

Preparing Families for International Adoption

Julia M. Bledsoe, MD,*
Brian D. Johnston, MD,
MPH[†]

Objectives After completing this article, readers should be able to:

1. Describe the changes in the demographic, medical, and developmental characteristics of internationally adopted children.
2. Discuss the role of the pediatrician in assessing information made available to families prior to adoption of a child abroad.
3. List conditions commonly seen in children adopted internationally and characterize their medical, developmental, and social consequences.
4. Describe the current understanding of the long-term medical, developmental, and emotional outcomes of international adoption.

Introduction

International adoption is an increasingly common phenomenon. With nearly 20,000 foreign-born adoptees entering United States families every year, most pediatricians can expect to encounter one or more of these children in their practices. However, as the demographics and medical risks of intercountry adoption continue to change, it also is likely that prospective adoptive parents will seek pediatric advice prior to completing their adoption. The goal of this review is to highlight the general and specific concerns that pediatric clinicians should address as they prepare families for international adoption.

Demographics and Risk

In 1989, approximately 8,000 children were adopted into United States homes from foreign countries. Most came from Korea, relinquished by young mothers who were stigmatized by out-of-wedlock pregnancy (Figure). Most of these children received United States-style pediatric care and were nurtured in well-funded foster homes until their adoption was completed, usually during infancy.

By 2002, the number of intercountry adoptions had more than doubled, with most children coming from either Russia or China (Figure). This shift in country of origin was accompanied by a change in the general health and well-being of international adoptees. For example, among children available for adoption from Russia, as many as 30% were born preterm or were of low birthweight. Many were relinquished or removed from parental care for reasons of abuse, deprivation, maternal mental illness or substance abuse, or a disabling medical condition in the child. In both China and Russia, most children were institutionalized prior to adoption and were toddlers, or older, by the time they arrived in the United States. Institutionalized children seldom receive optimal nutrition, stimulation, or health care, and group living itself increases the risks of infectious disease, abuse, and neglect. As a result, the medical complexity of the needs of international adoptees has increased while the general health of these children has deteriorated.

Families adopt from abroad for many reasons. Some are compelled by the plight of orphans in particular countries. Others may have been discouraged from domestic adoption due to nontraditional family configurations, single parenthood, or older parental age. Some families believe that foreign children are more readily available; more likely to be of a specific gender, age, or race; and less likely to engender later legal complications than children adopted domestically. Some families look abroad to reduce the risk of adopting a

*Division of General Pediatrics and Director, Center for Adoption Medicine.

[†]Division of General Pediatrics, Department of Pediatrics, University of Washington, Seattle, WA.

