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## International adoption of institutionally reared children: Research and policy

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### Abstract

This article summarizes the research on the developmental outcomes of postinstitutionalized children and discusses the implications for social policy. Postinstitutionalized children often reach their adoptive families with varying degrees of physical growth retardation, cognitive delays, and socioemotional problems. Many children demonstrate remarkable recovery following adoption. Unfortunately, some of the children continue to display significant problems that require professional intervention. It appears that the children's recovery may be influenced by their early experiences with their birth family and in institutional care, and there is suggestive evidence that postadoption experiences also play a role. These findings indicate that preadoption and postadoption services may support the outcome of postinstitutionalized children.

Since 1992, nearly 60,000 children have been adopted internationally into the United States with the number of adoptions increasing annually by approximately 18% (U.S. State Department, 2000). During the same period, the percent of children adopted from institutions has increased from approximately 20% to approximately 65% (Freivalds, 1998). Most of these children have spent 8 months or more in an institution prior to adoption, and they

have experienced an unknown combination of adverse prenatal conditions, malnutrition, and stimulus privation (Johnson, in press). Many of the children reach their adoptive families in poor medical health with stunted physical growth and varying degrees of developmental delay (Hostetter, Iverson, Dole, & Johnson, 1989; Hostetter, Iverson, Thomas, McKenzie, Dole, & Johnson, 1991; Johnson, Miller, Iverson, Thomas, Franchino, Dole, Kiernan, Georgieff, & Hostetter, 1992). Despite experiencing early adversity, many of the children make excellent progress. Unfortunately, an indeterminate number fail to make such progress and confront their adoptive parents with sometimes overwhelming problems. Given the number of internationally adopted children, particularly those with challenging problems, it is clear that this complex social issue must be addressed by the nation and within the disciplines that focus upon the development and well-being of children. Research conducted within a developmental psychopathology framework is crucial to understanding the developmental outcomes of internationally adopted children and guiding policy

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recommendations for these children. However, the recommendations for social policy are complicated by the fact that there are broader, global issues to consider with international adoptions.

The study of internationally adopted children is not only important in its own right, but it may also shed light on the developmental outcomes of other at-risk populations that encounter early adverse life circumstances. On the one hand, the long history of research with other at-risk populations may aid in understanding the developmental outcomes of internationally adopted children. On the other hand, unlike internationally adopted children, most children exposed to early adversity continue to be exposed to adverse conditions throughout development. Because internationally adopted children often encounter a conglomerate of early adverse events followed by development within a supportive family environment, research with these children may provide information on the long-term sequelae of a circumscribed period of early adversity. Furthermore, it is possible to further our understanding of resiliency as many of the children demonstrate adequate recovery following adoption despite their adverse early experiences. Thus, internationally adopted children provide a model of the impact of early adversity on developmental processes and the capacity of children to recover from early adversity when their social and physical context radically changes. In this article, we will provide a brief history of the research on the impact of early institutionalization and discuss the conditions that children currently encounter in institutions. We will then examine the effects of institutionalization upon the development of children and discuss the implications for social policy regarding internationally adopted children.

### **Early Research on Institutional Care and Postinstitutional Development**

Research on the development of institutionalized infants and toddlers has a long history. At the turn of the century the dominant issue was survival, as many infants in founding homes died before their second birthday. With

improvements in sanitation and medical care, the mortality rate of institutionalized children declined, and concerns then shifted to the issues of "hospitalism" and developmental delays, which were variously attributed to stimulus and maternal deprivation (Dennis, 1938; Lowrey, 1940; Skeels, 1940; Skeels & Dye, 1939; Skeels, Updegraff, Wellman, & Williams, 1938; Spitz, 1945).

By the 1950s few developmental psychologists doubted that infants languished in deprived institutional settings, but a strong controversy existed regarding the immutability of these early delays. With the rise of psychoanalytic theory and attachment theory came claims about the irreparable consequences of maternal deprivation in infancy, particularly if continued past the age of 2 years (Bowlby, 1951; Goldfarb, 1945b). Longitudinal studies of institutionalized children assessed before and after adoption (e.g., Dennis, 1973; Provence & Lipton, 1962; Skeels, 1966) appeared to support these claims with the documentation of chronic impairments in multiple areas of functioning unless the children were placed in a family environment during infancy. However, these studies continued to confound the general lack of stimulation with the specific absence of an attachment figure (Rutter, 1972).

### **Levels of Privation**

The conditions experienced in institutions are complex, varying over time and across institutions, and are probably not uniform even within an institution (i.e., some children receive better care than other children do). As Rutter (1981) noted several decades ago, ascribing all of the detrimental effects of early institutionalization to maternal deprivation is a gross and inaccurate simplification. To clarify the experience of institutionalized children, it may be helpful to consider three levels of privation that may be encountered in an institutional setting. At the most basic level, there are needs for adequate nutrition, hygiene, and medical care. The extent to which these basic needs are met may fluctuate with the political and economic conditions of the country. Recognition of a country's economic

hardship may bring an influx of humanitarian aid that improves conditions; however, it is sometimes questionable whether the aid actually benefits the institutions. At the next level, it is important to consider the need for stimulation and the opportunity to act upon the environment in ways that supports motor, cognitive, language, and social development. Finally, there is a need for stable interpersonal relationships and the opportunity to develop an attachment relationship with a consistent caregiver.

