Best of UNICEF Research unicef

The Office of Research is UNICEF's dedicated research arm. Its prime objectives are to improve international understanding of issues relating to children's rights and to help facilitate full implementation of the Convention on the Rights of the Child across the world. The Office of Research aims to set out a comprehensive framework for research and knowledge within the organization, in support of UNICEF's global programmes and policies, and works with partners to make policies for children evidence-based.

Publications produced by the Office are contributions to a global debate on children and child rights issues and include a wide range of opinions. The views expressed are those of the authors and/or editors and are published in order to stimulate further dialogue on child rights and ways to fulfill them.

The UNICEF Office of Research – Innocenti would like to thank all the Country Offices, Regional Offices, National Committees and HQ Divisions that participated in the *Best of UNICEF Research 2014*.

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Best of UNICEF Research 2014



FOREWORD

Research in the field of children's rights is vital: it influences policy, improves practice and, more important still, it often results in children's lives being protected and improved. UNICEF offices and national committees regularly undertake or commission cutting-edge research that proves instrumental in advancing children's rights. This publication introduces 12 research initiatives drawn from the 2014 round of 'Best of UNICEF Research', which are judged to have reached the highest standards.¹ The selected research pieces represent a wide range of themes and countries, with many bearing significance beyond country borders and with potential for impact at scale.

Three national studies looked at the benefits of cash transfers. A non-conditional scheme in Zambia was evaluated and has proven to have been well implemented, showed measurable effects on poverty and gained increased commitment from the Government. In the State of Palestine, the assessment of a conditional cash transfer scheme has shown positive household effects but that it was not considered sufficiently child-sensitive. In South Africa, the issue of broadening coverage of Child Support Grant beneficiaries was examined and ways of improving access were identified.

In the broad area of Child Protection, ground-breaking research in the East Asia and Pacific Region estimates the prevalence and economic cost associated with child maltreatment to support legislation and public investment to prevent it. In Uganda, using easily accessible data sources, risk factors of adolescent girls' vulnerability were identified and a global vulnerability index was pioneered to identify the girls most susceptible to risk and harm in the country and in the region.

Research in health continues to represent a significant part of the overall UNICEF research effort. A study from China shows that feeding practices and deficient diet are associated with poor outcomes in under-five mortality rates in rural areas. Another study, also carried out in China, takes a longitudinal observational approach to explore the effect of iron deficiency anaemia among mothers on the cognitive and mental development of their children. In Mongolia, the research team has examined limiting factors and barriers in preventing child deaths from pneumonia, diarrhoea and new-born care. Finally, a multi-country study reviewed models and practices of priority setting and resource allocation in the health sector and suggests new guidance for lowand middle-income countries.

With a special focus on minorities and disadvantaged children, barriers to education and ways of combatting exclusion and ensuring better transfer from primary to secondary school were investigated in Serbia, while a study in Bolivia showed that the issue around menstrual hygiene is a neglected area that has serious consequences on girls' school attendance and educational outcomes.

Finally, and in advance of the 25th Anniversary of the Convention on the Rights of the Child (CRC), the UNICEF United Kingdom National Committee commissioned a 12-country study on the legal implementation of the CRC. The study reviewed the experience of different countries in incorporating the convention into domestic law, policy and practice.

I hope you will appreciate reading about the examples of research UNICEF supported over the last year. This year we hope they will again stimulate the research and the policy communities to persistently push the frontiers of our knowledge on child rights, and to use this knowledge to design national and global programmes for the best interests of the child.

Marie-Claude Martin

Director Office of Research – Innocenti

All 12 research pieces were evaluated by an external panel of experts: Dr. Alula Pankhurst, Director of Young Lives Ethiopia; Dr. Shanaaz Matthews, Director of the Children's Institute at the University of Cape Town, South Africa; and Gordon Alexander, former Director of the UNICEF Office of Research – Innocenti.

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EAST ASIA AND THE PACIFIC

Costing Model to Estimate the Economic Burden of Child Maltreatment in the East Asia and Pacific Region



Xiangming Fang, Derek Brown and Phaedra Corso

LINK TO THE FULL REPORT
www.unicef.org/eapro/Child_Maltreatment.pdf

CHILD PROTECTION IN EAST ASIA AND THE PACIFIC

The cost of violence

Child maltreatment occurs in every culture and in every country. It is a distressing phenomenon that is uncomfortable to contemplate and difficult to prevent because it so often happens in private spaces, behind closed doors or is kept secret due to stigma for the victim. As such, it is difficult to gather sufficient evidence for the conviction of offenders or even to be exact about its prevalence.

But recent research by UNICEF in East Asia and the Pacific has broken new ground by gathering data on child maltreatment from every country in the region and by developing a model from which the minimum economic associated costs can be established. The effect is to bring a hidden phenomenon into the light – and to provide a clear economic justification for any investments that could help to prevent it.

The effect of such abuse on the children affected is devastating. The adverse health, social and economic consequences for survivors can be lifelong. These include:

- behavioural problems;
- mental health conditions;
- cognitive dysfunction;
- high-risk behaviours;
- increased risk of coming into conflict with the law, adult criminality and violent behaviour;
- greater susceptibility to chronic diseases;
- lasting impacts or disability caused by physical injury;

- reduced health-related quality of life; and
- lower levels of adult economic well-being.

Given these negative outcomes and the widespread prevalence, the economic costs of child maltreatment are bound to be substantial. Yet there have been few international estimates of these minimum direct and indirect costs. Such assessments of the economic impact of child maltreatment have been published for only a handful of countries, including the United States and Australia, but are not yet available for most regions of the world.

Recognizing the lack of such economic estimates in its own region, the UNICEF East Asia and Pacific Regional Office (EAPRO) built on a previous systematic review it had carried out in the region and calculated the percentage of children affected by each of the major forms of child maltreatment. It then went on to develop a costing model that allowed it to estimate the economic impact of this multifaceted phenomenon.

THE BASIS OF THE STUDY

There were two key phases to the research, which was based on an epidemiological model.

First, existing literature and data on the prevalence of child maltreatment and its impacts were used to estimate population attributable fractions (PAFs). PAFs were estimated separately for each of the five major types of child maltreatment in this report: physical abuse, sexual abuse, emotional abuse, neglect, and witnessing parental violence. They were also established for three outcomes: effects on mental health and behaviour; effects on physical health and sexual behaviour; and effects on aggression, violence and adult criminal behaviour. For each type of child maltreatment and category of impact, separate PAFs were estimated both for 'subregions' of East Asia and the Pacific as defined by the World Health Organization and for country-income classifications as defined by the World Bank.

Second, a regional costing model was developed to estimate the minimum costs of child maltreatment in the East Asia and Pacific region based on these PAFs. Disability-adjusted life years (DALYs) lost from deaths, diseases and health risk behaviours attributable to child maltreatment were estimated based on previous World Health Organization reports and these losses were then converted into monetary value for each of the subgroups. Since direct financial costs were not available in this region for many of the impacts of child maltreatment included in the report, the study did not include financial costs of the effects of child maltreatment on education, employment or service use nor the costs incurred by the legal and criminal justice systems.

CHILD MALTREATMENT: PREVALENCE AND COST

The report's primary goal was to calculate the economic costs of children's maltreatment, but this involved arriving at updated estimates of the problem's prevalence in the East Asia and Pacific region. The prevalence rates were found to be highest in countries considered by the World Bank to be in the lower middle-income bracket and lowest in those in the high-income category – though it must be noted that low-income countries were not included for most of the categories of maltreatment due to the lack of available data. While relatively minor gender differences were found when it came to the prevalence of witnessing parental violence, neglect and emotional abuse, males were significantly more likely to have been subjected to physical abuse and females to have suffered sexual abuse (see Table 1).

The next step for the researchers was to estimate the proportion of each negative health outcome that was attributable to child maltreatment. These outcomes varied to some extent according to the type of maltreatment, with sexually transmitted infections and genito-urinary symptoms, for example, included only in relation to sexual abuse. But four of the negative health outcomes were common to all but one of the forms of maltreatment (*see Table 2*). The study found that mental disorders, for instance, were more likely to be associated with sexual and emotional abuse, and witnessing domestic violence than with neglect or physical abuse. Self-harm, meanwhile, was associated more with neglect and emotional abuse.

If these estimates of the impact of child maltreatment in the region were to be useful to policymakers,

	1: CHILD M TES, LOWI				
	Witness to domestic violence	Neglect	Physical abuse	Sexual abuse	Emotional abuse
Male	32.0%	24.3%	34.9%	14.6%	37.4%
Female	27.9%	27.1%	17.4%	21.9%	35.9%

* Corrected for methodological factors; sample size weighted.

TABLE 2: POPULATION ATTRIBUTABLE FRACTIONS FOR HEALTH OUTCOMES ASSOCIATED WITH FORMS OF CHILD MALTREATMENT, LOWER MIDDLE-INCOME COUNTRIES*

		Mental disorder	Illicit drug use	Current smoker	Self-harm
Dhysical abuse	Male	9.7%	20.8%	5.8%	12.8%
Physical abuse Female		7.5%	16.5%	4.4%	9.9%
Convel obviou	Male	25.5%	22.5%	11.6%	12.5%
Sexual abuse	Female	30.8%	27.5%	14.6%	15.2%
Male	Male	14.8%	14.2%	3.7%	22.5%
Neglect	Female	16.2%	15.5%	4.1%	23.9%
Emotional abuse	Male	26.7%	23.6%	11.7%	21.9%
Emotional aduse Female		26.2%	23.2%	11.5%	21.5%
Witness to domestic	Male	27.6%	27.6%	7.0%	n.a.
violence	Female	26.4%	26.4%	6.6%	n.a.

* Based on the median value and uncorrected method.

however, they needed to be translated into a financial cost so that the potential economic benefits of reducing or eliminating child maltreatment could be established. The estimated economic value of disability-adjusted life years lost to deaths, diseases and health risk behaviours attributable to child maltreatment was therefore calculated and was ultimately found to total US\$160 billion, which amounted to 1.99 per cent of the region's gross domestic product (GDP) based on World Bank classifications (*see Table 3*).

A SPUR TO ACTION

As this study reveals, child maltreatment in East Asia and the Pacific is not only tremendously damaging for individual children in terms of its effects upon their lives, but it also has a vast economic cost that is borne - whether directly or indirectly - by everyone in the region. Estimating the economic burden of child maltreatment is an important tool for raising awareness of its current severity and extent. In addition, however, it can assist policymakers and government officials, allowing them to prioritize funding, develop preventive services and other programmes - and to evaluate the economic value of such interventions. It provides an additional set of arguments to those based on morality and child rights, arguments that enable policymakers to grasp the scale of the issue in terms of its impact on society.