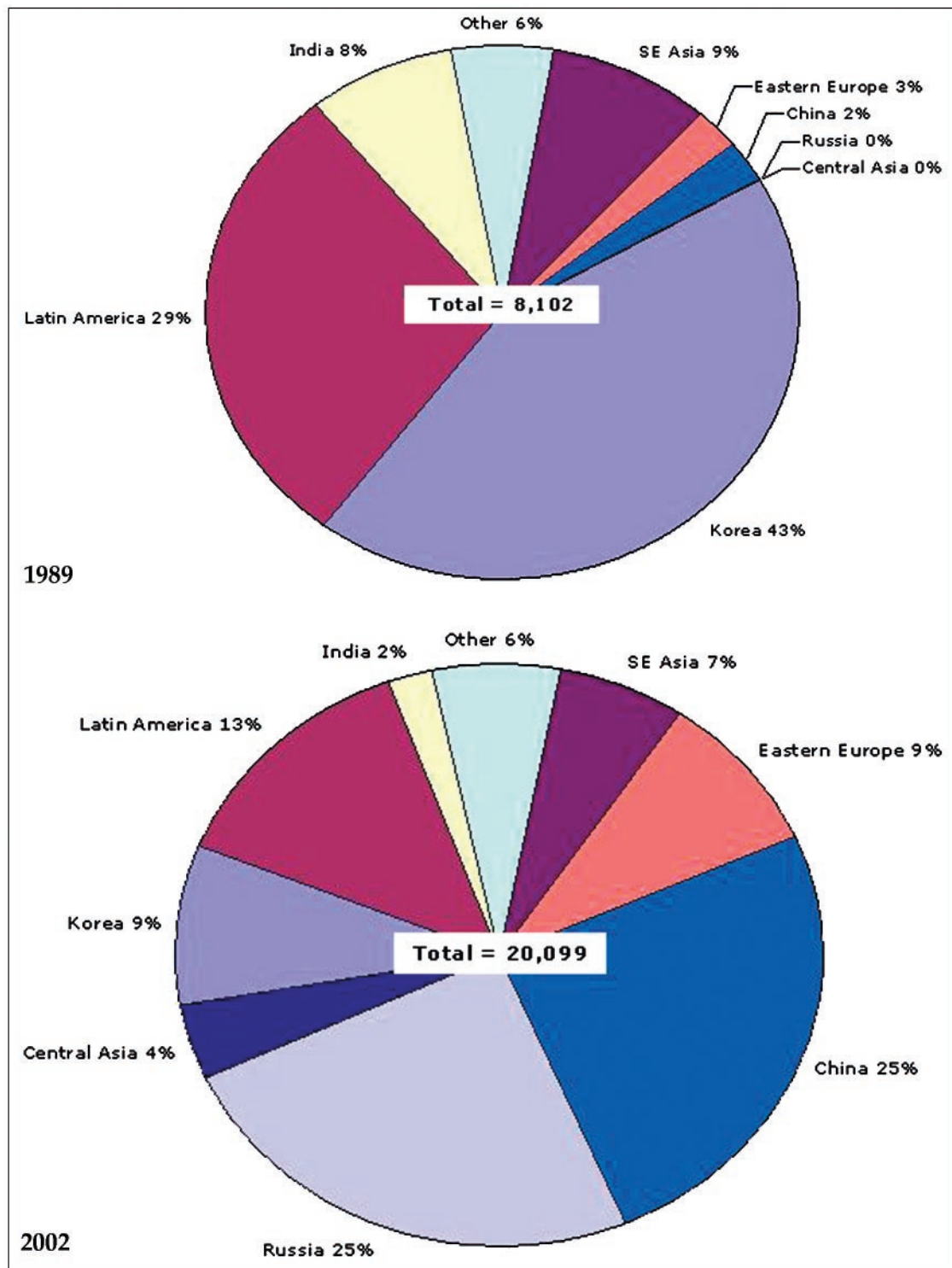


Figure. Immigrant visas issued to orphans coming to the United States by country of origin, 1989 versus 2002. Source: United States Department of State.

child who has “special needs.” In this latter case, the pediatrician should counsel families that all internationally adopted children are at risk for special needs and that families should be prepared to cope with these. No international adoption is risk-free.

The Adoption Process

International adoption is an emotional and often time-consuming process. It also is expensive and can be lucrative for unscrupulous agencies or facilitators. The Joint Council on International Children’s Services (a professional organization of international adoption workers) asks member agencies to subscribe to basic standards of practice and maintains a list of these nonprofit agencies that may be of use to families. However, for-profit agencies are common, and many specify their adherence to similar principles. In October 2000, the United States government moved to implement the Hague Convention on Protection of Children and Cooperation in Re-

passionately the often incomplete and occasionally inaccurate medical and developmental information available to them. However, it is crucial that prospective parents appreciate the known or plausible needs of the child as well as the medical, financial, and emotional resources available to them to meet those needs. A pediatrician who knows the family and their community often can facilitate this process by reviewing preadoption medical information with them. It is in this role, as an objective party in the process, that pediatricians can provide the greatest benefit to families preparing to adopt.

Preadoption Medical Review

The nature and quality of medical information available to parents prior to adoption varies widely among and within countries. From some countries, such as Korea, good family and prenatal histories are available, and western-trained pediatricians complete standardized assessments at regular intervals. In other countries, such as

China, it is illegal to relinquish a baby, and most children are abandoned without access to family or birth history, although subsequent medical care is recorded. It is important to remember that agencies typically receive only a summary or abstract of the child’s records. More information may be available if specifically requested by the agency. Families should be encouraged to pursue this information whenever it may affect their assessment of the child.

In all cases, the pediatrician should dis-

cuss the medical, social, and developmental implications of a number of diagnoses common among international adoptees (Table 1).