Although three levels of privation may be identified, these levels are clearly not independent of one another. For example, institutions that fail to meet the children's most basic needs for nutrition and medical care generally do not provide adequate stimulation or consistent interpersonal relationships for the children. Also, satisfying the need for stimulation and an opportunity to interact with the environment typically requires frequent and supportive contact with adults due to the motoric helplessness of the human infant. Adequate nonsocial stimulation, thus, typically involves adequate social stimulation. When toys and other objects are provided in the absence of improving adult–infant ratios and caregiver training, it is likely that the amount of stimulation received by the infants does not significantly improve.

Perhaps the most challenging need to meet in an institution is a young child's need for stable, consistent, interpersonal relationships. Previous research has demonstrated that it is possible to provide a highly stimulating, enriching institutional environment without creating the conditions that support a young child's need for consistent relationships (Tizard & Joseph, 1970). Even if adult–child ratios are improved within an institution, the staff changes throughout the day, weekend staffing problems, and policies that group children by age with the related changes in staff and settings (i.e., hospital to baby home to residential preschool) result in frequent changes in the children's caregiver and undermine the stability of the children's relationships. Rutter (1981) accurately summarized the experience of institutionalized children when he stated that it is difficult to achieve

the quality of environment provided by the vast majority of families during the earliest years of a child's life in an institutional setting.

Of course, we are often lacking the appropriate information to determine the degree of privation internationally adopted children encountered prior to adoption. Indeed, within an institution, children may experience differing degrees of privation (Frank, Klass, Earls, & Eisenberg, 1996). To some extent, the heterogeneity in the children's experiences at an institution may explain the differences in the rate and the degree of recovery following the adoption of children reared in the same institution. The concept of "favorites" is well known in the literature on institutionalized children (Ames, 1997). "Favorites" are children who receive special attention and care by one or more of the caregivers at an institution. Factors related to a child being a "favorite" have not been researched, but may include aspects of the child's behavior (e.g., temperament) and physique (e.g., health and ethnicity). The unique experience of a particular child, of course, is as difficult to document as the other early factors that might contribute to postadoptive development and recovery.

### **Developmental Outcomes of Postinstitutionalized Children**

#### *Physical growth*

Given the challenge of meeting young children's needs on all of these levels in even the best institutions, it is not surprising that children reared in institutions show growth declines around the world. Similar declines in growth have been noted for children reared in institutions in Russia, China, and Romania. It has been estimated that young children lose approximately 1 month of growth for every 2–3 months in institutional care (Johnson, in press). Furthermore, it is the growth of the long bones (i.e., height) that is suppressed, while weight remains fairly proportional to the child's height (Johnson, in press). This pattern has also been associated with psychosocial dwarfism (Skuse, 1993; Skuse, Albanese, Stanhope, Gilmour, & Voss, 1996).

This syndrome involves a reduced secretion of growth hormone (GH), blunted GH response to provocative challenge, and cell resistance to growth factors. Similarities between psychosocial dwarfism and depression have been noted. The blunted GH response to provocative challenge is one of the few neuroendocrine markers found in childhood or early-onset depression that parallels major depression in adulthood (Ryan & Dahl, 1993). These neuroendocrine changes associated with psychosocial dwarfism quickly revert upon removing the child from the deprived environment, showing alteration after 1 week and returning to near normal functioning within 3 weeks (Alanese, Hamill, Jones, Skuse, Matthews, & Stanhope, 1994).

A similar pattern of growth rebound is noted in institutionalized children following adoption (Johnson, *in press*). Indeed, postinstitutionalized children's rate of growth exceeds the typical rate of their peers, allowing postinstitutionalized children to reach approximately average height by the time of puberty. Their early experiences, however, may alter the timing of puberty. Early-onset puberty has been described for postinstitutionalized girls from India (Proos, Hofvander, & Turvemo, 1991), and anecdotal reports indicate that a similar phenomenon may occur for an indeterminate number of the children adopted from institutions around the world.

Interestingly, children diagnosed with psychosocial dwarfism also show alterations in behaviors related to food, sometimes long after neuroendocrine functioning and growth trajectories normalize (Skuse *et al.*, 1996). These behaviors include hyperphagia, difficulties in identifying and responding to cues of satiation, hoarding food, and signs of panic or distress following threat to the child's access to food. These behaviors have also been described for some postinstitutionalized children (Ames, 1997).

#### *Behavioral development*

Since the early research on institutionalized infants, the field has seen a marked increase in the understanding of brain development. It is now clear that many aspects of mammalian

brain development are organized by experience (Black, Jones, Nelson, & Greenough, 1998). It has been demonstrated that in mammals, including humans, there is a period of overproliferation of synapses that occurs at different times in different regions of the brain, followed by confirmation and organization of the synapses that are "used" and elimination of the synapses that are "unused." This process of overproliferation and pruning of synapses is viewed as the neural basis of experience-expectant learning that allows "experiences typically available to the young of the species in the environment of evolutionary adaptedness" to influence the developmental process (Huttenlocher, 1994). Research in neuroscience, thus, has increased the understanding of the neural mechanisms that transduce experiential effects into the effects upon brain and behavioral development. This information, in conjunction with the evidence of growth and behavioral delays in institutionalized children, raises concern about the developmental outcomes of institutionalized children following adoption. These concerns, however, need to be tempered, since neuroscience research also points to the remarkable plasticity of the brain. Unfortunately, the processes that allow later experiences to modify the effects of early experience and the types of intervention that may be needed to normalize trajectories for infants reared in adversity are not clear. However, the development of postinstitutionalized children provides documentation of the long-term consequences of early institutional care as well as evidence of remarkable plasticity.