TABLE 3: ESTIMATED VALUE OF DALYS LOST TOCHILD MALTREATMENT IN 2004, EAST ASIA ANDPACIFIC REGION

	Cost in millions of dollars	Percentage of GDP
Child deaths	412	0.005
Physical abuse	30,312	0.376
Sexual abuse	30,546	0.379
Neglect	24,807	0.308
Emotional abuse	50,474	0.626
Witnessing domestic violence	23,745	0.295
TOTAL	160,297	1.99

The researchers considered their overall estimates of the economic burden resulting from child maltreatment to be conservative, given that they were unable to estimate the costs of a number of key outcomes. Even so, the study underlines the worrying extent and the socio-economic cost of the various forms of child abuse in the region – and must act as a spur to greater action to reduce the incidence of such maltreatment and, where possible, to prevent it from happening.

Research partner: College of Economics and Management, China Agricultural University.



ZAMBIA

Social Cash Transfer Scheme: 24-Month Impact Report for the Child Grant Programme



David Seidenfeld, Sudhanshu Handa and Gelson Tembo

LINK TO THE FULL REPORT http://www.air.org/sites/default/files/Zambia_ Child_Grant_Program_Report_20131.pdf

ZAMBIA'S CHILD GRANTS Cash that works

The provision of a direct cash payment or grant is becoming an ever more important tool in the struggle against poverty in developing countries. In Zambia, the Government has been trialling a condition-free grant to households with children under five; evaluating the effectiveness of this policy is potentially of great importance not just to national decisions about the future of the programme but also to other countries designing new approaches to social welfare. UNICEF research has assessed the impact of the scheme over its first two years of operation and has concluded that the child grant programme is having a broadly positive effect across a whole range of indicators.

The Child Grant Social Cash Transfer Programme (CGP) was introduced in 2010 by Zambia's Ministry of Community Development, Mother and Child Health in three districts: Kalabo, Kaputa and Shangombo. Any household containing a child under five receives a payment of 60 kwacha (US\$12) a month with no conditions attached to the grant.

In the year the programme was launched, UNICEF Zambia commissioned American Institutes for Research to evaluate its impact over a three-year period through a randomized controlled trial. More than 2,000 households were randomly assigned to treatment or control conditions so as to assess the effects of the CGP on household expenditure, poverty, food security, children and the economy. This study reports on the results after the first two years of a scheme that is considered to have been successfully implemented, with beneficiaries receiving the correct amounts of money on time – 98 per cent of those taking part in the study received all their payments over the two-year period.

HOUSEHOLD EXPENDITURE

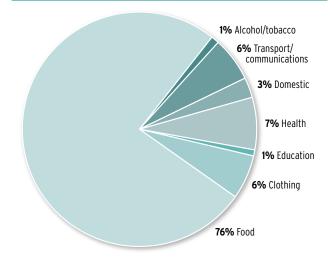
As much as 76 per cent of the increased spending by CGP recipients goes on food, with smaller proportions being spent on health and hygiene (7 per cent), clothing (6 per cent) and transportation/communication (6 per cent). The programme did not have a significant impact on spending on education, domestic items or alcohol and tobacco (*see Figure 1*). Of the food expenditure, around 40 per cent went on cereals, 21 per cent on meat and fish, 15 per cent on fats and 11 per cent on sugars.

POVERTY AND FOOD SECURITY

The study found that the programme reduced the rate of extreme poverty among recipient households by 5.4 percentage points. However, this is not a sufficient measure of the CGP's impact on poverty, as it records only those households which have moved above the poverty line. The more telling impact has been on households that have improved their income while still remaining below the poverty line overall, with both the poverty gap and the squared poverty gap – both of which measure depth of poverty – improving by 10 percentage points. Five times more CGP households than control households report being better off now than they were 12 months ago.

In addition, the research indicates that the CGP has increased the proportion of households eating two or more meals per day by 8 percentage points to 97 per cent. There has been an even bigger percentage increase in the number of households that are not severely food insecure (*see Figure 2*).





Source: American Institutes for Research: authors

CHILDREN

The CGP has reduced the incidence of diarrhoea among children under five by 4.9 percentage points, though other health outcomes for young children were unaffected. There has also been a huge improvement in infant and young child feeding, which has gone up from 32 per cent to 60 per cent, while the control group has improved only to 43 per cent. The programme also increases weight-forheight among children between the ages of three and five.

Older children have also seen significant improvements in their quality of life. The proportion of children with shoes, a second set of clothing and a blanket (considered to be basic needs) increased by

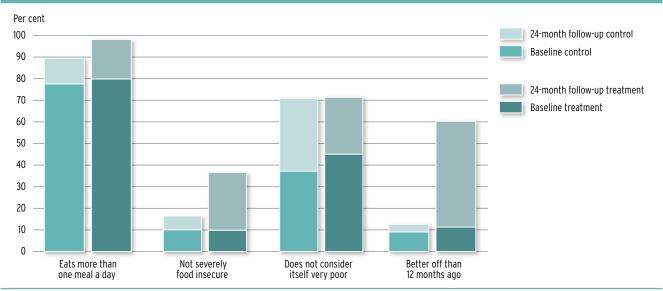


FIGURE 2: FOOD SECURITY INDICATORS BY TREATMENT STATUS AND TIME

Source: American Institutes for Research: authors

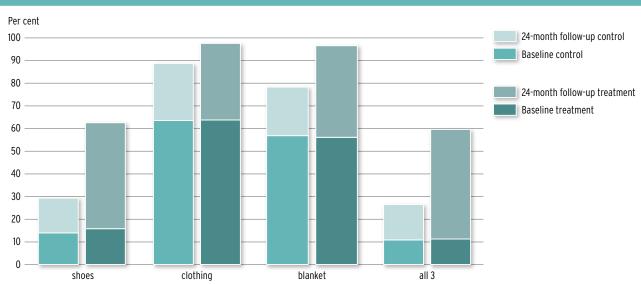


FIGURE 3: MATERIAL NEEDS MET BY TREATMENT STATUS AND TIME

Source: American Institutes for Research: authors

33 percentage points (*see Figure 3*). The programme has had a significant impact on enrolment and attendance in school only for children with less educated mothers, however – this is thought to be because more educated mothers have already made it a priority to enrol their child in school irrespective of monetary considerations.

ECONOMIC IMPACTS

Beneficiaries of the CGP programme are poor, with limited options in terms of livelihoods and few assets. On average they have half a hectare of agricultural land and a couple of chickens, and are highly dependent on unskilled labour. Most grow maize, cassava or rice using traditional technology and very low levels of modern inputs, with little access to credit.

The CGP has had a significant impact on this baseline position, increasing the amount of land cultivated by 18 percentage points, as well as increasing the proportion of households spending anything on agricultural inputs such as seeds, fertilizer and hired labour – also by 18 percentage points. These improvements have led to a 50 per cent increase in the value of harvest over the baseline amount. All of this extra production is sold rather than consumed, and therefore further increases household income. In addition, the CGP increased not only the number of households with livestock but also the variety of animals that they possessed. The study clearly indicates that the CGP benefits the local economy in general as well as the households directly receiving it. Because recipient families spend more on goods and services, each kwacha transferred to a poor household tends to increase the income in the local economy by 1.79 kwacha.

A POWERFUL TOOL

The overall conclusion of the study is that the CGP has had a positive impact on most of the indicators related to the original objectives of the programme. The research provides powerful evidence that this cash transfer programme has impacts above and beyond the immediate needs of poor households. It results in significant increases in these families' productive capacity, allowing them to expand into other areas of economic activity beyond subsistence agriculture. It is also already improving young children's health and delivering the basic material needs of older children.

This research has already had an influence on the Zambian Government's decision to increase its budget allocation for the CGP from about US\$3.5 million in 2013 to about US\$30 million in 2014. This should raise the number of people reached by the programme from 60,000 in 2013 to 190,000 in 2014 – covering about 20 per cent of the population living below the extreme poverty line.*

* Impact assessment provided by research submitters.



BOLIVIA

WASH in Schools Empowers Girls' Education in Rural Cochabamba, Bolivia: An Assessment of Menstrual Hygiene Management in Schools



Jeanne Long, Bethany A. Caruso, Diego Lopez, Koenraad Vancraeynest, Murat Sahin, Karen L. Andes and Matthew C. Freeman

LINK TO THE FULL REPORT

ENGLISH: www.ungei.org/files/WASH_Bolivia.pdf SPANISH: www.unicef.org/wash/schools/files/ WASH_en_escuelas_-higiene_menstrual_en_las_ escuelas.pdf

WATER, SANITATION AND HYGIENE IN BOLIVIAN SCHOOLS

Empowering girls through WASH

One of the major obstacles to girls' education in developing countries is the lack of facilities in schools that allow adolescents to deal with menstruation. Research by UNICEF in Bolivia casts new light on this situation through an in-depth examination of 10 rural schools. It emphasizes that girls are having to cope not just with inadequate hygiene infrastructure in schools but also with a range of other problems, including teachers' unwillingness to talk openly about the subject, enduring cultural myths about menstruation and the unavailability of absorbent materials. The effects can be even more far-reaching than missed class time or school drop-out, involving long-term mental health consequences and unplanned pregnancy. The research underlines the necessity for menstrual hygiene management (MHM) to form an integral part of water, sanitation and hygiene (WASH) in schools.

In 2012, UNICEF and the Center for Global Safe Water at Emory University in the United States initiated a research programme focusing on the MHM challenges faced by female students in Bolivia, the Philippines, Rwanda and Sierra Leone. The Bolivian research focused on 10 schools in rural communities in the Cochabamba region and involved in-depth interviews with girls; focus group discussions with girls, boys, mothers and teachers; interviews with teachers, health professionals and school administrators; and on-site inspections of school facilities.

THE BOLIVIAN CONTEXT

WASH conditions in Bolivia need improvement at both the community and school level. According to Ministry of Education data, pit latrines are the most common form of sanitation in rural Bolivian schools (63.7 per cent), followed by open defecation (10.8 per cent). Rural schools have an average of one toilet per school. Only 32 per cent of schools nationally have handwashing basins and 29 per cent have showers on the school premises; 13 per cent of schools do not have access to a water system.

