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#### **Abstract**

This article provides a case study of a project to improve the health, safety, and development of children birth to 6 years old in a large orphanage in Nepal. Two interventions were conducted: improvement of physical infrastructure and training, mentoring, and support for caregiving staff. As a result of these interventions, positive outcomes in terms of children's health and development have been observed, including reduction of communicable diseases and increased social interactions with caregivers. As part of the new training initiative, the caregivers began to meet regularly to share their ideas and experiences, and came to realize their vital role in the holistic development of the children in their care. One important change was a greater sense of dignity for the caregivers. The caregivers were formerly called Maids(Aaya), but asked to be called Mothers(Aama). The project also faced challenges, including communication barriers related to organizational structure.

#### **Keywords**

young, facility, institutional, dignity, nepal, caregiver, children, training, staff, facilities, transforming, mother, maid

#### **Disciplines**

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# From Maid to Mother: Transforming Facilities, Staff Training, and Caregiver Dignity in an Institutional Facility for Young Children in Nepal

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#### Abstract

This article provides a case study of a project to improve the health, safety, and development of children birth to six years old in large orphanage in Nepal. Two interventions were conducted: improvement of physical infrastructure and training, mentoring, and support for caregiving staff. As a result of these interventions, positive outcomes in terms of children's health and development have been observed, including reduction of communicable diseases and increased social interactions with caregivers. As part of the new training initiative, the caregivers began to meet regularly to share their ideas and experiences and came to realize their vital role in the holistic development of the children in their care. One important change was a greater sense of dignity for the caregivers. The caregivers were formerly called "Maids" (Aaya), but asked to be called "Mothers" (Aama). The project also faced challenges, including communication barriers related to organizational structure.

Keywords: institutional care, orphanages, caregivers

Young children raised in institutions are deeply influenced by the social relationships and environments they encounter in these settings. The nature of institutional care, with regimented schedules, high child-to-caregiver ratios, and changing caregivers, limits opportunity for reciprocal and stable interactions between children and caregivers and puts children at risk in various domains of development, including physical, cognitive, and socio-emotional (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2008). Children raised in institutional environments tend to be delayed physically and behaviorally (Gunnar, 2010; MacLean, 2003), with problems in cognitive processing, emotional regulation, and relationships with others that persist into adulthood (Julian, 2009, cited in Groark & McCall, 2011).

Children in institutional care in the world's poorest countries may be at particular risk for developmental and health and deficiencies. A meta-analysis of 75 studies considered the effects of institutional care on the cognitive development of more than 3,200 children in 19 countries. An association was observed between level of cognitive delay and the country's Human Development Index (HDI), a composite statistical measure of the country's overall level of health, education, and income. Higher HDI scores in the child's country of origin were associated with a smaller delay in institutionally raised children's intellectual development. The poverty of these countries may be even more impactful than the type of care provided, with these analyses finding no difference in the three countries with the lowest HDI scores (Kenya, Ethiopia, and Eritrea) in terms of cognitive development for children raised in institutions versus families (van IJzendoorn, Luijk, & Juffer, 2008).

While Nepal was not included in this meta-analysis, it is among the world's poorest countries, and is the third poorest country in the South Asia region (after Bangladesh and Pakistan), according to the United Nation's Multidimensional Poverty Index (United Nations

Development Programme, 2013). This measure describes the share of the population that is multidimensionally poor and the intensity of poverty in terms of average number of deprivations, considering education, health, and standard of living (United Nations Development Programme, 2013). Asia as a region has the largest number of orphans in the world, with more than 60 million children estimated to have lost one or both parents (UNICEF, 2006). Children in Asia and Africa, particularly South Asia and Sub-Saharan Africa, face the greatest challenges in terms of survival, development and protection (UNICEF, 2009).

Efforts around the world to transform institutional care for young children have shown promise, in countries including Iran (Hakimi-Manesh, Mojdehi & Tashakkori, 1984), India (Taneja, Aggarwal, Beri, & Puliyel, 2005), Korea (Kim, Shin, & White-Traut, 2003), Turkey (Berument, 2013), and Romania (Sparling, Dragomir, Ramey, & Florescu, 2005). Interventions to improve the quality of institutional care have been found to have large effect sizes (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2008), suggesting that developmental outcomes can be improved within institutional settings. Better results are found when interventions are comprehensive and intensive and involve both training and structural changes (Rosas & McCall, 2010).

The best-studied example of a comprehensive intervention involved training and structural changes in Baby Homes in the Russian Federation, primarily serving children under the age of 4 (St. Petersburg-USA Orphanage Research Team, 2008). The intervention had two components: 1) training caregivers on early childhood development and provision of developmentally appropriate and sensitive care; and 2) structural changes involving staff scheduling, physical layout, and procedures to facilitate closer relationships between caregivers and children, including reducing group sizes and ensuring more contact with fewer selected caregivers. The

purpose was to provide more family-like care within the institutional setting. Using a quasiexperimental design, one Baby Home was subject to both interventions, one to training only, and one to control conditions. Children's development was assessed at baseline and again after at least four months of exposure to the intervention or control conditions. Under the comprehensive intervention involving training and structural changes, children experienced significant improvements in physical growth, behavioral development, and social interaction with caregivers, and were more than twice as likely to exhibit organized attachment behavior with caregivers.

While relationships with caregivers seem to be the most impactful aspect of children's experiences (Rutter, 1972; O'Connor, Rutter & the English and Romanian Adoptees Study Team, 2000), there is little research on factors related to caregiving practices in institutions (Tirella, Chan, Cermak, Litvinova, Salas, & Miller, 2008; Vaschenko, Easterbrooks & Miller, 2010), and the views of caregivers are rarely solicited by researchers (Hicks, Archer, Whitaker, 1998). Across many cultures, the position of caregiver in residential institutions is perceived as low-status, high stress and low support (Heron & Chakrabarti, 2002).

Staff training and development of professional infrastructure is one avenue to improve the quality of care in institutions. Minimal amounts of training can result in improvements in children's development or preventing deterioration in development, provided that there is continuing monitoring of staff to sustain these changes (Engle, Groza, Groark, Greenberg, Bunkers, & Muhamedrahimov, 2011). The type of training that is most valuable is practical rather than theoretical, promoting specific behavioral changes in caregiving interactions and encouraging staff to care for children as though they were their parents (Groark & McCall, 2011). This can result in caregiving that is more warm, sensitive, and responsive, which

independent of other changes can positively impact children's development (McCall et al., 2010). Staff also need supervisory and infrastructural support that allows them to implement their training. Efforts to comprehensively change an institution should involve first seeking the buy-in of line staff, so that they do not feel that change is forced upon them (Groark & McCall, 2011).

