A Model for Caregiving of Adopted Children After Institutionalization

Karleen D. Gribble, PhD

TOPIC: Optimizing caregiving for newly adopted postinstitutionalized children.
PURPOSE: To consider a template of care for postinstitutionalized children based on experiences that physiological measures suggest are expected by infants postbirth.
SOURCES: Published literature and clinical experience.
CONCLUSION: Based on an understanding of physiologically expected care postbirth, special care for postinstitutionalized adopted children might include: close physical contact via use of a sling and cosleeping; breastfeeding or nurturing through food; and responsive caregiving. In replicating earlier missed experiences, parents may assist emotional development in their child and promote attachment development.
Search terms: Institutionalization, attachment, physiology

Karleen D. Gribble, PhD, is an Adjunct Research Fellow, School of Nursing, University of Western Sydney, NSW, Australia

Introduction

The number of children adopted worldwide via intercountry adoption is increasing each year, and the most recent statistics indicate that more than 20,000 children were adopted to the United States alone (U.S. State Department, 2005). These children have lost family, previous caregivers, familiar environments, and language, and many have also experienced some time in institutional care. Such children, with their history of loss and institutionalization, have special needs.

The experience of a child in an institution is very different from that of a child in a family. Although institutions vary widely in the quality of care they provide, they generally have high child-to-caregiver ratios, which do not allow for individualized attention. They may also be lacking in heating, cooling, space, toys, or nutrition and provide a restricted and regimented environment (Chisholm, 1998; Rutter & Team, 1998; Sloutsky, 1997). The physical and emotional deprivations of institutionalization can result in a raft of problems, including attachment difficulties, physical and developmental delays, and language and sensory integration issues (Chisholm; Fisher, Ames, Chisholm, & Savoie, 1997; Glennen, 2002).

It can be argued that the most serious deprivation of institutionalization is the lack of a consistent and sensitive caregiver whom the child can trust and form a healthy attachment to. Development of a secure attachment normally occurs through interactions in which a primary caregiver meets a child’s needs in an appropriate manner resulting in reduction of discomfort and in feelings of relief (Levy & Orlans, 2000). This cycle of need-arousal-gratification-relief-need is ordinarily repeated many thousands of times in the first years of a child’s life but is absent or greatly reduced in the experience of children in institutions (Chisholm, 1998; Fisher et al., 1997; Levy & Orlans).
Attachment theory is the primary paradigm within which the impact of the absence of a responsive, consistently available caregiver on the behavior of institutionalized children is understood (Gunnar, Bruce, & Grotevant, 2000), and the research presented in this paper has relied upon this framework.

Parenting a newly adopted postinstitutionalized child can be extremely difficult, as along with any issues that may exist as a result of institutionalization, the child may also be grieving and be traumatized by their placement. In addition, friends and healthcare professionals with little understanding of the experience or needs of postinstitutionalized children may deluge new parents with contradictory or inappropriate advice. Determining how to meet the needs of their postinstitutionalized child and assist attachment development is of great concern to adoptive parents, and the care that children receive in the immediate postplacement period can significantly impact long-term outcomes (Gunnar et al., 2000).

This paper will present a hypothesis that a suitable template for care for newly adopted children is to seek to replicate many of the early experiences that physiological measures suggest are expected by infants postbirth. In newborn babies, when this “expected” physiologically congruent care is provided, a physiological interdependence between mother and child is created. This physiological interdependence impacts mother and child in ways that can be viewed as positive for both of them and promotes responsive caregiving and attachment development. While this care is usually provided in the first year of a child’s life, it may be that aspects of physiologically congruent care can be applied to the care of older baby to school-aged postinstitutionalized children and may optimize the opportunity for development of the attachment relationship. The presentation of this hypothesis follows.

Physiologically Congruent Care for Infants

While there are many models for infant care that vary depending on cultural and ideological beliefs (Small, 1998), there is evidence that maternal separation is stressful for infants and that physiological congruent care, involving close physical contact between mother and child and frequent suckling at the breast, is ideal.

