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The Role of Pre-Placement Medical Review in Contemporary Adoptions Setting Expectations, Assessing a Child's Needs, and Supporting Successful Family Formation

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doption in the U.S., originally focused on placing healthy infants, has evolved to the point that now the majority of children available for placement either have recognized medical problems or are vulnerable to developing a variety of disabilities. This article traces the history of pediatric health care providers in the adoption process and discusses how new knowledge on adversity in early childhood has expanded our understanding of risk factors for medical, developmental, emotional, and behavioral problems in children who have been adopted. Finally, the process of pre-adoption medical evaluation is outlined, the goal of which is to assist parents in making a well-reasoned decision on whether they have the resources to provide for the child's needs.

The Evolution of Adoption in the United States

The First Wave—Normal Healthy Infants

In the late 19th and early 20th centuries, high mortality rates and adverse social outcomes for children who had been institutionalized brought calls from child care professionals for alternative ways to protect children



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deprived of parental care.^{1,2} In 1909, a U.S. Conference for the Care of Dependent Children focused attention on the importance of family-based care, establishing the foundation for child welfare and adoption practice in the U.S.³ This era also saw the establishment of the first school for social work, the New York School of Applied Philanthropy (1904), as well as the first private adoption agencies, including Children's Home Society in St. Paul, MN, The Cradle in Evanston, IL, and the Spence Alumni Society, the Free Synagogue Child Adoption Committee, and the Alice Chapin Nursery in New York City.^{4,5} By the 1930s, adoption had become a well-established method of building a family in the United States for married couples from a broad range of backgrounds.

Health care providers were at the forefront of this movement and assumed an important role in pre-adoption counseling. In 1958 Wallace Grant, M.D., wrote:

"The physician examining a child pre-adoptively owes it as complete an examination as he will give to any other child he sees in his practice. This includes not only a complete physical assessment with especial emphasis on the adequacy of special sense organs (eyes and ears) but also an appraisal of the child's developmental status. The adoptive parents may thus be adequately informed, and any correctable abnormality that is discovered can be treated."⁶

Most parents willing to consider adoption sought healthy infants, and the belief that only "normal" children should be adopted was widely shared within the medical profession of that era.^{7,8} This opinion extended to assessing characteristics of the birth parents with the belief that "blood will tell."⁹ Children thus labeled as having "special needs", e.g., older age, racial or social class differences, sibling groups, known sexual or

By the 1930s, adoption had become a wellestablished method of building a family in the United States for married couples from a broad range of backgrounds.

¹ Smith JL. Hindrances to the successful treatment of the diseases of infancy and childhood. Trans NY State Med Assoc. 1896;13:94-99.

² Jacobi A. Inaugural address including a paper on infant asylums. NY Med J. 1872:1-46.

- ⁶ Grant W. The doctor and adoption. Pediatr Clin North Am. 1958;5(2):523-530.
- ⁷ Gresham J. The doctor's role in child adoption. J Med Assoc State Ala. 1957;27(5):113-114.
- ⁸ Kappelman MM, Montalvo FF. Overseas adoption. III. The role of the pediatrician. Med Bull US Army Eur. 1959;16(1):5-8.
- ⁹ Krauss FI. The role of the physician in adoption. J Med Soc N J. 1946;43:271-273.

³ Children's Bureau. The story of the White House conferences on children and youth. 1967. <u>https://files.eric.ed.gov/fulltext/ED078896.pdf</u>. Accessed November 16, 2018.

⁴ Timeline of Adoption History. The Adoption History Project <u>http://darkwing.uoregon.edu/~adoption/timeline.html</u>. Accessed March 15, 2019.

⁵ First Specialized Adoption Agencies. *The Adoption History Project* <u>https://pages.uoregon.edu/adoption/topics/firstspecial.html</u>. Accessed May 2, 2009.