Medical terminology varies dramatically from country to country, and translated records may contain terms or diagnoses unfamiliar and often alarming to pediatricians in the United States. The Russian term “perinatal encephalopathy” is an example. United States-trained physicians may see this as a risk marker for cerebral palsy or mental retardation, but Russian physicians use the term to indicate the presence of almost any social, perinatal, or physical examination finding that suggests a risk of neurologic injury. Moreover, where United States physicians might view the immaturity of the newborn in a developmental context, Russian clinicians see the birth process itself as a form of neurologic insult from which the child “recovers.” Thus, it is not surprising that nearly all records from Russia list “perinatal encephalopathy” as a diagnosis.

Each medical diagnosis must be interpreted in an

Families should work with a reputable agency that is capable of providing support and assistance during the application process, during any required travel, and for years into the postadoption period.

spect of Intercountry Adoption, a global legal framework designed to protect birthparents, adoptive children, and their families. Among other provisions, the law requires the United States to create a central adoption authority and to accredit adoption agencies. The effect of this new oversight on the process and outcomes of the international adoption experience are, as yet, unknown. At this time, there are no federal standards and no federal oversight of international adoption except that which occurs at the time the child is granted an “orphan” visa.

Families should work with a reputable agency that is capable of providing support and assistance during the application process, during any required travel, and for years into the postadoption period. In most cases, parents receive a “referral” offering them a specific child abroad. In some situations, the parents initially travel to the country of adoption and are “presented” with an eligible child. In both cases, families can accept or reject the offered child, but may find it difficult to assess dis-

Table 1. Specific Concerns or Diagnoses to Discuss With Families Contemplating Overseas Adoption

Conditions or Risks Reported in Many Records

- Family history of mental illness or mental retardation
- Antenatal drug or alcohol exposure
- Estimated age
- Prematurity
- Low birthweight
- History of abuse/neglect
- Prolonged or recurrent hospitalization/institutionalization
- Malnutrition
- Rickets
- Anemia
- Recurrent respiratory tract infections
- Incomplete immunization
- Hepatitis B/C
- Maternal syphilis
- Developmental dysplasia of the hip
- Developmental delay
- Increased muscle tone

Conditions or Risks Commonly Confirmed After Placement

- Growth deficiency
- Microcephaly
- Fetal alcohol syndrome
- Sexual or physical abuse (especially in older children)
- Hepatitis B/C
- Positive purified protein derivative test
- Intestinal parasites
- Scabies
- Lead exposure
- Dental decay
- Strabismus
- Developmental delay (especially speech and language)
- Behavior problems
- Sleep disturbance
- Feeding difficulties (eg, tactile aversion, hoarding)
- Self-stimulatory behaviors (eg, head banging)

appropriate cultural context and tested against any available corroborating data (such as photographs, videotapes, and the observations of prospective parents or agency workers who have seen the child). The diagnosis of perinatal encephalopathy in a 2-year-old child who has normal cognitive and gross motor development can be ignored safely. However, it would be an error to dismiss all unfamiliar diagnoses as meaningless; many reflect real

concerns on the part of local physicians and deserve careful investigation. Collection and review of objective data is often the best strategy for weighing the real risks.

Growth and Development

Almost every medical report has at least one set of growth measurements. It is always advisable, and usually possible, to request an updated series of measurements on a newly referred child. Growth is an objective measure of the child's nutritional and medical status and may be the most reliable information available prior to adoption. Growth charts specific to children from certain countries (eg, China) are available, but anthropometric measurements can be plotted on United States growth charts. It is generally the pattern of growth over time, rather than growth indices at a specific age, that is of greatest value.

Unfortunately, an orphanage is far from the ideal environment for childhood growth. Many children exhibit evidence of malnutrition and psychosocial dwarfism. Most are stunted in linear growth. Generally, we expect children to lose about 1 month of linear growth for every 3 months in institutional care. Although most children who are malnourished and poorly stimulated maintain brain growth, over time even head circumference may not be spared. Microcephaly is a red flag. Children who have microcephaly that is extreme or present from early in infancy may have medical diagnoses other than malnutrition or deprivation, such as fetal alcohol syndrome, a genetic disorder, or a perinatal brain injury. Although most orphans exhibit dramatic catch-up growth after adoption, even in head circumference, it is not yet known whether this recovery of brain mass means that the brain will function normally.

