The Risk of Harm to Young Children in Institutional Care

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Better Care Network

Save the Children UK

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We're the world's independent children's rights organisation. We're outraged that millions of children are still denied proper healthcare, food, education and protection and we're determined to change this.

Save the Children UK is a member of the International Save the Children Alliance, transforming children's lives in more than 100 countries.

The Better Care Network (BCN) brings together organisations and individuals concerned about children without adequate parental care. Its mission is to facilitate active information exchange and collaboration on these issues and advocate for technically sound policy and programmatic action on global, regional, and national levels in order to:

- reduce instances of separation and abandonment of children
- reunite children outside family care with their families wherever possible and appropriate
- increase, strengthen and support family and community-based care options for children
- establish international and national standards for all forms of care for children without adequate family care, and set up mechanisms for ensuring compliance
- ensure that residential institutions are used in a very limited manner and only when appropriate.

The Better Care Network website can be found at http://www.crin.org/bcn/
The Better Care Network can be contacted for information or requests at contact@bettercarenetwork.org

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Author's biographical note

Kevin Browne is currently Professor of Forensic Psychology and Child Health at the Institute of Work, Health & Organisations, University of Nottingham, and was previously holder of the Chair of Forensic and Child Psychology at the Universities of Liverpool and Birmingham. He has worked and presented in more than 50 countries worldwide, including leading multi-sector training projects, on the prevention of child maltreatment and maternal and child health in Russia and Slovakia, supported by the British Government. For 12 years he was an Executive Councillor of the International Society for the Prevention of Child Abuse and Neglect – where he also chaired their research committee – and has been a consultant to the European Commission, World Bank, and UNICEF. He is Head of the World Health Organization's Collaborating Centre for Child Care and Protection. He was also a consultant and contributing author to the UN Secretary-General's *World Report on Violence against Children* (2006).

He recently led a two-year EU/WHO investigation into 33 European countries on the extent, characteristics and effects of early institutional care on child development and behaviour (See: Browne, K.D., Hamilton-Giachritis, C.E., Johnson, R. and Ostergren, M. (2006). Overuse of institutional care for children in Europe. *British Medical Journal*; 332: 485–487 [25/02/06]). This was followed by an 18-month project concerned with training policy-makers and practitioners, and capacity building community programmes and surrogate family care, to deinstitutionalise and transform children's services across Europe.

About this paper

Save the Children and the Better Care Network commissioned Professor Browne to undertake this review of the evidence base on the risks of harm to young children in institutional care. Both organisations are concerned to improve the situation of children without adequate care and to do so on the basis of the best possible evidence about both child development and professional good practice.

This paper is being published to share the findings of Professor Browne's review and to stimulate debate and further research on this topic. The views expressed in this paper are those of the author and not necessarily those of Save the Children or the Better Care Network.

Introduction

Young children are frequently placed in institutional care throughout the world. This occurs despite wide recognition that institutional care is associated with negative consequences for children's development (Carter, 2005; Johnson, Browne and Hamilton-Giachritsis, 2006). For example, young children in institutional care are more likely to suffer from poor health, physical underdevelopment and deterioration in brain growth, developmental delay and emotional attachment disorders. Consequently, these children have reduced intellectual, social and behavioural abilities compared with those growing up in a family home.

This paper provides an international summary of the extent and scale of young children living without parents in residential care 'children's homes', and of the reasons they are there. This is followed by an overview of the risk of harm to young children's care and development after being placed in institutional care, and considers core recommendations for policy and practice to prevent harm and promote the rights of a child to grow up in a family environment (UNCRC, 1989). To begin, a definition of what is meant by 'institution or residential care home for children' is presented to clarify the use of the term in this paper.

An institution or residential care home for children is defined as a group living arrangement for more than ten children, without parents or surrogate parents, in which care is provided by a much smaller number of paid adult carers. Typically in Europe this would be one carer to six children of a similar age during the day and fewer staff at night. Often the staff are inadequately trained and poorly supervised, making basic mistakes such as feeding a child (who should be able feed himself) on his back in a sleeping position (see plate 1).

Residential care implies an organised, routine and impersonal structure to the living arrangements for children (eg, all children sleep, eat and toilet at the same time) and a professional relationship, rather than parental relationship, between the adults and children. It is recognised that this definition would include children admitted to hospital, children in emergency care and those who attend boarding schools and summer camps. Therefore, children

Plate 1: A young child being fed inappropriately in his cot.

who live in an institution without a parent for more than three months are 'institutionalised children' and the focus of our concern.

Institutions or residential care homes for children are sometimes incorrectly referred to as 'infant homes' or 'orphanages'. The so-called 'infant homes' often provide a non-stimulating, clinical environment for toddlers and young children up to four years of age, and the vast majority (94 to 98%) of children in 'orphanages' have at least one living parent, often known to the authorities (Browne et al., 2005, 2006; Carter, 2005; Tobis, 2000). It is acknowledged that these figures do not refer to children in conflict or disaster zones, but even in these areas only a minority of children in institutions are orphans, with many of them being displaced and separated from a living parent or relative whose whereabouts may be unknown. Perhaps the increasing numbers of HIV orphans in sub-Saharan Africa are the only exception to this misnomer, although it has been reported that 59% of children from Zimbabwe living in institutions have at least one parent alive, and there is much anecdotal evidence that the majority of 'HIV orphans' in sub-Saharan Africa, whether in institutional care or otherwise, have at least one living parent.

1 The extent of institutional care for young children (0 to 3 years)

The damaging practice of placing young children in residential care without a parent or surrogate parent is a worldwide phenomenon. However, most information on the numbers and characteristics of young children in institutional care has been published for Europe where, ironically, this practice is regarded as the *traditional* response to 'protecting' children from harm and 'rescuing' them from poor and inadequate parenting. Indeed, Europeans in all parts of the world have been placing young children in need of help and support into social care institutions for over 200 years. However, the information from Europe, like elsewhere, has problems of reliability and validity. For example, there is no standardisation of types of institutions, of the government department(s) responsible, of the data collected or of the methods used, and some countries only report data from state institutions and do not include children in 'children's homes' run by privately owned, faith-based or non-governmental organisations (NGOs). This makes international comparisons problematic and complex but still very informative, as the following surveys demonstrate.

In 2003, a survey of 33 European (excluding Russian-speaking) countries was carried out under the auspices of the World Health Organization (WHO) Regional Office for Europe, as a part of the EU Daphne programme to combat violence to women and children. The study mapped the official recorded number and characteristics of children under age three years in residential care (Browne et al., 2005a) and found that 23,099 young children (out of an overall population of 20.6 million under three) had spent more than three months in institutions, of more than ten children, without a parent. This represents 11 children in every 10,000 under three years in residential care homes throughout the European Economic Community (EEC). The figures varied greatly between the different countries. Four countries had none or less than one per 10,000 children under three in institutions, 12 countries had institutionalised between one and ten young children per 10,000, seven countries had between 11 and 30 children per 10,000 and, alarmingly, eight countries had between 31 and 60 children per 10,000 under three years in institutional care. Only Iceland, Norway, Slovenia and the UK had a policy to provide foster care rather than institutional homes for all needy young children under the age of five. Of most concern were the 15 countries with more than one in every thousand (10 per 10,000) infants or toddlers living the first part of their lives in a residential 'children's home' without a parent. In 2003, these countries were Belgium, Bulgaria, Czech Republic, Latvia, with more than 50 per 10,000; Hungary, Lithuania, Romania, Slovak Republic with more than 30 per 10,000; Finland, Malta, Estonia, Spain, with more than 20 per 10,000; and Netherlands, Portugal and France, with more than 10 per 10,000.