In examining the developmental outcomes of institutionalized children following adoption, it is important to note that there are several problems hampering our ability to address this issue. Without exception, studies of postinstitutionalized children have used relatively gross measures of functioning (Gunnar, *in press*). With regard to cognitive functioning, nonspecific assessment tools, such as the Denver Developmental Screening Questionnaire and the Bayley Scales of Infant Development, and later the McCarthy Scales and Stanford-Binet Intelligence Scale, have been used (see, for a review, Rutter, 1981). These

tests yield measures of general cognitive functioning but do not allow for the assessment of specific aspects of cognition. Using these tests of general cognitive functioning, the research with postinstitutionalized children across a variety of samples demonstrates that the recovery is remarkable. For example, the children in several Romanian institutions demonstrated delays of a year or more on these cognitive tests (Carlson & Earls, 1997; Kaler & Freeman, 1994). However, within a few years with their adoptive families, many Romanian children were functioning within the average range for their age and some were functioning within the superior range (e.g., Ames, 1997; Rutter & ERA Study Team, 1998). Language development displayed a similar pattern of recovery, a phenomenon that seems even more striking since internationally adopted children learn a different language in their adoptive homes.

However, it is not yet clear whether more specific tests of cognitive functioning might reveal domains that are not as resilient. Clinical observations of postinstitutionalized children suggest that specific neuropsychological tests might reveal subtle differences in cognitive functioning (Goldfarb, 1945a; Provence & Lipton, 1962). These observations included greater rigidity in thinking, problems in concentration and attention, difficulties in generalizing solutions to new problems, problems in logical and sequential reasoning, and excessive concreteness of thought. These abilities are typically described as falling under the general rubric of executive functions that presumably involve activity in the prefrontal regions of the cortex (Denckla, 1996). Interestingly, problems with concentration and distractibility that may reflect executive function impairments have been reported by teachers for children that did not display general cognitive delays prior to adoption and were reared in institutions that provided adequate medical care and stimulation (Hodges & Tizard, 1989; Tizard & Hodges, 1978). Clearly, research efforts need to be directed towards assessing the development of more specific aspects of cognitive functioning, such as executive functions.

A similar conclusion can be reached with

regard to language development. Beyond standardized tests of intellectual functioning, language development has not been extensively studied in postinstitutionalized children (however, see Tizard, Cooperman, Joseph, & Tizard, 1972). The resiliency in language development to a wide variation in linguistic input is consistent with conclusions derived from deaf children of hearing parents (Golden-Meadow, 1998). Clinical observations on language development in postinstitutionalized children, however, suggest that the children may not readily use language for expressing emotion, requesting aid from adults, and expressing ideas and fantasy despite developing adequate language abilities (Provence & Lipton, 1962). These clinical observations are consistent with the evidence that an indeterminate number of adolescents demonstrated that their command of language was not as highly developed as their parents believed when language was required to express abstract concepts at school (Saetersdal & Dalen, 1991). The prevalence of these problems and their specificity to language development, as opposed to the cognitive ability to engage in abstract reasoning, has not been adequately studied.

Although there seems to be little doubt that many children who appear grossly delayed at adoption experience a rapid maturation in general intelligence and language, at this point we should exercise caution about concluding that general intelligence typically rebounds for postinstitutionalized children. In addition to the use of gross measures of cognitive functioning, the postinstitutionalized children studied most recently were fairly young at the time of their last intellectual assessment. In the studies of Romanian postinstitutionalized children adopted into the United Kingdom and into British Columbia, most of the children were under 8 years of age at the last assessment (Ames, 1997; Rutter & ERA Study Team, 1998). Therefore, we are uncertain about postinstitutionalized children's intellectual functioning in adolescence as the intellectual challenges encountered in school and on standardized tests require them to utilize more abstract reasoning.

In contrast to the apparent amelioration of

gross cognitive and language deficits, postinstitutionalized children appear to be at risk for psychosocial problems that may persist and even increase over time following adoption (Ames, 1997; Hoksbergen, 1981; Rutter & ERA Study Team, 1998; Tizard & Rees, 1974; Verhulst, Althaus, & Versluis-Den Bieman, 1993). The most frequent concerns are within the domain of attachment relationships, emotion regulation, and peer interactions (Chisholm, Carter, Ames, & Morison, 1995; Fisher, Ames, & Chisholm, 1995; Hodges & Tizard, 1989; Tizard & Hodges, 1978; Tizard & Rees, 1975; Verhulst et al., 1993).

Much of the early research with postinstitutionalized children concerned their ability to form emotional bonds with others following the absence of a consistent caregiver and an attachment relationship in infancy (Rutter, 1981). This interest has continued. The recent studies of postinstitutionalized Romanian children demonstrate the complexity of the outcome in this domain. Many of the postinstitutionalized children do seem to form a specific attachment to their adoptive parents. However, there is an increased likelihood of the children developing an insecure attachment. In the group of Romanian children adopted into British Columbia, 63% of the children were classified as insecurely attached several years after adoption (Chisholm, 1998). In addition, many of the children demonstrated "atypical" patterns in their attachment relationship (Chisholm, 1998). Among the Romanian children adopted into the United Kingdom, approximately 20% of the children displayed a number of behaviors that are consistent with an attachment disorder (O'Connor, Bredenkamp, Rutter, & ERA Study Team, 1999).