In addition to a lack of stable caregiver-child relationships, studies suggest that institutions offer poorer behavioral and physical environments than do homes (Smyke et al., 2007; Vorria et al., 2003) and early childhood care and education programs (Groark, McCall, Fish & The Whole Child International Evaluation Team, 2011) as assessed by instruments like the HOME scale for group environments, the Infant-Toddler Environmental Rating Scale (ITERS), and the Early Childhood Environmental Ratings Scale (ECERS) that rate quality in environment and child care processes. Physical renovation can support changes in caregiving practices, including by facilitating small group sizes (Groark & McCall, 2011).

This paper describes a case study of the transformation of institutional care for young children in a Nepali institution. The Infant Care Facility Improvement Project was conducted by International Child Resource Institute Nepal in the Nepal Children's Organization (NCO)'s Bal Mandir facility, the oldest and largest orphanage in Kathmandu, Nepal, from July 2004 - June 2008. The non-governmental organization was invited by the Central Child Welfare Board under the Ministry of Women, Children and Social Welfare to create changes that would lead to reduced infant mortality and morbidity in the institution. The project updated physical infrastructure, created child-friendly spaces, and trained staff in developmentally appropriate care, with the aim of improving the health, safety, and development of young children birth to age six in the Nepali orphanage.

#### **Background on institutional care in Nepal**

The government of Nepal has demonstrated a commitment to creating an environment that protects children's rights by ratifying the Convention on the Rights of the Child (CRC) in 1990 and implementing the Children's Act of 1992 to promote children's rights (Committee on the Rights of the Child, 1996). Additional protections for children have been incorporated into law by the Child Rights Protection and Promotion Bill and ratification of optional protocols to the CRC, including the Optional Protocol on the Involvement of Children in Armed Conflict (UNICEF Nepal, n.d.). The interim constitution of Nepal (Article 22) recognizes that certain children, including orphaned children, have "special privileges from the State to secure their future" (p. 2, International Institute for the Rights of the Child & Creating Possibilities, 2010) and specific protections for children are also being considered in a new constitution. A new national policy for children was drafted in 2012, with revisions to the 1992 Children's Act, but dissolution of the Constituent Assembly in 2012 has delayed its passage (Committee on the Rights of the Child, 2012).

Nepal law establishes preferences for alternative care of orphaned and abandoned children. The options in order of priority are: kinship care by blood relatives; foster care; domestic adoption; intercountry adoption; and institutional care as a final resort (R. Niraula, personal communication, June 3, 2004). Domestic adoption is rare in Nepal, with foster care more widely practiced, including by NCO/Bal Mandir. In August 2010, the U.S. Department of State and the Citizenship and Immigration Services of the Department of Homeland Security issued a joint statement announcing the suspension of U.S. processing of adoptions of Nepali children, citing that U.S. Consular offices had not been able to verify documents declaring children as legally abandoned. It concluded that documentation presented for adoption was found to be unreliable

and police and orphanage officials were not cooperative with investigations to the level required. Several other countries processing adoptions from Nepal also stopped accepting new cases (United States suspends processing of adoptions of abandoned children from Nepal, 2010).

Despite the legal priorities for alternative care, the majority of orphaned and abandoned children in Nepal are cared for in institutions. Nepal currently lacks a comprehensive data collection system on children in care (Committee on the Rights of the Child, 2012). There is no official published government data on the number of orphanages in Nepal. However, according to the news media, the Central Children Welfare Council has reported that there are 610 children's homes with around 13,281 orphaned and abandoned children in Nepal (The Kathmandu Post, 2012). A large number of children were orphaned or abandoned during the decade-long armed conflict between the government and Maoist fighters, known as the Nepalese Civil War (1996-2006). As a result of the fighting, parents in the countryside often placed their children into orphanages to keep them out of the line of fire. Other typical reasons why children are put into institutional care include domestic situations in which mothers are left by their husbands and have no way of providing for their children. Children are also abandoned by their mothers, either at the hospital after birth (as happens particularly in the case of unwed mothers due to social stigma) or when they choose to marry a new partner, leaving their children without care. Mothers have also been forced to abandon their young children when sentenced to prison, after a law was passed in 2000 prohibiting them from taking their children to prison with them. While the law has been somewhat relaxed, a network of group homes for children of prisoners (called the Network for Children, Prisoners and Dependents) has grown to provide care for children so that they will not have to be placed in orphanages. There remains a general belief

among poor Nepalis that children are well cared for, with adequate food, shelter, and education, within orphanages.

While Nepal shares many of the challenges of other low-resource countries, particularly in the South Asia region, it also has certain unique challenges related to the care of young children in institutions. Shared challenges with other low-resource countries include using traditional practices to care for children, without incorporation of child development research that would inform the development of standards of care for children based on developmental stages. Also, similar to other countries, the role of caregiver is low-paid and low status. It is not perceived as a profession, and attracts a workforce of primarily female workers with little to no formal education. More unique challenges to Nepal include cultural beliefs related to the Hindu caste system, with discrimination related to 'untouchables' and stigma toward orphans that has implications for public support of institutions. Cultural preference for boys and differences in treatment of boys and girls have resulted in disparities in gender outcomes, with lower rates of literacy and higher rates of early marriage among girls (UNICEF, 2003), with implications for fertility and unwanted births. The 10-year armed conflict in Nepal (1996-2006) has had a lingering affect on the political stability of the country, and impacts implementation of the legal protections ostensibly provided to orphaned and vulnerable children.

#### Nepal Children's Organization/Bal Mandir

Nepal Children's Organization (NCO) was founded in 1964 under the active initiative of Her Majesty the Queen Mother Ratna Rajya Laxmi Devi Shah. It was legally established under the National Directive Act of 1961, which had the purpose of registering professional associations, including those devoted to children (Sinha & Malla, 2004). Its mission is to "[improve] the lives of children throughout Nepal, enabling them to survive and succeed." The organization provides care for nearly 700 children in 11 facilities (Nepal Children's Organization [NCO], 2011), with the total number of children in care fluctuating by month. NCO operates seven homes for orphans, destitute and abandoned children, 2 homes for conflict-affected children, 1 for children with disabilities, and 1 for dependent children of prisoners. Children are eligible to be served by NCO if they meet one or more of the following criteria: 1) abandonment in hospitals; 2) referral from the police authorities; 3) recommendation for placement by District Administration Offices; and 4) transfer from other orphanages that get closed, according to Bal Krishna Dangol, NCO/Bal Mandir Deputy Director (personal communication, July 7, 2013).

The largest NCO facility is Bal Mandir, in Naxal, Kathmandu (the Central Orphanage), serving orphans, destitute, and abandoned children. At the time the intervention began, Bal Mandir housed approximately 90 children birth to age 6 and oversaw the care of approximately 200 older children, according to Rajeswor Niraula, Executive Director of NCO/Bal Mandir (personal communication, June 3, 2004). The intervention described in this paper was limited to the total population of young children (90 infants, toddlers, and preschoolers birth to age 6), because the conditions for their care were deemed more unsanitary and unhygienic than those for the older children cared for in the same facility, resulting in more health problems for the younger children including a higher incidence of mortality.

