



NURTURING CARE
FOR EARLY CHILDHOOD DEVELOPMENT

Nurturing care for every newborn



What is nurturing care?

What happens during early childhood (pregnancy to age 8) lays the foundation for a lifetime. We have made great strides in improving child survival, but we also need to create the conditions to help children thrive as they grow and develop. This requires providing children with nurturing care, especially in the earliest years (pregnancy to age 3).

Nurturing care comprises five interrelated and indivisible components: good health, adequate nutrition, safety and security, responsive caregiving and opportunities for early learning. Nurturing care protects children from the worst effects of adversity and produces lifelong and intergenerational benefits for health, productivity and social cohesion.

Nurturing care happens when we maximize every interaction with a child. Every moment, small or large, structured or unstructured, is an opportunity to ensure children are healthy, receive nutritious food, are safe and learning about themselves, others and their world. What we do matters, but how we do it matters more.

When cared for in a nurturing environment, babies not only survive, they are also helped to thrive. However, too many infants are deprived of their right to receive nurturing care, including when they require inpatient hospital care.

Every year an estimated 140 million babies are born, and among these about 30 million need inpatient hospital care with 8 – 10 million requiring neonatal intensive care (1). Since 1990, global newborn mortality has more than halved, but in 2019 an estimated 2.4 million newborns still died in the first month after birth (2). Babies who are born prematurely, have low

birth weight or experience birth complications are at the greatest risk, not only of death but also of lifelong disability. Progress in reducing newborn mortality will be compromised unless investments are also made in nurturing care.

Birth is the critical transition for every newborn from being nurtured in the womb to being cared for in the outside world. Essential newborn care - with immediate skin-to-skin contact, warmth, hygiene, early initiation of exclusive breastfeeding and zero separation of caregiver and newborn - is designed to make this transition as smooth as possible and provide the infant with a nurturing environment in the first minutes and hours after birth, needed for the brain and body to grow and develop (3).

This Thematic Brief summarizes why nurturing care is essential for every newborn. It outlines the five components of nurturing care and contains examples of practical actions to create and strengthen nurturing environments for newborns, including those who are born too soon, small or sick.

The first month of life is a once-in-a-lifetime opportunity for children to begin the journey of unlocking their full potential. Policy-makers, health care managers, health care providers and parents can lead the transformation that is needed for every newborn to make the best start in life. In this Brief, six case studies illustrate what can be done to create a nurturing environment and enable caregivers to provide nurturing care for their newborns, starting in the health facility and continuing at home.

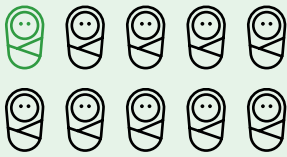
The importance of nurturing care for newborns to survive and thrive

Neurodevelopment starts in pregnancy and rapidly accelerates after birth. By the end of 28 weeks of gestation the growing fetus can hear, and from birth babies can recognize their mother's voice.

Neural connections are formed in the brain at an astounding speed in the early days and weeks after birth, creating the pathways for lifelong sensory functions such as hearing, seeing, speaking and understanding the environment. For this to happen, a newborn's brain needs to receive appropriate stimuli from the close interaction that newborns have with their caregivers and the environment, starting immediately

Facts and figures

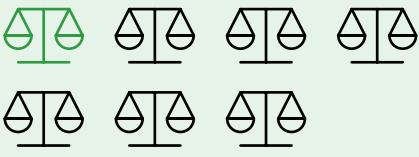
Globally, more than **80%** of births take place in a health facility with a skilled attendant (4).



One of every ten infants is born preterm (5).

Direct causes of death are prematurity, birth complications, neonatal sepsis and congenital anomalies.

An estimated **2.4 million** newborns die every year, mostly from preventable causes (2).



One of every seven infants is born with a low birth weight (6).

Low birth weight contributes to 60 – 80% of all newborn deaths (7).

after birth. When infants experience loving care from their parents and other caregivers, they have the best chance to survive and thrive, whether they are in a health facility or at home. But when newborns are deprived of such care, for example through separation from their caregivers or exposure to stress or pain, they become more vulnerable, with increased risk of dying or disability, including learning, visual and hearing problems. Therefore, nurturing care is vital for every newborn (1).

During pregnancy, nurturing care is supported by a minimum of eight antenatal contacts with health professionals. Each contact provides an opportunity for counselling the woman and her family regarding healthy diet, prevention of tobacco and substance abuse, birth planning and breastfeeding promotion, as well as providing mental health support. Optimal antenatal care includes iron and folate supplementation, early ultrasound, where available, for gestational age assessment and early identification and management of risk factors for preterm birth including infections (8).

High quality care during childbirth positions the mother to provide nurturing care to her newborn. It involves the presence of a birth companion of her choice, and the avoidance of unnecessary procedures, including caesarian section. Evidence shows that a traumatic birth experience can affect a mother's ability to bond with her baby and increase the risk of perinatal depression. Ensuring a positive birthing experience for every pregnant woman is a key aspect of supporting nurturing care, and is often best achieved through midwife-led care (8).



Photo credit: © USAID/Amy Cotter

In the first month of life, all five components of nurturing care need to be supported for every newborn.

Good health involves preventing and managing illness, including provision of evidence-based high quality care for sick or small newborns.

Adequate nutrition means optimizing exclusive breastfeeding or breast-milk feeding, including for very small and sick babies.

Safety and security means warmth, practising good hygiene, minimizing stress, and enabling the primary caregiver, most commonly the mother, to be with the infant in a quiet environment.

Early learning involves stimulating the baby's brain gently, through touch, voice or simply close contact.

Responsive caregiving means being aware of the newborn's signals, which can indicate readiness for a feed, pain or stress, and responding to them appropriately.



What are the nurturing care components?

GOOD HEALTH



Refers to health and well-being of children and their caregivers. Why both? We know that the physical and mental health of caregivers can affect their ability to care for the child.

ADEQUATE NUTRITION



Refers to maternal and child nutrition. Why both? We know that the nutritional status of the mother during pregnancy affects her health and well-being and that of her unborn child. After birth, the mother's nutritional status affects her ability to provide adequate care to her young child.

SAFETY AND SECURITY



Refers to safe and secure environments for children and their families. Includes physical dangers, emotional stress, environmental risks (e.g. pollution), and access to food and water.