It is important to understand the social and environmental context in the rural areas of Cochabamba within which girls have to cope with the challenges of menstruation. Distance and separation are serious challenges; the schools studied serve dispersed communities, which means that many children have to undertake long journeys each day, sometimes involving a two-hour bus ride each way; and some students are separated from their families because they have to board away from home in order to attend school, or because their parents have migrated to other parts of the country for work.

Poor access to WASH within the community affects practices in school. The first place many students encounter and use latrines, or learn about the importance of sanitation and hygiene, is often while attending school; however, none provide materials for personal hygiene, such as toilet paper and soap, let alone absorbent menstrual materials. The relationship between teachers and pupils can affect communication, making it difficult to discuss with or inform pupils about menstruation and reproductive health. Teachers often noted that simply introducing the topic embarrassed girls and increased teasing from boys. Girls' secondary school enrolment is low in rural areas and the drop-out rate is a major concern for teachers.

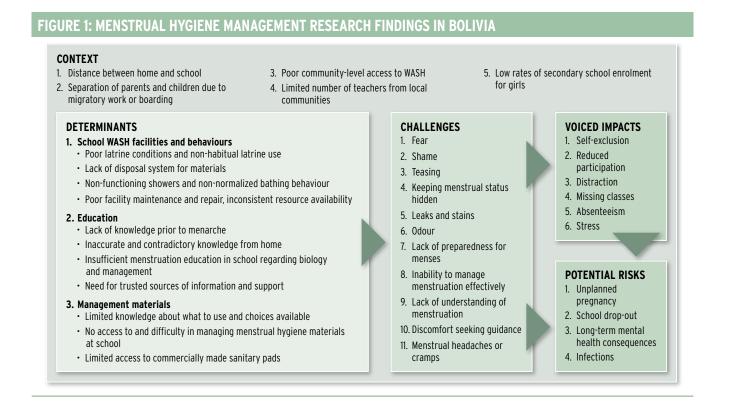
CHALLENGES GIRLS FACE DURING MENSTRUATION

Attending school during menstruation is often challenging for girls. Dominant experiences were of fear, shame and teasing and a common objective was to keep their periods hidden from others. When girls lacked menstrual materials or could not wash, they coped by altering their behaviour in an attempt to prevent others from noticing. These behaviour changes could lead to health and educational impacts, including self-exclusion and isolation, reduced participation in class, distraction and fear of pregnancy (*see Figure 1*).

Girls, teachers, boys and mothers not only knew when girls were menstruating, they were able to pinpoint and describe the altered demeanour and behaviour of girls during menses.

PREVENTABLE PROBLEMS

The challenges girls face in managing menstruation at school are produced by factors that are largely preventable.



SCHOOL WASH FACILITIES AND BEHAVIOURS

At some schools all the latrines were broken and unusable; at others they were mostly functional. In addition, the use of latrines was often not habitual. Poor latrine facilities at school generally hindered girls' opportunity to change absorbent materials during menstruation – girls described finding hiding places off school grounds to change their pads or cloths.

Due to a lack of adequate disposal systems, girls could not discreetly dispose of sanitary materials – waste bins were typically made from cardboard boxes or jerry-cans without lids. As a result, many girls preferred to wrap used materials in plastic bags and dispose of them at home rather than at school. Pupil-to-latrine ratios were often too high, and maintenance and repair of facilities were a problem for schools lacking capacity or budget.

EDUCATION

Girls often lacked knowledge and awareness prior to menarche. Several girls admitted that they did not know why they were bleeding the first time they menstruated. An important component of changing girls' experiences during menstruation is as simple as telling them about it before they reach menarche. Yet knowledge passed down from mother to daughter was frequently based on traditional practices and beliefs and was inaccurate.

Compounding this, by the time many girls received formal education in school about menstruation, the information was overdue. Teachers were not specifically trained and so rarely taught girls about menstrual management. Most girls maintained traditional beliefs and practices, suggesting the the formal education in school was not adequate.

MANAGEMENT OF MATERIALS

Knowledge about what materials are available to manage menstruation was limited. Girls often used home-made menstrual cloths that could be washed, dried and reused, but all preferred to use sanitary pads in school where possible. However, access to materials at school was difficult, and absorbent materials were not available for free, for purchase or for use in an emergency. Girls rarely had sanitary pads or cloths ready at menarche.

In rural communities girls often found it difficult to obtain sanitary pads, which were not always sold nearby. They avoided buying pads when men were behind the shop counter.

THE WAY FORWARD

The study identified several areas for improvement. Menstrual education should be provided to girls between the ages of 9 and 10 in primary school. This would include practical guidance on using absorbent materials, and the proper use of WASH facilities available in school, including showers, latrines and waste bins. Girls should also be taught the basic biology of menstruation, including planning for their cycle and fertility awareness.

The role of teachers is important. Teachers should be equipped with the knowledge and tools to provide in-depth and medically accurate information to students in a safe learning environment. Training could be provided by experts in reproductive health and WASH; alternatively, mobile health workers could teach reproductive health and WASH directly to students.

At national and local levels, governments should have policies and establish mechanisms that encourage proper use and facilitate maintenance of WASH facilities in schools. Mechanisms should be developed to maintain existing WASH infrastructure, including timely responses to requests for repairs, and environmentally appropriate waste collection and disposal. Schools requiring construction and repair of WASH facilities should be given high priority. There should also be regular education on correct latrine and shower use.

Schools themselves should have policies, facilities and resources in place that allow girls to manage menstruation discreetly. Basic WASH consumables and resources should be provided, including toilet paper and covered rubbish bins in each latrine stall; soap should be available at each handwashing station; each latrine stall should have a functional lock inside and a door that closes completely; and drying materials (ash, woodchips, sand) should be available in urine-diverting toilet stalls. Finally, girls should have access to absorbent materials. Sanitary materials should always be available in school for purchase or, preferably, be made available for free or at a reduced cost.

This important issue potentially affects girls' exclusion from school. The report identified simple measures to avoid this and to improve girls' experience with menstruation, as well as measures to promote good WASH practices for both boys and girls.

Research partner: Center for Global Safe Water at Emory University.



CHINA

Effect of Iron Deficiency Anaemia in Pregnancy on Child Mental Development in Rural China



© UNICEF/China/2011/Yan Lu

Suying Chang, Lingxia Zeng, Inge D. Brouwer, Frans J. Kok and Hong Yan

LINK TO THE FULL REPORT http://pediatrics.aappublications.org/ content/131/3/e755.full.html

IRON DEFICIENCY AND CHINESE CHILDREN

Why pregnant women need iron supplements

A ground-breaking study of pregnant women and their children in the first two years of life in rural western China has produced more concrete evidence than ever before that iron supplementation from early pregnancy enhances the mental development of children – yet few rural Chinese infants have hitherto received such supplementation. This was the first ever longitudinal study of prenatal iron status and child development. It could prove vital in encouraging the Chinese Government to introduce iron supplementation as standard during pregnancy – a programme that would have incalculable benefits for the well-being and healthy development of hundreds of millions of Chinese children in the future.

The links between anaemia and pregnancy are well known and long established. Broadly, both pregnant women and young children require more iron than other humans. Iron is essential to the developing brain, fostering communication between neurons as well as metabolizing energy. The most vital period for growth in the brain is during the last trimester of pregnancy and the first two years of life. During pregnancy, the iron requirements of pregnant women increase threefold to cover the foetal placenta's growth needs. If the mother is deficient in iron in the late stages of pregnancy, it impairs the healthy development of the baby.

Numerous past studies have shown that infants with iron deficiency anaemia (IDA) score lower in cognitive and motor tests than those without, while there is also direct evidence of biochemical abnormalities in such infants. But research into the impact of prenatal iron deficiency has hitherto been limited and inconclusive. The researchers, from UNICEF, Wageningen University in the Netherlands and the Xi'an Jiaotong University College of Medicine in Shaanxi, China, followed up on a previous randomized trial of prenatal supplementation in rural western China, which took place between 2002 and 2006, and which had concentrated on the effects of such supplementation on birthweight, pregnancy duration and perinatal mortality.

THE CHILDREN WHO THRIVED -AND THOSE WHO DID NOT

The trial was conducted in two poor villages in rural western China. The villages were randomly assigned to three treatments: multiple micronutrients (MMN), iron and folic acid or folic acid alone (5,828 women). Around 55 per cent (3,233) of the pregnant women attended the haemoglobin check in the third trimester and were divided accordingly into two groups – comparable in socio-economic and educational terms – based on whether or not they were iron deficient. A follow-up study was conducted and 1,286 women with a singleton full-term live birth attended to assess the development of their children. Ultimately, 850 children were assessed at every stage, at 3, 6, 12, 18 and 24 months of age (*see Figure 1*). The assessments

were made either at the village clinic or the child's home using the Bayley scales of infant development, translated into Chinese, adapted to be culturally appropriate. None of the children received any supplementation after birth.

Consistent results were achieved for all five of the Bayley scale assessments of the children. They showed the children from the group with prenatal IDA to score significantly lower in terms of mental development than those with adequate iron, though there was no such marked difference in terms of psychomotor development. More important still, the three groups of children whose mothers had received different forms of supplementation in pregnancy were significantly affected in terms of their mental development (*see Figure 2*).

While the children whose mothers had received folic acid or multiple micronutrients in pregnancy continued to develop less well than children whose mothers had not suffered from iron deficiency, those whose mothers had received iron and folic acid (including 60 mg iron) either equalled or outperformed their non-IDA peers.

PRACTICAL IMPACT

There were some limitations to the study. For example, the pregnant women's iron status was arrived at by measuring their haemoglobin levels.