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physical abuse, or an uncorrectable disability, were commonly considered unadoptable.¹⁰

The Second Wave—International and Special Needs Adoption

In 1968 an estimated 86,300 unrelated adoption placements occurred but by 1975 the total number had dropped precipitously to 47,700.¹¹ This change coincided with increasing social tolerance and financial support for single mothers, readily available contraception, as well as legal abortion services. The net result was that fewer infants were born to single mothers and even fewer were relinquished for adoption. Prior to 1973 the percentage of infants relinquished for adoption by never-married women younger than 45 years old was 8.7%. From 1989-95 the figure was 0.9%.¹²

The shortfall between children available for adoption and the much larger pool of parents seeking children was partially filled by an increase in adoption of children with special needs and children adopted from abroad. During this era, pediatricians promoted the placement of children with special needs but recognized the need to counsel families regarding the effects of caregiver deprivation and abuse as well as caregiving disruptions and to provide appropriate follow-up for this at-risk group of children.¹³ During the same period when domestic adoptions decreased 46%, international adoption more than tripled from 1,612 to 5,663.¹⁴ Within this population pediatricians recognized specific medical needs, particularly the presence of serious infectious diseases that posed health risks to not only the adopted child but the adoptive family as well.¹⁵

The 1990s brought a deeper understanding of how early childhood experiences in a developmental environment characterized by prenatal risk and postnatal social, nutritional, and medical deprivation, profoundly affect brain development.¹⁶ Within this environment children experience

Prior to 1973 the percentage of infants relinquished for adoption by never-married women younger than 45 years old was 8.7%. From 1989-95 the figure was 0.9%.

¹⁰ Bohman M. Adopted children and their families: a follow-up study of adopted children, their background, environment and adjustment. Stockholm: Proprius; 1970.

¹¹ Placek PJ. National Adoption Data. In: Marshner C, Pierce WL, eds. *Adoption Factbook III*. Alexandria, VA: National Council for Adoption; 1999:24-68.

¹² Miller BC, Coyl DD. Adolescent pregnancy and childbearing in relation to infant adoption in the United States. *Adoption Quarterly*. 2000;4:3-25.

¹³ Sokoloff B. Adoption and foster care—the pediatrician's role. Pediatr Rev. 1979;1(2):57-61.

¹⁴ Altstein H, Simon RJ. Introduction. In: Altstein H, Simon RJ, eds. *International adoption: a multinational perspective*. New York: Praeger; 1991:1-20.

¹⁵ Johnson DE, Eckerle JK. Medical issues. In: Fong R, McRoy R, eds. *Transracial and intercountry adoptions*. New York: Columbia University Press; 2016:237-273.

¹⁶ Shonkoff JP, Phillips DA. From neurons to neighborhoods: the science of early childhood development. Washington: National Academy Press; 2000.

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unbuffered periods of stress, generally referred to as "toxic stress," which not only exacts a toll in most developmental areas but is associated with a negative effect on physical and mental health in later life.¹⁷⁻²⁰ Children adopted from abroad during the last decade of the 20th century arrived primarily from orphanages in Eastern Europe, Central Asia, and China. Considering the profound adversity experienced by these children within institutional care settings, the findings that they arrived with significant medical problems as well as short- and long-term developmental, emotional, and behavioral disabilities were not surprising.^{15,21-23}

The Third Wave-At-Risk and Medically Complex Children

The incidence of significant medical issues as well as long-term disabilities in international adoptees continues to increase, as illustrated by the evolution in adoptions from China, the principal sending country to the U.S. since 2004. Following the gradual relaxation and then termination of the one-child policy, an increase in domestic adoptions in China has significantly reduced the number of healthy infants in orphanages.²⁴ Of those who remain institutionalized, 98% have disabilities.²⁵ Based on our own experience reviewing over 2,000 referrals from China during the past 15 years, these conditions range from straightforward correctable problems such as cleft lip and palate to conditions that require complex and often expensive care such as disorders of sexual differentiation and conditions that will likely require future heart or liver transplantation. In addition to changes in special needs status, children from China are now older. In 2004, 6% of children adopted from China were older than The incidence of significant medical issues as well as longterm disabilities in international adoptees continues to increase...

¹⁷ Danese A, McEwen BS. Adverse childhood experiences, allostasis, allostatic load, and age-related disease. Physiol Behav. 2012;106(1):29-39.