OPPORTUNITIES FOR EARLY LEARNING



Refers to any opportunity for the infant or child to interact with a person, place, or object in their environment. Recognizes that every interaction (positive or negative) or absence of an interaction is contributing to the child's brain development and laying the foundation for later learning.

RESPONSIVE CAREGIVING



Refers to the ability of the caregiver to notice, understand, and respond to their child's signals in a timely and appropriate manner. Considered the foundational component because responsive caregivers are better able to support the other four components.

Creating a nurturing environment for all newborns

When health care providers partner with families to provide nurturing care, more newborns will survive and receive better care in the health facility and at home to ensure they can thrive.

A nurturing environment is enabled when maternal and newborn care services are organized around core principles of dignity and respect, information sharing, participation and collaboration.

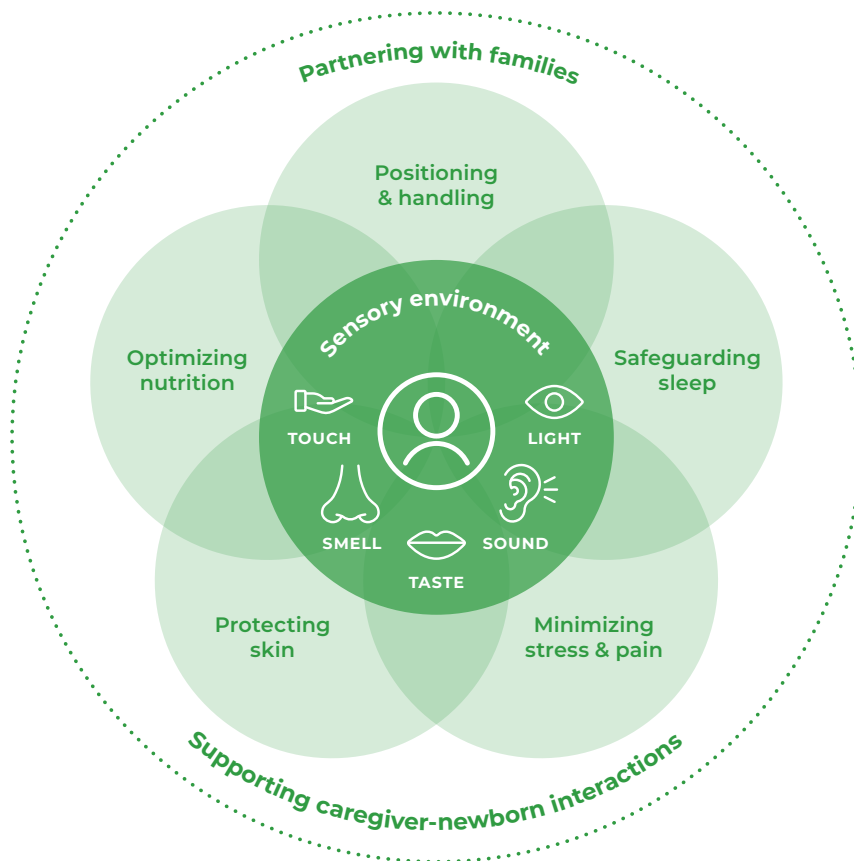
One approach is *infant- and family-centred developmental care* (IFCDC), which creates a nurturing environment to respond to each baby's needs and minimizes harm (Figure 1). IFCDC reduces stress for the newborn and the parents, increases bonding, benefits the child's feeding and growth, supports the child's neurodevelopment, helps to prevent disabilities, and facilitates early discharge from inpatient care.

Developmentally supportive elements of newborn care are optimizing nutrition, positioning and handling, safeguarding sleep, minimizing stress and pain and protecting the skin (9). This approach creates a sensory environment to respond to each infant's needs and minimize harm, and is especially important for small or sick babies who need inpatient care.

Provide early essential newborn care

Newborn care begins in the first seconds, minutes and hours after birth and encompasses thermal care, immediate skin-to-skin contact with the mother, keeping mother and baby together with zero separation even after a caesarean birth, identification of small or sick newborns for special care, early initiation of exclusive breastfeeding or breast-milk feeding, hygiene and handwashing, dry cord care, delayed bathing, and immunization.

Figure 1. Components of infant- and family-centred developmental care (9)



Evidence shows that adherence to recommended essential newborn care practices substantially reduces newborn mortality risks and supports neurodevelopment (10).

Engage parents as partners

Full participation of the family in newborn care begins immediately after birth with skin-to-skin contact of mother and baby for at least one hour after both vaginal and caesarean births. This contact establishes a physical and emotional environment for mother and baby that promotes physiological stability and encourages bonding. During this precious time, many babies will start searching for their mother's milk, and early breastfeeding is initiated. Fathers should not be forgotten as equal parents and, with other family members, should receive attention and guidance on how to engage in the care of their infant.

Implement the Ten Steps to Successful Breastfeeding

The Baby-friendly Hospital Initiative (11) and the Ten Steps to Successful Breastfeeding support a nurturing environment in maternity facilities and equip caregivers with the confidence and skills to provide nurturing care for their newborn.

Promote exclusive breastfeeding

The importance of early initiation of exclusive breastfeeding for a newborn's health and development cannot be overestimated. Breast milk contains all the nutrients needed in the first 6 months of life for most babies, including those who are small or sick and may require assisted feeding, including cup and nasogastric feeding. Breastfeeding also protects against common childhood illnesses, and reduces the risk of overweight and obesity in childhood and adolescence. Yet, current estimates are that only 42% of babies are exclusively breastfed in the first 6 months of life (4). When small or sick babies require supplementary feeding the use of donor human milk from safe and affordable milk-banking facilities is recommended; these may need to be set up.



Country-wide scale-up of family participatory care

A model of infant- and family-centred care was developed and evaluated through a randomized controlled trial in a tertiary care setting, the neonatal intensive care unit of Atal Bihari Vajpayee Institute of Medical Sciences and Dr Ram Manohar Lohia Hospital, New Delhi, India. A culturally sensitive, structured audiovisual tool was developed to enable parent attendants to deliver a limited package of care to their sick neonates during hospitalization. The approach aided care delivery by staff, improved breastfeeding rates and reduced the duration of hospitalization, without an increase in nosocomial infections. It was found to be feasible and acceptable across diverse cultural, socioeconomic and demographic caregiver profiles.