Another 2003 survey using official statistics from 27 countries in Central and Eastern Europe (CEE) and the Former Soviet Union (FSU) showed that most Russian-speaking European countries and Newly Independent States (NIS countries) in

Central Asia have at least 20 children in every 10,000 under three years in 'children's homes' (UNICEF Innocenti 2004). There was an overlap in the two surveys carried out in 2003, and a strong correlation was found for the number of young children resident in children's homes between the 11 countries that appeared in both surveys (Browne et al., 2006). This suggests that, although difficulties exist when collecting such information, reasonable estimates can be made and the data is reliable enough to inform policy and practice.

Browne et al. (2006) averaged the official data from both surveys and estimated the total number of children under three years in institutional care for 47 out of the 52 countries (90.4%) in the WHO European (and Central Asian) region. The five countries with no data for 2003 were Israel, Luxembourg (later estimated to be 12 per 10,000 under three), Monaco, San Marino and Switzerland. It was calculated that 43,842 young children from a population of 30.5 million 0 to 3 years (14.4 per 10,000) were in residential care homes without parents. The greatest numbers of under-threes in institutional care were found in Russia (10,411), Romania (4,564), Ukraine (3,210), France (2,980) and Spain (2,471).

2 The extent of institutional care for all children (0 to 17 years)

Carter (2005) claims that the overuse of institutional care for children is far more widespread than official statistics suggest. He reports 2002 figures from the non-governmental organisation (NGO) EveryChild for 20 countries in Eastern Europe and the Former Soviet Union. The figures show the total number of children (0 to 17 years) in social care facilities within these 20 countries to be approximately 1.3 million, and nearly double the 714,910 children officially reported to UNICEF for the same time period. Over the past 15 years, Carter (2005) observes a small decline (13%) in the absolute number of children in institutional care in this specific region. However, if the decline in birth rate is taken into account, the proportion of the child population in social care facilities has actually increased by 3% since the collapse of the communist systems.

Comparable data for North America is difficult to identify as they refer to all children in public care as '*fostered*', rather than restricting this term for children placed into professional surrogate families. Nonetheless, Johnson et al. (2006) report that on 30 September 2001, 542,000 children (0–18 years) were in public ('*foster*') care in the USA, and approximately one quarter of these (130,857) were under five years. Across the 50 states, an average of 9% of children under 12 years in public ('*foster*') care were placed in residential children's homes (ranging from 1.3% in Hawaii to 27.2% in Arizona). Therefore, it can be estimated for the USA that approximately 11,777 young children under five years resided in residential care institutions. Outside the developed world of Europe and North America, the problem of institutionalised young children is commonplace, but accurate statistics are unavailable.

Overall, UNICEF estimates that the total number of children in institutional care globally is 2.2 million, but they point out that under-reporting and a lack of regulation in some countries indicates that this figure is an underestimate. Information available from UNICEF and other international organisations suggests that the use of residential care for children is increasing, especially for countries in economic transition, conflict or disaster zones. In sub-Saharan Africa, for example, recent reports indicate that the number of privately funded institutions has risen rapidly. A contributing factor is the concern about where to place the growing numbers of children orphaned by HIV/AIDS. It was estimated in 2001 that Ethiopia alone has 989,000 children orphaned by AIDS. Therefore, governments are looking for simple solutions, without considering what is in the best interests of children in adversity.

3 Relative costs

Funding institutional care rather than the alternatives is misguided when the relative costs are considered. Analyses of children of all ages in Romania, Ukraine, Moldova and Russia show that institutional care is six times more expensive than providing social services to vulnerable families or voluntary kinship carers; three times more expensive than professional foster care; and twice as expensive as community residential/small group homes (Carter, 2005). Furthermore, analyses of data from 13 countries in western and central Europe demonstrated that institutional care was twice as expensive as foster care for young children with disabilities, and three times more expensive than foster care for young children without any disabilities. This finding was independent of the level of spending on quality of care in each country (Browne et al., 2005a). Institutions are more expensive than family-based alternatives, partly because 33% to 50% of paid staff employees in residential care have no direct contact with children, according to reports from Montenegro, Serbia and Slovakia (Browne, 2007; Browne, Vettor and Dejanovic, 2006; Tinova, Browne and Pritchard, 2007).

4 Reasons for institutional care

It has been observed that institutional care is increasing in countries where there is economic transition, because for many families and communities the changes have increased unemployment, migration for work, family breakdown and single parenthood (Carter, 2005; Tinova et al., 2007). In these countries, poverty seems to be the main underlying factor for placing a child in institutional care, with single parents and parents with large unplanned families equally challenged by poverty and unable to cope (Sigal et al., 2003). This situation is compounded further by impoverished child welfare services. Hence, in Europe an association has been reported between low community health and social services spending and high numbers of abandoned and institutionalised children. Furthermore, inadequate health and social services for parents (eg, mental health and alcohol/drug addiction services) also means that children are likely to remain in institutional care for longer periods of time (Browne et al., 2005b; 2006). However, the relationship between child poverty and institutional care is not straightforward because there are also significant numbers of children who live in residential care facilities in economically developed countries.

In the USA and western Europe child protection systems have developed faster than family-based alternative care. Therefore, when parents are judged by professionals as abusive, neglectful or incapable of meeting the physical and/or psychological needs of the child, professionals are given powers to remove the child to a place of safety. All too often this is a residential care facility rather than surrogate foster or kinship family care. This inappropriate intervention can compound the effects of abuse and neglect, and contribute to the suffering of children and the harm done to them.

The child's characteristics may also increase the chances of institutional care because of discrimination and negative social attitudes towards children with physical and/or mental disabilities, children from ethnic minorities, illegitimate children and children from single mothers or broken families, all of whom are over-represented in residential care. In some countries even gender may have an influence, with female children more often abandoned to institutional care and international adoption.

Browne et al. (2005b) found different reasons for young children being taken into institutional care in economically developed countries within the original 15 EU member states in 2003, compared with EU accession countries that were in economic transition in 2003. Figure 1 (see page 8) gives the official cited reasons for children under three years being in social care facilities for six of the 15 EU member states in 2003. The vast majority of children (69%) were placed in residential care because of abuse and neglect, 4% due to abandonment, 4% because of disability and 23% for social reasons, such as family ill-health or parents in prison. No biological orphans (ie, without living parents) were placed in institutions.

By contrast, Figure 2 gives the official cited reasons for children under three years being placed in residential care for 11 of the 14 EU accession countries in 2003. Only 14% were placed in institutions due to abuse or neglect, 32% were

Figure 1. Reasons for institutionalisation of young children under three years in economically developed EU member states, 2003 (data from Belgium, Denmark, France, Greece, Portugal and Sweden)