- ¹⁸ Dozier M, Roben CKP, Caron E, Hoye J, Bernard K. Attachment and Biobehavioral Catch-up: An evidence-based intervention for vulnerable infants and their families. *Psychother Res.* 2018;28(1):18-29.
- ¹⁹ Shonkoff JP, Garner AS, Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, Section on Developmental and Behavioral Pediatrics. The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*. 2012;129(1):e232-246.

²⁰ Centers for Disease Control and Prevention. Adverse childhood experiences (ACEs). 2018. <u>https://www.cdc.gov/violenceprevention/</u> <u>acestudy/index.html</u>. Accessed December 28, 2018.

- ²¹ Kumsta R, Kreppner J, Kennedy M, Knights N, Rutter M, Sonuga-Barke E. Psychological consequences of early global deprivation: an overview of findings from the English & Romanian adoptees study. *Eur Psychol.* 2015;20:138-151.
- ²² McCall RB, van IJzendoorn MH, Juffer F, Groark CJ, Groza V. Children without permanent parents: research, practice, and policy. *Monogr* Soc Res Child Dev. 2011;76(4):1-281.
- ²³ Nelson CA, Fox NA, Zeanah CH. Romania's abandoned children: deprivation, brain development, and the struggle for recovery. Cambridge: Harvard University Press; 2014.
- ²⁴ Ministry of Civil Affairs, Peoples Republic of China. Data of Chinese children adoption (2010-2016). 2018. <u>http://www.mca.gov.cn</u>. Accessed December 10, 2018.
- ²⁵ Vanderklippe N. The tragic tale of China's orphanages: 98% of abandoned children have disablities. *The Globe and Mail*. 2018;May 12. <u>https://www.theglobeandmail.com/news/world/the-tragic-tale-of-chinas-orphanages-98-of-abandoned-children-have-disabilities/article17625887/</u>. Accessed November 17, 2018.

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two years of age vs 83% in 2017.²⁶ As they are housed within institutions for longer periods of time, adoptees from China are now at greater risk of secondary cognitive, emotional, and behavioral effects related to prolonged deprivations.²⁷ Similar changes have been observed in most sending countries over the past decade.

Recapitulating the abrupt decrease in white infant adoptions in the late 1960s, the number of international adoptions to the U.S. has fallen 79% since 2004, returning to levels (4,714 in FY 2017) not seen since the 1970s.^{14,26,28} In contrast, adoptions from U.S. foster care have increased over the past 20 years. Following passage of the Adoption and Safe Families Act of 1997, legislation designed to speed placement of waiting children into permanent homes, the number of adoptions from foster care rose 54% from 36,650 in 1998 to 53,549 in 2015.²⁹ However, as with institutionalized children, the impact of adversity on the physical and mental health of children prior to and after entering foster care has been increasingly recognized.³⁰⁻³⁵ In addition, children with disabilities are overrepresented in foster care system were determined to have a disability in contrast with 5.8-6.2% of children of similar age in the general population.^{36,37}

As with institutionalized children, the impact of adversity on the physical and mental health of children prior to and after entering foster care has been increasingly recognized.

²⁶ U.S. Department of State-Bureau of Consular Affairs. Adoption Statistics. 2018. <u>https://travel.state.gov/content/travel/en/Intercountry-Adoption/adopt_ref/adoption-statistics.html</u>. Accessed December 19, 2018.