The Ministry of Health piloted the approach in public health settings in 2014. Finding readiness for and acceptability of the innovation, Family Participatory Care (FPC) was approved for country-wide scale-up. National operational guidelines and a training package were released in 2017. An impact assessment of FPC in 69 district Special Newborn

Care Units showed a range of positive practices. In the units, enabling logistics, improved provider skills, parent participation in caregiving and improved follow-up after discharge were observed. Home care showed increased practice of kangaroo mother care (KMC) and rates of exclusive breastfeeding, more play and stimulation activities and better detection of danger signs and care-seeking. FPC was shown to improve quality of sick newborn care at facility level, and has also improved family and community practices for child survival, growth and development.

References: Sarin E, Maria A. Acceptability of a family-centered newborn care model among providers and receivers of care in a public health setting: a qualitative study from India. *BMC Health Services Research*. 2019;19(1):184.

Verma A, Maria A, Pandey RM, Hans C, Verma A et al. Family-centered care to complement care of sick newborns: a randomized controlled trial. *Indian Pediatrics*. 2017;54(6):455-9.



Promote responsive caregiving and early learning activities

When caregivers hold their newborn baby often, make regular eye contact and gently talk or sing, it becomes easier for them to observe the baby's signals and recognize when their baby is ready to feed or sleep. Learning to recognize, understand and respond to these cues with support from health care providers increases parents' confidence and ability to continue responding to the newborn's changing needs at home. Such support can be especially important for first-time parents.

Support caregiver mental health

Parents of newborns can become tired and overwhelmed and uncertain how to best care for their baby. Providing support, including paying attention to mental health, is important as one in six women worldwide experiences signs of depression postnatally which affects her capacity to care for her baby (12). All parents appreciate being asked how they are doing. When health care providers have empathetic listening skills, they can give simple and helpful suggestions for any emotional problems expressed, such as focusing on the relationship with the infant, ensuring adequate nutrition, enough sleep, relaxation and physical activity.

Provide postnatal care after discharge from the facility

Ongoing postnatal care is vital throughout the first month to ensure the mother-baby pair remains healthy in all aspects (physical, nutritional, mental and social). After an uncomplicated vaginal birth in a health facility, healthy mothers and newborns should receive care in the facility for at least 24 hours after birth. At least three additional postnatal contacts are recommended for all mothers and newborns, on day 3 (48–72 hours), between days 7–14 and six weeks after birth (13).

Integrated care for mother and baby is key, whether at home or in clinic. Such care should include assessment of signs of illness in the mother and the baby, attention

to thermal care, cord care and immunization, and support for exclusive breastfeeding. Counselling on responsive caregiving, communication and play with the newborn, and assessment and support for maternal mental health are two elements of postnatal care that are essential but sometimes forgotten. Additional follow-up visits may be needed for newborns who experienced complications or are born in families experiencing adversities.

Nurturing care for small and sick newborns

Every year around 20 million low-birth-weight (< 2500 g) babies are born, among whom 15 million are preterm (5).

Furthermore, an estimated 6.9 million babies are affected by possible serious bacterial infection, or sepsis (14).

Prematurity and sepsis cause over one half of all newborn deaths and, along with intrapartum events and congenital anomalies, are the leading causes of newborn deaths (4).

Being born too soon or too small, or being sick, necessitates extra care for these more vulnerable newborns. This care is best provided directly by the parents, in close partnership with health care professionals. About two thirds of these small or sick newborns do not need intensive care, but extra support for feeding, warmth and infection prevention, all provided in a nurturing environment.

Promote zero separation

Bonding between newborn and parents is impeded by unnecessary separation, especially for small or sick newborns. Parents who are separated from their infants are more likely to experience anxiety and feel helpless compared to

those who participate as partners in the care of their baby. Being together enables them to learn how to respond to their infant's needs. Continuous family access, with rooming-in and opportunity to practise skin-to-skin contact, is the best solution to ensure that parents are fully enabled to provide nurturing care of their newborn at all times.

Implement developmentally supportive inpatient care

The hospital environment influences the experience of care for newborns and their families when inpatient care is needed. The baby responds to sensory stimuli with physiological changes to heart rate and oxygenation saturations which may affect brain development. Stimuli such as bright lights, noise and painful procedures can be overwhelming for newborns with negative impact. Stimuli appropriate to the newborn's condition and stage of development, such as gently massaging the baby, softly talking or singing, and being in skin-to-skin contact, result in positive changes in vital signs, and the newborn engaging in eye contact and controlled limb movements.

The Baby-friendly Hospital Initiative has been adapted for care of small and sick babies (15) and is aligned with the standards of the IFCDC approach (Figure 2). It promotes that parents be engaged directly in the provision of routine care and practise frequent skin-to-skin contact or KMC. Exclusive breastfeeding or breast-milk feeding is supported.

IFCDC also reduces negative stimulation from loud noise and bright lights, clusters medical procedures in time, and respects the baby's sleep cycles in scheduling care and feeding. It enables maternal presence during interventions, avoids pressure and noxious substances on the baby's skin, and has protocols for emollients and careful use of adhesives for newborns. Families are facilitated in providing their baby with care that is attuned to different stages of development.

SWEDEN:

Zero separation of small and sick babies and their caregivers

In the referral hospital of Uppsala University, the neonatal intensive care unit has a strong IFCDC ethos. As the lead neonatal nurse says, “what you do often, you will be good at”. Zero separation is practised directly after vaginal and caesarean births and even for preterm infants, who can be given respiratory support and have skin-to-skin contact with their mothers in the delivery room.