NCO/Bal Mandir had a positive national reputation, as befitting its name (Bal Mandir means "temple for children" in Nepali) until the restoration of democracy in 1990. Prior to 1990, the organization enjoyed the patronage of the royal family, particularly the Queen Mother, and received ample government funding as well as private donations (including funding and land) from those interested in cultivating favors with the royal family. Since that time, it has experienced a number of challenges related to administration and management. While it has an

organizational constitution, NCO/Bal Mandir lacks a written policy to guide the organizational governance and legal issues related to the overall operation of the agency. They do not have a transparent system in staff recruitment, monitoring and evaluations, due to high political interference. The organization has remained under the same leadership for the last 20 years, and these leaders were originally appointed by the political party that was then in power (Nepali Congress Party). NCO/Bal Mandir has a central executive board of directors composed of 21 members, each affiliated with one of the major political parties of Nepal. Each member has his own vested interests related to his political party and these political interests can take precedence over the children's interests. Most of the staff is recruited on the basis of personal acquaintance and political party affiliation, rather than relevant experience or prior training. Employees are hired who are connected to or in favor of the political parties of the organizational leadership, and support the political agendas of these parties. Decisions made by the organizational leadership are more frequently based on their personal and political interests, rather than the development and welfare of the children in their charge (R. Niraula, personal communication, May 12, 2005).

Since the elimination of the government's regular funding and private patronage from the royal family and their supporters more than 20 years ago, NCO/Bal Mandir has been facing extreme financial constraints. Until 1992, the Government of Nepal provided financial support to NCO/Bal Mandir. Now, the sole government support comes in the form of 200 grams of rice per day from the Department of Prison Management, provided only for children previously cared for with their parents in prison. The primary sources of funding are sponsorship programs, adoption fees, property lease income, and foreign donations (Poudel, 2011). The drastic drop in international adoptions has resulted in a steep decrease in the funding available to orphanages

(Russia Today, 2012). Funding is used to cover the costs of feeding, clothing, educational support, institutional administration and management, and at times has been insufficient to provide food and meet other basic needs (GorkhapatraOnline.com, 2012). Lack of funding forced Bal Mandir to stop accepting new children in 2010 (Poudel, 2011). No funds are available for child development plans and programs. The organization has been criticized for poor management (AlJazeera, 2011). For some of these reasons, management of the Bal Mandir facility was assumed by the Mitrataa Foundation in 2011 (Mitrataa Foundation, 2011). However, this arrangement ended in April 2012 (personal communication, B.K. Dangol, July 7, 2013).

There is little systematic planning at Bal Mandir for transitioning children to placements or independent living outside the institution. NCO/Bal Mandir does not prepare and implement reintegration plans for orphaned, destitute and abandoned children whereas the children of prisoners are reunited with their parents when they are released from prison. There has also been an effort to reintegrate conflict-affected children with their biological families after the Nepalese Civil War ceasefire in November 2006. For children age 18 and over transitioning to independent living, some have been provided with technical vocational training through sponsorship programs, but many lacked basic life skills and preparation for earning a livelihood when they left the care of the facility. Most of the children below the age of 6 years who leave institutional care are put up for adoption. In cases of adoption, Bal Mandir tries to find the person who brought the child to the facility. If this person is not found, they search for the child's blood relatives and arrange for a legal handover of the child, with signed contracts witnessed by the Chief District Office. After a child is legally adopted, Bal Mandir does not monitor or conduct further follow-up regarding the condition of the child, according to NCO/Bal Mandir

Central Executive Board Member and Home Management Coordinator Chij Kumar Shrestha (personal communication, June 4, 2013).

#### **Description of the Infant Care Facility Improvement Project**

The Infant Care Facility Improvement Project is an initiative implemented by Nepal Children's Organization/Bal Mandir (NCO/Bal Mandir), with assistance and support from International Child Resource Institute (ICRI) Nepal, a non-governmental organization based in Kathmandu Valley, and affiliated with International Child Resource Institute, headquartered in the United States. The project was initiated in July 2004 and completed in June 2008, with some support including facilitating caregiver meetings that continued until 2010, when the project ended completely. The budget for this project was \$10,000 U.S. dollars, for facility improvement and staff training, not including volunteer and in-kind contributions. The ICRI staff involved in the project included 4 trainers, 4 support staff, 2 leaders at the national level, and 1 leader at the international level. A project management committee was given the responsibility of executing the agreed work plan and project activities. The committee was composed of a Bal Mandir board member, a Bal Mandir executive staff member, a direct supervisor of the caregivers, ICRI staff, and the facilities contractor. SOS Children's Villages also provided support to this project by offering consultation on development of training materials and building mentoring relationships with the caregivers.

The goal of the project was to improve the care of the total population of children birth to age six at NCO/Bal Mandir. Training and support was provided for the 18 direct caregivers working with these 90 young children. These caregivers had all been employed for a minimum of 5 years in the institution, for as long as 25 years. Additional training was also provided for 12 part-time staff working as technicians in roles that included food preparation, cleaning, facility repair, and

maintenance. Two interventions were implemented to meet the project's goal: 1) Facility infrastructure improvement, to make spaces more safe, sanitary, and child friendly, with reduced group sizes; and 2) Training of caregivers in early childhood development and effective caregiving practices, with ongoing mentoring and support. See Table 1 for a partial list of program activities associated with the two interventions.

#### **INSERT TABLE 1 ABOUT HERE**

#### **Pre-Intervention Conditions in the Bal Mandir Facility**

**Facility infrastructure, health, safety, and sanitation.** Bal Mandir was not purposely built as a children's home. It was originally a palace from the Rana Dynasty, later converted into an orphanage. The 90 young children ages birth to 6 were housed in two overcrowded rooms. The interior of the facility was unsanitary, unsafe, and without climate control, making for a drafty environment in the winter and a sweltering hot one in the summer. Water was often completely unavailable, causing soiled cloth diapers to be hung out of windows to dry and pounded to remove dried excrement before reuse. Children suffered from a host of health problems and a related high mortality rate. Common diseases among children in the facility include pneumonia, anemia, dysentery/diarrhea, and respiratory problems, with skin diseases and respiratory problems as the most frequent ailments. Due to ill health, children were frequently hospitalized and medicated repeatedly with antibiotics, which were given inconsistently due to severe caregiver shortages. The health of children in the Bal Mandir facility is similar to that reported for children adopted internationally from Nepali institutions, who have frequent health problems including dermatological and respiratory conditions and gastrointestinal problems (Yates & Pandey, 2006).