- ²⁷ Tan TX, Robinson EAX. Institutionalized Chinese children with congenital medical conditions: placement delay, developmental issues at arrival and current wellbeing. *Child Youth Serv Rev.* 2018;88:380-386.
- ²⁸ Westerman A. Why international adoption cases in the U.S. have plummeted. 2018. <u>https://www.npr.org/2018/06/25/623114766/why-international-adoption-cases-in-the-u-s-have-plummeted</u>. Accessed December 28, 2018.
- ²⁹ Johnston WR. Historical statistics on adoption in the United States, plus statistics on child population and welfare. 2017;2018(January 9). http://www.johnstonsarchive.net/policy/adoptionstats.html. Accessed January 9, 2018.
- ³⁰ Turney K, Wildeman C. Adverse childhood experiences among children placed in and adopted from foster care: Evidence from a nationally representative survey. *Child Abuse Negl*. 2017;64:117-129.
- ³¹ Simms MD, Dubowitz H, Szilagyi MA. Health care needs of children in the foster care system. *Pediatrics*. 2000;106(4 Suppl):909-918.
- ³² Chernoff R, Combs-Orme T, Risley-Curtiss C, Heisler A. Assessing the health status of children entering foster care. *Pediatrics*. 1994;93(4):594-601.
- ³³ Ahrens KR, Garrison MM, Courtney ME. Health outcomes in young adults from foster care and economically diverse backgrounds. *Pediatrics*. 2014;134(6):1067-1074.
- ³⁴ Clarkson Freeman PA. Prevalence and relationship between adverse childhood experiences and child behavior among young children. *Infant Ment Health J.* 2014;35(6):544-554.
- ³⁵ Flaherty EG, Weiss H. Medical evaluation of abused and neglected children. Am J Dis Child. 1990;144(3):330-334.
- ³⁶ Kraus L. 2016 Disability statistics annual report. Durham, NH: University of New Hampshire; 2017.
- ³⁷ Waldrop J, Stern SM. Disability status: 2000. Washington, DC: US Census Bureau; 2003.

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Professionals and families involved in adoption now face a situation where a high percentage of children being placed through international adoption or from foster care have either recognized medical problems and/or risk factors that increase the likelihood of developmental, emotional, and behavioral challenges.³⁸ Even children placed as infants through private adoption may share such risks due to intrauterine illicit drug or alcohol exposure or maternal stress during pregnancy.³⁹ Therefore, it is more important than ever that prospective adoptive parents are fully and accurately counseled about issues they may face when parenting a specific child.

When Should a Medical Provider Become Involved?

Discussions with health care providers can begin even before a specific child is identified. Many agencies have families complete a checklist indicating which medical conditions they are willing to consider. In these situations, providers can explain the nature of the condition and what care will be required, and can speak in broad terms about expected outcomes. Consultation after a family receives a referral is the most common situation in which medical providers offer counsel. In our clinic, this relationship extends through the process of requesting and evaluating additional information and bringing the child into the adoptive home. The needs of each child differ as do the capabilities of each adoptive family. However, based on over 30 years of experience and over 25,000 referrals, summary guidance is offered in the following sections.

Medical Information (Table I)

The amount and accuracy of a child's medical and social information varies widely depending on the capabilities of the medical system where the child received care, the quality of translations, as well as the training, experience, and personal biases of the professionals responsible for collecting and reporting this information. The experience of health care professionals who are familiar with diagnostic terminology, common medical practices within specific countries, reliability and optimal timing of diagnostic testing, and the biology of specific disease states, can help families accurately interpret this often confusing information. This expertise is particularly helpful in serious infectious diseases such as hepatitis B and C, HIV, and syphilis, cases in which the timing and It is more important than ever that prospective adoptive parents are fully and accurately counseled about issues they may face when parenting a specific child.

³⁸ O'Dell KE, McCall R, Groark C. Supporting families through the international special needs adoption process. *Child Youth Serv Rev.* 2015;59:161-170.

³⁹ Mulder EJ, Robles de Medina PG, Huizink AC, Van den Bergh BR, Buitelaar JK, Visser GH. Prenatal maternal stress: effects on pregnancy and the (unborn) child. *Early Hum Dev.* 2002;70(1-2):3-14.

nature of available laboratory tests may falsely suggest, to the untutored observer, the presence or absence of infection. These same professionals can also assist in and realistically gauge whether additional information should or even could be obtained. However, prolonging the decisionmaking process with repeated attempts to obtain every scrap of data is rarely in the best interests of either the child or the adoptive family. Delays prolong the period of adversity experienced by the child, and irrespective of how much additional information is obtained, risk will never be completely eliminated and some questions will never be answered. Factors to consider when requesting additional information include how long it will take and whether the results will actually alter the medical opinion or make a difference in the family's decision to adopt.

Medical information can be loosely divided into two categories: objective and subjective. Objective information is the most informative and includes

Table I. Information Helpful in Assessing a Child Prior to Adoption

History

- *Child*: Orphanage or foster care, age of entry, number of disruptions
- Maternal: Perinatal risk factors, illicit drug, or alcohol use

Birth and current measurements (height, weight, and head circumference)

Laboratory tests with dates (hepatitis B and C, syphilis, HIV, hemoglobin)

Developmental Information (particularly if standardized testing can be obtained)

Detailed information about the child's disability or medical condition. On what information did they base the diagnosis?