When the children's attachment relationship was atypical or disordered, the type of behavior observed suggested a shallowness in the children's emotional bond to their adoptive parents (O'Connor et al., 1999). This shallowness may be related to the phenomenon of indiscriminate friendliness, which is frequently noted among postinstitutionalized children (Chisholm, 1998). The children appear to lack a social reserve with strangers

that is typically seen in family-reared children. However, it should be noted that indiscriminate friendliness is a misnomer, as the core behavior is neither friendly nor sociable in the traditional sense and the children are not completely indiscriminate (O'Connor et al., 1999). Instead the friendliness is superficial, impersonal, and rarely reciprocal. The level of privation that influences the development of indiscriminate friendliness and emotional shallowness is not known. It is noteworthy, however, that a shallowness in emotional relationships has been observed in children reared in institutions that provided adequate medical care and stimulation (Hodges & Tizard, 1989; Tizard & Hodges, 1978). For example, nearly 50% of the children adopted from a high-quality British residential nursery demonstrated four or five characteristics that reflected lack of social competence, including the lack of a special, intimate friendship, in adolescence (Hodges & Tizard, 1989).

In addition to an emotional shallowness in relating to others, postinstitutionalized children may also demonstrate difficulties with emotion regulation. For example, at 8 and 16 years of age, teacher reports for postinstitutionalized children demonstrated that many of the children were within the clinical range on externalizing behaviors, such as "resentful and aggressive when corrected," "irritable," and "likely to argue and fight with peers" (Hodges & Tizard, 1989; Tizard & Hodges, 1978). Recently, similar problems have been reported for the Romanian-adopted children (Ames, 1997). These problems with behavior regulation may underlie many of the difficulties postinstitutionalized children have with peers (Groze & Ileana, 1996).

Regardless of the sample studied, research on postinstitutionalized children consistently demonstrates that problems cluster within children. Therefore, the overall averages noted above may be a poor way to describe the developmental outcomes of postinstitutionalized children. For example, in the study in British Columbia with postinstitutionalized Romanian children, less than a third of the children accounted for the vast majority of the problems in cognitive functioning, attachment relationships, and other psychosocial prob-

lems (Ames, 1997). Similar findings have been reported in an epidemiological study of internationally adopted children in the Netherlands (Verhulst, Althaus, & Versluis-Den Bieman, 1990).

#### *Factors related to recovery*

The critical issue for prospective parents is the exact number of postinstitutionalized children who exhibit significant problems and the ability to predict which children will have significant problems. Identifying the children who may have multiple debilitating problems is not a simple task. Many factors, including the children's early experiences with their birth family and in the institutional setting, may impact postinstitutionalized children's developmental outcomes and recovery following adoption.

Although many postinstitutionalized children are placed in an institutional setting at birth, an indeterminate number of children are reared by their birth family until political, economic, or personal circumstances prevent the family from continuing to care for their child. For the children who are reared with their birth family, it seems likely that these early experiences would impact the children's developmental outcomes. For example, in a study of children reared in long-term residential care in Greece, the children who experienced a stable, harmonious home environment prior to being placed into residential care displayed fewer emotional, behavioral, and scholastic difficulties than children who had experienced family disruption at birth (Vorria, Rutter, Pickles, Wolkind, & Hobsbaum, 1998). In fact, except for lacking an intimate friend, the children who experienced a stable home environment prior to residential care did not differ from a group of children reared with their families. Of course, it is often difficult to determine the quality of the home environment and the relationships that the children experienced prior to being placed in institutional care.

The child's age at adoption also appears to be another important factor. In several studies of postinstitutionalized Romanian children, the likelihood of multiple, persis-

tent, debilitating problems increased for children who were institutionalized for more than 6 to 8 months (Ames, 1997; Rutter, Andersen-Wood, Beckett, Bredenkamp, Castle, Groothues, Kreppner, Keaveny, O'Connor, & ERA Study Team, 1999). In addition, the children who were over 2 years of age at adoption demonstrated an even greater risk for developing multiple, persistent problems (Ames, 1997; Castile, Groothues, Bredenkamp, Beckett, O'Connor, Rutter, & ERA Study Team, 1999). The degree of privation also increases the likelihood of multiple, severe, and persistent problem (Castile et al., 1999; Verhulst et al., 1993).

While it would seem reasonable to conclude that the duration of time in an institution, particularly a poor quality institution, would increase the risk of long-term adjustment problems, caution is warranted in concluding that children who are older at adoption are necessarily at greater risk. In general, agents in the birth country can be more accurate in providing information about the level of functioning for older children. While it may be difficult to assess the functioning of an 8-month-old infant, it may be easier to observe the severe cognitive, language, and social delays of a 24-month-old child. Furthermore, the assumption that the children who are more difficult to place due to undesirable characteristics remain in institutions longer may not be accurate. Many factors affect the duration of a child's institutional stay, such as political changes that affect opportunities for placement, and do not reflect a child's level of functioning. Thus, age at adoption from an institution may not always be a strong predictor of the child's recovery and developmental outcome following adoption.

Judging the degree of privation is also extremely difficult. In many cases, information about the conditions at the institution is scanty prior to adoption. Sometimes prospective parents can visit the institution and observe the conditions that the children experience; however, in many instances parents never have an opportunity to inspect the institution. Importantly, proxy measures, such as the degree of growth retardation as measured by height or head circumference, have proven to be a poor

predictor of the children's recovery. In the sample of Romanian children adopted into the United Kingdom, the children, on average, were 2 standard deviations below expected growth norms at adoption, but after several years in their adoptive homes their initial growth retardation was not correlated with their intellectual performance (Castile et al., 1999; Rutter and ERA Study Team, 1998).