Hospital teams have looked for practical solutions to keep mother and baby together. Infants who are not very ill are cared for on the maternity ward, but if they need to be transferred to the neonatal intensive care unit, families find a welcoming environment. Each cot has a bed for a parent next to it, and whole family togetherness is enabled through family rooms and absence of visiting restrictions for friends and relatives. A baby's older sibling can even stay on the unit, with school and play areas available. The role of nurses has changed from directly caring for the newborn themselves to educating and supporting parents to do so. Skin-to-skin care is strengthened by

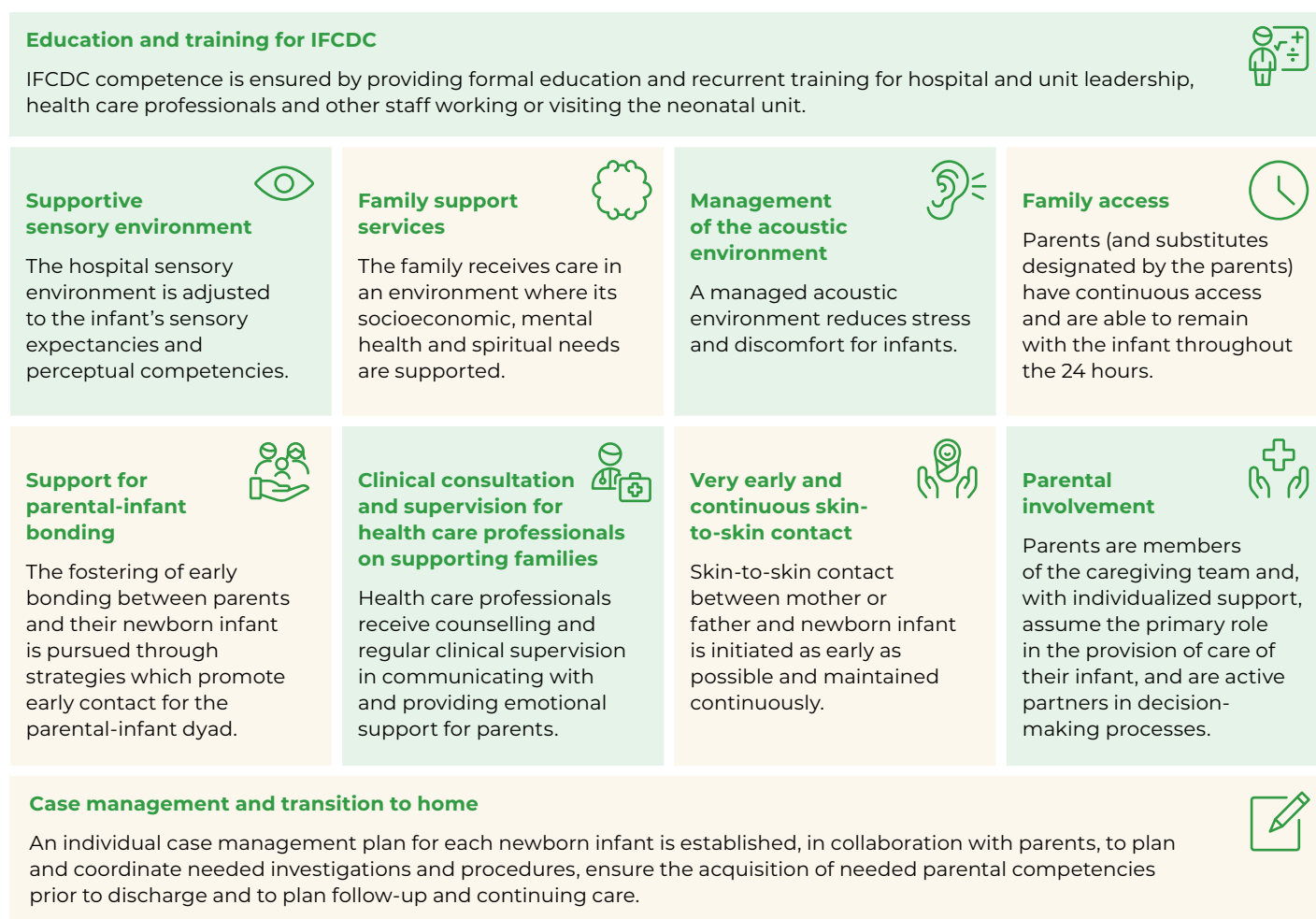
not using clothing on the infant, as this was found to be a major obstacle. The IFCDC approach is supported by research findings as well as Swedish parental benefits, which mean that when a child needs intensive care, both parents can dedicate their time to the care of the baby as they do not need to work during the hospital stay. Maternity and paternity leave begin after the child is discharged. Strong support from society is needed to realize the right for all infants, even in intensive care, to have at least one parent always with them. In January 2020, Sweden was one of the first countries in the world to go beyond ratification of the United Nations Convention on the Rights of the Child to its full incorporation into Swedish law.

Reference: Roué J-M, Kuhn P, Maestro ML, Maastrup RA, Mitanché D et al. Eight principles for patient-centred and family-centred care for newborns in the neonatal intensive care unit. *Arch Dis Child-Fetal and Neonatal* Edition. 2017;102(4):F364-8.



Photo credit: © Karolinska University Hospital, Stockholm, Sweden/Stina Klemming

Figure 2. Standards for infant- and family-centred developmental care



Adapted from: European Foundation for the Care of Newborn Infants (10).

Support kangaroo mother care

KMC is a very effective way of providing all components of developmentally supportive care for preterm and low-birth-weight babies, even when they are sick (16). It includes continuous or prolonged skin-to-skin contact of the baby with the mother, father or other primary caregiver; supports exclusive breastfeeding or breast-milk feeding; and facilitates early discharge from a health facility.

KMC strengthens parents' positive perception of their small infant, their ability to detect and respond to their infant's cues, and their confidence in giving care. It provides an appropriate sensory environment for the baby through soft touch, hearing caregivers' voices and gentle stimulation. Newborns experience less hypothermia, less infection, more stable breathing and better sleep.

KMC benefits families emotionally and even financially. It is associated with increased newborn survival, improved neurodevelopment and decreased length of hospital stay. Caregivers experience less anxiety, resulting in a lower incidence of postpartum depression. The cognitive, behavioural and social benefits for the infant are long-lasting, including better school attendance, less antisocial behaviour, and higher hourly wages. These effects are magnified with a longer duration of skin-to-skin contact and the participation of fathers.

KMC is usually initiated in health facilities, but it has also been successfully supported by trained providers in the community. After discharge, KMC can be continued at home with adequate support and follow-up. Neonatal intensive care units can safely support KMC, as part of infant- and family-centred care (17).

Transform neonatal intensive care units

Engaging caregivers in routine care when newborns need special or intensive care is very important. These infants are particularly vulnerable, and their immature brains and bodies benefit from the proximity and loving care of the mother, father and/or other caregivers. Rooming-in of the caregiver must become the norm while aiming towards zero separation. Mother-newborn couplet care, meaning that the mother receives her own medical care while together with the baby in neonatal intensive care, has been practised in Scandinavia (18). New evidence from Ethiopia, Ghana, India, Malawi and Nigeria shows that this approach is also feasible and highly effective in low- and middle-income countries (17).