Photographs of child's face (close-up, looking directly at the camera, mouth closed and not smiling) to look for facial features diagnostic of fetal alcohol spectrum disorder

Video (five minutes or longer) demonstrating developmental milestones (infants in diapers only), playing and interacting with peers/caregivers in the child's customary environment

Photographs and videos of the specific disability or condition

weight, length/height, and head circumference measurements; laboratory, radiology, operative, and pathology reports; standardized developmental testing administered by a trained individual; photographs and videos of the child's facial features, anomalies, and disabilities; as well as videos of a child spontaneously playing with other children, demonstrating milestones, or interacting with caregivers. Subjective information, while also important, can be biased, such as narrative descriptions by the child's caregiver, or general statements that the child is "normal" or "delayed."

While frequently unavailable, information on the birth mother's pregnancy and delivery as well as the child's birth measurements may identify prenatal substance exposure, birth complications, or suggest that a child could have been born prematurely or was growth restricted. All potentially increase the risk of neurodevelopmental compromise. Growth records (height, weight,

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and head circumference) beginning at birth and extending through the time of referral are perhaps the most objective measures of child wellbeing. Wasting (low weight) suggests an inadequate diet, stunting (low length/height) is a sensitive marker of overall adversity, and a small head circumference indicates poor brain growth. Virtually every referral contains information on hemoglobin that provides information on whether or not iron deficiency or inherited anemias might be present as well as testing for hepatitis B, HIV, syphilis, and often hepatitis C. The incidence of hepatitis B in adoptees has decreased during the past 30 years due to the institution of universal hepatitis B vaccination in almost all countries. However, since transmission of the virus from infected children to adoptive families has been reported, parents need to be aware when a child is positive for the virus so the entire adoptive family can be immunized against this infection as soon as possible. The presence of HIV infection in children adopted to the U.S. has actually increased over the same time period as new treatments have dramatically improved outcomes and increased interest in adopting children with this condition. Parents considering adopting children exposed to or infected with any of these agents need to arrange appropriate care for their children with experts in these conditions and investigate insurance coverage particularly for HIV and hepatitis C, for which drug treatment, while effective, can be very expensive.

Photographs and videos can be extremely helpful but too often the images provided are more compelling than informative. While everyone loves to have a child's smile brighten their day, such photos obscure facial features that can suggest prenatal alcohol exposure, a growing problem worldwide. Close-up photographs with the child looking directly into the camera, mouth closed and not smiling, are the most informative. Videos may provide the only objective information on development yet they should be interpreted with care as the ability to detect moderate to severe developmental delay by video review is limited.⁴⁰

Interpreting Information (Table II)

Growth

When interpreting growth we advise using the World Health Organization (WHO) growth curves to monitor growth in infants and children ages 0 to 2 years born in the U.S. and 0 to 5 years born outside the U.S.⁴¹ Centers for Disease Control (CDC) 2000 growth curves can be used for children ages

⁴⁰ Boone JL, Hostetter MK, Weitzman CC. The predictive accuracy of pre-adoption video review in adoptees from Russian and Eastern European orphanages. *Clin Pediatr (Phila)*. 2003;42(7):585-590.

⁴¹ World Health Organization. The WHO Child Growth Standards. 2009. <u>https://www.who.int/childgrowth/standards/en/</u>. Accessed April 24, 2019.