Given these data, it seems likely that to some extent the developmental outcomes of internationally adopted children may be related to postadoption experiences, including the financial and emotional resources of the adoptive families and the availability of postadoption services. Although there is a long history of research on postinstitutionalized children, the postinstitutional environment has received little attention. There is, however, recent data available from the study of Romanian children adopted into British Columbia (Ames, 1997). In that study, for example, the Caldwell HOME inventory was administered. For the internationally adopted children, but not their Canadian peers, higher scores on the HOME were correlated with better cognitive performance several years after adoption. Similarly, in that study, both the adoptive mother's education and the family's economic status were associated with the child's outcomes. Finally, there was some evidence that adopting two or more of the Romanian children increased the risk of maladaptive outcomes for the children. The researchers who conducted this study have argued that these data indicate that postinstitutionalized children should be viewed as having special needs that require time, attention, and resources. The availability of these resources in the adoptive home supported the development and recovery of the postinstitutionalized children despite their early adverse experiences. This conclusion would point to the importance of making the appropriate postadoption services, which would need to be tailored to the needs of the child, available to the adoptive families.

### **Implications for Policy**

As noted earlier, in his review of the literature on maternal deprivation Rutter (1981) con-

cluded that, while not impossible, it is difficult to provide the support that infants need for adequate physical, intellectual, and socioemotional development in an institutional setting. The research conducted with institutionalized infants and children in the last 20 years does not appear to warrant a change in this conclusion. Therefore, we would be remiss if we failed to state that the overarching implication for policy is reducing the number of infants and young children in poor-quality institutional care. This goal would require addressing the reasons for families' inability to care for their children. Addressing these issues, while absolutely critical, is beyond the scope of this article, as it involves addressing problems of war, social upheaval, racial prejudice, and economic injustice (Simon & Alstein, 1991). In this article, we will limit our discussion to some of the policy issues raised by the literature regarding postinstitutionalized children that are adopted into the United States.

Within any policy domain, the interests and concerns of the various constituents frame the issues. In the international adoption of postinstitutionalized children, the constituents who need to be considered are (a) the children, (b) the agencies and political entities in the birth country, (c) the adoptive families, and (d) the agencies in the adoptive country (Simon & Alstein, 1991). While many of the concerns of these constituents overlap, some concerns diverge and, at times, conflict. In raising the implications for policy, we will not presume to explicate all of the overlapping, diverging, and conflicting concerns of the constituents in international adoptions. Indeed, this cannot be done adequately without an analysis that includes variations by historical periods, birth country, and the age and health of the child. Instead, we will highlight two issues from our review of the research literature. The first issue is the evidence that while many of the children demonstrate remarkable recovery following their adoption, an indeterminate number exhibit significant, multiple, and often serious problems that can overwhelm their adoptive families. The second is the evidence, albeit limited at this juncture, that postadoption experiences may im-

pact the children's ability to recover from early privation. These two issues emphasize the importance of preadoption and postadoption services in the lives of internationally adopted children and their adoptive families.

#### *Preadoption services*

Families differ in their reasons for deciding to adopt, their reasons for choosing to adopt internationally, and their decisions about the type of child that they wish to adopt. It is inconceivable that any family who adopts internationally has not examined their reasons and resources in these regards. The nature of the adoption process forces this kind of self-analysis. Unlike having a birth child, the adoption process requires families to receive the approval of an adoption agency based on a home study completed by a social worker. However, completing the adoption process and receiving the approval to adopt does not necessarily guarantee that parents have received adequate guidance regarding the questions and issues that they need to ask themselves or discuss with their partners, their extended family, and friends. The adoption process is designed to ensure that the parents can care for a child, but does not require that they clearly understand the challenges that they may encounter when they adopt a child who has been raised in an institutional setting or, more generally, from any deprived, adverse environment. It seems ironic, given the literature reviewed earlier, that some families choose to adopt internationally precisely because they do not feel prepared to raise a child with special needs. Because of the parents' age or marital status, adopting a child within the country in a timely fashion would require that these families adopt either an older child or a child with documented special needs. International adoptions frequently allow families to adopt younger children and avoid possible future involvement of the child's birth parents (Telfer, 1999).

Adoption agencies have a responsibility to prospective families to openly disclose the risks of institutional care upon the development of children and the possibility that institutionalized children may have special needs.

Many agencies do provide this information in various forms to families (Miller & Ward, 1996). However, the fact that many children from deprived institutional settings demonstrate remarkable recovery following adoption leaves agencies and parents uncertain. The adoption agency is confronted with the difficult choice of emphasizing the negatives or the positives of adopting children from institutions. While emphasizing the risks may allow prospective parents to adequately evaluate their capacity to provide for a child with special needs, it may reduce a child's chances for adoption into a family environment. Furthermore, families who have great hopes and dreams of adopting a child are not always receptive to information that suggests some of the institutionalized children may have special needs.