Supporting caregivers when their newborn is in special or intensive care includes encouraging them to focus on what they can and are able to provide, such as comfort, connection, stimulation and emotional security. With dedicated support from health care providers, caregivers quickly learn how to care for their small or sick baby: changing diapers, breast-milk feeding, holding the baby in skin-to-skin contact, and providing nurturing care when the baby is awake and active. This involvement will build caregivers' confidence and fosters bonding. Peer support can be provided by more experienced mothers on the ward.

Facilitate a smooth transition to care at home

When parents experience and practise nurturing care in hospital, they build skills and confidence to better equip them to care for their infant at home. An individualized case management plan, including the importance and timing of any follow-up investigations and procedures, should be established in collaboration with parents and primary health care providers in the community. Parents should feel ready to provide all the routine continuing care needed for their child prior to discharge. Family support is crucial to protect the mother from becoming over-tired, and therefore other caregivers should be involved in preparing for the transition to care at home.

Strengthening the health system

Build an enabling environment for developmentally supportive inpatient care

Providing developmentally supportive care requires established family spaces, beds, chairs, water, toilets, food or places to cook, and laundry facilities to enable mothers, fathers and other family caregivers to stay with their newborns. Facilities for expression and safe storage of breast milk, utensils and support for cup feeding, and access to donor breast milk, where feasible and appropriate, are also needed. In many settings, re-organizing ward spaces must be part of a renewed commitment to meet requirements for nurturing care.

Invest in the health workforce

Even when faced with health workforce challenges, countries can take steps to strengthen human resources for newborn health. Investment is needed in a stable team of medical, nursing and allied health professionals to create an enabling environment (79). In special and intensive care units, teams need to include staff with specialized neonatal skills and a good understanding of the physiological, psychosocial,

emotional and spiritual needs of these newborns and their families. Building collaborative partnerships between parents and health workers depends on mutual respectful interaction, active listening and careful communication, and shared decision-making, with the goal of increasing parents' confidence to become the primary caregivers. Health care professionals themselves also need functioning support systems and a positive and healthy working culture with supportive supervision and adequate time to enable them to be motivated to provide IFCDC, including emotional support.

Ensure appropriate follow-up care

Monitoring growth and development and screening for specific conditions, including vision and hearing, are very important for at-risk babies after neonatal special or intensive care, and appointments should be scheduled. Ensuring access to social services, paid leave and peer support will enhance a positive experience for parents, as will the presence of a primary health care provider who can facilitate the availability of care from relevant disciplines, as and when needed. Where community health workers are well integrated into a primary health care system, they can play a critical role in providing home-based support. Peer support has also been shown to enhance caregivers' ability and confidence to care for their vulnerable baby. It can be offered individually or in support groups, in-person or through digital means. Parent organizations whose mission it is to improve care for small and sick newborns are effectively an important driver of progress in quality of newborn care and provide useful resources for concerned parents.

Update the basic benefit package for universal health coverage

To implement all provisions of the IFCDC approach and increase access to these services, the relevant interventions should be included in basic benefit packages for primary health care and universal health coverage. This will enable public and private health care providers to cover the costs of care for the newborn-caregiver pair and protects families from incurring financial hardship.



PHILIPPINES:

Care for small and sick babies in national health insurance benefit package

KMC was first implemented at the Dr. Jose Fabella Memorial Hospital in Manila in 1999, after a neonatologist and a neonatal intensive care unit nurse received training from the Colombian Kangaroo Foundation. The hospital director's commitment was the first step towards the adoption of a policy to provide KMC for preterm and low-birth-weight newborns.

Following the initial training, the creation of a KMC Committee at the hospital to oversee and manage programme implementation led to: 1) training a core team of trainers who trained all other health care and allied professions staff; 2) coaching of staff on the job; 3) monitoring and evaluating through research and audits; and 4) development of a hospital policy. A memorandum of understanding with the Manila City Health Department facilitated provision of post-discharge care for those practising KMC through community involvement in 2004. Other health facilities in the city duplicated these actions, and the first network of KMC services was formalized in 2005.

Cognizant of the impact of KMC on the survival of small and sick newborns, the lead KMC trainer pursued advocacy through the creation of the Philippines' Kangaroo Mother Care Foundation in 2008. The process of establishing facility-based KMC programmes with community linkages, and granting recognition and accreditation of facilities as KMC Centres of Excellence was replicated in all regions of the Philippines. The Foundation initially was an independent nongovernmental organization, but from 2013 onwards was supported by professional societies, global development partners and the Ministry of Health. KMC was incorporated into the *Care for small babies* package of interventions by the Ministry of Health in 2016 which led to its adoption into the national health insurance benefit package for preterm and small babies in 2017.

Read more about KMC in the Philippines at: <http://www.kangaroomothercareph.org>.



MULTI-COUNTRY STUDY:

Immediate kangaroo mother care saves lives

A randomized, controlled trial conducted in five hospitals in Ghana, India, Malawi, Nigeria, and the United Republic of Tanzania has illustrated that starting KMC immediately after birth for babies with a birth weight between 1.0 and 1.799 kg reduced mortality by 25%. These very small babies were cared for in neonatal intensive care units by their mothers in close coordination with the medical staff. Referred to as mother-neonatal couplet care, the study showed that it is possible to change the hospital environment to enable mothers to be with their babies to provide continuous KMC, and receive their own post-birth care without being separated from their baby. When a mother was unwell, another primary caregiver, such as the father, was engaged to ensure that the provision of kangaroo care continued until the mother was able to care for her baby again. Using these results, it is estimated that starting KMC immediately after birth has the potential to save up to 150 000 more lives each year, compared with the current recommendation of starting it only once a baby is stable. For more information, read the publication (17) at: <https://www.nejm.org/doi/full/10.1056/NEJMoa2026486> and <https://www.who.int/news/item/27-05-2021-kangaroo-mother-care-started-immediately-after-birth-critical-for-saving-lives-new-research-shows>.