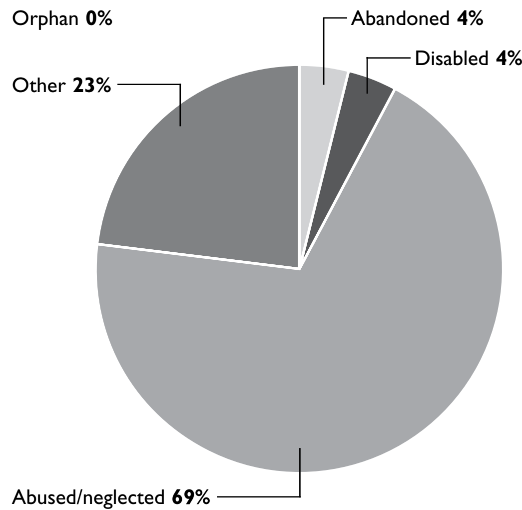
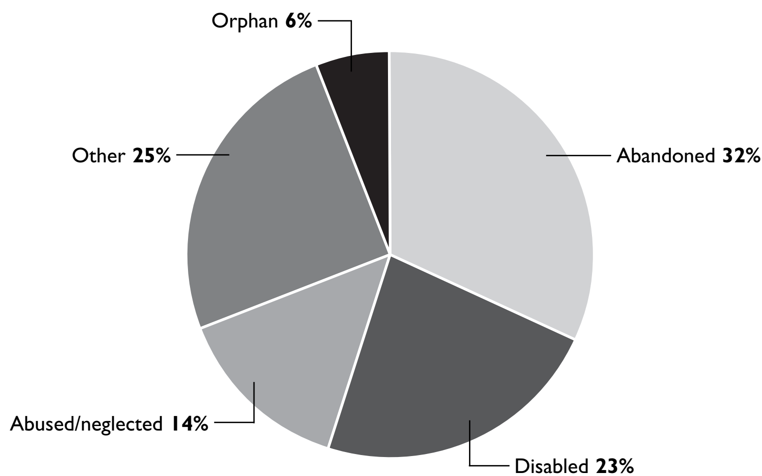


Figure 2. Reasons for institutionalisation of children under three years in EU accession countries undergoing economic transition, 2003 (data from Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Romania, Slovakia and Turkey)



abandoned, 23% had a disability, 25% were 'social orphans' (placed because of family ill-health and incapacity) and 6% were true biological orphans.

In 2003, children were most often placed in residential care in European economically developed countries for abuse and neglect, whereas in parts of Europe undergoing economic transition it was mainly because of abandonment and disability. Overall, 27% of young children had a disability on admission to residential care, but approximately a third of children leaving care had some form of disability that required follow-up in the community where possible, possibly due to the effects of growing up in an institution (Browne et al., 2004).

5 Effects of institutional care on physical development and motor skills

Typically, institutions for young children under four years are overcrowded, clinical environments with highly regimented routines, unfavourable care-giver to child ratios, and unresponsive staff who see their roles more related to nursing and physical care than to psychological care (Nelson et al., 2007). Often, young children will spend a significant proportion of each day in a cot with a 'vacant stare' or tapping on the bars of their cot/crib 'cage' (Maclean, 2003), having already become habituated to the novelty of the non-interactive soft toys left with them and any pictures on otherwise blank walls (see plate 2).

Much emphasis is placed on infection control, and the children experience the outside world only on rare occasions under strict supervision and limited play. The everyday contact with dirt, which challenges and helps develop a child's immune

Plate 2: A young child in residential care at a 'children's home' in Montenegro

system, is mostly restricted. This over-control of the children's environmental experiences has a number of detrimental effects (Carter, 2005; Mulheir and Browne, 2007; Smyke et al., 2007):

- Physical under-development, with weight, height and head circumference below the norm. Severe conditions may result in failure to thrive;
- Hearing and vision problems that may result from poor diet and/or under-stimulation. Often the problems are not diagnosed and are left untreated;
- Motor skill delays and missed developmental milestones are common for children in institutional care, and in severe conditions stereotypical behaviours, such as body rocking and head banging, are often seen.
- Poor health and sickness result from overcrowded conditions, with cots back to back and limited environmental experiences inhibiting the development of the immune system. Children may be isolated from staff and other children when they are sick and at a time when they most need comforting and sensitive care;
- Physical and learning disabilities may arise as a consequence of institutional care from a combination of motor skill delays and retarded developmental stages, especially under conditions of poor health and sickness.

Many of the problems described above are hidden by incomplete records of the development of children in residential care (Mulheir and Browne, 2007). Sometimes records are falsified or exaggerated – for example, the implementation of immunisation programmes within the institutions (Carter, 2005).

6 The psychological harm caused to children by institutional care

The damaging psychological consequences of institutional care have been written about for over 50 years. The publications of Goldfarb (1944; 1945) and Bowlby (1951) were particularly influential and highlighted a number of emotional, behavioural and intellectual impairments that characterised children who had been raised in residential care. Children living in institutions without parents are reported to perform poorly on intelligence tests and to be slow learners with specific difficulties in language and social development, in comparison to children with foster parents. In addition, they had problems concentrating and forming emotional relationships, and were often described as attention-seeking. The lack of an emotional attachment to a mother figure during early childhood was attributed as the cause of these problems, which were considered to be long-lasting.

'Attachment theory' (Bowlby, 1969) emphasised the negative consequences of institutional care compared with family-based care and the importance of a primary care-giver for normal child development. This led to a decline in the use of institutional care or large children's homes in some parts of the English-speaking world. In other parts of world, child care policy has been less concerned with the psychosocial needs of children. Instead, an emphasis has been placed on the physical needs of children and controlling their environment. In these countries, this has led to a reliance on *institutions*, rather than on the development of substitute parenting, such as kinship care, foster care and adoption (Browne, 2002).

Johnson et al. (2006) carried out a systematic search of the literature and found that since these early studies there have been 2,624 articles on early privation/deprivation of parenting or children in institutional/residential care published in English from 1944 to 2003. They reviewed in detail 27 research studies that used a control or comparison group and met the following criteria:

- Population – children 0–17 years
- Intervention – children exposed to residential care in an institution under the age of five years, *without* a primary caregiver, for varying lengths of time
- Comparator – children exposed to family-based care with a primary caregiver for varying lengths of time
- Outcome – child to primary caregiver attachment patterns, social and behavioural development, cognitive development.

Effects of institutional care on social behaviour and interaction with others

Of the 27 studies scientifically investigated by Johnson et al. (2006) concerning the development of children who have been raised in institutions, 17 studies measured social and behavioural problems that were more prevalent in residential care children compared with other children. Evidence of negative social or behavioural consequences for children raised in institutional care was reported by 16 (94%) of the studies, highlighting problems with anti-social conduct,

social competence, play and peer/sibling interactions. In addition, one in ten children who spent their early lives in poor conditions, often deprived of interaction with others, were found to show 'quasi-autistic' behaviours such as face guarding and/or stereotypical 'self-stimulation/ comfort' behaviours, such as body rocking or head banging (Beckett et al., 2002; Rutter et al., 1999, 2007b; Sweeny and Bascom 1995). However, the severity and duration of difficulties varied greatly across the studies, reflecting the different situations and experiences of the children studied in various countries. Observations carried out in European residential care homes have since confirmed more stereotypical behaviour in children who are under-stimulated in institutions of poorer quality – after six months the young children were observed to have become socially withdrawn. As a consequence of failed interactive initiatives, young children learn *not* to be sociable, and visible efforts of a child to interact with others become rare due to unresponsive care-giving practices (Nelson et al., 2007). This observation is particularly pertinent to children under three years of age where a six-month institutional placement represents a significant proportion of their early life experience. EU/WHO research in seven European countries (Denmark, France, Greece, Poland, Hungary, Romania, and Slovakia) has demonstrated that the average length of stay for infants was 15 months, with a mean age of 11 months on admission and 26 months on departure (Browne et al., 2004).

Poor care-giver to child ratios not only inhibit social interaction, but also influence the way staff respond to the needs of the children in residential care, which can significantly influence the children's attention-seeking behaviour. A Serbian children's home (regarded as a national centre of excellence), with two staff and 16 children per room, provides two examples of how things go wrong.