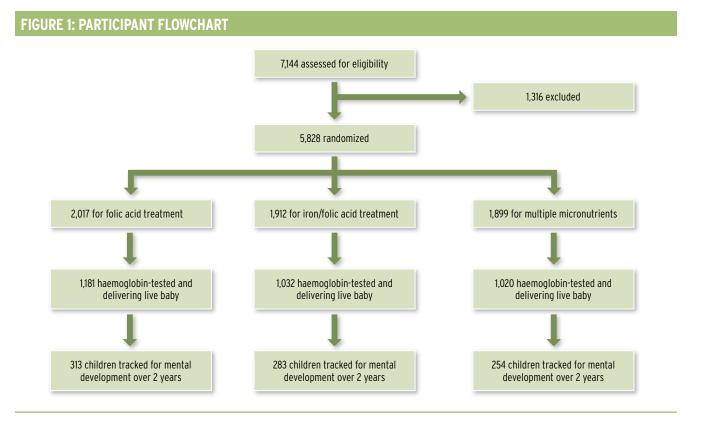
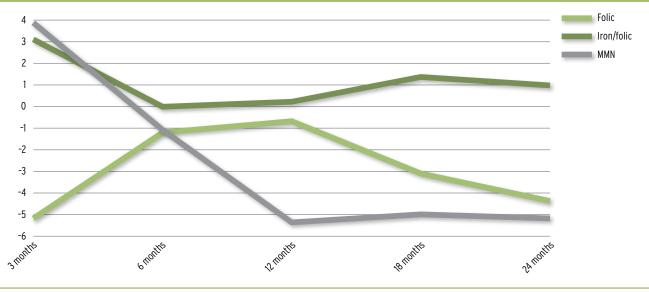


FIGURE 2: DIFFERENCE IN MENTAL DEVELOPMENT BETWEEN PRENATAL IDA AND NON-IDA GROUPS BY FORM OF SUPPLEMENTATION



These levels can be reduced by anaemia arising from other causes, such as infections, meaning that the prevalence of IDA may have been overestimated. However, other studies have demonstrated that the high prevalence of anaemia in the third trimester in China is mainly caused by iron deficiency.

Nevertheless, the study's finding that children whose mothers were given iron and folic acid during pregnancy suffered no adverse consequences in terms of mental development – even when their mother's own IDA was not corrected – has potentially enormous implications in China, particularly in areas where the intake of iron in the diet is generally poor. UNICEF and the World Health Organization recommend that iron and folic acid supplements are universally distributed to pregnant women in developing countries to prevent and treat IDA so as to improve the health and development outcomes of newborns and young children. Yet in China there are at present no such specific policies or programmes, even for the most disadvantaged women. This research, originally published in the journal *Pediatrics*, can only improve the chances of national and international organizations working in partnership with the Chinese Government to safeguard and enhance the life chances of future generations by adopting the best international practice.

Research partners: Division of Human Nutrition, Wageningen University; School of Public Health, Xi'an Jiaotong University College of Medicine.



STATE OF PALESTINE

Effects of the Palestinian National Cash Transfer Programme on Children and Adolescents: A Mixed Methods Analysis



Paola Pereznieto, Nicola Jones, Bassam Abu Hamad and Mohammed Shaheen with Elsy Alcala

LINK TO THE FULL REPORT http://www.odi.org/sites/odi.org.uk/files/odiassets/publications-opinion-files/8936.pdf

SOCIAL WELFARE IN PALESTINE

Cash transfers and holistic care for children

The State of Palestine has made great strides in recent years in its provision for the poorest and most vulnerable members of society. The Palestinian National Cash Transfer Programme (PNCTP), managed and administered by the Ministry of Social Affairs, was introduced in 2010 and is well targeted to reach the poorest households in Gaza and the West Bank.

But new research suggests that children's rights are being insufficiently addressed by the programme – and recommends key improvements that could help transform the lives of vulnerable children and adolescents in this conflict-ridden society. The research could carry lessons for the design of social-protection programmes elsewhere in the developing world, which are too often blind to the needs of children.

CASH FOR THE POOR - AND THE PLIGHT OF CHILDREN

More than 40 per cent of the population of the State of Palestine is under the age of 15. Household poverty – estimated at around 16 per cent in the West Bank and almost 32 per cent in Gaza – disproportionately affects children. Around 1 in 10 children under the age of five suffer chronic malnutrition and, between 2000 and 2010, child malnutrition rose by 40 per cent nationally and by 60 per cent in Gaza. Although there is now near-universal access to basic education – with girls and boys having equal access – the quality of teaching and learning is often poor and widespread violence in schools, by teachers as well as students, contributes to a high drop-out rate among adolescents. There has been an increase in mental health conditions among children, including higher levels of post-traumatic stress disorder. The everyday threats limit children's capacity to participate, while girls' mobility and social activities are also restricted by traditional attitudes to gender.

Beneficiaries of the PNCTP are selected on the basis of a household means test – and a 2012 World Bank study found that almost 70 per cent of its beneficiaries were correctly identified, with error rates lower than those of other programmes widely considered successful, such as the Bolsa Familia in Brazil. Eligible households receive 750–1,800 shekels (US\$195–468) per quarter, which is intended to bridge 50 per cent of the poverty gap. Beneficiary households are also entitled to other assistance, including health insurance, food support, school-fee waivers, and cash grants to help with one-off emergency needs.

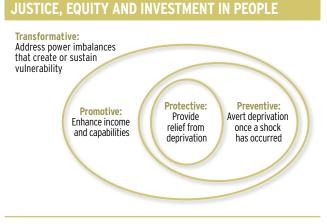
As of September 2013, 105,678 households were receiving the cash transfer – 57,449 in Gaza and 48,229 in the West Bank – containing an estimated 287,794 children. The PNCTP was not designed as a childfocused programme but households often prioritize meeting children's needs, principally for food, but also for clothing and schooling.

AIMING FOR TRANSFORMATION

Research on the effectiveness of the PNCTP drew on Devereux and Sabates-Wheeler's 2004 social protection framework aimed at empowering poor and vulnerable populations. This emphasizes the need for an interrelated programme combining protective, preventive, promotive and transformative elements (*see Figure 1*).

Protective measures, such as cash transfers, safeguard household income and consumption. **Preventive**

FIGURE 1: SOCIAL PROTECTION AIMS FOR ECONOMIC



Source: UNICEF, 2008

instruments, such as health insurance, reduce household vulnerability by mitigating the impact of shocks. **Promotive** measures bolster people's capacity for productive activities by providing assets or subsidies. **Transformative** social protection, meanwhile, addresses the power imbalances that disadvantage individuals and groups based on, for example, their gender, religion, ethnicity, race, class or disability.

Child-sensitive social protection adds another aspect to this analytical framework, highlighting childhood's unique set of intersecting risks and vulnerabilities.

The study used a mix of methods. Cross-sectional quantitative data were first collected from an intervention group (those receiving the cash transfer) and a comparison group (who were not receiving the payment). Qualitative data were then garnered from interviews with children and adult caregivers, with a special focus on adolescents and on children with particular vulnerabilities, such as having a disability or a Bedouin background.

KEY FINDINGS

The study found that the PNCTP is an important programme that is valued by its beneficiaries. It contributes positively to children's right to survival; and it helps households to cope with economic hardship and meet children's basic needs, such as buying more nutritious food and paying some school- and healthrelated costs. Just as importantly, it contributes to household debt repayment, which is a major source of stress in Gaza and the West Bank (*see Table 1*). The cash transfer programme also contributes to improving children's emotional and mental well-being in an extremely pressured and challenging context.

However, the study concluded that the PNCTP is insufficiently child-sensitive and does not address children's poverty from a multidimensional perspective. While the programme contributes to children's right to survival, its effects on children's rights to development, protection and participation are less evident.

RIGHT TO SURVIVAL

Recipients of the cash transfer also receive free health insurance, which is vital for families who would otherwise be unable to afford treatment or who would have gone into debt to pay for it. However, paying for medicines, which are often out of stock at government hospitals, is a common cause of household debt. Health insurance covers neither the daily costs of

TABLE 1: WHAT BENEFICIARIES HAD SPENT THE CASH TRANSFER ON IN THE PREVIOUS YEAR

	West Bank	Gaza
	n =322	n =315
Food %	92	94
Clothing %	43	60
Paid bills %	64	21
Debts %	59	82
Rent %	7	8
Education %	33	47
Savings %	5	3
Livestock %	1	0.3
Investment %	0	0

Source: ODI 2014

caring for children with disabilities nor the repair and maintenance of key equipment such as wheelchairs or hearing aids. Cash transfers have improved children's nutrition by enabling households to buy larger quantities and a greater variety of nutritious food.

RIGHT TO DEVELOPMENT

The exemption of recipient households from school fees is vital for many families and the extra cash provided through the transfer pays for transport, books, uniforms and school bags that enable children to continue in school. But the study found that, for the poorest households, the cash transfer was not enough to cover the costs of school after food and health-care expenses had been prioritized. Only a small minority of households had found the cash transfer sufficient to allow a child who had started work to return to school.

RIGHT TO PROTECTION

Violence is widely practised – by children and adolescents themselves, their parents, teachers and service providers. School violence was one of the main reasons adolescents gave for not attending or dropping out of school. The cash transfer programme has had some impact, however, in terms of reducing violence within the home, with lower stress levels resulting from an easing of financial pressures.

RIGHT TO PARTICIPATION

Poverty and hierarchical cultural norms combine to limit children's (especially girls') opportunities to participate in family decisions or in schools, as well as their awareness of their rights, and there is no evidence that the cash transfer programme alters this situation.

HOW TO IMPROVE THE CASH TRANSFER PROGRAMME

The researchers advocate greater support for and investment in the PNCTP. They feel that the programme would have greater impact on children's lives and well-being if it were more closely linked to complementary initiatives addressing the multidimensional nature of poverty and vulnerability. They recommend a range of specific measures.

Streamline social workers' caseload and role: social workers should engage with all members of beneficiary families, not just parents, so that they can identify children's physical and emotional needs and refer them where necessary to the appropriate services. To make this possible they need additional training and a reduction in caseloads to a manageable level. Volunteers could be used as 'community facilitators' to provide routine follow-up.

Invest in capacity-building: the Ministry of Social Affairs should provide training for social workers in children's rights to survival, development, protection and participation, as part of a broader cultural shift away from a policing approach (identifying 'undeserving' beneficiaries) to a supportive, rightsbased approach. Social workers need to develop specialist skills in specific child-related concerns.

Strengthen referral systems and the capacity of other government staff interacting with children: the PNCTP should take a multidimensional approach to

meeting the needs of children. Teachers need training in non-violent forms of discipline so that they can respect children's rights and improve students' school performance and motivation. Counsellors could be based in health centres as well as schools to reach children who are out of school.

Address gender-specific vulnerabilities: given the influence of prevailing cultural norms, the need for gender-segregated safe spaces is acute, particularly in Gaza. Girls need practical support such as respite care that could help them manage their educational and domestic care responsibilities/duties, and, in the case of older adolescents, facilitate access to employment opportunities. Both girls and women need safe forums in which they can discuss issues of importance to them and their families, thereby breaking down their social isolation and reducing their psychosocial stress.