Even if the agency fails to adequately present the potential risks that institutional care pose for the development of children, prospective parents are often aware that the risks exist. Access to the Internet readily connects prospective parents to a variety of organizations and networks with diverse perspectives and opinions about the development of post-institutionalized children. At least one adoption agency has sponsored a survey study of the children that it has placed (Perilstein, 1998). Not surprisingly, the report emphasized that most of the children were developing appropriately. Furthermore, the report stated that all but a small minority of parents were satisfied with their adoption experience and would adopt another child under similar circumstances. Presenting a different perspective, parent groups, such as the Parents Network for the Post-Institutionalized Child (PNPIC), emphasize the special needs of post-institutionalized children. The PNPIC publishes a newsletter for adoptive parents, *The Post*, and holds informational meetings at various sites around the country each year. In a variety of forums, information is provided to prospective parents that a sizeable percentage of institutionalized children have seriously debilitating problems. As a result of the information provided by the adoption agency or other sources, many adoptive parents are aware of the need to carefully scrutinize the

medical and behavioral information that they obtain at the referral. Many prospective families realize the importance of determining the needs of the child and evaluating their emotional and financial capacity to provide for the child.

However, the information provided to adoption agencies and prospective parents is often meager, confusing, or inaccurate. The definition or criteria for certain diagnoses, such as perinatal encephalopathy, are not consistent across various countries. Furthermore, some diagnoses are specific to a country and are not familiar to medical professionals in the United States (D. E. Johnson, personal communication, April 2000). Therefore, some of the diagnoses in the children's medical records are not as serious as they appear when the children are seen for medical evaluation and treatment in the adoptive country, while other problems may be more serious than the records indicate. In addition, as noted earlier, delays in physical growth and behavioral development are typical in institutional settings. It may be difficult for medical personnel in the birth country and the adoptive country to accurately differentiate between a delay that will resolve with adoption into a family setting and a delay that indicates impairment that will not readily resolve. In other words, while adoption agencies and prospective parents need as much accurate information as possible to make informed decisions, providing complete and accurate information about institutionalized children is often a difficult task. Finally, in addition to problems with the accuracy and interpretation of the medical records of institutionalized children, the amount of information is often meager. The birth countries often lack significant pieces of data. When children are abandoned or orphaned by war or natural disaster, the birth country often cannot supply exact information about the child's birth status (e.g., prematurity, birth weight), exposure to prenatal toxins (e.g., alcohol), postnatal health, or even age.

Because of the meager, conflicting, and potentially misleading information in the children's medical records, prospective parents who are required to make a rapid decision about a particular child can be overwhelmed

by uncertainty. Some adoption agencies have increased the amount of time that parents get to accept referrals, which allows families to seek professional help in interpreting the available information. However, the extra time is not useful if prospective parents do not have access to professionals who are able to interpret the information. Thus, in addition to giving parents time to make the necessary evaluations, adoption agencies need to be encouraged to establish a network of professionals with experience in international adoptions that can help parents review the available information and make an informed decisions. From a research perspective, although there are experienced professionals that can be consulted, the professionals often do not receive feedback regarding the accuracy of their advice due to the lack of follow-up studies with the children who have been evaluated prior to adoption. Clearly, these studies need to be conducted. Working with the birth countries to increase the amount and interpretability of the information provided, assisting families in the interpretation of the available information, and evaluating the accuracy of the information provided by professionals who review referral information for prospective parents are important goals. While in some cases this may prevent a child from being adopted, it is presumed that it will help to ensure better developmental outcomes for internationally adopted children by allowing families to adequately prepare for the children that they adopt.

#### *Postadoption services*

Not only is complete and accurate information important in helping families make informed decisions, this information is sometimes critically important in helping to diagnose and provide appropriate medical treatment to the children in the adoptive country. Barring the availability of complete information, medical professionals in the adoptive country need to be informed about interpretation of the available information, the medical and behavioral needs of postinstitutionalized children, and the screening assessments that should administered (Hostetter et al., 1991).

Frequently, adoptive parents take their children to a general practice pediatrician shortly after their arrival in the country. Depending upon the pediatrician, he or she may have extremely limited experience with institutionally reared children or children from that area of the world. There are an increasing number of clinics within the United States that specialize in assessing internationally adopted children, and the publications from these clinics are available to guide practitioners who are inexperienced with internationally children (Albers, Johnson, Hostetter, Iverson, & Miller, 1997; Hostetter & Johnson, 1989; Hostetter et al., 1989, 1991). However, not all practitioners or adoptive families are aware of this information and the suggested standards of care. Adoption agencies can play a critical role in this process by informing parents of the available medical information and serving as liaisons between the families and the medical community. Clearly, internationally adopted children and their families would benefit from policies that allow information to be transferred from more experienced to less experienced professionals.

The need for postadoption services for internationally adopted children is great. Since the advent of international adoptions in the United States, adoptive parents have been quite successful in building support networks of adoptive parents. For example, Adoptive Families of America (formerly known as OURS), an organization that was established by three families that adopted children from Korea, grew into an organization that publishes *Adoptive Families* magazine, which is received by 20,000 adoptive families across the United States (Adoptive Families of America, 2000). As noted earlier, the PNPIC is a network, established by adoptive parents, specifically dedicated to the needs of postinstitutionalized children. On average, parents who decide to adopt internationally are highly educated, dedicated to their children, and tenacious. These are strengths that can be built upon by adoption agency and other professionals. Adoptive parents have often united to find and disseminate information precisely because they have felt isolated and bereft of the postadoption information and services that

they needed to adequately care for their children. The concerns of the adoptive families range from concerns that all families of internationally adopted children may have to the more specific concerns of families with children displaying problematic and overwhelming behaviors. Thus, parent-organized networks and information sources discuss concerns about telling the child about their adoption, learning about their child's birth country and arranging ways to foster the children's understanding of their culture, and dealing with discrimination and the hurtful comments of strangers (see Hohulin, 1999). For adoptive families with children displaying significant problems, the search for information and the appropriate treatment can absorb a great deal of the parents' time and create immense frustration and anxiety (Hannon, 1999). Some adoptive parents tell horrendous stories about the difficulty they encountered in their struggle to find the appropriate help for their children. For example, some adoptive parents report that professionals told them "not to worry" despite observing behaviors that were clearly problematic. Also, parents encountered professionals who provided conflicting advice or who were unable to interpret the behaviors and symptoms the children were exhibiting. Furthermore, some adoptive parents felt that agencies were deaf to their concerns and their children's problems (Hannon, 1999).