Case 1

An 18-month-old boy quickly learnt that when he hit other children he would receive attention from the staff, albeit negative. As any attention is better than no attention at all, his aggressive behaviour was being unknowingly rewarded by the staff's behaviour, to the extent that his hitting became such a problem that he was socially isolated from others (staff and children) at 18 months of age.

Case 2

A two-year-old girl with suspected learning difficulties nevertheless learnt that scratching herself and pulling her hair quickly received attention from the staff. Again, this attention reinforced the behaviour, and the little girl scratched herself and pulled her hair out all the more. This pain was preferable to the feeling of neglect and lack of attention for this child. Given that the staff had, on average, seven other children to care for, they managed the situation by tying the child up in her own bed clothes to prevent her self-harming. Although this was effective in limiting the child's self-harm, it constituted physical abuse and neglect of the child in full visibility of the senior management, who condoned this practice (see plate 3).

Effects of institutional care on the formation of emotional attachments

Johnson et al. (2006) reviewed 12 studies that specifically considered the formation of emotional attachments for children in institutions compared with other children. Only one study found no supporting evidence for greater attachment difficulties for children growing up in residential care. Nine studies report significantly more indiscriminate friendliness, over-friendliness and/or disinhibited behaviour for children in institutions, suggesting 'disorganised attachment disorder' has greater prevalence among these children compared with children in families or children who were admitted to institutional care after the age of two years (Wolkind, 1974; Rutter et al., 2007a).

Smyke, Dumitrescu and Zeanah (2002) proposed a 'continuum of attachment disorder', based on the quality and the sensitivity of care-giving children received, after they compared emotional attachment problems in three groups of Romanian children:

Plate 3: A two-year-old girl tied up in bed clothes to prevent her scratching and pulling hair in a Serbian children's home

1. Children raised by their biological parents, where few showed attachment problems
2. Children placed in small family-like homes with four consistent care-givers, where some exhibited attachment problems
3. Children in a residential care institution, with 20 staff acting as care-givers at different times, where the majority demonstrated significant attachment difficulties.

In terms of emotional attachments, even apparently 'good quality' institutional care can have a detrimental effect on children's ability to form relationships throughout life. The lack of a warm and continuous relationship with a sensitive caregiver can produce children who are desperate for adult attention and affection. Superficially, the behaviour of these children can appear 'normal' (or pseudo-secure), but their lack of discrimination in seeking affection is indicative of disorganised/disorientated or disinhibited attachment disorder (Zeanah, 2000; Rutter et al., 2007a). The presence of attachment disorder is more common in children who have spent more of their infancy in institutional care (O'Connor et al., 1999, 2000a). However, this pattern is not an inevitable consequence of early deprivation and there are mediating factors that can ameliorate the negative effects, such as the child being a particular favourite of a residential care worker and receiving sensitive care giving. Nevertheless, this is rare and children in institutional care clearly have limited opportunities to form selective attachments, compared with children in family-based care, especially where there are large numbers of children, small numbers of staff and a lack of consistent care through shift work and staff rotation.

Effects of institutional care on intellect and language

Johnson et al. (2006) found that 12 of the 13 studies that considered intellectual development reported that poor cognitive performance and lower IQ scores were associated with children in institutional care, illustrating the negative effects of this environment in comparison to family-based care on the development of the mind. However, some of these studies also suggest that early removal to family-based care can result in recovery and catch up.

Since the completion of the Johnson et al. (2006) systematic review, a randomised controlled trial, comparing abandoned children reared in Romanian institutions with abandoned children first placed in institutions and then moved to foster care in

Romanian communities, has been carried out (Nelson et al., 2007). All institutionalised children initially showed the effects of institutionalisation (mean IQ 77 indicating "greatly diminished intellectual performance [borderline mental retardation])", compared with children growing up in their biological families who had never been institutionalised (mean IQ 103); this supported previous findings (Smyke et al., 2007).

However, the children randomly assigned to foster care showed significant gains in intellect at 42 months (mean IQ 86), with those fostered before the age of 18 months showing a higher intellectual performance (mean IQ 94) compared with those who were fostered after 24 months (mean IQ 80). This supports the idea of a critical period of development in early childhood.

At 54 months of age, no improvement in intellectual performance was observed in those children who remained in institutional care (mean IQ 73), whereas those children in foster care maintained their higher level of cognitive functioning (mean IQ 81). As yet, fostered children had not caught up with children growing up in biological families (mean IQ 109).

The disruption to the development of mind associated with under-stimulated children in institutional care is most obviously expressed by the delay in language acquisition. Goldfarb (1944, 1945) investigated speech and language organisation in infancy, at six to eight years, and at adolescence. He observed a clear deficiency in language development in all three age groups compared with same age groups of fostered children. Other studies have since reported deficits in the language skills and early reading performance of children raised in institutions (Roy and Rutter, 2006). These deficits include poorer vocabulary and less spontaneous language (Tizard and Joseph, 1970). Nevertheless, Croft et al. (2007) found that children recover well from these deficiencies in language development once placed in a family, although socio-economic status and background of the child's new family have an effect on this language development (Geoffroy et al., 2007).

Effects of institutional care on the developing brain

Further to the findings of the systematic review by Johnson et al. (2006), recent advances in the field of neurobiology have added greatly to our understanding of why institutional care, particularly in very young children, has a negative effect on child development. The human infant is born with some 100 billion neurons, and each neuron forms about 15,000 synapses during the first two years of life (Balbernie, 2001). The overabundance of synapses and neurons in the infant's brain allows the adaptation of the brain in response to the environment (neuroplasticity). Synapses that are frequently used are reinforced, whereas redundant synapses are 'pruned'. Thus, early experience determines which neural pathways will become permanent and which will be eliminated (Balbernie, 2001). The human infant is genetically predisposed to interact with others, but for this process to result in optimal brain development the infant needs to interact with a caregiver who will handle, talk and respond to them in a sensitive and consistent way, repeatedly introducing new stimuli appropriate to their stage of development (Schaffer, 1990; Trevarthen and Aitken, 2001; Perry and Pollard, 1998). Hence, a strong case has been proposed for the maturation of the infant brain being embedded in the relationship between the infant and the primary caregiver (Perry and Pollard, 1998; Schore, 2001a), usually the mother.

While a socially rich family environment promotes infant brain growth, an impoverished environment through parental neglect or institutional care has the opposite effect and will suppress brain development (Glaser, 2000). Without a supportive and predictable parent providing a one-to-one relationship to 'scaffold' infant learning, there is no process to guide synaptic connections and the development of neural pathways. This leads to the pruning of synapses in those areas of the brain that are under-stimulated. All areas of the cortex can be affected by early institutional care, but there is significantly reduced metabolic activity in the frontal and temporal lobes of the developing brain (Chugani et al., 2001) and fewer connections between these

regions (Eluvathingal et al., 2006). This results in neural and behavioural deficits, especially for social interactions and emotions (right temporal cortex), and language (left temporal cortex) (Schore, 2001a, 2001b, 2003).

The child's lack of opportunity to form a specific attachment to a parent figure is a typical feature of residential care. The culture of institutional practice is primarily concerned with the physical care of children and the establishment of routines, with less emphasis on play, social interaction and individual care (Giese and Dawes, 1999). Thus, the residential care of young children under three years old may have the potential to negatively affect brain functioning at the most critical and unparalleled period for brain development, and have long-lasting effects on social and emotional behaviour (Balbernie, 2001; Schore, 2001a, 2001b, 2003).