Developmental delay also is extremely common among children in an orphanage; most exhibit deficits in at least one domain. Expressive language almost always is delayed. Motor delays may be due to lack of appropriate stimulation, to caregiving practices (such as bundling or swaddling infants) that limit developmental experience, or to the secondary effects of chronic medical conditions such as rickets. In many orphanages, toys are kept on display rather than used for play, sedatives are used to induce sleep, and most children never have left the grounds of the institution. These children are residents of a unique and unnatural culture that does little to promote optimal development.

In the limited number of studies that have assessed the developmental status of institutionalized children, there appears to be a correlation between time in the orphanage and linear growth and developmental attainment. In our preadoption assessments, we look for developmental

attainment that, at a minimum, matches the child's linear growth. Developmental delays that markedly exceed this are cause for added concern. In all cases, it is important to remind parents that, even in this country, children who have limited cognitive potential may perform well on early developmental testing. Also, early development "within the expected range for an institutionalized child" does not guarantee a normal cognitive or behavioral outcome.

Photographs and Videos

A grainy photograph of the child accompanies many adoption referrals. An increasing proportion of referrals include several seconds to many minutes of video footage as an adjunct to the written information. These video records can be very helpful in confirming or refuting information found elsewhere in the record. However, it is important to realize that most video records do not include a standardized developmental or physical examination of the child and can miss significant diagnoses. Conversely, the video captures only a small portion of the

tunities to assess the face for the stigmata of fetal alcohol syndrome (FAS). Although significant cognitive and behavioral impairment may be present in alcohol-exposed children who do not have facial dysmorphism, the presence of a thin upper lip, a long smooth philtrum, and short palpebral fissures should prompt consideration of FAS. In some centers, standardized facial photographs or video can be screened by using image analysis software to quantify the risk of FAS. This technology has yet to be validated in international adoptees, however, and is not yet available clinically.

Specific Medical Conditions

Pediatricians may feel most comfortable discussing the implications and expected prognoses of diagnosed medical conditions. Children who have congenital heart defects, cleft lip/palate, orthopedic deformities, or prematurity or low birthweight (and the attendant complications) often are referred for international adoption. Because these conditions frequently are undertreated abroad, affected children can be expected to have medical needs at least as great as children born with similar conditions in this country. A careful review of records is likely to reveal associated secondary morbidities attributable to these primary conditions (eg, hearing loss in a child who has an unrepaired cleft palate). Families can be guided to a realistic assessment of the impact of these conditions and the resources nec-

essary to meet the needs of the child. In some cases, the pediatrician's most important role is facilitating the family's discussion with local subspecialists or with other families who are parenting similarly affected children.

Putting It Together

It is highly unlikely that a pediatrician will review pre-adoptive records and certify a child living in an orphanage in a foreign country as "normal." Indeed, most of these children are not "normal" by United States standards. It is more likely that the review will confirm that the child is at "average risk," given the information available and the known sequelae of institutional life. In some cases, children clearly are at higher risk for poor outcome because of markedly abnormal medical or developmental findings. Extremely low-birthweight babies, children who have the facial characteristics of FAS, or those who have microcephaly out of proportion to other growth parameters fit into this category.

For many children of "average" risk, the prognosis is

Each medical diagnosis must be interpreted in an appropriate cultural context and tested against any available corroborating data.

child's life and may underestimate his or her true abilities. In many cases, children are stunned by the lights, direction, attention, and playthings suddenly offered to them. They may be hungry, tired, afraid, or ill. We find video most useful as an adjunct to written records of growth and development rather than as an assessment that can stand alone.

When reviewing a video, the pediatrician should look for symmetry in muscle function and evidence of normal tone. Developmental milestones, such as reaching, grasping, rolling over, or pulling to a stand frequently are observed. Gross evidence of visual or auditory ability often is present. The quality of the child's interaction with adult caregivers should be noted: Is it warm and reciprocal? Does the child look to an adult for consolation when upset? Is the child interested in other children or adults in the scene? These behaviors may provide clues to the quality of caregiving and the child's capacity to develop a secure attachment.