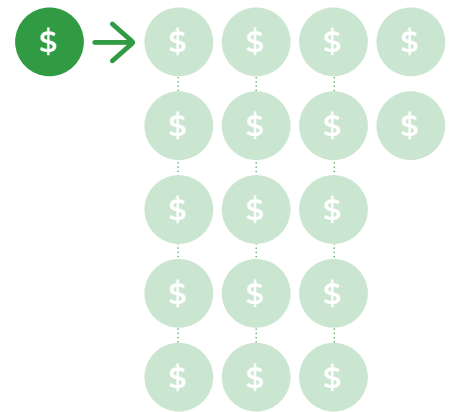
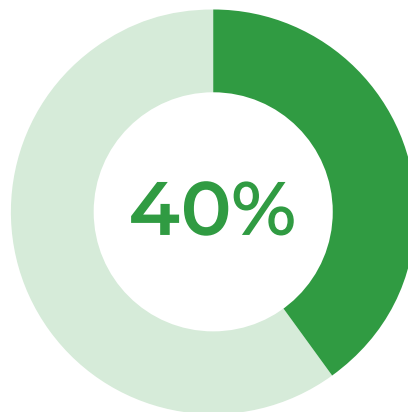
Photo credit: © Fundación Canguro/Kangaroo Foundation, Bogotá, Colombia

Did you know?

More than

80%

of a human brain
is formed in the
first 3 years.



The care and
support parents
and other caregivers
provide children in
the earliest years is
critical for healthy
brain development.

In low- and middle-income countries, 250 million children younger than 5 years – more than 40% of children – are at risk of not reaching their developmental potential because of poverty and neglect ⁽²⁰⁾.

Every additional US\$ 1 invested in early childhood development can yield a return in economic and social benefits of between US\$ 6 and US\$ 17 ⁽²¹⁾.

0-3

The human brain
develops faster
from conception
to age 3 years than
at any other time.



In the first years of life, parents, family members, and other caregivers are the closest to the young child and thus the best providers of nurturing care. In order to provide caregivers with time and resources to provide nurturing care, policies, services, and community support need to be in place.



Nurturing care improves health, productivity and social cohesion throughout a lifetime, and the benefits continue into the next generation.

Nurturing, protecting
and supporting
caregivers
and children are
essential to achieve
the Sustainable
Development Goals.

LEBANON:

Innovating for nurturing care in neonatal intensive care units

Greater family involvement in caring for preterm and sick newborns at high risk is being promoted in neonatal intensive care units of the American University of Beirut Medical Center in Lebanon. Instead of being separated, mothers and fathers participate in routine hospital care of their babies. Characteristics of the family-friendly unit include:

- All infants who require incubator care lie in a position to simulate being in-utero.
- The unit environment is calm, with dim lighting and quiet times.
- Mothers provide their breast milk as soon as possible.
- Babies achieve earlier suckling through non-nutritive stimulation of the mouth.
- Mothers and fathers learn to gently carry their infants by using their hands to mimic holding them.
- Once their infants are stable, mothers and fathers hold them skin-to-skin as much as possible.
- Mothers and fathers learn to provide routine care for their infants and talk and sing quietly to them.
- Newborns receive individualized developmental care in addition to the monitoring of their physical development.
- A family room for mothers to rest is adjacent to the unit.

Following this approach, based on the Newborn Individualized Developmental Care and Assessment Program, has led to more involvement and bonding of parents with their infants, and parents have become responsive to the subtle cues of their weak infants. The attitudes of nurses and doctors are positive, supporting the changes towards family-based care in the unit. The staff of the unit are following the effects of this approach on infants' development. They expect to find less developmental delay in the infants with the participation of their families in early care and stimulation, compared to infants cared for in a more traditional task-oriented unit.

References: Als H, McAnulty GB. The newborn individualized developmental care and assessment program (NIDCAP) with kangaroo mother care (KMC): comprehensive care for preterm infants. *Current Women's Health Reviews*. 2011; 7(3):288-301.

Charafeddine L, Masri S, Sharafeddin SF, Kurdahi Badr L. Implementing NIDCAP training in a low-middle-income country: comparing nurses and physicians' attitudes. *Early Hum Dev*. 2020;147:105092.



Photo credit: © American University of Beirut, Beirut, Lebanon/Lama Charafeddine

COLOMBIA:

Maintaining kangaroo mother care during the COVID-19 pandemic



The *Fundación Canguro*, or Kangaroo Foundation, has been providing KMC as an evidence-based alternative method for neonatal care in Bogotá, Colombia, since 1994. Following the identification of its first COVID-19 case, the Government of Colombia issued a series of restrictions and a national health emergency declaration. Doctors and nurses at the KMC programme in the Universidad Javeriana were concerned about the virus' potential consequences, but they also felt confident that KMC was the best way to support low-birth-weight and preterm newborns.

Almost immediately after the pandemic began, the Colombian Society of Neonatology, the Colombian Ministry of Health and the Kangaroo Foundation published the first set of recommendations for the continued and safe operations of KMC programmes. These recommendations covered biosecurity measures for both caregivers and personnel, management of asymptomatic and symptomatic mothers, and logistics of outpatient consultations. Unlike in some other countries, where official guidelines directed that mothers infected with or suspected of having COVID-19 be separated

from their newborns, the close working relationship between these institutions allowed rooming-in practices to continue. As a result, 50 indicators of maternal and child health were maintained at pre-pandemic levels while there was an increase in maternal lactation, possibly because parents understood its important role in developing the child's immune system. Staff continued to encourage breastfeeding and discourage mother-child separation for COVID-19 positive mothers, knowing their immense benefits for both the mother and the child. More information about the specific measures that were taken to sustain KMC during the COVID-19 pandemic is available in the full case study.

Reference: Hackett K, Proulx K, Alvarez A, Whiteside P, Omoeva C. Case studies of programs to promote and protect nurturing care during the COVID-19 pandemic. FHI360, The LEGO Foundation; 2021 (<https://www.fhi360.org/sites/default/files/media/documents/resource-lego-case-study-nurturing-care-report.pdf>, accessed 21 April 2021).