7 Long-term effects of institutional care

Overall, the evidence suggests that early institutional care is typically detrimental to all developmental domains of children. Features of institutional care that contribute to developmental delays include low staff to child ratios/interaction, low levels of staff experience and autonomy, strict routines, poor provision of books and play equipment, children's lack of personal possessions and individuality (eg, birthday celebration), and children's lack of 'everyday' experiences and trips outside the institution (Mulheir and Browne, 2007; Smyke et al., 2002). Much of the recent UK and North American research investigating the long-term effects of these residential care experiences has compared young children adopted nationally (without institutional care experiences) with similar-aged children 'imported' from Romania through international adoption after experiencing early institutional care.

These studies have demonstrated that many young children with institutional care backgrounds can make a rapid recovery from their poor health, sleep and eating problems (Beckett et al., 2002; Fisher et al., 1997), and 'catch up' on their physical and cognitive development when they are placed in a caring family environment at an early age (Rutter and The English and Romanian Adoptees Study Team, 1998; Marcovitch et al., 1997). This is despite the initial obvious problems shown in their preschool years (Beckett et al., 2006; Vorria et al., 2006). Indeed, a substantial proportion of children who had experienced early deprivation in institutional care were shown to have normal intellectual functioning at age 11 (Kreppner et al., 2007), as long as the new family setting had been responsive to their needs.

However, the poor conditions and deprivation encountered by children in Romanian 'children's homes' have a profound effect on development, and complete recovery has only been observed, so far, in children who were placed in family-based care before the age of six months. Children who were placed later made significant improvements in their development after leaving institutional care, but were still at an intellectual and social disadvantage six years later (Beckett et al., 2007; O'Connor et al., 2000b).

The effects of early institutional care on social and emotional behaviour also seem to be as persistent as delays in intellectual development. The insecure/anxious attachments shown by Romanian adoptees were qualitatively different from national adoptees. Romanian adoptees from institutional care backgrounds had disinhibited emotional attachments, and there were few differences in the children's social responses to their adopting parents or strangers (O'Connor et al., 2003). This attachment disorder was still evident at age 11 years (Rutter et al., 2007a). Furthermore, one in ten Romanian adoptees also exhibited quasi-autistic behaviours, and three-quarters of this group had autistic features to their behaviour at age 11 (Rutter et al., 2007b).

The child's first emotional attachment to their primary caregiver (usually a mother figure) is considered to be a '*blueprint or inner working model*' for all later emotional attachments, as the young child learns how to love and to be loved, which forms the basis of self worth and empathy for others (Bowlby, 1969; Egeland, Bosquet and Chung,

2002; Grossman and Waters, 2006). The absence of this experience puts the child at a considerable disadvantage, with a greater probability of low self esteem, anxiety and depression, possibly leading to social withdrawal, antisocial behaviour and delinquency (Andersson, 2005; Browne and Herbert, 1997; Fisher et al., 1997). However, studies have not confirmed higher levels of aggression in Romanian adoptees, despite their observed inability to share intimacies and poor peer relations (Gunnar et al., 2007; Tarullo, et al. 2007).

Therefore, research over the last decade has confirmed earlier findings that institutional care in early life predisposes children to intellectual, behavioural and social problems later in life. Many of the problems observed in samples of severely deprived children, such as stereotyped behaviours and eating problems, show rapid improvement once the child is removed from institutional care and placed in a supportive family environment. However, placement with a family is not enough by itself to overcome difficulties, as poor outcomes have been observed for some children restored to their natural family (Hodges and Tizard, 1989a). The age of placement into a kinship, foster or adopting family and the quality of the subsequent family care are important factors in the outcome of children who have experienced institutional care (Brand and Brinich, 1999; Gunnar et al., 2007). While subsequent placement in a supportive family can result in the formation of close attachments within that family, many institutionally raised children will still have problems interacting with peers and adults outside the family (Hodges and Tizard, 1989a; Gunnar et al., 2007). Other studies, have shown how, even after early placement with a family, children who have spent their infancy in institutions are more likely to manifest social and emotional problems in adolescence compared with children who have been adopted but who were not institutionalised (Hodges and Tizard, 1989a, 1989b; Gunnar, et al., 2007; Rutter et al; 2007ab; Tarullo et al., 2007). Disinhibited attachments and emotional vulnerability shown by these children place them at risk of physical and sexual abuse, as their craving for attention may result in a readiness to trust teenage and adult strangers and make them obvious targets for substance misuse and sexual exploitation (Carter, 2005; Elliott, Browne and Kilcoyne, 1995).

Yang et al. (2007) found that childhood institutional care was a risk factor for the development of adult personality disorder. This may be related to the potential for abuse and neglect in residential care. This has been observed in institutions all over Europe (see plate 3), but again the most comprehensive evidence comes from Romania.

With the permission of the Government of Romania, a national survey on "Child abuse in residential care institutions" was carried out by UNICEF in 2000. An anonymous questionnaire was given to 3,164 children aged 7 to 18 years (7.8% of the overall population in residential care). The study (UNICEF, 2002) found that 37.5% of children in residential care institutions report that they have been victims of severe physical punishment or "beatings" (approximately two-thirds were boys and one-third girls). The perpetrators of this physical abuse were residential care staff in the vast majority of the reports (77%). Nearly one fifth (19.6%) of the respondents (approximately half boys and half girls) claimed to have been blackmailed for sexual activities and a further 4.3% claimed that they were "constrained" to have sex. The reported perpetrators of these acts of sexual abuse were older residents of the same sex (50%), older residents of the opposite sex (12%) and institutional staff (1.3%) offending inside the institution, as well as relatives (3.9%), other young people (2.6%) and adults (1.3%) offending outside the institution. However, a significant minority of the respondents would not identify their perpetrator (29%). When the number of children resident in institutional care in Romania and elsewhere is considered, these findings could suggest a considerable number of children suffering maltreatment while in residential care. It is this group that is most at risk of offending against others in later life (Haapasalo and Moilanen, 2004; Hamilton, Falshaw and Browne, 2002).

8 The way forward: moving young children out of institutions and preventing new admissions

Regardless of the quality of institutional care, 'normal' child development requires the opportunity for frequent and consistent one-to-one interaction with a parent or foster parent. This is especially important for the under-threes because the early years are critical for brain development. Therefore, it is recommended that *no* child under three years should be placed in a residential care institution without a parent/primary caregiver. High-quality institutional care should only be used as an emergency measure to protect or treat children. Even then, it is recommended that the length of stay should be as short as possible, and non-violent parents should be encouraged to visit or stay with the child. Hence, the vast majority of childcare experts argue that *all* 24-hour residential care institutions for children under five (including children with disabilities) should be transformed into other services, such as mother-baby units and day care facilities (see plate 4), and the children in them returned to family-based care (Mulheir and Browne, 2007). However, the under-fives currently living in institutional care should be moved to family-based care only when kinship, foster or adopting families have been carefully assessed, recruited and trained, and associated community services are in place. Deinstitutionalisation without comprehensive assessments on the suitability of kin, foster or adopting family carers, prior to the move, will place the child at risk of entering a placement that cannot meet their needs.

A European study (Browne et al., 2004) identified ways in which young children under five in institutional care were being de-institutionalised and returned to family-based care in seven European countries (see page 12). Nearly one in five children (19%) returned to their parents or relatives, 63% entered a new family (38% into foster care and 25% adopted), and 18% were inappropriately moved to another institution of 11 children or more (11%), or a specialist institution for children with disabilities (7%). The study found that countries with better community support services were more likely to base their decisions on the child's needs, and to provide the most appropriate placement and better preparation for the move. Most countries assessed children's physical, health and developmental needs, together with the physical environment and carer suitability. However, only half of the disabled children had their disability assessed as part of the decision-making process and only 38% of children with siblings were placed together with one of their siblings.