Finally, the clinician should look carefully for oppor-

good. Most exhibit remarkable catch-up growth, even in head circumference, once placed in an adoptive home. Developmental progress also can be expected, especially if early diagnostic and therapeutic referrals are pursued. However, it is unrealistic for families to expect that “love alone” will erase the ill effects of years in an institution. Many children continue to demonstrate delays in language as well as specific behavioral, emotional, and social impairments many years after adoptive placement.

Long-term studies of institutionalized children who later are adopted are lacking, such that the ultimate developmental prognosis for this population is unknown. Some of the most complete data come from studies of Romanian children who were adopted from appalling conditions in the orphanages of the Ceausescu regime. Overall, follow-up studies in childhood suggested that one third of these adoptees were doing very well; one third had minor residual problems; and one third had serious medical, developmental, or behavioral sequelae. Weight and developmental status at the time of adoption were less predictive of developmental outcome than was age at the time of adoption. Children adopted at fewer than 6 months of age were, as a group, indistinguishable from nonadopted peers at age 4 or 6 years. Those adopted between 6 and 24 months of age had slighter lower mean cognitive scores than the comparison group, and those adopted at older than 2 years of age were the most likely to have intellectual or behavioral impairments at follow-up. The applicability of these data to children adopted from other countries and other social settings in 2004 is uncertain.

When reviewing records with a family, it is important to recall that it is not the pediatrician's role to choose a child for the family or to judge the advisability of a proposed adoption. Rather, the clinician should help the family make a fully informed decision. Are they capable of parenting this specific child? Can they identify resources in their community for any medical, rehabilitative, or educational needs the child may have? Can the family tolerate the uncertainties involved in the process? In some cases, the pediatrician may function as a conduit for information, requesting specific data from the agency or discussing the child with an orphanage physician through an interpreted conference call. In other cases, the physician can provide support and reassurance to a family that wishes to decline a risky referral, a process that

often is excruciatingly difficult, tainted with feelings of guilt and loss. In the end, however, the decision to become parents to a specific child requires a certain amount of faith that no amount of medical data can provide; only the parents are in a position to make this commitment.

Traveling to Adopt

Although some children are escorted to the United States for adoption, most international adoptees are collected in their birth countries by their adoptive parents. In many cases, this process requires more than one trip or a prolonged stay in the foreign country. Formal adoption usually is completed in a foreign court prior to return to the United States.

All family members traveling to adopt should be advised to seek medical advice regarding immunizations and prophylactic medications appropriate to the country and region they will be visiting. The Centers for Disease

it is not the pediatrician's role to choose a child for the family or to judge the advisability of a proposed adoption. Rather, the clinician should help the family make a fully informed decision.

Control and Prevention has useful advice for travelers on its Web site (Table 2).

Because families often have custody of the child for several days or even weeks in a foreign country before returning home, the pediatrician can be very helpful in suggesting a list of age-appropriate food and supplies to carry abroad. Basic first aid materials are useful, as are sterile needles if the child or parents require phlebotomy or an injection. At our institution, we also provide a list of prescription and nonprescription medications as well as instructions for their use and indications requiring the counsel of a physician.

Crises do arise during travel and should be anticipated. First-time parents may be overwhelmed by the normal demands of a toddler, which can be compounded by adjustment issues as the child experiences life outside an institution. Occasionally, parents are presented with a child who is seriously ill or markedly changed from previous reports. In this situation, advice from a physician familiar with the child's records can be invaluable.

Table 2. Useful Internet Sites

AAP Provision Section on Adoption
<http://www.aap.org/sections/adoption/default.htm>
 National Adoption Information Clearinghouse
<http://naic.acf.hhs.gov/>
 Joint Council on International Children's Services
<http://www.jcics.org/jcics.html>
 US State Department—International Adoption Issues
<http://travel.state.gov/adopt/html>
 Evan B. Donaldson Adoption Institute
<http://www.adoptioninstitute.org/>
 Child Welfare League of America
<http://www.cwla.org/>
 Adoptive Families Magazine
<http://www.adoptivefamilies.com/index.php>
 Help with Russian Medical Terms
<http://www.russianadoption.org/adoptionfaq.htm>
 University of Minnesota, International Adoption Clinic
<http://www.peds.umn.edu/iac/>
 CDC Travel Advice
<http://www.cdc.gov/travel/>

For these reasons, our clinic offers families a number to reach a United States physician by long-distance telephone while they are abroad.