Infant and child mortality in the Bal Mandir facility was greater than the national average, with the majority of deaths resulting from disease. In 2005, the infant mortality rate at NCO/Bal Mandir was 57 per 1000 (R. Niraula, personal communication, December 5, 2005) as compared to 50 per 1000 infants overall in Nepal (World Bank, 2013). This constituted a nearly 14% higher mortality rate than the very high national rate; Nepal has one of the highest rates of infant mortality in the world (IRIN Asia, 2009).

Poor health practices impacted infant mortality. Those practices included sharing of milk bottles, formula, used cloth diapers, linens, dirty utensils, and cribs. Weak immune systems of the infants due to lack of breastfeeding and lack of caregiver knowledge of early identification of diseases of the children were contributing factors to child mortality. In terms of health care at Bal Mandir, there was one nurse in residence at the facility, and a doctor who would do checkups once a week; when the nurse was away, there was no provision for alternative nursing care. The training of nurses in Nepal has been inconsistent, and nurses often have the same superstitions regarding certain health practices as local cultural norms.

Staffing and caregiving practices. Caregivers at the Bal Mandir facility had minimal training on caring for infants, toddlers, and young children. There is no minimum education criterion for employment of caregivers at the Nepal Children's Organization, although basic literacy is preferred. Recently hired caregivers had on average completed their education from 7<sup>th</sup> to 10<sup>th</sup> grade. Staff who had been at the facility for many years, up to 25 years or more, often had no educational background and were in some cases semi-literate. In Nepal, the female literacy rate is 57.4% according to the most recent census (Government of Nepal National Planning Commission Secretariat Central Bureau of Statistics, 2012) and the rate of primary school completion among females is 63% (Population Reference Bureau, 2011), suggesting the

caregivers with longer employment were less educated and literate than the general female population. Hiring preference is given to women who are single, separated, or widowed. Caregivers reside within the institution and, prior to the intervention, were on duty 24 hours a day, with no paid leave (C.K. Shrestha, personal communication, June 4, 2013).

Many of the caregivers seemed to be overloaded due to the low number of staff per number of children. Before the intervention, there were no set regulations regarding the number of children per caregiver. The 90 children birth to age six were cared for in mixed age groups in two rooms. Caregivers would circulate among children, without being assigned to a particular group. Caregivers did not have adequate time to give individual attention to the children, and there was no stability of care to promote appropriate attachment relationships. Infants were left unattended and unnoticed for long periods of time if they were quiet. The bottle-feeding schedule was inconsistent. Bottles were used and refilled to feed infants, without sanitizing them between feedings. The diapers that were used for infants were thin and were not fastened, so they often fell off and had poor absorption. There were no designated areas for stimulation and play. As a result of these conditions and the lack of stable relationships with caregivers, the youngest children of Bal Mandir suffered from a broad range of failure to thrive disorders, had severe attachment disorders, and were developmentally delayed due to lack of stimulation and interaction.

#### **Interventions Associated with the Infant Care Facility Improvement Project**

A needs assessment for the Infant Care Facility Improvement Project was completed in 2005. It entailed meeting with all key stakeholders to evaluate the situation for orphaned children in Nepal in general and specifically at NCO/Bal Mandir. All caregivers, directors, medical personnel, and community advocates were interviewed in their native language by local ICRI

Nepal staff. The children were observed at several different times of the day on multiple occasions. Further research was conducted to examine other successful models in Nepal and worldwide to determine the best approach for making reforms to the Bal Mandir facility. Efforts to reduce the incidence of disease and infant mortality and promote positive child development were implemented, including infrastructure improvements, staffing changes, and training.

Changes to facility infrastructure and health, safety, and sanitation. Health, safety, and sanitation changes included infrastructure modifications to the dormitories and dining facilities and staff training. The space allocated to young children was expanded, from two to four rooms. Two former offices were remodeled and used as dormitories for infants and toddlers. Each child was ensured an individual crib, and policies were put in place to stop the sharing of materials and supplies. Feeding practices were changed to promote a balanced diet for each child. The diet for infants was changed from packaged formula made of refined cow's milk to a formula mixture containing corn, soybean, wheat, and other sources of protein. Bottles were no longer shared among infants during a feeding, and each bottle was sanitized after each feeding by putting the bottle in clean, boiling water. Meals for toddlers and preschoolers were also changed to promote a more nutritious and balanced diet, with a reduction in refined sugars. Health and sanitation supplies were transferred to the control of individual rooms, with staff training on how to best use the materials and keep them stocked and in a ready-to-use mode. The main materials needed were inventoried, and local suppliers were identified. These materials included diapers, creams for rashes, antiseptic soaps, and anti-mosquito equipment. Dining facilities were improved to ensure sanitation and hygiene, which involved implementing new systems to use, clean, and store the utensils and cooking equipment after meals; orient caregivers and children on the newly established dining routine and facilities; and delegate responsibility to the assisting personnel

such as cooks, caregivers, and older children. Regular visits of the doctors and provision of adequate residential nurses in the home were instituted. Caregivers were trained about health, hygiene, and sanitation issues.

Since the facility was not designed as a children's home, it was not customized for serving children's needs. An architect was hired to design and oversee modifications to the existing building structure, with guidance from International Child Resource Institute Headquarters. New structures for drying clothing were constructed and made accessible to staff. Each care room was given a changing table, where the caregivers could change children's diapers, keep clean diapers and dispose of used diapers. Sanitizing dispensers with gel were placed in the changing areas for convenience of the caregivers and for use by visitors. A crawling nest for the infants was installed, with adequate safety features, and with stimulating play items and toys. Floors were replaced with high-density foam and carpet. Rooms were repainted and new curtains added, and some rooms were rewired for electricity. The project also included training and orientation for staff members on the proper use and upkeep of the improved facilities.

Changes to staffing and caregiving practices. Caregiving practices were changed through reducing group sizes, improving the caregiver-child ratios, and providing a series of caregiver trainings and meetings, with ongoing support and mentoring. Initially, there were 16 caregivers involved in the day-to-day care of children birth to age 6, most of whom lacked training on child care and development. Two additional caregivers were transferred from the older children's ward, making for 18 total caregivers employed by Bal Mandir to care for young children. In addition, three trained caregivers were recruited from SOS Children's Villages and remained in residence for the duration of the intervention. Changes were made to staff schedules by asking caregivers to decide among themselves how chores would be allocated. The workday for

caregivers was limited to 8-10 hours per day, instead of the required 24 hour duty before the intervention. Caregivers were also consulted through a participatory process about leave regulation, and a new procedure was developed for caregivers to request paid leave.