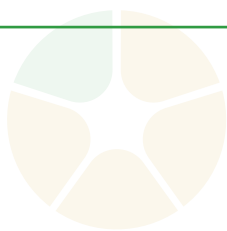
Photo credit: © UNICEF/UNI312809/Dejongh

Conclusion

The first hours, days and weeks after birth are a precious time for a newborn's survival, health and development. Knowledge and tools are available to provide every newborn with nurturing care that involves parents and other caregivers directly. To create the enabling environment for providing such care, there is a need to invest in policies, health systems and community awareness. As more newborns survive we now need to make sure that they also thrive. This is especially important for those at greatest risk: small and sick babies who are more likely to die or suffer more illness.

The COVID-19 pandemic has caused great disruption in the lives of families and communities, and health systems have been challenged to maintain essential services. No evidence of infectious virus capable of replicating and infecting other cells or of transmission through breast milk has been found (22). The case study from Colombia shows that it is safe to sustain the practices described in this Brief in the face of COVID-19 and continue to provide newborns with nurturing care, provided adequate protective measures are taken.

Standards of care (3,10) are available to guide the actions that policy-makers, health programme managers and others should take. Core indicators to measure improvements in newborn quality of care are being developed to include small or sick newborns. The time is right for every newborn to receive nurturing care and to leave none behind.



Remember

The first month of life is a critical time for children's healthy growth and development.

Strengthen

Improving the quality of care that mothers and newborns receive in maternity and neonatal care facilities in line with well-defined standards is essential.

Add

Providing nurturing care through IFCDC for small or sick newborns who need special or intensive care is feasible, including in low- and middle-income countries.

ACKNOWLEDGEMENTS

WRITING TEAM:

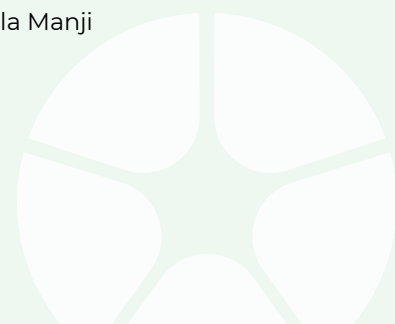
Bernadette Daelmans, Department of Maternal, Newborn, Child and Adolescent Health and Ageing, World Health Organization (WHO/MCA), Louise Tina Day (London School of Hygiene & Tropical Medicine), Ornella Lincetto (WHO/MCA).

The authors express their gratitude to Nathalie Charpak (Fundación Canguro/Kangaroo Foundation, Bogotá, Colombia), Arti Maria (ABVIMS & Dr Ram Manohar Lohia Hospital, New Delhi, India), Lama Charafeddine (American University of Beirut, Pediatrics and Adolescent Medicine Department, Beirut, Lebanon), Socorro De Leon-Mendoza (Kangaroo Mother Care Foundation Philippines, Inc., Philippines), Ylva Thernström Blomqvist (University Hospital, Neonatal Intensive Care Unit, Uppsala, Sweden) and Björn Westrup (Department of Women's and Children's Health, Karolinska Institutet, Sweden) for their reviews of the manuscript and the short reports that illustrate how nurturing care for small and sick newborns is being practised in a variety of settings.

A vote of thanks also goes to Anne Detjen (UNICEF), Maya Elliott (UNICEF), Leah Greenspan (United States Agency for International Development [USAID]), Tedbabe Degefe Hailegebriel (UNICEF), Lily Kak (USAID), Romilla Karnati (Momentum Country and Global Leadership/Save the Children), Catherine Kirk (Save the Children), Neena Khadka (Momentum Country and Global Leadership/Save the Children), Jane Lucas (consultant), Silke Mader (European Foundation for the Care of Newborn Infants), Sheila Manji (WHO/MCA), Alison Morgan (Global Financing Facility), Karen New (consultant), Susan Niermeyer (USAID), Ana Nieto (UNICEF) and Theresa Shaver (USAID) for their careful review of draft versions of this Brief.

EDITORIAL SUPPORT:

Peggy Henderson; Sheila Manji



Selected resources

Every Newborn

a joint action platform for the reduction of preventable newborn deaths and stillbirths, through implementation of the Every Newborn Action Plan that was endorsed by the World Health Assembly in 2014.

<https://www.healthynewbornnetwork.org/issue/every-newborn/>

Network for Improving the Quality of Care for Maternal, Newborn and Child Health

a broad partnership of committed governments, implementation partners and funding agencies working to ensure that every pregnant woman, newborn and child receives good quality care with equity and dignity.

<https://qualityofcarenetwork.org/>

Global Alliance for Newborn Care

a network to improve newborn and maternal health worldwide, ensure nurturing care in all settings, and enable every girl, woman and parent to make well-informed choices and decisions during pre-conception, pregnancy and birth as well as during follow-up and continuing care after discharge from a hospital.

<https://www.glance-network.org/>

Every Premie

designed to provide practical, catalytic, and scalable approaches for expanding uptake of preterm birth and low-birth-weight interventions in 24 countries, predominantly in Africa and Asia, providing useful resources.

<https://www.everypreemie.org/>

Newborn Essential Solutions and Technologies (NEST360)

A multi-disciplinary alliance working with African governments to enable every hospital in Africa to deliver high-quality, life-saving care for small and sick newborns. NEST360 is an evidence-based model for sustainable health systems implementation at national scale, including closing gaps for human resources, technology, and data.