Maternal Recognition

At birth, healthy babies placed on the abdomen of their mother will crawl up onto her chest and locating the nipple via smell will attach to her breast and suckle (Klaus, 1998; Righard & Alade, 1990). Breast secretions are attractive to newborns because they overlap in chemistry with that of the amniotic fluid of their mother and are therefore familiar (Porter & Winberg, 1999). Babies become familiar with their mother’s voice in utero (Fifer & Moon, 1994) and within a short time of birth learn to recognize and prefer looking at her face (Bushnell, Sai, & Mullin, 1989; Walton, Armstrong, & Bower, 1997). Thus, babies know their mother at birth and when removed from skin-to-skin contact with her give a specific “separation distress cry/call” indicating their desire for reunion (Christensson, Cabrera, Christensson, Uvnas-Moberg, & Winberg, 1995). In animal models such separation results in stress hormone release (Rosenfeld et al., 1991; Laudenslager et al., 1995).

Close Physical Contact

It appears that babies expect to be kept in close physical contact with their mother, being carried for most of the day. Carrying a baby provides proprioceptive-vestibular stimulation, which encourages neonatal alertness, and an environment within which interaction between caregiver and child is easily facilitated (Gregg, Haffner, & Korner, 1976; Lozoff, Brittenham, Trause, Kennell, & Klaus, 1977; Sieratzki & Woll, 2002). Thus, encouraging mothers to carry their baby results in increased maternal responsiveness and security of attachment (Anisfeld, Casper, Nozyce, & Cunningham, 1990). There is also some evidence that
babies who are carried more, cry less (Hunziker & Barr, 1986), and there is reason to believe that the threshold for acceptable levels of crying in babies is set too high in Western societies where it is unusual for babies to be carried for extended times (Barr, 1990). Excessive crying may be detrimental to the physical health of babies (Anderson, 1989) as well as compromising attachment development (Australian Association for Infant Mental Health, 2002).

Close physical contact during the night, that is, cosleeping, results in increased breastfeeding frequency as compared to separate sleeping (McKenna, Mosko, & Richard, 1997). It also results in sleep cycle synchronicity between mother and child (wherein it is the mother who regulates infant sleep) and enhanced infant arousals (McKenna & Mosko, 1994). Thus, cosleeping protects the infant against long periods of deep sleep that may contribute to sudden infant death syndrome (McKenna & Mosko).

**Skin-to-skin contact between mother and child is the utmost in physical closeness.**

Skin-to-skin contact between mother and child is the utmost in physical closeness. In newborns, maternal skin-to-skin contact is often facilitated via a method called “kangaroo care” in which the naked infant is held upright between the mother’s breasts under her clothing. In babies, skin-to-skin contact reduces stress hormone release (Mooney, Giannakoulopouloa, Glover, Acolet, & Modi, 1997), reduces blood pressure (Anderson, 1989), stabilizes blood glucose levels (Christensson et al., 1992), acts as an analgesic (Gray, Watt, & Blass, 2000), and aids neurobehavioral self-regulation (Ferber & Makhoul, 2004). Temperature and respiration rates of babies are stabilized by skin-to-skin contact with their mother (Acolet, Sleath, & Whitelaw, 1989; Christensson et al., 1992; Ludington-Hoe, Hashemi, Argote, Medellin, & Rey, 1992). Massage, as a form of skin-to-skin contact/touch is also beneficial to newborns (Ferber et al., 2002; Ferber, Laudon, Kuint, Weller, & Zisapel, 2002), and a deficit in touch is associated with nonorganic failure to thrive (Polan & Ward, 1994). It appears that maternal skin-to-skin contact is the expected habitat for the newborn baby and that in this environment the mother has an extensive infant regulatory role (Alberts, 1994; Hofer, 1994; Smotherman & Robinson, 1994).