Countries in transition have been observed to seek simple solutions to the long-term institutional care of children and have considered international adoption as serving the interests of these children. However, recent research has shown that the child's best interests are rarely considered or their rehabilitation with their biological family prioritised over international adoption procedures. Hence,

Plate 4: A pilot day care scheme to prevent children entering into institutional care within Montenegro

international adoption is rarely the last resort that it is proposed to be (UNCRC, 1989 Article 21). In fact, research has shown that international adoption is associated with an increase in the numbers of children in residential care rather than a decrease in both sending and receiving countries (Chou and Browne, 2008).

It is important to emphasise that poor practices in the deinstitutionalisation process may further damage children – for example, if the transition is too rapid with little preparation for the child, as observed in Romania (Mulheir et al., 2004), or if the needs of the children are not considered or treated as a priority. Up to a third of children who leave institutions show disability or developmental delay and require follow-up home visits by health and/or social service professionals or volunteers. Investment in day care, community health and social services is also essential as a prevention strategy to stop children entering residential care in the first place (see plate 4). Parents of children with disabilities often welcome the idea to collect their child from day care, after work each day. They return their child the following morning for physiotherapy and other interventions necessary to meet the child's needs, and are their full-time carers at weekends. Twenty-four hour residential care for children with disabilities cannot be justified on the basis of required interventions, as these interventions usually take place between 9am and 5pm. Day care provides the opportunity for these interventions to take place, while allowing parents to continue working and bringing in income for their families. This breaks the cycle of parents giving up their children to institutional care because they cannot afford to be full-time carers (Browne, Vettor and Dejanovic, 2006; Browne 2007).

Child abandonment can also be prevented through community, health and social services, by engaging mothers during pregnancy, identifying those children who are at high risk for abandonment (out of poverty, lack of social support or cultural stigma), and offering intervention at birth, such as shelter and accommodation (ie, mother and baby unit) or foster care of the mother and baby (for young mothers under 18 years). The identity of the mother and the identity of the newborn child is best established and legally registered prior to them leaving the maternity unit (Browne, Poupard and Pop, 2006).

Mulheir and Browne (2007) have formulated a best practice model to deinstitutionalise and transform children's services so that the majority of children and families in need receive community-based interventions, with the child remaining in their family home. Where this is impossible for a small minority of children (eg, due to risk of harm by an abusive and/or neglectful parent), alternative family placements (kinship or foster care) are sought or shelter provided for the child, together with their non-abusive parent. Only a very small number of exclusive 24-hour institutional settings are proposed to remain for adolescent and teenage children who are at risk to themselves or to others. The residential care of all children under five years (whether disabled or not) is prevented through the implementation of a ten-step model (See Table 1).

Table 1 : The ten-step model to deinstitutionalising and transforming children's services (Mulheir and Browne, 2007)

Step	Description
STEP 1 **Raising awareness**	Raising awareness of the harmful effects of institutional care on young children and their development.
STEP 2 **Managing the process**	The establishment of an effective multi-sector project management team (at national and regional levels) to pilot projects in one or more areas or institutions.
STEP 3 **Country level audit**	To audit the nature and extent of institutions for residential care of children nationally and to measure the number and characteristics of children who live in them.
STEP 4 **Analysis at institution level**	Data collection and analysis within an institution of admissions, discharges and length of stay of children, and an assessment of individual needs of the children in residence.
STEP 5 **Design of alternative services**	Design of alternative services based on individual needs of children and an assessment of family based services currently available (eg, mother–baby unit for parents at risk of abandonment) and those new services that need to be developed (eg, day care and foster care services for children with disabilities).
STEP 6 **Plan transfer of resources**	Management plan and practical mechanism for the transfer of resources – financial, human and capital. Finances should always follow the child.
STEP 7 **Preparing and moving children**	Preparing and moving children and their possessions on the basis of their individual needs and treatment plans. Matching these needs and plans to the new placement and the capacity of the new carers. Transfer procedures need to respect the rights of the child and always be in their best interest.
STEP 8 **Preparing and moving staff**	Preparing and moving staff by assessing staff skills, staff training needs and staff expectations in relation to the new demands of transformed services for children.
STEP 9 **Logistics**	Carefully considering logistics to scale-up a successful pilot project involving one institution or one region, to a national strategic plan.
STEP 10 **Monitoring and evaluation**	Setting up a national database of children in public care to monitor and support the transfer of children from institutional care to family based care. This involves health and social service staff making home visits to families with deinstitutionalised or newly placed children to assess, monitor and evaluate the treatment plans and optimal development of the children.

9 Implications for policy and practice: a summary

1. Institutional care of young children is harmful to children's development and negatively affects neural functioning at the most critical and unparalleled period of brain development, causing physical, intellectual, behavioural, social and emotional skill deficits and delays.

2. An estimated 43,842 (14.4 per 10,000) children under three years are officially recorded as living in institutional care for more than three months without a parent, within 47 countries of the WHO European region, but this is likely to be an underestimate. Every effort should be made to prioritise the deinstitutionalisation of these children into family-based care as soon as possible, following a best practice model that considers and respects the needs and rights of the child.

3. Institutional care is not restricted to countries in transition, but is common throughout the entire world. At least nine out of ten children in residential care have one living parent, and are mostly placed in institutions for social and economic reasons in transition countries, and for reasons of abuse and neglect in economically developed countries.

4. Young children placed in a caring family environment by the age of six months will probably recover and catch up on their physical and intellectual development. Those children placed in a family after six months of age are likely not to recover completely from their intellectual deficits. All young children with institutional care experiences may be permanently affected in their neural functioning related to social interactions and emotional attachments, leading to a greater probability of poor intimate relationships, antisocial behaviour and mental health problems.

5. Children under three years old should *not* be placed in residential care without a parent. When institutions are used as an emergency measure, the child should be moved into foster family care as soon as possible. For all countries, child protection legislation and interventions to deal with abusive and neglectful parents should be developed in parallel with community services and alternative family-based care for children.

6. Education and training for policy-makers and practitioners is urgently needed on the appropriate care and placement of young children facing adversity. Any form of alternative, family-based care must provide high-quality care that enhances the development and protection of the child. Children returning to their biological families or being adopted/placed in surrogate families require their carers to be carefully assessed, supported and monitored to prevent the child continuing to experience poor parenting, maltreatment and additional moves.

7. Countries in transition have used international adoption as an alternative to long-term institutional care of children, which may not be in the best interest of the child. Services should be offered to parents and surrogate parents before international adoption is considered, but this rarely happens with international adoption.

References

Andersson, G. (2005) Family relations, adjustment and well-being in a longitudinal study of children in care. *Child & Family Social Work*, 10: 43–56

Balbernie, R. (2001). Circuits and circumstances: The neurobiological consequences of early relationship experiences and how they shape later behaviour. *Journal of Child Psychotherapy*, 27, 237–255.

Beckett, C., Bredenkamp, D., Castle, J., Groothues, C., O'Connor, T.G. and Rutter, M. (2002). Behaviour patterns associated with institutional deprivation: A study of children adopted from Romania. *Developmental and Behavioural Pediatrics*, 23, 297–303.

Beckett, C., Maughan, B., Rutter, M., Castle, J., Colvert, E., Groothues, C., Hawkins, A., Kreppner, J., O'Connor, T.G., Stevens, S. and Sonuga-Barke, E.J.S. (2007). Scholastic attainment following severe early institutional deprivation: A study of children adopted from Romania. *Journal of Abnormal Child Psychology*, 35, 1063–1073.