<https://www.nest360.org>

References

1. Survive and thrive: transforming care for every small and sick newborn. Geneva: World Health Organization; 2019 (<https://www.who.int/publications/i/item/9789241515887>, accessed 31 May 2021).
2. United Nations Interagency Working Group for Child Mortality Estimation. Levels and trends in child mortality. New York: UNICEF; 2020 (<https://data.unicef.org/resources/levels-and-trends-in-child-mortality/>, accessed 31 May 2021).
3. Standards for improving quality of care for small and sick newborns in health facilities. Geneva: World Health Organization; 2020 (<https://www.who.int/publications/i/item/9789240010765>, accessed 31 May 2021).
4. The Global Health Observatory (<https://www.who.int/data/gho>) and the Maternal, newborn, child and adolescent health and ageing data portal (<https://www.who.int/data/maternal-newborn-child-adolescent-ageing/global-strategy-data>).
5. Chawanpaiboon S, Vogel JP, Moller A, Lumbiganon P, Petzold M et al. Global, regional, and national estimates of levels of preterm birth in 2014: a systematic review and modelling analysis. *Lancet Glob Health*. 2019;7(1):e37-e46. doi: 10.1016/S2214-109X(18)30451-0.
6. UNICEF, WHO. UNICEF-WHO low birthweight estimates: levels and trends 2000–2015. Geneva: World Health Organization; 2019 (<https://www.who.int/news/item/07-06-2019-joint-low-birthweight-estimates-levels-and-trends-2000-2015>, accessed 31 May 2021).
7. Lawn JE, Davidge R, Paul VK, Von Xylander S, De Graft Johnson J et al. Born too soon: care for the preterm baby. *Reprod Health*. 2013;10(Suppl 1):S5. (https://www.who.int/pmnch/knowledge/publications/preterm_birth_report/en/index3.html, accessed 31 May 2021).
8. WHO recommendations on antenatal care for a positive pregnancy experience. Geneva: World Health Organization; 2016 (<https://www.who.int/publications/i/item/9789241549912>, accessed 31 May 2021).
9. Altimier L, Phillips R. The Neonatal Integrative Developmental Care Model: advanced clinical applications of the seven core measures for neuroprotective family-centered developmental care. *Newborn and Infant Nursing Reviews*. 2016;16(4):230–44.
10. European Standards of Care for Newborn Health. Infant and family-centred developmental care. European Foundation for the Care of Newborn Infants [website] (<https://newborn-health-standards.org/standards/infant-and-family-centred-care/overview/>, accessed 31 May 2021).
11. WHO, UNICEF. Implementation guidance: protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services: the revised Baby-friendly Hospital Initiative. Geneva: World Health Organization, UNICEF; 2018 (<https://www.who.int/publications/i/item/9789241513807>, accessed 31 May 2021).
12. Gelaye B, Rondon MB, Araya R, Williams MA. Epidemiology of maternal depression, risk factors, and child outcomes in low-income and middle-income countries. *Lancet Psychiatry*. 2016; 3(10):973–82.
13. WHO recommendations for postnatal care of the mother and the newborn. Geneva: World Health Organization; 2013 (<https://www.who.int/publications/i/item/9789241506649>, accessed 31 May 2021).
14. Seale AC, Blencowe H, Manu AA, Nair H, Bahl R et al. Estimates of possible severe bacterial infection in neonates in sub-Saharan Africa, south Asia, and Latin America for 2012: a systematic review and meta-analysis. *Lancet Infect Dis*. 2014;14(8):731–41. doi: 10.1016/S1473-3099(14)70804-7.
15. Protecting, promoting and supporting breastfeeding: the Baby-friendly Hospital Initiative for small, sick and preterm newborns. Geneva: World Health Organization, UNICEF; 2020 (<https://www.who.int/publications/i/item/9789240005648>, accessed 31 May 2021).
16. Conde-Agudelo A, Diaz-Rossello JL. Kangaroo mother care to reduce morbidity and mortality in low birthweight infants. *Cochrane Database Syst Rev*. 2016;(8): CD002771.
17. WHO study group on KMC. Immediate “Kangaroo Mother Care” and the survival of infants with low birth weight. *N Engl J Med*. 2021; 384:2028–38. doi: 10.1056/NEJMoa2026486.
18. Klemming S, Lilliesköld S, Westrup B. Mother-newborn couplet care from theory to practice to ensure zero separation for all newborns. *Acta Paediatr*. 2021;001:1–7. doi: 10.1111/apa.15997.
19. Human resource strategies to improve newborn care in health facilities in low- and middle-income countries. Geneva: World Health Organization; 2020 (<https://www.who.int/publications/i/item/9789240015227>, accessed 31 May 2021).
20. Chunling L, Black MM, Richter LM. Risk of poor development in young children in low-income and middle-income countries: an estimation and analysis at the global, regional, and country level. *Lancet Glob Health*. 2018;4(12):e916–22. doi: 10.1016/S2214-109X(16)30266-2.
21. Heckman JJ. There's more to gain by taking a comprehensive approach to early childhood development. Chicago: The Heckman Equation; 2017 (https://heckmanequation.org/www/assets/2017/01/F_Heckman_CBAOnePager_120516.pdf, accessed 31 May 2021).
22. Rollins N, Minckas N, Jehan F, Lodha R, Raiten D et al. A public health approach for deciding policy on infant feeding and mother–infant contact in the context of COVID-19. *Lancet Glob Health*. 2021;9:e552–7. doi: 10.1016/S2214-109X(20)30538-6.
23. WHO, UNICEF, World Bank Group. Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential. Geneva: World Health Organization; 2018 (https://www.who.int/maternal_child_adolescent/documents/nurturingcare-early-childhood-development/en, accessed 31 May 2021).

Nurturing care framework **for early childhood development**

The document *Nurturing care for early childhood development: a framework for helping children survive and thrive to transform health and human potential* (23) builds on state-of-the-art evidence of how child development unfolds and of the effective policies and interventions that can improve early childhood development. WHO, UNICEF and the World Bank Group developed the *Nurturing care framework* in collaboration with the Partnership for Maternal, Newborn & Child Health, the Early Childhood Development Action Network and many other partners to provide a roadmap for attaining the Sustainable Development

Goals and the survive, thrive and transform goals of the Global Strategy on Women's, Children's and Adolescents' Health. Launched alongside the seventy-first World Health Assembly in May 2018, it outlines: i) why efforts to improve health and well-being must begin in the earliest years, from pregnancy to age 3; ii) the major threats to early childhood development; iii) how nurturing care protects young children from the effects of adversity and promotes physical, emotional and cognitive development; and iv) what families and caregivers need in order to provide nurturing care for young children.



FOR MORE INFORMATION

nurturing-care.org
ecdan.org

JOIN THE CONVERSATION

#NurturingCare
@NurturingCare

CONTACT

Department of Maternal, Newborn, Child and Adolescent Health and Ageing, World Health Organization at mncah@who.int or NurturingCare@who.int.



Photo credit: © UNICEF/UN0198614/Njiokiktjien VII Photo



Nurturing care for every newborn: thematic brief

ISBN 978-92-4-003520-1 (electronic version)

ISBN 978-92-4-003521-8 (print version)

© World Health Organization and the United Nations Children's Fund (UNICEF), 2021.
Some rights reserved. This work is available under the [CC BY-NC-SA 3.0 IGO](https://creativecommons.org/licenses/by-nc-sa/3.0/) licence.