It is not surprising that professionals who advocate particular advice and interventions for postinstitutionalized children have attempted to address the need for postadoption services. While the advice is often well intended, it is often untested outside the professional's clinical practice. Parents are told, for example, that it is essential that they introduce postinstitutionalized children gradually to the characteristics of their new environment, maintaining the privation of their preadoption experiences for months (Johnson, in press). The adoptive parents are also told to inhibit their natural desires to be warm and responsive to postinstitutionalized children and maintain emotional distance and a strict regime of rewards and punishments (Federici, 1998). To adoptive parents who have longed

for a child, this advice can be overwhelming and painful. If the approach helps postinstitutionalized children adjust to their new environment, it may be important to encourage and support families to follow the advice. However, there have been no scientific evaluations of the efficacy of such treatments for postinstitutionalized children. Therefore, it is difficult for adoption agencies and other professionals to advocate their implementation.

When adoptive families encounter significant behavioral difficulties with their children, they are often confronted with a myriad of advice and intervention techniques that frequently have not been scientifically evaluated. For example, adoptive parents are often encouraged to view behavioral and interpersonal difficulties from an attachment disorder perspective. As our review of the research literature suggests, postinstitutionalized children are at risk for developing an insecure, and perhaps disordered, attachment relationship with their adoptive parents. However, if problems with the attachment relationship are present, the appropriate intervention for postinstitutionalized children is not always evident. There is an abundance of advice for adoptive families with postinstitutionalized children, including sometimes highly expensive therapies (e.g., \$20,000) that have not been subjected to rigorous scientific evaluation (The Attachment Center at Evergreen, 2000; Crawford, Haworth, & Sclare, 1986). Sensory integration disorder is another diagnosis that is commonly used with postinstitutionalized children (Kranowitz, 1998). This diagnosis is also associated with strict behavioral regimes that have not been subjected to scientific evaluation. An indeterminate number of postinstitutionalized children also receive various regimens of Clonidine, Ritalin, and other psychoactive medications. Several years into the adoptive parents' search for an appropriate intervention for their child, it is not uncommon to find a long history of various diagnoses and treatments. Determining the extent to which the child's behavior reflects the impact of institutional care and early developmental factors or a history of untested and possibly ill-advised treatments becomes impossible. Furthermore, it seems likely that

the adoptive parents' search for the appropriate treatment for their children may result in tremendous stress and frustration that may greatly impact the parents' mental and physical well-being (Loux, 1997). Clearly, the implication for policies regarding the need for postadoption services for postinstitutionalized children depends upon our ability to conduct the required research to determine the appropriate diagnoses and efficacy of various intervention techniques for postinstitutionalized children.

In addition to the dearth of research regarding accurate diagnoses and effective treatments, there are a number of barriers to the provision of appropriate postadoption services. Indeed, even when accurate diagnoses are given, public funding is not available for the postadoption services for internationally adopted children. Under the Federal Title IV-E Adoption Assistance Program, federal funding is provided to subsidize the cost of medical care and social services for children with special needs adopted within the country (North American Council on Adoptable Children, 2000). However, the eligibility requirements for the Adoption Assistance Program tend to preclude internationally adopted children from qualifying for federal assistance. Thus, adoptive parents of internationally adopted children must rely on personal funds and private health insurance. Private resources and health insurance may be inadequate to cover the extensive treatments. Fortunately, the Health Insurance Portability and Accountability Act of 1996 (also known as the Kennedy-Kassebaum bill) prohibits group health insurance carriers from using preexisting condition limitations to exclude adopted children from coverage and protect adopted children if their parents change their job or insurance carrier. In addition, private health insurance may preclude the use of some experimental treatments or limit parents' access to professionals within their network of managed care. In an indeterminate number of cases, the lack of public funding for internationally adopted children forces adoptive parents to relinquish the rights of their child due to the tremendous costs for their professional care. As a ward of the state, funding for the child's professional

care becomes available. In some cases, adoptive parents completed the procedures to relinquish the rights to their child and then became the child's foster parents, and thus solved the problem of funding the child's health care.

Taken together, these barriers to postadoption services suggest several policy recommendations. It is crucial to the recovery of internationally adopted children that adoption agencies and other professionals encourage the process of seeking evaluation and treatment so that adoptive families can access the necessary services as early as possible. It is also recommended that continuing education regarding the physical health and behavioral issues facing internationally adopted children needs to be provided in a systematic way for medical, psychological, and social work professionals. Although it is unrealistic to expect that all professionals offer services directly to internationally adopted children, they need to have an adequate understanding of the issues to make the appropriate referrals. Following from this recommendation, it is clear that a network of highly specialized clinics needs to be made available for the assessment and treatment of internationally adopted children. To date, there are approximately 20 medical clinics that specialize in international adoptions within the United States (D. E. Johnson, personal communication, March 2000). Finally, although it is unrealistic at this time to expect the availability of public funding for internationally adopted children, perhaps states or high-risk insurance pools could make coverage available for adoptive parents' health insurance plans that would subsidize the cost of extraordinary or catastrophic treatment. At the very least, adoptive parents should be encouraged to review their medical insurance and obtain the best possible coverage prior to the adoption. Furthermore, because the needs of internationally adopted children are often difficult to assess, it would be desirable for managed care insurance plans to allow families access to specialized clinics, even if the clinics are not in their managed care network.