**Frequent Suckling**

The physiology of milk production and comparative physiology of milk composition suggest that human infants expect frequent breastfeeding. Milk production is driven by the frequency of breast emptying (Daly, Kent, Owens, & Hartmann, 1996), and while there is considerable plasticity in this process, infrequent breastfeeding is a common cause of insufficient milk supply syndrome (Gussler & Briesemeister, 1980). The composition of milk is correlated with the behavior patterns of infant care and associated frequency of suckling in mammals. As seen in Table 1, mammals such as deer, which leave their infants in a safe place all day while they graze, have high fat and protein

<table>
<thead>
<tr>
<th>Animal</th>
<th>Type of care</th>
<th>Feeding interval</th>
<th>Protein (%)</th>
<th>Fat (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deer</td>
<td>Cache</td>
<td>5–15 hours</td>
<td>10.4</td>
<td>19.7</td>
</tr>
<tr>
<td>Dog</td>
<td>Nest</td>
<td>2–4 hours</td>
<td>3.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Chimpanzee</td>
<td>Carry</td>
<td>Continuous</td>
<td>1.2</td>
<td>3.7</td>
</tr>
<tr>
<td>Human</td>
<td>Carry</td>
<td>?</td>
<td>0.9</td>
<td>3.8</td>
</tr>
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Figures from Ben Shaul (1962), Lozoff et al. (1977), and Jensen (1995)
concentrations in their milk in order to sustain their young between sucklings. Mammals such as dogs that regularly return to their young or whose young follow them for part of the day, allowing fairly frequently suckling, have lower fat and protein concentrations in their milk. Primates, like chimpanzees, have still lower low protein and fat concentrations as they continuously carry their infants resulting in very frequent suckling. When it is considered where humans might fit within this paradigm, it is seen that human milk has extremely low fat and protein concentrations, suggesting that close physical contact (carrying) and frequent suckling is the expected behavior. It should be noted that it is known that babies who are kept in close physical contact with their mother breastfeed more frequently (Hunziker & Barr, 1986; Vis & Hennart, 1978), and it is likely that close physical contact is a prerequisite for frequent suckling. The relationship between milk composition and suckling frequency is not a new connection but one that has long been discussed and is associated with the hypothesis of “exterior gestation” (Earnshaw, 1961; Jones, 1972; Kennell & Klaus, 1979; Kirsten, Bergman, & Hann, 2001; Lozoff et al., 1977). Exterior gestation as a concept is part of an evolutionary model that states that due to bipedalism and large brain size, full-term human infants are born immature and expect close maternal contact and frequent breastfeeding as their habitat for the first 9 months of life (Earnshaw, 1961; Kirsten et al.).

Not only does breastfeeding appear to be physiologically expected from the perspective of providing optimum food to babies, but it also has a positive impact in other areas. Suckling at the breast results in calming (evidenced in reduced heart and metabolic rates) and pain relief in babies (Blass, 1994, 1996; Carbajal, Veerapen, Couderc, Jugie, & Ville, 2003). Suckling is a pleasurable activity for infants and is calming because it stimulates oropharyngeal tactile and mechanoreceptors and focuses attention on the mouth, reducing the influence of other sources of stimulation (Blass & Ciaramitaro, 1994; Smith, Fillion, & Blass, 1990). The skin-to-skin contact and social interactions that occur during breastfeeding are also involved in this calming (Blass, 1990; Blass & Ciaramitaro). These physical aspects of breastfeeding have an immediate impact that lasts until suckling ceases. However, a longer lasting calming/analgesic affect is experienced in the provision of the flavor of milk, which is thought to stimulate the release of opioids in the brain (Barr, Young, Alkawaf, & Wertheim, 1996; Blass, 1996, 1997; Smotherman & Robinson, 1994). In addition, suckling and intestinal adsorption of fat from milk results in the release of the hormone cholecystokinin, which has a relaxant effect (Uvnas-Moberg, Widstrom, Marchini, & Winberg, 1987). Research suggests that there may be many components of milk involved in calming and relaxation (Oberlander, Barr, Young, & Brian, 1992) and that suckling (including non-nutritive suckling) is an agent of energy conservation in newborns (Blass, 1994).