2 years and older born in the U.S. and ages 5 years and older born outside the U.S.⁴²

Growth within foster care is expected to be within the normal range. Growth within institutional care settings depends on the quality of care (both food and nurture) provided. Average height and weight of institutionalized children are about 1-1.5 standard deviations below the mean. In other words, these children would be expected to plot in the lower half of standard growth curves. Children who are plotting two standard deviations or more below the mean (below the 3rd percentile on standard growth curves) deserve additional attention as they may be profoundly deprived or have organic illnesses that affect growth. Head circumference reflects brain growth during early childhood. As with height and weight, a head circumference below the range of

Table II. Interpreting Information

Growth (use World Health Organization curves)

- Most foster care: normal growth
- Most institutional care: growth impairment

Development

- *Foster care*: gross motor delays up to ages 8 to 10 months (no "tummy time")
- Institutional care:
 - Gross and fine motor delays till ages 8 to 9 months and then catch-up with most children walking by 18 months.
 - Language delays that become more significant with time.
 - Social:
 - Indiscriminate friendliness
 - Institutional quasi-autistic behavior (stereotypes) in profoundly deprived children can be confused with true autism spectrum disorders

Interpretation of laboratory tests

• Name and date of the test are needed for appropriate interpretation

normal requires additional attention and a head circumference more than three standard deviations below the mean in adopted children is cause for concern.

Development

Development in foster care is generally comparable to development in birth families. A notable exception is in Korea where foster mothers carry infants much of the first year of life. In this situation, infants do not get much "tummy time" and lag behind in motor development through the first 8 to 9 months of life. These motor delays are transient, and social and language development is unaffected.

Development within institutional care settings can be quite abnormal. Large and fine motor delays are routine through 8 to 9 months of age, e.g. rolling over at 6 months, sitting at 8 to 9 months, crawling at 10 to 11 months. This

⁴² Centers for Disease Control and Prevention. Growth Charts. 2010. <u>https://www.cdc.gov/growthcharts/</u>. Accessed April 24, 2019.

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is followed by gradual improvement once the infant acquires enough muscle strength and ability for self-stimulation. An institutionalized child then exhibits a period of developmental catch-up and generally walks independently by 18 months of age. When motor developmental age is less than half of the child's chronological age it is concerning, particularly after 12 months of age. Language delays are progressive through the first years of life since there is little reciprocal communication with caregivers. In addition, uni- and bilateral hearing loss is more common in postinstitutionalized children likely due to the high incidence of chronic ear infections.⁴³ Inconsistent caregiving and pervasive neglect handicaps social development in most institutionalized children. Experienced adoption medicine providers can assist adoptive families in determining whether behaviors such as rocking, poor eye contact, or disinhibited social engagement with strangers are the result of institutional living alone or signs of a more significant problem.

Age Determination

Foundlings (children who were abandoned) are often assigned a birthdate based on the infant's physical findings at the time of abandonment. Unfortunately, determining the veracity of this birthdate is impractical as there are no objective tests that can truly discriminate slight (months) differences in age. Since adoptive parents prefer to adopt young children, fabricating a birthdate that would make an older child younger is not unheard of. However, determining the actual age of an abandoned older child, for school placement or other reasons, can be daunting. Unfortunately, "objective" parameters such as bone, dental, and developmental age as well as pubertal development not only have a wide normal range but are adversely affected by social, nutritional, and medical deprivation. The common assumption that a child with delayed development should have their age changed after arrival to allow placement in a lower grade may backfire when developmental catch-up and pubertal progression positions the child far ahead of schoolmates. As a general rule, parents should not attempt to reassign age until at least one year after arrival and linear growth rate has stabilized, only in consultation with a knowledgeable pediatric endocrinologist, and only after considering whether age reassignment is clearly in the long-term best interests of the child.

Predicting the Future (Table III)

An adoption agency director once jokingly presented a Magic 8 Ball to me in acknowledging the difficulty of predicting the future for a child As a general rule, parents should not attempt to reassign age until at least one year after arrival and linear growth rate has stabilized, only in consultation with a knowledgeable pediatric endocrinologist, and only after considering whether age reassignment is clearly in the long-term best interests of the child.

⁴³ Eckerle JK, Hill LK, Iverson S, Hellerstedt W, Gunnar M, Johnson DE. Vision and hearing deficits and associations with parent-reported behavioral and developmental problems in international adoptees. *Matern Child Health J*. 2014;18(3):575-583.