Homecoming and Beyond

United States immigration law mandates a medical examination by an approved physician prior to issuing an entry visa. This screening examination is strictly to detect infectious diseases of public health concern and should not replace a thorough pediatric evaluation after arrival. Most children should be seen within 2 weeks of homecoming and sooner if they are ill. The specifics of this examination have been well described in a previous issue of *Pediatrics in Review* (see Jenista in Suggested Reading). Following a cardinal rule of adoption medicine (that all preadoptive information is to be taken seriously, but all such information also is suspect), we emphasize that all examinations and tests be repeated once a child comes to the United States (Table 3).

Families experience predictable disruptions and challenges as they settle into new routines with their adopted child. Structure and predictability assist with most transitions. New experiences and opportunities easily overwhelm children adopted from stimulus-poor environments. Gradual introduction of the new environment with limited stimulation is a more successful approach. Sleep often is an issue. Children from institutions may be very resistant to sleeping alone or in a western-style bed. Families can be counseled that although providing sleep

Table 3. Suggested Components of a Postplacement Medical Evaluation for Internationally Adopted Children

- Review of any newly acquired medical, educational, or institutional records
- Interview of child, with interpreter
- Screening of hearing and vision
- Assessment of growth
- Physical examination
- Developmental assessment
- Newborn screening panel (young infants only)
- Hemoglobin electrophoresis
- Complete blood count with red cell indices
- Hepatitis B serology; hepatitis C antibody
- Human immunodeficiency virus antibody (on arrival and 6 months postplacement)
- Serologic test for syphilis
- Urinalysis
- Stool examination for ova and parasites (three specimens)
- Stool examination for *Giardia* antigen (one specimen)
- Tuberculin skin test (on arrival and 6 months postplacement)
- Thyroid function tests
- Lead level
- Ca^{++} , PO_4 , and alkaline phosphatase, if child has stigmata of rickets
- If growth deficiency is profound (height <2nd percentile), consider evaluation for short stature
- Dental visit
- Other subspecialty referrals as required

training to adoptees does not cause psychological harm, it can wait until a period of adjustment has passed. Most families also worry about attachment and bonding. Although some adopted children exhibit serious disorders in attachment, most develop secure relationships with their adoptive families over time, a process that cannot be rushed. However, until such attachment develops, some children will be indiscriminately friendly with adults, a condition that may pose a safety hazard.

Pediatricians are uniquely qualified to recognize the wide variation in “normal” temperaments and behaviors. Families are well-served when pediatricians assess the adopted children from that perspective. Many developmental and behavioral concerns seen in adopted children are normative conditions that can arise in any population, rather than the specific sequelae of adoption. Advice and guidance suitable for nonadoptive families often is all

that is required. However, in some circumstances, specialized counseling may be needed to help a family or child cope with behavioral difficulties.

Most families who adopt from abroad are highly satisfied with their experience. Like most families, those whose children are adopted from overseas struggle with the problems, disappointments, set-backs, and challenges of parenting, but few regret their decision to adopt or would consider disrupting the adoption.

Future Questions

With international adoptions continuing to increase, long-term studies of foreign-born adopted children are needed. We still have much to learn about the long-term impact of early environmental deprivation and malnutrition on growth and development. Further, although many “resilient rascals” seem to be unscathed by their first months or years in an institution, there may be more subtle deficits in learning and behavior that are not easily identified in younger children. In addition to these more general issues, this population provides an opportunity to explore more specific questions about which early environmental attributes are most important in promoting normal growth and development. These studies are needed to answer questions more accurately about the prognosis of international adoptees. Perhaps more importantly, the answers also may guide aid and development work directed toward the care and well-being of institutionalized children worldwide, most of whom never will find an adoptive home.