Develop a broader package of child-sensitive social protection services: it is recognized that economic





support alone is inadequate to tackle the intersecting economic and social vulnerabilities faced by children and their families; additional complementary services should be considered to maximize the programme's impact.

Improve communication: in order for the Ministry of Social Affairs to play an effective coordination role, it needs to improve its communication mechanisms – explaining its role, the services it offers, its procedures and the rationale for any reforms.

Provide disability-specific support: the PNCTP needs to do more to address the specific needs of children with disabilities; at present, there is no guarantee that their needs will be prioritized over those of adult family members. Social workers require training if they are to provide the multilayered support needed by children living with disabilities and their families.

Expand the coverage and improve the quality of psychosocial services: the Ministry of Social Affairs urgently needs to undertake a referral system for families and children experiencing mental and emotional health issues. Community health centres would play a key role but introducing community facilitators could also help to identify families and individuals in need of specialist psychosocial support.

Link beneficiaries to technical and vocational training for adolescents: improving the quality of education and providing alternative forms of higher education might enable adolescents from beneficiary households to earn an income to support themselves and help their families.

Improve parenting skills and behaviour towards children: the Ministry of Social Affairs, through social workers or community facilitators, could do more at the family and community levels to raise parents' awareness of positive parenting, gender equality, non-violent discipline, and the challenges facing adolescents.

While the transfer programme is both relevant and effective, a comprehensive social protection package that takes the full range of children's vulnerabilities into account, alongside income poverty, is needed to deliver a more child-responsive, developmental and transformative cash transfer programme that benefits children and their families.

Research partner: Overseas Development Institute



MULTI-COUNTRY

The UN Convention on the Rights of the Child: A Study of Legal Implementation in 12 Countries



Laura Lundy, Ursula Kilkelly, Bronagh Byrne and Jason Kang

LINK TO THE FULL REPORT www.unicef.org.uk/documents/publications/ unicefuk_2012crcimplentationreport.pdf

CHILDREN'S RIGHTS IN 12 COUNTRIES Lessons in law

In the run-up to the twenty-fifth anniversary of the United Nations Convention on the Rights of the Child (CRC), a new report studies 12 countries that have implemented the provisions of the human rights treaty through various means and instruments. The study concludes that incorporating the CRC into national law – even if this can be done in a variety of ways – is vital, producing positive results that would be difficult to achieve by other means.

The survey was commissioned by UNICEF UK from researchers at Queen's University Belfast, with a view to learning from examples in other countries what might be the most effective and practical ways of embedding children's rights in United Kingdom domestic law. The 12 countries studied were chosen in part because of their potential relevance to the United Kingdom but also in order to represent a range of common and civil law structures; national and federated states; differing strengths in terms of implementation; and varied child-rights legislative models.

The countries chosen were: Australia, Belgium, Canada, Denmark, Germany, Iceland, Ireland, New Zealand, Norway, South Africa, Spain and Sweden. The reports of each of these nations to the Committee on the Rights of the Child were carefully examined, together with the Committee's assessments of their general measures of implementation. The policy and political contexts in each of those countries, with particular attention paid to human rights, child policy and international legal obligations, were examined along with other relevant datasets. Australia, Belgium, Germany, Ireland, Norway and Spain were then chosen for in-depth study, which involved interviewing individuals active in the field of children's rights, including academics, lawyers and service providers.

TABLE 1: RATIFICATION DETAILS OF THE CRC AND ITS OPTIONAL PROTOCOLS BY COUNTRIES STUDIED

	Date of ratification	Optional Protocol on involvement of children in armed conflict	Optional Protocol on sale of children, child prostitution and child pornography	Optional Protocol on a communications procedure
Australia	1990	×	×	
Belgium	1991	×	×	Signed, not ratified
Canada	1991	×	×	
Denmark	1991	×	×	
Germany	1992	×	×	Signed, not ratified
lceland	1992	×	×	
Ireland	1992	×	Signed, not ratified	
New Zealand	l 1993	×	×	
Norway	1991	×		
South Africa	1995	×	×	Signed, not ratified
Spain	1990	×	×	Signed, not ratified
Sweden	1990	×	×	
UK	1991	×		

A RANGE OF PATHWAYS

All States parties to the CRC have committed to implementing its principles and provisions in law and in practice, and this research suggests that there are multiple routes to success. However, the study indicates that, where countries have opted to incorporate the Convention fully into domestic law – in Belgium, Norway and Spain – it has had a significant effect. The very process of incorporation raises awareness of children's rights and the CRC in government and civil society. Interviewees felt that children were more likely to be perceived as rights holders, that there was a culture of respect for children's rights, and that there were knock-on effects in terms of the principles of the Convention being carried through into domestic law and policy.

Nevertheless, the CRC does not have to be fully incorporated in order for progress to be made. Integration of the Convention's principles into domestic law was taking place across all 12 of the countries analysed and appears to be increasing steadily over time. Article 3 of the CRC – the best interests of the child – was the general principle that was most likely to be represented in domestic law. It was most commonly found in areas of child protection, alternative care and family law, but also influenced juvenile justice in Ireland and immigration policy in Norway. Article 12 – the right of the child to have their views taken into account – was the principle next most likely to be included, and had a strong impact in practice in Belgium and Norway.

The following tools and strategies were considered successful in supporting implementation.

RAISING AWARENESS

The need for training was vital at every level in every country, and effective implementation was contingent upon awareness of children's rights. This did not simply involve knowledge of the CRC articles or issues such as child protection, but also an understanding that children are rights holders who are entitled to be treated with dignity and respect as well as having the right to exert influence over their own lives.

BUILDING A CHILD-RIGHTS CULTURE

Three significant drivers were identified as leading to increased levels of implementation by building a culture of respect for children's rights: a strong voluntary sector; advocates or supporters of children's rights in government or public office; and a periodic CRC reporting process.

MONITORING CHILDREN'S RIGHTS

Most of the countries analysed had a Children's Commissioner or Ombudsman, though the powers and resources at their disposal varied widely. The Commissioner or Ombudsman plays a key role in monitoring implementation over time, in holding government to account, and in ensuring consistency at times of political change. In countries with an Ombudsman – such as Ireland, Norway and Spain – the ability of children to make complaints directly to the office for investigation was seen as vital.

ESTABLISHING A NATIONAL PLAN FOR CHILDREN

Almost all the countries had a national plan for children, but not all plans had been kept current. National plans are most effective when accompanied by concrete action plans and targets. It is clear that an ambitious national strategy can drive CRC implementation in particular areas, as in the case of participation rights in Ireland.

GATHERING COMPREHENSIVE DATA

The availability of comprehensive data on children is essential. This needs to be systematically collected and must track changes over time. In most of the countries studied, the focus was on key child development and well-being indicators rather than on the full range of children's rights – though South Africa's attempts to develop and employ child-rights indicators stood out.

FOSTERING CHILD PARTICIPATION

The principle of child participation has been most fully accepted in Belgium and Norway, where there appears to be recognition that such participation is required at all levels of decision-making. Ireland has made an explicit commitment to listen to the views of children in national policy, which has supported a participation agenda in governmental decision-making across the board. Child participation appeared to be less systematic elsewhere, though there were many significant positive examples, including children's involvement in city-planning decisions in Melbourne, Australia.

CONDUCTING CHILD-IMPACT ASSESSMENTS

The most established example of child-impact assessments built into the legislative review process can be seen in Sweden. The Flemish region of Belgium has recently introduced an evaluation process, known under the acronym JOKER, which must be conducted for every draft decree directly affecting the interests of people under 25.

DEVELOPING CHILD-SPECIFIC BUDGETS

There was great interest in child-specific budgets, but the only practical example was found in South Africa, where researchers have collaborated with the National Treasury to analyse expenditure in relation to the implementation of child welfare legislation.

PROBLEMATIC AREAS

In all countries analysed, the most vulnerable children continued to fare less well in comparison to their peers, including those seeking asylum, those from indigenous groups and those in conflict with the law. In several countries, interviewees suggested that separated children and asylum seekers were not seen as rights holders in the same way as other children.

Implementation of the CRC in federated states could also be problematic. In Australia, Belgium, Germany

and Spain, the national government had signed and ratified the CRC, but the onus for ensuring its implementation in law, policy and practice effectively rested with devolved or federated regions with responsibility for areas such as education, health and social care. These regions differed in their level of commitment to the principles of the Convention as well as in their approaches to implementing them. There was, therefore, a clear risk that the duty of the State party to ensure implementation was diluted in the transfer of responsibility to the regions.

WAYS FORWARD

The researchers acknowledge that it is difficult to establish, in any definitive or scientific way, the likely impact on children's lives of the approaches and measures in the countries studied. Nevertheless, their judgement is that children's rights are better protected in countries that have given legal status to the CRC in some form, and that have followed this up by establishing the necessary systems to support, monitor and enforce implementation. Those countries that have adopted a range of approaches are deemed to be most successful in terms of implementation, though each nation has to find its own path.

The study facilitated the development of models for incorporation, of the implementation of the CRC in general, and of children's rights into domestic law and practice in ways that would be appropriate and effective for the different contexts across the UK, namely England (UK Government), Scotland, Northern Ireland and Wales. It concludes that, in general, formally incorporating the CRC into domestic law is the single most effective strategy for securing children's rights, on the grounds that positive consequences flow from this - in terms of how children's rights are perceived and implemented in practice – that would be hard to attain in any other way. Incorporation can have an impact on the content of domestic law and policy and can mean that the principles of the CRC start to infuse decisions made by state officials. Legal incorporation does, however, have to be underpinned by systematic child-rights training. It also requires a strong constituency – stretching from UNICEF and national human rights institutions right through to non-governmental organizations, academics and the media - acting as watchdogs, lobbying for change and raising public awareness of children's rights.



UGANDA

The Adolescent Girls Vulnerability Index: Guiding Strategic Investment in Uganda



Sajeda Amin, Karen Austrian, Michelle Chau, Kimberly Glazer, Eric Green, David Stewart, Marie Stoner

LINK TO THE FULL REPORT www.unicef.org/education/files/PGY_AGI_ Uganda_2013.pdf

ADOLESCENT GIRLS IN UGANDA Measuring vulnerability

Adolescents can all too often fall through the cracks – caught between the more obvious vulnerabilities of young children and the full citizenship of adulthood. Yet as child-mortality rates continue to decline, the proportion of children surviving into their second decade is growing all the time – as is the proportion of adolescents within the population in many developing countries, particularly in Africa. Girls are especially vulnerable in adolescence – they are more likely than boys, for example, to drop out of school, to marry at an early age, and to bear the brunt of poor sexual and reproductive health outcomes.