Postadoption services are not only necessary for the minority of postinstitutionalized children who exhibit medical and behavioral

problems; they are also critical for many of the children who demonstrate adequate recovery following adoption (Grotevant & Kohler, 1999). Because many of the challenges that internationally adopted children and their families encounter are not specific to the adoption of children from institutions, we have not emphasized them in this discussion. However, they include the challenges of establishing a multicultural family and helping children traverse a landscape where they are likely to experience discrimination, particularly as the children age. Adoptive families need to realize that adopting a child from another country makes them a multicultural family and need to be prepared to deal with the discrimination their children may face. Adoption agencies should assist adoptive parents in anticipating the situations that may arise and considering possible solutions in advance. Furthermore, schools and communities need to increase efforts to teach tolerance and combat racism (Meier, 1998). The challenges that internationally adopted children and their families encounter also include the developmental changes that children undergo in their understanding of adoption and the needs for different types of information about the children's birth country and heritage at different developmental stages (Brodzinsky, Singer, & Braff, 1984). Internationally adopted children and their families also experience the challenge of meeting the individual needs of the child. Postadoption services designed to meet children's psychosocial needs should not be viewed as "one size fits all." Children differ in terms of their interest in learning about the culture of their birth country and may have different needs for support or information at different times. These services need to be offered flexibly and in an ongoing, developmentally appropriate manner (Meier, 1998).

#### *Global social issues*

Aside from the policy concerns that apply to individual children or families, it is also important to consider the broader social issues operating at a global level (Triseliotis, 1999). Consideration of the "commodification" of children from third-world countries, exploita-

tion of birth mothers, and violation of children's rights, while beyond the scope of this article, provide a background against which the issues we have discussed should be considered.

The United Nations Declaration on the Rights of the Child (not currently ratified by the United States) speaks directly to international adoptions: "The primary aim of adoption is to provide the child who cannot be cared for by his or her own parents, with a permanent family. If that child cannot be placed in a foster or adoptive family and cannot in any suitable manner be cared for in the country of origin, inter-country adoption may be considered as an alternative means of child care." This statement makes it clear that the purpose of adoption is to locate families for children needing permanent homes rather than to guarantee the right of every adult or couple to become parents (Triseliotis, 1999). Adoption policy and practice should reflect this perspective.

The Hague Convention on Inter-Country Adoption, which was signed by the United States in 1994 and is currently pending ratification with certain amendments, is a multilateral agreement that puts procedures and safeguards in place to protect the integrity of the adoption process. It reflects the provisions in the United Nations Declaration. Among its provisions is a requirement that all persons who negotiate intercountry adoptions must be accredited, approved by an accrediting body, or acting under the supervision of an accredited person or agency. It also requires that the agency provide prospective adoptive parents with the child's medical records, translated into English if at all possible, and that the agency also provides prospective adoptive parents with preplacement counseling and guidance to promote a successful adoption. On-going information about the Hague Convention and other ethical issues surrounding international adoption can be found by contacting groups such as the Joint Council on International Children's Services (Joint Council on International Children's Services, 2000).

### **Conclusions**

The frequency of international adoptions is increasing. Over the last decade, the number

of children adopted internationally increased by 10–20% each year. At the same time, the percent of the children adopted from institutions climbed to an estimated 65%. Both the preadoption circumstances and postadoption needs of these children create a challenge for adoptive families and society. Policies that encourage the accumulation of information about the developmental outcomes of internationally adopted children and the interventions that support their development, policies that improve the information and guidance to families prior to adoption, and policies that aid families in adequately caring for their children are needed. Many adoptions of post-institutionalized children are success stories by any measure; however, we should strive to increase the number of postinstitutionalized children and their families that are succeeding.

In order to improve our understanding of the developmental outcomes of internationally adopted children and our recommendations for the children encountering problems following adoption, further research is clearly warranted. It is crucial to study the development of internationally adopted children across multiple domains of functioning, such as physical growth, cognitive development, and socioemotional development, across the life span. The use of developmentally appropriate measures that assess specific aspects of functioning, such as executive functioning and complex language and communication skills, may reveal deficits that were previously untold. Furthermore, the children may display problems, such as the inability to appropriately regulate emotion or attention, only years after their adoption as the expectations for mature functioning increase. Longitudinal research may clarify the developmental outcomes of internationally adopted children as a group and may provide information about the sample of children who continue to display multiple problems years after adoption. In order to identify the children who may require services following adoption, it will be important to study the children's prenatal history, experiences with their birth family, and institutional care, as well as the experiences and the resources in the adoptive environment. Given the heterogeneity of the children's

background, it will be crucial to study children raised in institutions across the world to determine the effect of cultural variations in institutional care. Finally, with the number of children who require intervention it will be crucial to research the efficacy of the various interventions that are recommended for inter-

nationally adopted children. Systematic research on the developmental outcomes of internationally adopted children and the appropriate interventions for the children who fail to demonstrate adequate recovery following adoption will facilitate our ability to make well-informed policy decisions.

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