Conclusion

The road to international adoption is fraught with risks and rewards, some of which are readily apparent and some of which are hidden. Pediatricians can be extremely

helpful to potential adoptive families in navigating the medical and developmental issues surrounding this unique and growing segment of our patient population.

Referral and Resources

Pediatricians who would like consultation or assistance from a colleague experienced in adoption medicine can contact the American Academy of Pediatrics Section on Adoption and Foster Care for a referral (Table 2). Those interested in joining an e-mail list for clinicians who care for adopted children can send an inquiry to adoption@u.washington.edu.

Suggested Reading

- Albers LH, Johnson DE, Hostetter MK, Iverson S, Miller LC. Health of children adopted from the former Soviet Union and Eastern Europe. Comparison with preadoptive medical records. *JAMA*. 1997;278:922–924
- American Academy of Pediatrics. Medical evaluation of internationally adopted children for infectious diseases. In: Pickering LK, ed. *Red Book: 2003 Report of the Committee on Infectious Diseases*. 26th ed. Elk Grove Village, Ill: American Academy of Pediatrics; 2003:173–177
- American Academy of Pediatrics: Committee on Early Childhood, Adoption & Dependent Care. Initial medical evaluation of an adopted child. *Pediatrics*. 1991;88:642–644
- Gunnar MR, Bruce J, Grotevant HD. International adoption of institutionally reared children: research and policy. *Dev Psychopathol*. 2000;12:677–693
- Jenista JA. The immigrant, refugee, or internationally adopted child. *Pediatr Rev*. 2001;22:419–429
- Jenista JA, ed. Medical issues in international adoption. *Pediatr Ann*. 2000;29(4)
- Johnson DE. Medical and developmental sequelae of early childhood institutionalization in international adoptees from Romania and the Russian Federation. In: Nelson CA, ed. *The Effects of Early Adversity on Neurobehavioral Development*. Mahwah, New Jersey: Lawrence Erlbaum Associates; 2000

PIR Quiz

Quiz also available online at www.pedsinreview.org.

9. Which of the following statements about federal standards for and federal oversight of international adoption is *most* accurate?
 - A. At this time, there are no standards or oversight other than issuing of an "orphan" visa.
 - B. Federal guidelines, administered by several states, regulate international adoption procedures.
 - C. Federal standards exist but are administered voluntarily by the several agencies involved in international adoption.
 - D. The federal government accredits international adoption agencies.
 - E. The United States International Adoption Agency is the central authority for international adoptions.
10. Which statement about the effect of institutionalization in orphanages on linear growth is *most* accurate?
 - A. Children tend to lose about 1 month of linear growth for every 3 months spent in an institution.
 - B. Children tend to lose about 1 month of linear growth for every 6 months in an institution.
 - C. Children tend to lose about 1 month of linear growth for every 12 months spent in an institution.
 - D. Children tend to lose about 1 month of linear growth for the duration of time spent in an institution.
 - E. There is no correlation between such institutionalization and linear growth.
11. A "red flag" finding that may indicate, besides malnutrition or deprivation, such medical conditions as fetal alcohol syndrome, genetic disorders, or perinatal brain injuries in orphans considered for adoption, is:
 - A. Alopecia areata.
 - B. Exophthalmos.
 - C. Microcephaly.
 - D. Refractory psoriasis.
 - E. Scoliosis.
12. In preadoption assessment of foreign children, the pediatrician should look for developmental attainment (eg, expressive language, motor skills) that, at a minimum:
 - A. Is not more than 3 months behind the child's linear growth.
 - B. Is not more than 6 months behind the child's linear growth.
 - C. Is not more than 1 year behind the child's linear growth.
 - D. Is not more than 2 years behind the child's linear growth.
 - E. Matches the child's linear growth.
13. Which of the following statements concerning the use of standardized facial photographs or video captures with image-analysis software to quantify the risk of fetal alcohol syndrome (FAS) is *most* accurate?
 - A. Facial stigmata owing to FAS are rare; the technique should not be employed.
 - B. The facial stigmata of FAS are diagnostic; the technique should be applied routinely.
 - C. The technology appears to be helpful when used with standardized photographs or videos but is yet to be validated in international adoptees.
 - D. The technology is helpful when used with standardized photographs only.
 - E. The technology may be helpful when used with videos but not photographs.