Recognizing this pattern of extreme need, UNICEF Uganda, in partnership with the Ugandan Government and the Population Council, conducted a comprehensive research project aimed at creating a new summary indicator, the Adolescent Girls Multilevel Vulnerability Index (AGI). The goal was to use the indicator as:

- an advocacy tool drawing attention to the risks facing adolescent girls;
- a rigorous measure to inform decisions about policymaking and allocating resources; and
- an instrument for planning and monitoring progress.

The Ugandan Government launched the report on the International Day of the Girl Child, 11 October 2013, and it has been widely publicized. The AGI not only studied Uganda and its constituent regions but also referred to the country's neighbours in eastern and southern Africa in a conscious attempt to ensure that its research and policy recommendations were applicable to more than the single country in which it was conceived.

HOW THE INDEX WAS CONSTRUCTED

The researchers adopted the UN definition of adolescence as between the ages of 10 and 19, though the subgroups of early adolescence (10–14) and later adolescence (15–19) were also incorporated. Recognizing that risk factors for adolescent girls are present at multiple levels, the AGI measures vulnerability in three different spheres – the individual, household and community. Figure 1 shows the main risk factors at these three levels selected for inclusion, ranging from early sexual experience and lack of schooling through inadequate water and sanitation to high national prevalence of HIV. Girls were considered vulnerable if they experienced deprivation on one count at the individual level, two at the household level and one at the community level.

The decision was taken to rely for the core data upon the Demographic Health Survey (DHS) and the Multiple Indicator Cluster Survey (MICS) – these are periodically conducted in all countries and thus allow for multinational comparisons. This had the advantage of ready availability but the disadvantage of being tied to a generic set of questions that do not allow for more detailed interrogation – for example, of the 10–14 age group, for which, as the researchers acknowledged, there is a conspicuous lack of data or programmatic provision. In addition, the household surveys do not collect detailed data for urban neighbourhoods, and do not distinguish between slum and non-slum areas – this effectively meant

FIGURE 1: INDICATORS AT EACH LEVEL

that the AGI was unable to consider the vulnerability of adolescent girls in the country's capital and largest city, Kampala. The researchers accepted that capturing this is an important area for future study.

THE GIRLS MOST AT RISK

The researchers found significant regional variation in adolescent girls' level of risk within Uganda, ranging from Karamoja, where over half (53.6 per cent) are vulnerable at all three levels, to the Western and Eastern regions, where 12 and 14 per cent of girls respectively experience this extreme vulnerability (*see Figure 2*). Even in the least extreme areas, however, the AGI reveals significant cause for concern – in the Eastern region, for example, three in four adolescent girls (74.9 per cent) are considered vulnerable at the individual and community levels.

Lack of education is a major factor putting girls at risk, though again there is wide regional variation, especially between Karamoja, where almost 90 per cent of 10–14-year-old girls are two years behind in their education or have never been to school, and the Central regions, where around half of girls are fully 'on track' in educational terms.

Risks at the household level tend to contribute less to girls' vulnerability than individual and community factors, though there is an alarming lack of access to improved sanitation in Karamoja and to improved drinking water in West Nile (*see Figure 3*). There

INDIVID	OUAL LEVEL	HOUSEHOLD LEVEL	COMMUNITY LEVEL
10-14 (1 of 2)	15-19 (1 of 4)	10-19 (2 of 3)	10-19 (1 of 3)
lo education DR wo or more years behind grade for age lot living with parents	Ever married Ever given birth OR currently pregnant No secondary school High-risk sex: Age at first sex under the age of 15 OR multiple partners OR non-regular partners	No access to an improved source of water No access to improved sanitation or shared facilities Household head has no education	 Lives in a community that is above the mean with respect to the following indicators among women aged 20-49.* a) Marriage before 18 b) Illiteracy** c) High national prevalence of HIV (% of population aged 15-49) and high rate of no comprehensive knowledge*** of HIV for women aged 20-49 * Calculated relative to Uganda for Uganda rankings and relative to countries in region for regional rankings. ** Either did not attend secondary school or higher or cannot read a whole sentence or part of a sentence. *** Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of acquiring HIV, knowing that a healthy-looking person can be HIV-positive, and knowing that you can't acquire HIV from mosquito bites or sharing food.

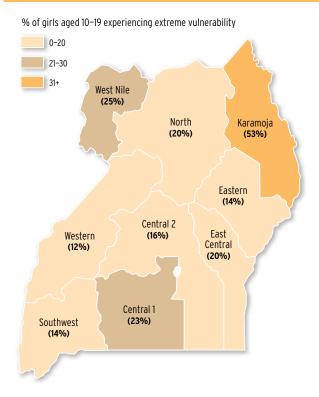
Source: Population Council 2013

is, however, a wide range of vulnerability at the community level, with early marriage particularly common in the Eastern and North regions, and high prevalence but little knowledge of HIV in Central 2, Western and Southwest regions.

The advantage of using the results from two separate DHS surveys five years apart was that progress could be tracked and, overall, the AGI shows a significant improvement, falling from 32.7 per cent in 2006 to 20.6 per cent in 2011, much of which was attributable to better access to improved water and sanitation over that period.

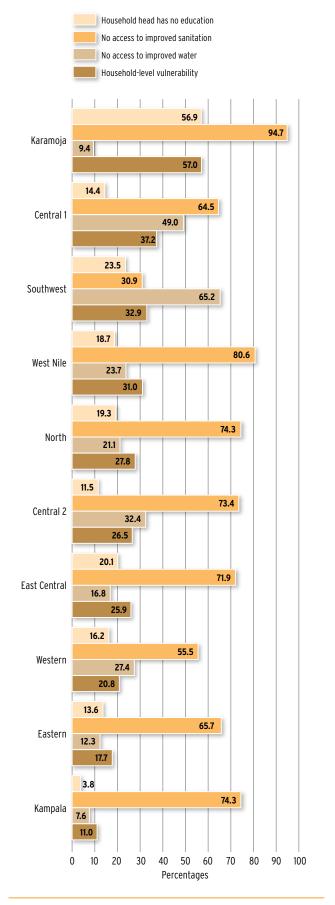
Cross-country comparisons within eastern and southern Africa were also fundamental to the AGI, not only to cast light on Uganda's progress relative to its neighbours but also to encourage its adoption as a tool by other countries in the region (*see Figure 4*). Uganda was, by this measure, a middle-ranking country, with its adolescent girls much more at risk than girls in Lesotho, Namibia, Zimbabwe and, nearer home, Rwanda, but much less at risk than those in Ethiopia, Somalia and, nearer home, Burundi and Tanzania.

FIGURE 2: AGI MULTI-LEVEL VULNERABILITY (3 LEVELS) RESULTS FOR ADOLESCENT GIRLS AGED 10–19, UGANDA



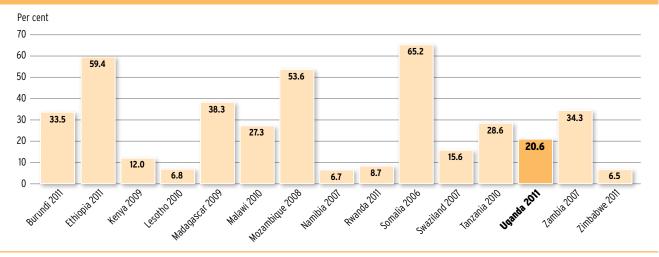
Source: DHS 2011

FIGURE 3: AGI HOUSEHOLD-LEVEL RESULTS FOR GIRLS AGED 10–19, UGANDA



Source: DHS 2011

FIGURE 4: PERCENTAGE OF ADOLESCENT GIRLS AGED 10–19 WHO ARE EXTREMELY VULNERABLE, EAST AND SOUTHERN AFRICA



Source: DHS 2007-2011; MICS 2006-2008

THE WAY FORWARD

The AGI illuminates what might otherwise not be evident: that in Uganda adolescent girls are more vulnerable to individual and community-level factors than to household-level threats. This helps guide policymakers towards three broad-brush policy goals:

- making sure that girls stay in school and that their attainment is improved;
- strengthening HIV programming in certain key regions; and
- combatting social values and cultural norms that promote child marriage and early childbearing.

In general, policy frameworks are not the problem in Uganda but rather the lack of dissemination, enforcement and coordination of the policies that do exist. The situation in the country could be improved, for example by creating a national interministry committee to harmonize government actions to help adolescent girls - as well as district-level committees to monitor and address adolescent girls' issues. Policies should be aimed at reaching very young adolescent girls with investments that will prevent negative outcomes rather than cope with the fall-out after the event. To this end, the researchers acknowledged that it would be useful to collect additional data, disaggregated to reflect the diversity of adolescents' experience and living arrangements, including information specifically related to girls at the younger end of adolescence - between the ages of 10 and 14.

Intervening to improve the quality of girls' educational experience is vital, as is strengthening child protection and countering the social norms that lead to girls' rights being violated. The strongest programmes are those that put assets directly in the hands of vulnerable adolescent girls and create an enabling environment in their communities.

If existing support is not working – and it is clear that many vulnerable adolescent girls are simply not being reached – it is important that lessons are learned from the most successful girls' programmes. These tend to maximize participation by, for example, ensuring that there is a safe place in the community where a group of girls can meet regularly with peers, and that effective female mentors are involved. There is no point in even thinking about the content of a programme unless the targeted girls actually turn up.

To reach the most vulnerable girls, the researchers argue, it will often be necessary to create new programmes as well as to expand existing ones. In many cases nothing exists at the community level in which girls can participate and new activities will need to be created.

The most successful initiatives have often concentrated on providing a diverse range of social, health and economic assets for girls. This shifts the key question from 'What are girls' problems?' to 'What do girls need?' This can lead programmes to focus on helping girls in key areas of their lives instead of narrowly focusing on a particular problem.

Research partners: Republic of Uganda, the Population Council.