Caregiver-to-child ratios were established based on the size of the rooms and ages of children, ranging from 1:4 to 1:7 during the day while the children were awake. Each age group (infants, toddlers, and preschoolers) included a trained caregiver from SOS Children's Villages in addition to caregivers from NCO/Bal Mandir. The largest room was 40x17 square feet; this room was arranged with four family units comprised of 10 caregivers for 40 infants (1:4 ratio). Two rooms were 20x14 square feet, arranged for toddlers with a combined group size of 24 children and 4 caregivers (1:6 ratio). The final room was 25x17 square feet, and was arranged to care for 26 preschoolers with 4 caregivers (1:6-7 ratio). At night, while the children slept, one caregiver was on active duty per room. However, since the caregivers lived at the Bal Mandir facility, the caregiver on duty could call other caregivers if needed. While specific children were not assigned to caregivers, caregivers were assigned to specific rooms and cared for the same group of children to promote consistency and a family-like environment.

Three trained caregivers from SOS Children's Villages were brought into the Bal Mandir facility to assist with implementation of caregiving practices and act as role models. Great care was made to assure that both groups of caregivers understood and appreciated each other's importance in the work. Prior to their arrival at the Bal Mandir facility, the SOS caregivers were trained for three months using a curriculum developed by SOS. This training curriculum emphasized professional conduct and how to promote positive child development. The trained SOS caregivers were asked to coach the primary Bal Mandir caregivers and provide in-house training by residing at the Bal Mandir facility for three months. This coaching involved direct

instruction and modeling on how to promote holistic development of young children in the institution and how to act professionally with colleagues. The SOS caregivers provided group mentoring during the weekly training meetings and daily one-on-one coaching and mentoring for the NCO/Bal Mandir caregivers. Because they resided at the facility, they were available to the caregivers on a constant 24 hours a day/7 days a week basis. They reinforced the content learned during the trainings by demonstrating how to provide high quality care to young children, including maintaining eye contact, respecting children's emotional expression, and creating stimulating learning environments.

The focus of the trainings was to empower the caregivers in their daily work and improve their professional skills in coordination and communication with their colleagues. Whereas prior to the training, the caregivers primarily focused on the physical care of young children in terms of feeding and diapering, the trainings encouraged the caregivers to think more broadly about the care they provided. When asked their views of the challenges and needed changes within their program, several caregivers stated that this was the first time in their many years of work that they had been asked what they thought about the program. They stated that international aid organizations and local social services agencies would routinely come through the orphanage, walk right by them, and explain how they would make the program better. This was the first time an organization was asking them what they thought could be done to improve conditions, lower infant mortality, and increase the chances that children would survive and thrive.

Weekly caregiver trainings and meeting sessions were conducted during the period of intervention. Each session lasted about 3 hours, and for the duration of the session, caregivers for older children at the Bal Mandir facility would fill in for the caregivers of the young children. The caregivers learned about children's development and ways to promote holistic development

through play, gross motor stimulation, language, and other activities. Caregivers were trained to document children's development with an individual development plan, recording developmental milestones such as first steps, first word, and appearance of first tooth. The key objectives of the weekly caregiver meetings were to encourage the caregivers to express their opinions and share their problems and concerns; listen to and support one another; discuss the state of the children's health and well-being; discuss and adjust as necessary work schedules, roles, and responsibilities; learn about early childhood development and best practices for child care; and help encourage teamwork within the care delivery context. Training topics included:

- Early childhood development (physical, cognitive, social and emotional);
- Infant care practices;
- Importance of toys for young children for their stimulation/development;
- Feeding systems for the young children ages 0-6 months, 6-12 months, 12-36 months and older; and
- Use of sanitizing gel for caregiver and child health.

In addition, informal meeting discussion topics included:

- Internal communication and cooperation;
- Feedback from the caregivers regarding training and workshop delivery;
- Feedback from the caregivers regarding medical and sanitary supplies;
- Monitoring daily chores of the caregivers;
- Volunteer assignments and arrangement; and
- Procedures for caregivers accompanying children to the hospital.

In their first weekly meeting, the caregivers were asked to decide what they would like to be called by the children in Bal Mandir. They were also asked this question because the term used

to designate them, Aaya (or Maid), was felt to be inappropriate and humiliating. Out of the 16 caregivers participating in the discussion, the majority of them suggested the more respectful title of Aama (or Mother). The central executive board and the management of NCO/Bal Mandir decided in their meeting to make this change in designation official. This simple change in title has had a significant impact on the dignity of the caregivers themselves. They now feel more respected and honored, and proud of being listened to by management. It has helped to boost morale and has further encouraged them to fulfill their roles in a responsible manner. Similarly, the children themselves have felt that they have mother figures in the orphanage, creating a situation where the children are now starting to feel a sense of a family within the orphanage. It is an initial step toward transforming the institutional care system into a family-like approach.

#### **Results of the Infant Care Facility Improvement Project**

The Infant Care Facility Improvement Project resulted in changes to facility infrastructure, caregiving practices, caregiver perspectives, and improvements in child health and development. Infrastructure improvements included the physical appearance of the rooms in which children housed, which are brighter due to new paint and curtains. Each child has an individual crib with toys kept in each crib. Sanitation facilities have been improved, with availability of wash bins and hand sanitizers, and places to dispose of used diapers. The staff is more conscious of nutrition and provide children with balanced diets. They also use better hygienic practices and try to avoid the spread of communicable disease while feeding children and changing diapers. With the reduced number of children in their care, staff can provide more individualized care for children. Prior to the intervention, children spent the vast majority of their time alone or with other children in the same crib. Caregivers now are able to take children out of their cribs and make use of the play spaces for interaction and stimulation, and children primarily spend time in

their cribs when sleeping. Caregiving perspectives also improved, with caregivers able to access regular support through weekly meetings.

Based on what they learned through these trainings and meeting sessions, the caregivers were encouraged to make concrete changes in their interaction patterns with children. Rather than simply attending to physical needs, caregivers began to focus more on socio-emotional and cognitive development by engaging with children and playing with them. Caregivers make sustained eye contact when feeding, diapering, and bathing and use language to explain what is happening. When soothing crying infants, they use additional techniques learned through the training, like using gentle movement such as walking. They support children's development through activities that encourage jumping and crawling for gross motor skills and grasping for fine motor skills. They also use toys and set up learning centers within the rooms to encourage physical, emotional, and cognitive development. The caregivers particularly appreciated the creation of play areas for young children. They also accepted that although they were providing physical care prior to the intervention, they had not been meeting the holistic developmental needs of children. One of the caregivers said that the trainings and meetings upgraded their level of understanding, increased their capacity, and empowered them to be vocal with their problems.

After the intervention, the four rooms for young children look more child-friendly and the children appear healthier and happier. Prior to the intervention, the children were more passive in their interactions and generally appeared lost and aimless. They were sick more frequently and experienced more skin rashes. After the intervention, they appear more confident and curious in their general affect and demonstrate more intentional actions, including jumping, crawling, walking, climbing, clapping, and speaking. Children show more signs of engagement with the caregivers including vocalizations during play. Because the standard of hygiene improved, the

incidence of illness has decreased and the rate of infection has dropped significantly. However, due to continuing financial problems and limited staffing, systemic documentation of children's health, growth, and development are not maintained within Bal Mandir or other Nepali orphanages.

