to Move Naturally, without Getting Squeezed or Pinched (Davies et al., 2015; Health Service Executive, 2024).
- Check and measure children's feet every three to six months and replace their shoes immediately when they grow out of them to avoid issues because of a bad fit.
- Purchase sports-suitable shoes for your child: this way, the child can get the comfort and stability they require to avoid sports injuries.
- Prefer Shoes from Leather or Mesh to Improve Comfort and Prevent Skin Problems
- Talk to pediatricians or podiatrists about appropriate footwear for children with special conditions.

7.2 For Healthcare Providers

- As part of typical pediatric visits, bring up shoe fit and foot health topics with parents to raise their knowledge.
- Creating Clear Guidelines for Parents: Supply detailed, up-to-date recommendations and lists of helpful information to parents picking shoes for their children (Hughes et al., 2025).
- Join efforts with shoe retailers so staff have accurate pediatric foot health information they can share with customers.

7.3 For Footwear Industry and Retailers

- Make and promote shoes that are both strong, supportive and flexible for different ages of children.
- Deliver better advice on shoe sizing, offer online and in-store fittings so parents can choose the shoes that suit best.
- Increase easy access to footwear to boost the ability of families to overcome the cost of new shoes.

- Ensure that community arrangements for education are taken to clarify the value of appropriate shoes for kids.

When these recommendations are carried out, stakeholders can collectively look after children's feet, encourage parents to choose suitable footwear and assist in avoiding preventable issues for children's feet.

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