CHINA

Poor Complementary Feeding Practices and High Anaemia Prevalence among Infants and Young Children in Rural Central and Western China



Chris Stowers/PANOS

David Hipgrave, Xulan Fu, Hong Zhou, Ye Jin, Xiaoli Wang, Suying Chang, Robert W. Scherpbier, Yan Wang, and Sufang Guo

LINK TO THE FULL REPORT www.nature.com/ejcn/journal/vaop/ncurrent/ full/ejcn201498a.html

INFANT FEEDING IN RURAL CHINA

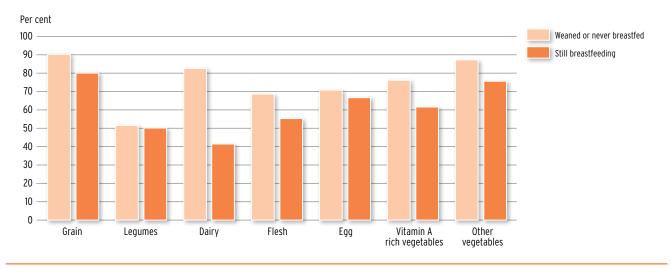
Nutrition practices and the risk of anaemia

China has made great progress in reducing rates of under-five mortality and undernutrition, but poor rural areas are lagging behind. A new detailed survey of infants and young children in the country's central and western regions, where iron deficiency anaemia and other forms of vitamin and mineral deficiency are particularly prevalent, has laid this at the door of poor infant and young child nutrition practices – and has shown that continued breastfeeding beyond the first year can be an indicator of associated problems.

This was the first time that infant and young child feeding in these parts of China had been documented using methods that are standard elsewhere in the world. The survey – a joint venture between the School of Public Health at Peking University and UNICEF – assessed 2,244 children aged 6–23 months in 26 counties spread across 12 provinces, using sophisticated statistical techniques to analyse associations between the children's haemoglobin levels, feeding practices and their socioeconomic, demographic, environmental and healthservice contexts (*see Figure 1*).

The results were startling – and potentially have huge implications for the local Chinese authorities. Only 41 per cent of the infants and young children surveyed consumed a minimum acceptable diet and, perhaps surprisingly, those children who continued breastfeeding after the first year of life were particularly likely to receive inadequate nutrition. Complementary foods in the surveyed areas tend to be introduced too early by breastfeeding mothers but they are also

FIGURE 1: FOOD INTAKE DIVERSITY IN SURVEYED HOUSEHOLDS, BY BREASTFEEDING STATUS (N=2,244)



Source: Hipgrave et al. (2014), European Journal of Clinical Nutrition:1-9

offered in insufficient quantity and variety, especially to children who have not been weaned. Children who had been weaned or, indeed, who were never breastfed, tended to have a better diet.

The other factors associated with poor infant and young child feeding practices were age (younger infants were less likely to be receiving an appropriate diet), low levels of maternal education, and having a home in the poorest areas or residing at higher altitudes. Children who had been left behind in the community by a parent who had migrated for work were also found to be more at risk.

INADEQUATE DIET

Despite the reduced rates of undernutrition in rural China over the last two decades – China achieved the 2015 Millennium Development Goal target on child underweight as early as 2002 – the infant and young child feeding practices observed by the researchers were consistently poorer than the recommended international standards. In particular, there were poor rates of minimum meal frequency, which reflects the tendency in rural China for infants and young children only to be fed at the same time as adults. Most of the children surveyed had a diet largely dependent for their nutrition on grains and cereals that contained elements inhibiting the absorption of iron.

Locally produced iron-fortified infant formula and complementary foods are widely available, but poor rural households may not give them priority. While most infants can share standard family foods by about 12 months of age, they require nutrient-dense foods up to the third year of life. Plant-based complementary foods alone are insufficient to meet the needs for certain nutrients (particularly iron, zinc and calcium) during this period, and animal products may not be sufficiently available to meet these deficiencies.

For these reasons it is vital that other strategies are pursued to address micronutrient malnutrition in poor rural areas of China. These could include fortifying food prepared in the home with micronutrient sprinkles or powders, providing children with supplements, or cash transfers to poorer families to make more nutritious foodstuffs affordable; there is a raft of interventions that have been internationally proven to improve the nutrition of young children and their mothers, and these could be pursued in these regions of China.

Weaned or never breastfed	Continued breastfeeding	Total				
71.9%	51.7%	63.2%				
81.5%	57.7%	72.3%				
44.4%	37.1%	41.6%				
78.9%	63.3%	72.1%				
44.6%	59.8%	51.3%				
	or never breastfed 71.9% 81.5% 44.4% 78.9%	or never breastfed Continued breastfeeding 71.9% 51.7% 81.5% 57.7% 44.4% 37.1% 78.9% 63.3%				

TABLE 1: COMPLEMENTARY FEEDING AND ANAEMIAPREVALENCE AMONG CHILDREN AGED 6-23 MONTHS

Source: Hipgrave et al. (2014), European Journal of Clinical Nutrition:1-9

There is also a particular need, however, for parents in rural China to be educated about infant feeding frequency and dietary diversity. This could take place during parents' regular points of contact with the health system, for example for vaccination services or growth monitoring. This should apply to all parents, but the research indicates that special attention should be paid to the poorest families, to children left behind by migrant parents, to mothers with low education and to families living at higher altitudes or with more than one child.

In addition, the higher risk of poor infant and young child feeding practices among children who continue to be breastfed after the first year means that women still breastfeeding at this time should be targeted for counselling on the importance of frequent, diverse meals containing adequate iron as well as for follow-up screening of their children and, if necessary, intervention.

URGENT NEED FOR ACTION

Although the population sample in this research includes a disproportionate number of children from

ethnic minorities, the results indicate that there are millions of cases of iron deficiency and anaemia among children in rural China that could be prevented. There are encouraging signs that the health authorities in China are beginning to take this problem more seriously. After several pilot schemes, pre-packaged micronutrient powders standardized for young children are now being distributed in poorer counties for home fortification of meals, and a national standard for micronutrient supplementation for women is being finalized. In addition, proactive steps being undertaken to improve economic development in China's rural west are also likely to benefit children and families such as those in this study.

But the problem remains urgent: rates of micronutrient deficiencies in Chinese children have remained stubbornly high while other areas of maternal and child health have improved markedly. This research should both strengthen and provide renewed impetus to efforts by UNICEF China and the Chinese Government to ensure that millions of children in poor rural areas receive the proper nutrition that is their right.



MONGOLIA

Reducing Preventable Child Deaths from Pneumonia, Diarrhoea and Newborn Complication in Mongolia



Ginger Johnson and Juliet Bedford

LINK TO THE FULL REPORT
www.unicef.org/mongolia/2145_21246.html

REDUCING CHILD DEATHS IN MONGOLIA Spreading the word

Child deaths in Mongolia could be reduced by a broad range of initiatives that includes, at one end of the spectrum, training traditional healers and, at the other, investigating greater use of mobile phone technology. The recommendations come in a new report commissioned by UNICEF East Asia and the Pacific Regional Office that examines how to reduce preventable child deaths from pneumonia, diarrhoea and newborn complications.

The study focuses on two of the most disadvantaged regions in Mongolia: Khovsgol Province in the north, a rural area, and Nalaikh, a peri-urban district of the capital, Ulaanbaatar (*see Figure 1*). It used in-depth interviews, focus group discussions and a technology survey, and involved 162 participants, including primary caregivers, local healers, religious leaders, pharmacists, fathers, community health workers, nurses and midwives (*see Table 1*).

RECOGNIZING SYMPTOMS AND CAUSES

In general, caregivers recognized the key symptoms of pneumonia, especially respiratory distress. Most people felt that the best preventive method was to keep children warm, though many others also mentioned the need to support a child's immune system with healthy foods and vitamins.

Caregivers were less confident about identifying the causes of diarrhoea, which was seen as a 'normal' problem that would not warrant a trip to a clinic or hospital unless the child became dehydrated or started vomiting. Handwashing seemed to be of a generally

FIGURE 1: MAP OF FIELD SITES



high standard in both Khovsgol and Nalaikh, but nobody raised sanitation as an issue connected with diarrhoea. The disposal of young children's faeces was treated separately from that of adults, not just because it was difficult for them to use a shared latrine but also because there was a common belief that children's stools are 'cleaner'.

The most common problems experienced during pregnancy were swelling and high blood pressure. These had often led to mothers' referral to the provincial hospital for delivery where better equipment and more qualified staff resulted in a birth with no complications. Swelling in pregnancy was commonly attributed to cold weather but nobody understood the causes of high blood pressure.

HEALTH-CARE CHOICES

Caregivers sought treatment for their children in a range of different ways, from spiritual healers and rural health workers to clinics and hospitals.

SPIRITUAL AND TRADITIONAL HEALERS

Local healing practices were particularly adopted by two ethnic groups: the Darkhad in Khovsgol and the Kazakh in Nalaikh. Generally these healers did not dispense medication but rather spiritual help that preceded conventional medical treatment. Shamans in Khovsgol generally did not deal with pneumonia, diarrhoea or with pregnant women, but Kazakh healers treated childhood pneumonia by applying horsemeat to the body and misguidedly advised mothers to keep their babies indoors for the first 40 days of life.

PHARMACIES

Frequent symptoms, including fever, coughing and a runny nose, were generally first treated with medicine bought at a pharmacy. Treating children in this way before seeking medical attention was common.

HEALTH FACILITIES

All participants had recently visited a health centre and were positive about biomedical treatment but more negative about the delivery of services. All but the nomadic herder families in Khovsgol had fully vaccinated their children and all considered that it was best for babies to be delivered at a health-care facility with skilled staff in attendance. Gender issues did not prevent women from seeking health care – and the majority of doctors were women.

BAGH FELDSHERS

The services provided by these rural health workers varied depending on the distance to families, the time of year and the level of institutional support. But all those consulted were well versed in the World Health Organization *Integrated Management of Childhood Illness* guidelines.

PRIVATE CLINICS

Very few caregivers could afford private treatment. Users of private clinics had generally had an adverse prior experience of public facilities.