Challenges encountered with implementing the Infant Care Facility Improvement

Project. Despite the successful delivery of the project activities, some challenges were
encountered. These challenges related to the different levels of the NCO/Bal Mandir
organization and coordination among them, as well as logistical issues encountered with
changing the physical infrastructure of the facility. There were also financial and personnel
constraints, because there were no additional human resources or budget allocations other than
what was approved for the project itself. To overcome these challenges, ICRI Nepal formed a
project management committee comprised of a Bal Mandir board member, a Bal Mandir
executive staff member, a direct supervisor of the caregivers, ICRI staff, and the facilities
contractor. This project management committee implemented many organizational changes to
motivate staff to implement the project.

At the administrative level, staff turnover and collaboration with the board of directors were two significant challenges. Three executive directors changed during the period of the project. It was also initially a challenge to make the board members of NCO/Bal Mandir understand the significance of the Infant Care Facility Improvement Project because they were from diverse backgrounds in terms of their knowledge and skills about child development. Moreover, the actions of the board were often driven by political ideology, more than careful attention to the needs of young children. The project management committee educated the administrators and board of directors regarding model child care and development programs, so that they could

understand the intentions of the Infant Care Facility Improvement Project and how the recommended changes would improve children's health and developmental outcomes.

Initially, there was a significant gap in terms of communication and coordination among the board of directors, management, and service provider levels at NCO/Bal Mandir, resulting in delayed implementation of planned activities and dissemination of contradictory information. To address these issues, several procedures were put in place to encourage open communication and regular dialogue on day-to-day management and caregiving practices. A monthly staff meeting convening the caregivers and administrators was established to approve the project's activities and promote smooth implementation. Several administrators were invited to attend the caregivers' training sessions to share administrative updates and challenges regarding project implementation. The project management team also established a trend in the institution for the administrative staff and board members to talk about child care practices during their meetings, keeping the children's interest as a central focus.

It was challenging to motivate staff and administrators to implement the changes needed to support the project. Internal conflict in the organization related to fears of the organizational hierarchy, frustrations of staff, limited resources, and overstaffing at the executive administrative level. One strategy that was used to encourage staff interest in the project was to invite a consultant from Volunteer Services Overseas (VSO) to lead an organizational assessment of NCO/Bal Mandir and involve staff and administrators, so that they could come to see the types of changes that were needed within the organization. Another strategy was to bring staff and board members on site visits to SOS Children's Villages facilities in the towns of Bhaktapur and Banepa, so that they could observe the same types of caregiving practices that were being implemented at NCO/Bal Mandir.

There were coordination issues with the government as well. The expected communication and linkages on the behalf of project with government entities could not be established to the level desired due to high political instability during the project period. This political instability impacted government bureaucracy in terms of day-to-day management and cooperation with nongovernmental organizations. These challenges at the organizational and governmental levels have impacted the sustainability of the project and limited the level of ownership assumed by the organization over the changes that have been made.

At the caregiver level, there were challenges related to implementation of staff training and staff meetings. Caregivers were under heavy demands, with very busy schedules, limiting their availability. Because of differences in educational and cultural backgrounds, it was difficult to engage all staff members in the training intervention. Most of the caregivers who had worked in the facility for more than 10 years stated that they did not need any training because they thought they had adequate experience. These attitudes were addressed through repeated communication, coordination and rapport building efforts. Training that utilized active learning, including role plays, demonstrations, puppet shows, games, and other activities was found to be most effective for the older caregivers (above the age of 40) rather than lecture-based methods of training. In addition, lack of clear understanding of child care and development among caregivers resulted in delays and confusion during the program implementation process. Most of the older caregivers believed in traditional cultural health care practices such as putting oil in infants' ears and covering them with warm clothes if they showed signs of fever; these behaviors were changed through repeated education and communication of health practices. One of the best cultural practices was that the caregivers would provide massages for the infants from birth to two with mustard oil in the sun every day. The practice of regular infant massage was encouraged, given

its value in lowering anxiety and stress hormones in infants (Field, 1995) and promoting weight gain and other positive health outcomes (Field, 1998).

There were also challenges associated with changing the infrastructure. The building was constructed out of brick and lime, so it was not possible to renovate the walls with cement. The mason had to make repairs with traditional materials. Toys for the babies were stolen by the older children living in the same facility, so toys were attached to cribs with hard plastic rope. Hiring skilled contractors and securing appropriate local materials and supplies for facility renovation (e.g., child friendly cribs, cost effective absorbent diapers, and energy efficient building materials) also proved difficult.

#### **Discussion**

This article reports a case study of an effort to transform an orphanage facility in Nepal caring for infants, toddlers, and preschoolers under the age of 6. The project was conceptualized, developed and implemented to improve health, safety, and development by renovating physical infrastructures and improving caregiving practices. The young children in the facility showed improvements in health and development as a result of the changes to infrastructure and care delivery practices.

There are limitations to this case study. Changes to the institution were not conducted under the rigorous conditions of a study, and there is no control or comparison group. In addition, there is limited documentation on outcomes. Measurement of project outcomes could have been improved by ensuring systemic documentation of the children's health and development at baseline, and then throughout the project's implementation. This documentation could have included records of health (e.g., respiratory illnesses and skin ailments), growth (e.g., head circumference, height, and weight), and developmental milestones (e.g., holding head without

support, using pincer grasp, following simple directions). This case study contributes to the literature on efforts to change residential institutions for children by providing information on the experiences of a project jointly coordinated by an orphanage and a non-governmental organization in Nepal, a country where little information is available on the care of children in orphanages.

Despite the challenging circumstances, internal evaluations conducted among caregivers, management staff, and the central executive board members demonstrate that the project has been very exciting, rewarding, and satisfying to those involved. The project also has received praise from visitors, adoptive parents, and government officials such as the Honorable Mr. Dilendra Prasad Badu, the Minister of Women, Children and Social Welfare (D.P. Badu, personal communication, September 14, 2006). Infrastructure improvements, particularly changes to the children's rooms, turned out better than expected, with excellent work provided by the architect and contractors. Spaces were developed and planned based upon international early childhood best standards. The staff of NCO/Bal Mandir were cooperative during this work and provided all the assistance that was required during the improvement process. The new communication procedures that were implemented during the project have continued to promote regular attention and dialogue about children's needs among caregivers and administrators. The project management committee was very effective in terms of monitoring implementation and outcomes. An important and enduring change was the recognition within the organization of the importance of the caregivers to children's health and development. This was symbolized by administrators' recognition of the new job title of the caregivers of Aamas, or mothers, rather than Aayas, or maids.