Impact of Physiologically Congruent Care on Mothers

As already described, caring for a baby by keeping in close physical contact assists a mother to respond sensitively to her child and increases security of attachment (Anisfeld et al., 1990). This effect is not insignificant since the developing attachment relationship is one within which both child and mother plays a role. Skin-to-skin contact also results in the release of the hormone oxytocin (Uvnas-Moberg, 1998). Oxytocin is known to be essential for expression of maternal behavior in some mammals (Insel, 1997; Keverne & Kendrick, 1992), and although the research is as yet scant, there is some evidence that oxytocin is also involved in the development of maternal love in humans (Bartels & Zeki, 2004). Some research has found that when babies spend time in skin-to-skin contact with their mother that it increases the mother’s desire to be with her baby (Affonso, Wahlberg, & Persson, 1989; Meyer & Anderson, 1999) and enhances her sensitivity (Feldman, Eidelman, Sirota, & Weller,
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2002; Tessier et al., 1998). Even simple measures to facilitate opportunities for mother-infant physical proximity are significant and have, for example, resulted in improved child health and maternal interest in premature babies (Zeskind & Iacino, 1984) and decreased child abandonment in hospitals (Buranasin, 1991; Lvoff, Lvoff, & Klaus, 2000). However, it appears that the more babies and mothers are kept together, the greater the impact on the mother in terms of exhibition of attachment behaviors (Feldman, Weller, Leckman, Kuint, & Eidelman, 1999).

There is some research investigating the impact of breastfeeding on maternal behavior, and while this research is limited and cannot be considered conclusive, it provides some evidence that the physiological impact of breastfeeding influences behavior. Some studies have found that breastfeeding women are more socially interactive (Nissen, Gustavsson, Widstrom, & Uvnas-Moberg, 1998) and exhibit a greater responsiveness and caring to their babies than non-breastfeeding mothers (Brandt, Andrews, & Kvale, 1998; De Andracà, Salas, Lopez, Cayazzo, & Icaza, 1999), which may have a long-term impact (Fergusson & Woodward, 1999). This is perhaps a result of the hormonal influences already described, or it may be related to the communication via touch, vocalizations, and facial expressions that occur between mother and child during breastfeeding sessions (Epstein, 1993) since breastfeeding requires mothers to maintain physical proximity to their children and to interact with them on a regular basis in a positive and intimate manner (Blass & Ciaramitaro, 1994; Epstein; Paul, Dittrichova, & Papousek, 1996; Smotherman & Robinson, 1994). There may also be a positive feedback response involved, as some research shows that breastfeeding women seek greater proximity to their

Breastfeeding impacts mothers in a number of ways. There are at least three hormones that are released in response to suckling that can influence caregiving. Already mentioned in relation to skin-to-skin contact, oxytocin is also released during breastfeeding (Mathiesen, Ransjo-Arvidson, Nissen, & Uvnas-Moberg, 2001). Prolactin is another hormone associated with mothering behavior that is released as a child suckles (Uvnas-Moberg, Widstrom, Nissen, & Bjorvell, 1990; Uvnas-Moberg, Widstrom, Werner, Mathiesen, & Winberg, 1990). Third, the relaxant hormone cholecystokinin is released in the intestine of mothers during breastfeeding (Uvnas-Moberg et al., 1987). Breastfeeding women have decreased cortisol levels and blood pressure and respond less to stress than nonbreastfeeding women (Groer, Davis, & Hemphill, 2002; Heinrichs, Neumann, & Ehlert, 2002; Uvnas-Moberg, Widstrom, Nissen, et al., 1990; Uvnas-Moberg, 1998). This decreased responsiveness to stress is apparent in a “relaxation response” measured in the brain during breastfeeding (Cervantes, Ruelas, & Alcala, 1992). Mothers who are less stressed are able to be more responsive to their babies (Feldman, Eidelman, & Rotenberg, 2004; Rosenblum & Andrews, 1994) and there is a positive correlation between maternal sensitivity and the security of attachment in children (Ainsworth, Blehar, Waters, & Wall, 1978; Pederson, Gleason, Moran, & Bento, 1998).