Beckett, C., Maughan, B., Rutter, M., Castle, J., Colvert, E., Groothues, C., Kreppner, J., Stevens, S., O'Connor, T.G. and Sonuga-Barke, E.J.S. (2006). Do the effects of early severe deprivation on cognition persist into early adolescence? Findings from the English and Romanian adoptees study. *Child Development*, 77, 696–711.

Bowlby, J. (1969). *Attachment: Attachment and loss volume 1*. London: Hogarth Press.

Bowlby, J. (1951). *Maternal care and mental health*. Geneva: WHO Headquarters.

Brand, A. and Brinich, P. (1999). Behavior problems and mental health contacts in adopted, foster, and non-adopted children. *Journal of Child Psychology and Psychiatry*, 40, 1221–1229.

Browne, K.D. (2007) *Final Consultancy Report to UNICEF and the Government of Montenegro on deinstitutionalising and transforming services for children in Montenegro*. Podgorica: UNICEF, 27th November 2007.

Browne, K.D. (2002). Child Protection. In M. Rutter and E. Taylor (Eds.), *Child and adolescent psychiatry*. (4th Edition; Chapter 70, pp. 1158–1174).Blackwell Science.

Browne, K.D, Poupard, P. and Pop,V. (2006) *The development of strategies and actions related to the prevention of infant abandonment in Romania. UNICEF Report to the Government of Romania.* Bucharest: UNICEF Romania Office.

Browne, K.D., Vettor, S. and Dejanovic, V. (2006) *Final Consultancy Report to UNICEF and the Government of Serbia on deinstitutionalising and transforming services for children in Serbia*. Belgrade: UNICEF, 18th July 2006.

Browne, K.D., Hamilton-Giachritis, C.E., Johnson, R. and Ostergren, M. (2006). Overuse of institutional care for children in Europe. *British Medical Journal*. 332, 485–487 (25/02/06)

Browne K.D., Hamilton-Giachritsis C., Johnson R., Chou, S., Ostegren, M., Leth, I., Agathonos-Georgopoulou H., Anaut M., Herczog M., Keller-Hamela M., Klimackova A., Stan V. and Zeytinoglu S. (2005a). A European survey of the number and characteristics of children less than three years old in residential care at risk of harm. *Adoption & Fostering*. 29(4): 23–33.

Browne, K.D., Hamilton-Giacritsis, C.E., Johnson, R., Chou, S. (2005b). Young children in institutional care in Europe. *Early Childhood Matters*, 105: 15–18.

Browne K.D., Hamilton-Giachritsis C., Chou S., Johnson R., Agathonos-Georgopoulou H., Anaut M., Herczog M., Keller-Hamela M., Klimackova A., Leth I., Mulheir G., Ostergren M. and Stan, V. (2004). *Identifying good practices in the deinstitutionalisation of children under five years from European institutions*. (European Union Daphne Programme, Final Project Report No. 2003/046/C), EU/WHO/University of Birmingham, Birmingham, England: University Centre for Forensic and Family Psychology.

Browne, K.D. and Herbert, M. (1997). *Preventing Family Violence*. Chichester: Wiley.

Carter R. (2005). *Family Matters: A study of institutional childcare in Central and Eastern Europe and the Former Soviet Union*. London: Everychild.

Chou, S. and Browne, K.D. (2008). The relationship between institutional care and international adoption in Europe. *Adoption and Fostering*, 32(1), 40–48.

Chugani H.T., Behen M.E., Muzik O., Juhasz C., Nagy F. and Chugani D.C. (2001). Local brain functional activity following early deprivation: A study of post-institutionalized Romanian orphans. *Neuroimage*. 14:1290–1301.

Croft, C., Beckett, C., Rutter, M., Castle, J., Colvert, E., Groothues, C., Hawkins, A., Kreppner, J., Stevens, S., Sonuga-Barke, E., (2007) Early adolescent outcomes for institutionally-deprived and non-deprived adoptees II: Language as a protective factor and a vulnerable outcome, *Journal of Child Psychology and Psychiatry* 48(1) 31–44.

Egeland, B., Bosquet, M. and Chung, A.L. (2002). 'Continuities and discontinuities in the intergenerational transmission of child maltreatment: Implications for breaking the cycle of abuse. In K.D.Browne, H.Hanks, P.Stratton and C.Hamilton (Eds) *Early Prediction and Prevention of Child Abuse: A Handbook*. Chichester: Wiley (pp.217–232).

Elliott, M., Browne, K.D. and Kilcoyne, J. (1995) Child sexual abuse prevention: what offenders tell us. *Child Abuse and Neglect: The International Journal* 19 (5): 579–594.

Eluvathingal, T. J., Chugani, H.T., Behen, M.E., Juhász, C., Muzik, O., Maqbool, M., Chugani, D.C., and Makki, M. (2006). Abnormal brain connectivity in children after early severe socioemotional deprivation: a diffusion tensor imaging study. *Pediatrics*, 117, 2093–2100.

Fisher, L., Ames, E., Chisholm, K., and Savoie, L. (1997). Problems reported by parents of Romanian orphans adopted to British Columbia. *International Journal of Behavioral Development*, 20, 67–82.

Geoffroy, M., Cote, S., Borge, A., Larouche, F., Seguin, J. and Rutter, M. (2007). Association between nonmaternal care in the first year of life and children's receptive language skills prior to school entry: the moderating role of socioeconomic status. *Journal of Child Psychology and Psychiatry*, 48, 490–497.

Giese, S., and Dawes, A. (1999). Child care, developmental delay and institutional practice. *South African Journal of Psychology*, 29, 17–22.

Glaser, D. (2000). Child abuse and neglect and the brain: A review. *Journal of Child Psychology and Psychiatry*, 41, 97–116.

Goldfarb, W. (1945). Effects of psychological deprivation in infancy and subsequent stimulation. *American Journal of Psychiatry*, 102, 18–33.

Goldfarb, W. (1944). The effects of early institutional care on adolescent personality. *Journal of Experimental Education*, 12, 106–129.

Grossman, K., Grossman, K. and Waters, E. (2006). Attachment from infancy to adulthood: The major longitudinal studies. Critical Notice. *Journal of Child Psychology and Psychiatry*, 47, 974–977.

Gunnar, M., Van Dulmen, M. and The International Adoption Project Team. (2007). Behaviour problems in post institutionalized internationally adopted children. *Development and Psychopathology*, 19, 129–148.

Haapasalo, J. and Moilanen, J. (2004). Official and self-reported childhood abuse and adult crime of young offenders. *Criminal Justice and Behavior*, 31, 127–149.

Hamilton, C.E., Falshaw, L. and Browne, K.D. (2002). The link between recurrent maltreatment and offending behaviour. *International Journal of Offender Therapy and Comparative Criminology*, 46, 75–94.

Hodges, J., and Tizard, B. (1989a). IQ and behavioural adjustment of ex-institutional adolescents. *Journal of Child Psychology and Psychiatry*, 30, 53–75.

Hodges, J., and Tizard, B. (1989b). Social and family relationships of ex-institutional adolescents. *Journal of Child Psychology and Psychiatry*, 30, 77–97.

Johnson R., Browne K.D. and Hamilton-Giachritsis C.E. (2006). Young children in institutional care at risk of harm. *Trauma Violence and Abuse*, 7(1): 1–26.

Kreppner, J.M., Rutter, M., Beckett, C., Castle, J., Colvert, E., Groothues, C., Hawkins, A., O'Connor, T.G., Stevens, S. and Sonuga-Barke, E.J.S. (2007). Normality and impairment following profound early institutional deprivation: a longitudinal follow-up into early adolescence, *Developmental Psychology*, 43(4), 931–946.