Continuing and expanding the work of the Infant Care Facility Improvement Project would require funding, technical assistance, and institutional participation. The next step for the project would be to expand the intervention to the care of older children in the facility and to other orphanages, and to reestablish facilitation of the weekly caregivers' meetings, regular trainings for caregivers, and other assistance to ensure that the facility provides the best possible care to children. The opportunity to expand the project is dependent on raising sufficient funds. Technical guidance and support would also be needed in the areas of international best practices in child care and development, external monitoring and evaluation, organizational development strategies, capacity building, human resource infrastructure development, staff training, and establishing medical support for institutionalized young children. According to administrators at NCO/Bal Mandir, the organization would also need additional service providers and administrators, staff training and buy-in for institutional change, and cooperation from governmental entities, according to Bal Krishna Dangol, Deputy Director NCO/Bal Mandir (personal communication, July 7, 2013). Establishing a joint vision and commitment between ICRI Nepal and NCO/Bal Mandir also would be critical, so that all parties agree upon the project's desired outcomes. This is in concert with the credo of International Child Resource Institute: "We only go where we are invited."

#### References

- Al Jazeera (2011, September 20). *Nepal: Children for sale*. Retrieved from <a href="http://www.aljazeera.com/programmes/101east/2011/09/2011920125119853524.html">http://www.aljazeera.com/programmes/101east/2011/09/2011920125119853524.html</a>
- Bakermans Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2008). Earlier is better: A meta-analysis of 70 years of intervention improving cognitive development in institutionalized children. *Monographs of the Society for Research in Child Development*, 73(3), 279-293.
- Berument, S. K. (2013). Environmental enrichment and caregiver training to support the development of birth to 6-year-olds in Turkish orphanages. *Infant Mental Health Journal*, 34(3), 189-201.
- Committee on the Rights of the Child (1996). *Rights of the child in Nepal*. Retrieved from <a href="http://www.crin.org/docs/resources/treaties/crc.12/Nepal\_NGO\_Report.pdf">http://www.crin.org/docs/resources/treaties/crc.12/Nepal\_NGO\_Report.pdf</a>
- Committee on the Rights of the Child (2012). *Committee on the Rights of the Child examines*report of Nepal on the sale of children and child prostitution. Retrieved from

  <a href="http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=12218&LangID=E">http://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=12218&LangID=E</a>
- Engle, P.L., Groza, V.K., Groark, C.J., Greenberg, A., Bunkers, K.M., & Muhamedrahimov, R.J. (2011). VIII. The situation for children without parental care and strategies for policy change. *Monographs of the Society for Research in Child Development*, 76(4), 190-222.
- Field, T. (1995). Massage therapy for infants and children. *Journal of Developmental & Behavioral Pediatrics*, 16(2), 105-111.
- Field, T. M. (1998). Massage therapy effects. American Psychologist, 53(12), 1270.

- GorkhaptraOnline.com (2012, June 4). *Ncell provides support to Bal Mandir*. Retrieved from <a href="http://www.gorkhapatraonline.com/trn/2012-10-16-04-54-48/2220-ncell-provides-support-to-bal-mandir.html">http://www.gorkhapatraonline.com/trn/2012-10-16-04-54-48/2220-ncell-provides-support-to-bal-mandir.html</a>
- Government of Nepal National Planning Commission Secretariat Central Bureau of Statistics (2012, November). *National population and housing census 2011 (national report)*.

  Retrieved from http://cbs.gov.np/wp-content/uploads/2012/11/National%20Report.pdf
- Groark, C. J., & McCall, R. B. (2011). Implementing changes in institutions to improve young children's development. *Infant Mental Health Journal*, *32*(5), 509-525.
- Groark, C.J., McCall, R.B., Fish, L., & The Whole Child International Evaluation Team (2011).

  Characteristics of environments, caregivers, and children in three Central American orphanages. *Infant Mental Health Journal*, 32(2), 232-250.
- Gunnar, M. R. (2010). Reversing the effects of early deprivation after infancy: Giving children families may not be enough. *Frontiers in Neuroscience*, *4*, 1-2.
- Hakimi Manesh, Y., Mojdehi, H., & Tashakkori, A. (1984). Short communication: Effects of environmental enrichment on the mental and psychomotor development of orphanage children. *Journal of Child Psychology and Psychiatry*, 25(4), 643-650.
- Heron, G., & Chakrabarti, M. (2002). Examining the perceptions and attitudes of staff working in community based children's homes: Are their needs being met? *Qualitative Social Work*, *1*(3), 341-358.
- Hicks, L., Archer, L., & Whitaker, D. (1998) The prevailing cultures and staff dynamics in children's homes: Implications for training. *Social Work Education* 17(3), 361–73.

- International Institute for the Rights of the Child & Creating Possibilities (2010). Awareness-raising on children's rights in Nepal: Dialogue about children's rights. Retrieved from <a href="http://www.childsrights.org/html/documents/wr/wrnepal2010.pdf">http://www.childsrights.org/html/documents/wr/wrnepal2010.pdf</a>
- IRIN Asia (2009, February 3). *NEPAL: Maternal, neonatal mortality "too high."* Retrieved from <a href="http://www.irinnews.org/report/82714/nepal-maternal-neonatal-mortality-too-high">http://www.irinnews.org/report/82714/nepal-maternal-neonatal-mortality-too-high</a>
- The Kathmandu Post (2012, June 14). *Inter-country adoption cases fall*. Retrieved from <a href="http://www.ekantipur.com/the-kathmandu-post/2012/06/13/metro/inter-country-adoption-cases-fall/235998.html">http://www.ekantipur.com/the-kathmandu-post/2012/06/13/metro/inter-country-adoption-cases-fall/235998.html</a>
- Kim, T. I., Shin, Y. H., & White-Traut, R. C. (2003). Multisensory intervention improves physical growth and illness rates in Korean orphaned newborn infants. *Research in Nursing and Health*, 26, 314–319.
- MacLean, K. (2003). The impact of institutionalization on child development. *Development and Psychopathology*, 15, 853–884.
- McCall, R. B., Groark, C. J., Fish, L., Harkins, D., Serrano, G., & Gordon, K. (2010). A socioemotional intervention in a Latin American orphanage. *Infant Mental Health Journal*, 31(5), 521-542.
- Mitrataa Foundation (2011, May 17). *Bal Mandir revisited—Be careful what you wish for!*Retrieved from <a href="http://mitrataa.blogspot.com/2011/05/bal-mandir-revisited-be-careful-what.html">http://mitrataa.blogspot.com/2011/05/bal-mandir-revisited-be-careful-what.html</a>
- Nepal Children's Organization [NCO] (2011). *NCO at a glance*. Retrieved from <a href="http://www.nconepal.org/pages/pages/nco-at-a-glance">http://www.nconepal.org/pages/pages/nco-at-a-glance</a>
- O'Connor, T. G., Rutter, M., & the English and Romanian Adoptees Study Team (2000).