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**Responsive Care**

The needs of newborn babies are relatively simple: food, sleep, comfort, and social interaction. When babies are kept physically close to their mother, nearly all of these needs can be met exclusively within that closeness, allowing for the completion of the attachment cycle when arousal occurs. Because of the close proximity of mother and child, the possibility for greater communication is available, increasing opportunities for positive interactions independent of any arousal/discomfort. Such interactions positively impact attachment development (Schore, 2002). As described, a diversity of research suggests that when babies and mothers are kept close, behaviors that assist the development of a secure attachment are encouraged and the mother is assisted to be a responsive caregiver. It can therefore be concluded that enhanced maternal responsiveness is one outcome of physiologically congruent care.

Physiological congruent care is not commonly provided to children in Western nations (Quandt, 1995), and for children who remain with their biological families this is unlikely to be problematic. Clearly, human babies are adapted to have flexibility in their ability to grow and thrive in a range of environments and under a variety of caregiving styles. However, children vulnerable due to institutional neglect and early loss may be less flexible in the type of care they require in order to overcome early adversity.

**Special Care for Postinstitutionalized Children**

Children who have been institutionalized have lost their mother and she has not been replaced. For such children, loss of the external regulation that a responsive mother provides and the absence of any substitute results in increased levels of stress hormones and alters and retards brain development (Ladd et al., 2000; Schore, 2001). Research has shown that postadoptive children can recover, at least somewhat, from the impact of such deprivation (Chisholm, 1998; O’Conner, Bredenkamp, & Rutter, 1999). However, there is as yet no research that addresses how parents might care for their children postadoption in order to maximize recovery (Gunnar et al., 2000). It is possible that some of the damage caused by early loss and neglect can be ameliorated if children are supplied with care that provides an opportunity to participate in earlier missed experiences. The experience of parents of postinstitutionalized children is that providing such care is helpful to themselves and their children. This special care is based on the physiologically congruent care previously described and involves close physical contact, skin-to-skin contact, cosleeping, breastfeeding, or nurturing through food and responsive caregiving. Nurses who work with adoptive families may assist them by encouraging this type of care.

1. **Close Physical Contact**

It is advisable for newly adopted postinstitutionalized children to be kept in close physical contact with their primary caregiver and be carried as much as possible. As previously described, in intact mother–child dyads, carrying increases opportunities for interaction and increases maternal sensitivity and security of attachment. It can be theorized that a similar effect might be seen in cases of adoption. In addition, carrying decreases external stressful stimulation as compared to the alternative in young children: the use of a pram. Decreasing stress is advisable since postinstitutionalized children have a decreased capacity for coping with stress due to early deprivation, and any novelty is stressful to them (Schore, 2001). Carrying also reduces the opportunity for a child exhibiting indiscriminate affection to engage with strangers and makes it easier for parents to restrict the access of others to their child. Depending upon the size of the child and physical abilities of the caregiver, it is possible to carry a child of up to 5 or 6 years of age in a sling child.
carrier. Use of a sling may be necessary even with quite young children because due to their lack of contact with adults, many postinstitutionalized children do not know how to assist an adult carrying them by holding on, and until they learn how to do so remain a “dead weight.” It is also common for newly adopted children to be unable to tolerate any separation from their primary caregiver, and use of a sling allows the adult to engage in other tasks while meeting the needs of their child. In situations where carrying is not possible, holding the child’s hand or having them sit next to the parent or on the parent’s lap are other ways of maintaining a physical connection.

2. Skin-to-skin

Encouraging skin-to-skin contact between primary caregiver and child through such activities as massage, co-bathing, and swimming together may be helpful in providing pleasurable interaction, the release of oxytocin, and potentially some of the regulatory effects of skin-to-skin contact described earlier. Skin-to-skin contact has been found to assist biological mothers who have had pain associated with their journey to parenthood (e.g., preterm birth to an ill baby) to recognize and grieve their losses, resulting in increased self-esteem and confidence in their mothering (Affonso, Bosque, Wahlberg, & Brady, 1993; Furman & Kennell, 2000; Tessier et al., 1998). It is possible that adoptive parents with a history of infertility and/or neonatal loss may be assisted by skin-to-skin contact in a similar way. For children with a history of sexual abuse, caution must be taken in providing skin-to-skin contact, and parents should seek ways of providing close physical contact that their child can accept and be gentle and respectful.