Maclean, K. (2003). The impact of institutionalization on child development. *Development and Psychopathology*, 15, 853–884.

Marcovitch, S., Goldberg, S., Gold, A., Washington, J., Wasson, C., Krekewich, K., and Handley-Derry, M. (1997). Determinants of behavioural problems in Romanian children adopted in Ontario. *International Journal of Behavioral Development*, 20, 17–31.

Mulheir, G. and Browne, K. (2007). *De-Institutionalising And Transforming Children's Services: A Guide To Good Practice*. Birmingham: University of Birmingham Press (in collaboration with EU, WHO, CHLG and Hope and Homes for Children).

Mulheir, G., Browne, K., Darabus, S. Misca, G., Pop, D. and Wilson, B., (2004). *De-institutionalisation of children's services in Romanian: A good practice guide*. Bucharest: High Level Group for Romanian Children/ UNICEF Romania office.

Nelson, C., Zeanah, C., Fox, N., Marshall, P., Smyke, A., Guthery, D., (2007). Cognitive recovery in socially deprived young children: The Bucharest early intervention project. *Science* 318 (no.5858); 1937–1940 (21st December 2007).

O'Connor, T.G., Marvin, R., Rutter, M, Olrick, J. and Britner, P. (2003). Child–parent attachment following early institutional deprivation. *Development and Psychopathology* 15: 19–38.

O'Connor, T.G., Rutter, M, and The English and Romanian Adoptees Study Team. (2000a). Attachment disorder behaviour following early severe deprivation: Extension and longitudinal follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(6), 703–712.

O'Connor TG, Rutter M, Beckett C, Keaveney L and Kreppner J. (2000b). The English and Romanian Adoptees Study Team. The effects of global severe privation on cognitive competence: Extension and longitudinal follow-up. *Child Development*, 71(2):376–390.

O'Connor, T.G., Bredenkamp, D., Rutter, M., and The English and Romanian Adoptees Study Team. (1999). Attachment disturbances and disorders in children exposed to early severe deprivation. Infant *Mental Health Journal*, 20(1), 10–29.

Perry, B., and Pollard, R. (1998). Homeostasis, stress, trauma and adaptation: A neurodevelopmental view of childhood trauma. *Child and Adolescent Clinics of North America*, 7, 33–51.

Roy, P. and Rutter, M. (2006). IC: associations between inattention and early reading performance. *Journal of Child Psychology and Psychiatry*, 47, 480–487.

Rutter, M., Colvert, E., Kreppner, J., Beckett, C., J., Groothues, C., Hawkins, A., O'Connor, T., Stevens, S., Sonuga-Burke, E. (2007a). Early adolescent outcomes for institutionally-deprived and non-deprived adoptees I: Disinhibited attachment. *Journal of Child Psychology and Psychiatry* 48(1) 17–30.

Rutter, M., Kreppner, J., Croft, C., Murin, M., Colvert, E., Beckett, C., Castle, J., Sonuga-Burke, E. (2007b). Early adolescent outcomes for institutionally-deprived and non-deprived adoptees III: Quasi-autism. *Journal of Child Psychology and Psychiatry* 48(12) 1200–1207.

Rutter, M., Andersen-Wood, L., Beckett, C., Bredenkamp, D., Castle, J., Groothues, C., Kreppner, J., Keaveney, L., Lord, C., O'Connor, T.G., and The English and Romanian Adoptees Study Team. (1999). Quasi-autistic patterns following severe early global privation. *Journal of Child Psychology & Psychiatry*, 40(4), 537–549.

Rutter, M., and The English and Romanian Adoptees Study Team. (1998). Developmental catch-up, and deficit, following adoption after severe global early privation. *Journal of Child Psychology & Psychiatry*, 39(4), 465–476.

Schaffer, H.R. (1990). *Making Decisions About Children: Psychological Questions and Answers*. Oxford: Blackwell. Second edition, 1998.

Schore, A.N. (2003). *Affect disregulation and disorders of self*. New York: Norton.

Schore, A.N. (2001a). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22, 7–66.

Schore, A.N. (2001b). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22, 209–269.

Sigal, J. J., Perry, J.C., Rossignol, M. and Ouimet, M.C. (2003). Unwanted infants: Psychological and physical consequences of inadequate orphanage care 50 years later. *American Journal of Orthopsychiatry*, 73, 3–12.

Smyke, A.T., Koga, S.F., Johnson, D.E., Fox, N.A., Marshall, P.J., Nelson, C.A., Zeanah, C.H. and The BEIP Core Group. (2007). The caregiving context in institution-reared and family-reared infants and toddlers in Romania. *Journal of Child Psychology and Psychiatry*, 48, 210–218.

Smyke, A.T., Dumitrescu, B.A., and Zeanah, C.H. (2002) Attachment disturbances in young children. I: The continuum of caretaking casualty. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(8), 972–982.

Sweeny, J. and Bascom, B. (1995). Motor development and self stimulatory movement in institutionalised Romanian children. *Pediatric Physical Therapy*, 7; 124–132.

Tarullo, A.R., Bruce, J. and Gunnar, M.R. (2007). False belief and emotion understanding in post-institutionalised children. *Social Development*, 16, 57–78.

Tinova, M., Browne, K.D. and Pritchard, C. (2007) *Children services in Slovakia and their impact on the child's right to optimal development*. Geneva: Report to UNCRC Select Committee. 18th May 2007.

Tizard, B., and Joseph, A. (1970). Cognitive development of young children in residential care: A study of children aged 24 months. *Journal of Child Psychology & Psychiatry*, 11, 177–186.

Tobis, D. (2000), *Moving from Residential Institutions to Community Based Social Services in Central and Eastern Europe and the Former Soviet Union*. New York; World Bank.

Trevarthen, C., and Aitken, K.J. (2001). Infant intersubjectivity: Research, theory, and clinical applications. *Journal of Child Psychology and Psychiatry*, 42, 3–48.

UN 1989. *United Nations Convention on the Rights of the Child (UNCRC)*. New York: United Nations.

UNICEF (2002): *Child abuse in residential care institution; A national survey*, Bucharest: UNICEF Romania office.

UNICEF Innocenti 2004. *Innocenti Social Monitor. The Monee Project*. Florence: United Nations Children's Emergency Fund (UNICEF Innocenti Centre).

Vorria, P., Papaligoura, Z., Sarafidou, J., Kopakaki, M., Dunn, J., Van Ijzendoorn, M.H. and Kontopoulou, A. (2006). The development of adopted children after IC: A follow up study. *Journal of Child Psychology and Psychiatry*, 47, 1246–1253.

Wolkind, S.N. (1974). The components of "affectionless psychopathology" in institutionalized children. *Journal of Child Psychology & Psychiatry*, 15, 215–220.

Yang, M., Ullrich, S., Roberts, A. and Coid, J. (2007). Childhood IC and personality disorder traits in adulthood: Findings from the British National Surveys of psychiatric morbidity. *American Journal of Orthopsychiatry*, 77, 67–75.

Zeanah, C.H. (2000). Disturbances of attachment in young children adopted from institutions. *Journal of Developmental & Behavioural Paediatrics*, 21, 230–236.

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The Risk of Harm to Young Children in Institutional Care

This paper provides an international summary of the extent and scale of young children living without parents in residential care 'children's homes', and of the reasons they are there. It also gives an overview of the risk of harm to young children's care and development after being placed in institutional care. The author concludes with core recommendations for policy and practice to prevent harm to children and to promote the rights of children to grow up in a family environment.

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