  Attachment disorder behavior following early severe deprivation: Extension and longitudinal

- follow-up. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39, 703–712.
- Population Reference Bureau (2011). *PRB the world's women and girls 2011 data sheet*.

  Retrieved from http://www.prb.org/DataFinder/Topic/Rankings.aspx?ind=242
- Poudel, A. (2011, September 16). Bal Mandir stops taking new children. *Republica*. Retrieved from <a href="http://pearadoptinfo-nepal.blogspot.com/2011/09/bal-mandir-stops-taking-new-children.html">http://pearadoptinfo-nepal.blogspot.com/2011/09/bal-mandir-stops-taking-new-children.html</a>
- Rosas J., & McCall R.B. (2010). *Characteristics of institutions, interventions, and resident children's development*. University of Pittsburgh Office of Child Development; Pittsburgh, PA.
- Russia Today (2012, March 3). *Cashing in on Nepal's youth*. Retrieved from <a href="http://rt.com/news/orphanage-child-trafficking-nepal-761/">http://rt.com/news/orphanage-child-trafficking-nepal-761/</a>
- Rutter, M. (1972). Maternal deprivation reassessed. London: Penguin.
- Sinha, A.K., & Malla, S.P. (2004). Philanthropy and law in Nepal. In M. Sidel & I. Zaman (Eds.)

  Philanthropy and law in South Asia: Recent developments in Bangladesh, India, Nepal,

  Pakistan and Sri Lanka (pp. 183-244). Retrieved from

  <a href="http://asianphilanthropy.org/APPC/philanthropy-law-in-SouthAsia-2004.pdf">http://asianphilanthropy.org/APPC/philanthropy-law-in-SouthAsia-2004.pdf</a>
- Smyke, A. T., Koga, S. F., Johnson, D. E., Fox, N. A., Marshall, P. J., Nelson, C.A., Zeanah, C., & 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.

- Sparling, J., Dragomir, C., Ramey, S. L., & Florescu, L. (2005). An educational intervention improves developmental progress of young children in a Romanian orphanage. *Infant Mental Health Journal*, 26(2), 127-142.
- St. Petersburg-USA Orphanage Research Team (2008). The effects of early social-emotional and relationship experience on the development of young orphanage children. *Monographs of the Society for Research in Child Development*, 73(3), vii–295.
- Taneja, V., Aggarwal, R., Beri, R. S., & Puliyel, J. M. (2005). Not by bread alone project: A 2-year follow-up report. *Child: Care, Health and Development*, *31*(6), 703-706.
- Tirella, L. G., Chan, W., Cermak, S. A., Litvinova, A., Salas, K. C., & Miller, L. C. (2008). Time use in Russian baby homes. *Child: Care, Health and Development*, *34*(1), 77-86.
- UNICEF Nepal, (n.d.). *Legislation and policies for child protection*. Retrieved from <a href="http://www.unicef.org/nepal/5522\_Legislation\_and\_policies\_for\_child\_protection.htm">http://www.unicef.org/nepal/5522\_Legislation\_and\_policies\_for\_child\_protection.htm</a>
- United Nations Children's Fund [UNICEF] (2003). *Nepal statistics*. Retrieved from <a href="http://www.unicef.org/infobycountry/nepal\_nepal\_statistics.html#107">http://www.unicef.org/infobycountry/nepal\_nepal\_statistics.html#107</a>
- United Nations Children's Fund [UNICEF] (2006). Africa's orphaned and vulnerable

  generations: Children affected by AIDS. Retrieved from:

  <a href="http://www.unicef.org/publications/files/Africas\_Orphaned\_and\_Vulnerable\_Generations\_C">http://www.unicef.org/publications/files/Africas\_Orphaned\_and\_Vulnerable\_Generations\_C</a>

  <a href="http://www.unicef.org/publications/files/Africas\_Orphaned\_and\_Vulnerable\_Generations\_C">http://www.unicef.org/publications/files/Africas\_Orphaned\_and\_Vulnerable\_Generations\_C</a>

  <a href="http://www.unicef.org/publications/files/Africas\_Orphaned\_and\_Vulnerable\_Generations\_C">http://www.unicef.org/publications/files/Africas\_Orphaned\_and\_Vulnerable\_Generations\_C</a>
- United Nations Children's Fund [UNICEF] (2009). The state of the world's children special edition: Celebrating 20 years of the Convention on the Rights of the Child. Retrieved from: http://www.unicef.org/rightsite/sowc/pdfs/SOWC\_Spec%20Ed\_CRC\_Main%20Report\_EN\_090409.pdf

- United States suspends processing of adoptions of abandoned children from Nepal (2010, October). *The American Journal of International Law*, 104(4), 661-662.
- van IJzendoorn, M. H., Luijk, M. P., & Juffer, F. (2008). IQ of children growing up in children's homes: A meta-analysis on IQ delays in orphanages. *Merrill-Palmer Quarterly*, *54*(3), 341-366.
- Vashchenko, M., Easterbrooks, M., & Miller, L. C. (2010). Becoming their mother: Knowledge, attitudes, and practices of orphanage personnel in Ukraine. *Infant Mental Health Journal*, 31(5), 570-590.
- Vorria, P., Papaligoura, Z., Dunn, J., van IJzendoorn, M. H., Steele, H., Kontopoulou, A., & Sarafidou, Y. (2003). Early experiences and attachment relationships of Greek infants raised in residential group care. *Journal of Child Psychology and Psychiatry*, 44(8), 1208-1220.
- World Bank (2013). *Mortality rate, infant (per 1,000 live births), 2005*. Retrieved from <a href="http://data.worldbank.org/indicator/SP.DYN.IMRT.IN?page=1">http://data.worldbank.org/indicator/SP.DYN.IMRT.IN?page=1</a>
- Yates, J. A., & Pandey, P. (2006). Medical problems of internationally adopted children presenting to a travel medicine clinic in Nepal. *Journal of Travel Medicine*, *13*(6), 381-383.

Table 1

### Partial list of program activities for two interventions

Intervention	Program activities
Improve facility	1. Install portable wash basin system, air conditioner, heaters,
infrastructure and make	humidifiers, and air ionizer to maintain suitable climate within
spaces more safe, sanitary,	the care units
and child-friendly	2. Upgrade electricity system to ensure adequate lights in the
	units
	3. Refurbish kitchen infrastructure and dining facilities for
	proper sanitation and hygiene
	4. Install crawling floor and develop zones of activities in the
	care units for adequate stimulation of young children
Provide training and	1. Develop individual profile of caregivers to understand their
mentoring for 18 caregivers	level of knowledge and skills in service delivery
in early childhood	2. Provide innovative training models, training methodologies,
development and effective	audio video aids, materials, handouts and training resources
caregiving practices	3. Conduct initial 6-8 days training and receive feedback on
	outcomes to continue improvements in service delivery process
	4. Develop a system to mentor/coach the caregivers with
	caregivers from SOS Children's Villages