3. Cosleeping

Cosleeping will assist in providing opportunity for physical closeness and responsive care through the night. Sleep problems are very common in newly adopted, postinstitutionalized children and can be the most challenging aspect of early parenting. Both difficulty in getting to sleep and night waking may occur and last for months to years. It is not unusual for a newly adopted child to take several hours to go to sleep at night and to wake a dozen times or more per night in distress. Night distress is often a result of the trauma of an abrupt placement and a drastic change in environment. It appears that children may be able to consciously control their reaction to the stress of the new environment during their waking hours, but in a more relaxed state during sleep their anxiety and/or anger is exposed. Night is also a time when grief can surface and the losses that a child has experienced are revealed. However, in responding sensitively to night distress, parents may assist their child to work through the trauma of placement, or other past traumas, and to feel safe in their new environment. Cosleeping makes it as easy as is possible for caregivers to provide responsive care through the night (e.g., Quillin & Glenn, 2004) and has been mentioned by many parents as being helpful in ameliorating sleep difficulties.

4. Breastfeeding or Nurturing Through Food

If the adoptive mother is able to breastfeed her child, she will benefit from the release of the “mothering” hormones involved in breastfeeding and a decreased response to stress. The child will benefit from the pleasurable interaction, skin-to-skin contact, hormonal, and calming influences that have already been described as being associated with breastfeeding. Mothers who have breastfed an adopted child have stated that the intimate interaction involved in breastfeeding and the ability to comfort their child through breastfeeding are helpful in building trust and in developing the attachment relationship (Australian Breastfeeding Association, 2004). Furthermore, some parents describe their children as using contact with their mother via breastfeeding to assist in self-regulation (Australian Breastfeeding Association). It is important to note that children may take quite some time to trust
enough to contemplate the intimacy associated with breastfeeding (Gribble, 2006), although it is also relatively common for children to actively seek breastfeeding from their new mother (Gribble, 2005).

If breastfeeding is not possible, providing food directly to the child (hand feeding) or bottle-feeding may assist in replicating somewhat the early-expected experience of nurture through food. In some cases, adoptive families have found that in their child’s institution babies were bottle-fed with teats with very large holes and thus sucking was not pleasant but a situation where they needed to swallow without choking on the fast flow. Children who have been weaned from the bottle can regain the natural enjoyment in sucking for food if breast or bottle-feeding is reintroduced, even if only once a day. Anthropological researchers report that breastfeeding until the age of 4 or 5 years is common in some cultures and that the natural age of weaning may be as old as 7 years (Dettwyler, 1995). Thus, reinitiation of breast/bottle-feeding beyond the age at which children are normally weaned in Western contexts may be appropriate. Many adoptive parents find that it is when they are providing nurturing through food that they are able to elicit extended eye contact with their child for the first time. It is thought that the visual attentiveness of newborn babies during suckling is related to the high probability for maternal social interactions at that time (Blass & Ciaramitaro, 1994; Paul et al., 1996). That postinstitutionalized children often provide eye contact during feeding may be related to these earlier mechanisms and may be significant in attachment development (Robson, 1973).

5. Responsive Caregiving

Providing responsive caregiving is essential in building attachment with a newly adopted postinstitutionalized child. Older children have more complex needs than new babies, and so it is not the case that through keeping a child physically close and providing nurturing through food that all of their needs will be met. However, determining to choose options in all areas of care that encourage closeness rather than distance between child and caregiver may assist decision making.