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entering an adoptive home. While using this device is often tempting, there are experience- and evidencebased risk factors that can help set appropriate expectations for families. In my dialogue with adoptive parents about the future, I face the inevitable tension between my desire that all children find a permanent family and my professional duty to fully inform families of potential challenges. Finding this balance is not any different than it was 70 years ago when Dr. Grant stated that a physician "should avoid making positive predictions as to future physical and mental capacity which cannot really be made until the child reaches adulthood but is justified in giving a qualified *impression as to what the future holds* in the light of current findings and a knowledge of the child's background."6

Table III. Factors that Increase the Risk of Identifying Medical, Developmental, and Mental Health Problems after Placement (*Risks are Additive*)

Underlying diagnosis

Institutional care during infancy for > 4-6 months

Low income country

Age at arrival (> 2 years)

Birthweight < 2.5 kg

 \geq 2 caregiving disruptions

Head circumference more than 3 standard deviations below the mean

Severe developmental delays (developmental age less than one-half chronologic age or clear autistic behavior)

Optimism is warranted in most situations as recovery within an adoptive home is usually quite striking. However, there are situations that demand caution. Additional exploration of parental expectations is warranted when there is a high risk of severe family stress or disruption, such as adoption of a child with fetal alcohol spectrum disorder, a history of sexual or severe physical abuse, large sibling groups with multiple risk factors, and children with profound cognitive delays or signs of autism spectrum disorder. In such situations, there is a chance that a child may never achieve complete independence and the family must consider whether they have the desire as well as the financial, social, and personal resources to parent a child who requires life-long medical or psychiatric care and direct supervision.

Additional Considerations

Almost all families who adopt internationally have health insurance⁴⁴ and children adopted from the foster care system often qualify for government-sponsored long-term medical assistance. Nevertheless, families must consider the range of services that their child may require, as not all services may

⁴⁴ Hellerstedt WL, Madsen NJ, Gunnar MR, Grotevant HD, Lee RM, Johnson DE. The International Adoption Project: population-based surveillance of Minnesota parents who adopted children internationally. *Matern Child Health J.* 2008;12(2):162-171.

be available in their community or adequately covered by their health insurance (e.g., occupational, speech-language and physical therapy, and psychological/psychiatric inpatient and outpatient services). Families should also be in contact with their school system as many services that enhance development and address needed accommodations in the classroom are provided for free. However, the process of qualification as well as the quality and types of services provided vary greatly among school districts.

Conclusion

Focusing on the best interests of a child mandates that families have the information needed to knowledgably ascertain whether their access to health care, financial and emotional resources, social networks, and marriage and family structure are congruent with the likely needs of a particular child. Since the majority of children now being placed for adoption have identified medical problems or risk factors for experiencing developmental or mental health challenges, medical providers play an even more crucial role in parent education than in the past.

Establishing appropriate expectations is critical as expectations minus reality equals disappointment—a state that can contribute to adoption dissatisfaction and disruption.^{45,46} Unpublished data from the Minnesota International Adoption Project⁴⁴ confirmed that families who spoke with a medical provider during the preadoption period reported fewer negative feelings about adoption, fewer incorrect expectations, and fewer behavior problems in their children. Unforeseen challenges are a routine part of parenting but a deliberate, well-informed process of decision-making by adoptive parents facilitates the process of family formation and improves the odds of long-term success.

ABOUT THE AUTHOR

Dr. Dana Johnson is a Professor of Pediatrics and member of the Divisions of Neonatology and Global Pediatrics at the University of Minnesota where he co-founded the International Adoption Program in 1986. His research interests include the effects of early institutionalization on growth and development and the outcomes of internationally adopted children. Dr. Johnson has authored numerous scholarly works including co-editing Adoption Medicine published by the American Academy of Pediatrics. He has received the Distinguished Service Award and the Lifetime Achievement Award from Joint Council for International Children's Services, the Friend of Children Award from the North American Council on Adoptable Children, and the Harry Holt Award from Holt International. In addition to serving on the Board of Directors of National Council For Adoption, he serves on the Boards of OneSky, SPOON, and Both Ends Believing. Dr. Johnson has two birth daughters, an adopted son from India, and three stepdaughters.



⁴⁵ Coakley JF, Berrick JD. Research Review: in a rush to permanency: preventing adoption disruption. *Child Fam Soc Work*. 2008;13:101-112.

⁴⁶ Palacio J, Sanchez-Sandoval Y, Lee E. International adoption disruptions in Spain. *Adopt Q*. 2006;9:35-55.