Other Considerations

It should be kept in mind that adoptive parents may impact the physiology of their children in some, but perhaps not all of the ways described earlier for biological mothers. For example, babies kept skin-to-skin with a nonbiological caregiver have been found to have lower blood pressure than those kept physically isolated from caregivers (Anderson, 1989). However, complete replication may not be possible; for example, biological fathers cannot regulate infant body temperature in the same way as biological mothers can via skin-to-skin contact (Ludington-Hoe et al., 1992). It is not known whether this is because they are male or because only women who have recently given birth can regulate infant temperature. Whether adoptive mothers are able to regulate infant body temperature is currently under investigation (Nils Bergman, Mowbray Maternity Hospital, Cape Town, South Africa, personal communication, 2003). The age of the child may also have a significant influence on the regulatory capabilities of primary caregivers.
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It is important to note that mothers of postinstitutionalized children come to parenting at a disadvantage not only because their child’s life experience may make it difficult for him or her to accept nurture but also because adoptive mothers do not experience the hormonal priming for mothering that occurs during and immediately after pregnancy (Rosenblatt, 1994). However, it is possible that a woman who provides care for a child, even if she has never given birth, can have the same neurological and behavioral changes wrought in her as those experienced by biological mothers (Modney & Hatton, 1994). It is reasonable to assume that caregiving that is closer to the physiological norm will result in a more complete and faster change in the mother. Men have not been studied in this regard and so no conclusions can be drawn as to how caregiving might impact fathers who are primary caregivers.

It needs to be recognized that children may not be able to accept the special care described from placement. Whereas for a child cared for by the biological mother since birth, intimacy means security and comfort, for a child with a history of hurt in relationships, intimacy is scary. Gentle persistence with closeness and responsive caregiving is needed to overcome this reticence. In addition, just as newborn babies begin by developing an attachment relationship with one person before branching out to develop relationships with others (Schore, 2002), some postinstitutionalized adopted children appear to need to cultivate a relationship with one parent to a sufficient level before expanding vulnerability to the other. It is important to recognize that providing sensitive, physiologically congruent care may not be sufficient in some cases and professional intervention may be needed.

Adoptive parents may have difficulty in accepting that the described care is desirable since predominant Western parenting practices involve physical separation of mother and child and a high value being placed on early independence (Quandt, 1995; Small, 1998). However, there is evidence that adoptive parents who receive information on parenting in addition to skilled support and feedback can be encouraged to increase their responsiveness (Juffer, Hoksbergen, Riksen-Walraven, & Kohnstamm, 1997). Support for the special care described from pediatric, public health, or maternal child nurses may be critical in enabling parents to sensitively care for their child. Nurses may also assist by referring parents to Internet-based or face-to-face support groups for “attachment parenting.”

The appropriateness of parenting postinstitutionalized adopted children in a way similar to that of newborns may be questioned. However, just as a child who has missed experiences in other areas of development (e.g., speech or gross motor skills) might benefit from therapies in those areas, children with emotional deficits can benefit from remedial work. Thus, in feeding a child who can feed him/herself, parents are not primarily supplying food but are providing the emotional aspects of nurturing through food that the child was deprived of earlier. The physical and the emotional are linked, and physical activity has an impact on emotional development (Schore, 2002). Thus, in postinstitutionalized children the experience-dependent maturation of the brain (Davies, 2002) in relation to emotional development and regulation may be assisted by provision of special care modeled on the physiologically congruent care that research suggests newborn babies expect. The principle of parenting neglected children based on their emotional rather than chronological age applies (Perry, Runyan, & Sturges, 1998), and “making up for missed experiences” as described is developmentally appropriate.

Conclusion

This paper presents the hypothesis that an appropriate approach to caring for newly adopted postinstitutionalized child is to seek to replicate many of the experiences that physiological measures suggest newborn babies expect. While there is a scientific basis to this premise and it is also borne out by the experience of adoptive parents, this hypothesis has not been tested empirically. Thus, this hypothesis may provide a rich
avenue of neurobiological and behavioral research into the care of newly adopted postinstitutionalized children.

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Author contact: karleeng@uws.edu.au with a copy to the Editor: poster@uta.edu

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