	Khovsgol Province (n=10)		Nalaikh District (n=7)		
Relation to child	Mother	10	Mother	6	
			Grandmother	1	
Ethnicity	Darkhad	2	Kazakh	2	
	Reindeer	2	Khalkh	2	
	Khalkh	4	Migrants	3	
	Khotgoid	2			
Age range	Mothers (years)	23-38	Mothers (years)	20-35	
			Grandmother	58	
Children in care	Number of children	1-4	Number of children	1-4	
Religion	No religion	4	No religion	4	
	Buddhist	4	Islam	2	
	Shamanism	2	Shamanism	1	
Education level	No education	0	No education	1	
	Primary	2	Primary	0	
	Secondary	4	Secondary	5	
	Tertiary	4	Tertiary	1	
Monthly income	Tugrik	40,000-1,300,000	Tugrik	40,000-550,000	
	US\$	23-758	US\$	23-321	
Most recent child sickness	Pneumonia	1	Pneumonia	1	
	Diarrhoea	3	Diarrhoea	2	
	Pneumonia and diarrhoea	2	Pneumonia and diarrhoea	2	
Newborns	No. of interviewees	4	No. of interviewees	2	

Source: Anthologica: authors

BIRTHING AND FEEDING PRACTICES

The births described were generally attended by at least four people – a doctor, nurse, midwife and midwifery assistant. Fathers were never present. Midwives led the delivery, with doctors intervening only during complicated or obstructed labours. A notably high proportion (37 per cent) of mothers participating had delivered their baby via Caesarean section, however. Maternity staff advised mothers to breastfeed exclusively for between six months and two years. A common concern among mothers was low levels of breastmilk production, which led many to start supplementary feeding with infant formula or milk from cows or reindeer.

OVERCOMING BARRIERS

The barriers deterring participants from seeking healthcare treatment were of five kinds: financial obstacles; distance, transport and location; sociocultural and religious factors; insufficient information; and health facility deterrents. The inability to afford prescribed medicines or supplies was the most common problem, though transportation home from hospital was also mentioned. Caregivers generally coped by buying only the most important medicines or partial doses or by prioritizing the child's health over other household needs.

The biggest obstacles to access were faced by rural herder families but distance and lack of transport also deterred people in Khovsgol referred from district centres to provincial hospitals, especially during winter and early spring. Participants were unanimous in suggesting that the best solution to the problem of access would be to increase the capacity of *bagh feldshers*.

Sociocultural and religious factors also represented barriers to seeking advice and treatment. When local healers were consulted it did not preclude later seeking biomedical health care but it could result in potentially harmful delay. Children being improperly dressed in winter caused harm as did the intense workload of pregnant women, particularly herders. Health-care professionals stressed the necessity of improving caregivers' education, while health information in general was seen to be insufficient. Participants cited television, brochures and other mothers as their key sources of health information, not clinics or hospitals. Health workers lamented their own lack of knowledge; they also suggested using more visually engaging information materials.

The environment of many health facilities was frequently a deterrent. Among the problems here were: a forbidding environment, with inadequate heating and clean water and overcrowding; lack of essential medical equipment; the service provided by health professionals, who are often overworked but can also be perceived as discriminatory or uncaring; and distrust of the diagnoses and prescriptions offered. Among the solutions proposed by participants were: hiring more highly skilled doctors so as to reduce the pressure on staff; allocating appointments in advance to avoid queuing and discrimination; improving the basic infrastructure of facilities in Khovsgol; and increasing salaries and incentives for trained staff who agree to work in rural areas.

THE WAY FORWARD

The research team highlighted four interrelated areas for intervention. These were communication, health education, mobile health and engaging the private sector.

Communicating correct messages and information is a priority. Pneumonia communications should focus on prevention and early-warning signs but should also incorporate advice about the respiratory dangers associated with burning solid fuels inside the home. Diarrhoea communications should also focus on prevention, including handwashing with soap, improved sanitation and household water treatment and storage. But they should also counter the myth that children's faeces are 'cleaner' than adults' and should encourage exclusive breastfeeding while engaging directly with mothers' concerns about low milk production. Two further key messages to be advanced are that caregivers should not make decisions about medication for children and should stick to the doses prescribed by health professionals.

Better communications and information can emerge through improved health education. The quality and quantity of educational sessions need to be improved and health professionals and *bagh feldshers* should be trained in communication and counselling skills. The winter months provide the best opportunity for such sessions but community activities should also be borne in mind. Mothers should be targeted for health education messages at maternity clinics and should also be offered the chance to share experiences together informally. The role of local healers should be recognized and they should receive basic training on promoting healthy behaviours and referring patients promptly to medical services.

A specific survey of participants' use of new technology suggested that introducing mHealth – the use of mobile technology to gather data and spread health messages – in Mongolia is a serious possibility that should be investigated further. A high percentage of caregivers had mobile phones that they used for calls and text messages and phone credit is widely available. The use of low-cost tablet computers by *bagh feldshers* should also be considered, along with CommCareHQ technology for Java-enabled mobile phones.

These three areas could be facilitated by private-sector engagement. Three partnerships in particular could enhance child-survival activities at national and local levels: with the two biggest mobile phone companies, Unitel and Mobicom; with the National Broadcasting Channel, which could reach the largest number of caregivers if health programming were routinely aired at set times; and with private pharmacists, who already have a network that reaches down to community level.

In addition, representatives from the Ministry of Health, the National Centre for Maternal and Child Health, the National Centre for Communicable Diseases and UNICEF agreed on the key advocacy issues in this field. Raising awareness of evidence-based child health initiatives is vital if public support and government funding are to be improved – and politicians should be targeted more broadly, perhaps taking them to rural hospitals at times of high workload so that they understand the need for increased resources. Better planning is essential, with enhanced coordination between sectors. But the health system is also in great need of extra human resources - more qualified personnel prepared to work in rural provinces as well as continuing professional development and refresher training for existing staff. The Ministry of Health needs to concentrate on supply-chain management and the provision of essential drugs rather than relying on private companies for drug distribution.





SERBIA

Providing Additional Support to Students from Vulnerable Groups in Pre-university Education



UNICEF and the Government of the Republic of Serbia

LINK TO THE FULL REPORT www.unicef.org/serbia/POLICY-IMPACT-ANALYSIS-Providing-Additional-Support-to-Students-from-Vulnerable-Groups-in-Pre-University-Education.pdf

EDUCATING VULNERABLE CHILDREN IN SERBIA

How to reach the poorest

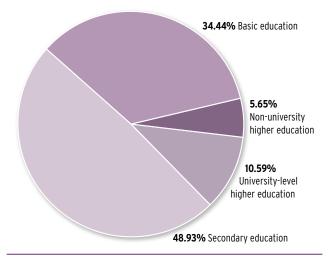
The lives of vulnerable Serbian children who are currently out of school and at risk of dropping out could be transformed if a meticulously costed package of measures were to be introduced by the national government and its partners, according to research conducted by UNICEF in partnership with the country's Social Inclusion and Poverty Reduction Unit.

The research project interrogated not just the education policy framework but also the existing social welfare measures that are in place to help poor families. It then examined international best practice before coming up with a list of specific recommendations, contending that the return on the proposed investments would be worth seven times the original expenditure.

More than a third of the Serbian population have completed only basic education or lower, while only 16 per cent have benefited from higher education (*see Figure 1*). Attendance at primary school and for a year of preschool education is compulsory, yet 96 per cent attend the former and less than 90 per cent the latter. Even more of a concern are the high drop-out rates, with students from the Roma minority being particularly likely to be affected, with a drop-out rate at least five times the national average. Among children from Roma settlements aged 15–18, only 19 per cent attend school.

Nearly a quarter of the population is considered to be at risk from poverty, which is more likely to afflict those with basic education or less, only 30.3 per cent of whom are employed. As of 2010, 9.2 per cent of

FIGURE 1: EDUCATION BREAKDOWN OF THE SERBIAN POPULATION ACCORDING TO THE 2011 CENSUS



Source: UNICEF and Government of Serbia (2013)

the Serbian population were living below the absolute poverty line, with children particularly vulnerable (13.7 per cent), though, for the purposes of the study, children from poorer families were defined as being those from the poorest 20 per cent of the population. Such children can receive some forms of in-kind assistance to improve the chances of their attending and completing school, including provision of clothing and footwear, free meals in school, free textbooks and school supplies, and free transportation.

However, such assistance is not consistently supplied across the country – and even in areas where it is available, qualifying families often do not know about it. Even more of a concern for the researchers was that there seemed to be very little institutional cooperation between the education and social welfare systems. There are no privileged cooperation channels or horizontal links between them – only working groups or committees with limited decision-making powers. Their data-collection systems are separate and there is no sharing of information at either national or local levels.

BOTTLENECKS IN THE SYSTEM

The research project conducted a bottleneck analysis to establish exactly where the current system is not working. This is a powerful tool for understanding the barriers that vulnerable children have to overcome in order to avail themselves of the education that is their right.

Enrolment bottlenecks exist at all levels of education but are most pronounced at the preschool level. Distance from the nearest school or preschool is one major factor deterring participation. In general there is insufficient outreach to vulnerable social groups, who are frequently unaware of their legal right to support. Roma children are among those most likely to face obstacles related to lack of information, rejection due to the limited space in preschool institutions and in some cases lack of identity documents. In general, the new national commitment to inclusive education is not yet percolating through to the preschool education level.

Attendance barriers include the lack of any systematic provision of free meals, clothing or school supplies for vulnerable children, as well as the failure of some local authorities to fund transportation to school. Schools sometimes do not accept their responsibility for preventing children from dropping out. The lack of contact between schools and centres for social work, moreover, can mean that parents receiving child allowance are not held to the condition that they send their child to school.

There are also **progression bottlenecks** – students are frequently required to repeat years because they have not met the requisite standards. Although such provisions have been eliminated from the early years of schooling (up to Grade Four), thereafter the system remains extremely rigid. Students from families with low socio-economic status tend to be at higher risk of repetition, being forced to switch to part-time education – for which a fee is payable – or being enrolled in low-quality education tracks that do not lead to decent employment or academic studies.

The **barriers to achievement** are mainly erected by the poor quality of the education available in schools. While this affects all students, children from poor families are less able to compensate for it by private study or use of external tutors. Textbooks are free only in the lower grades, which can be a significant disincentive for poorer students to progress. Computers are not available for everyday use, which has a greater impact on students less likely to have them in the home. There is a need for educational reforms that would include improving teacher competency, introducing modern teaching methods and fostering greater parental involvement.

RECOMMENDATIONS FOR CHANGE

Having identified the key problems, the research project considered relevant best practice internationally. The policies and practices considered most appropriate to the Serbian situation were then carefully examined and rigorously costed. The measures recommended were divided into three categories: basic support measures, including material help, for vulnerable children;

TABLE 1: NUMBER OF SCHOLARSHIPS AND LOANS APPROVED IN 2011/12 AND 2012/13, WITH BREAKDOWN FOR VULNERABLE GROUPS IN 2012/13

Year	Number of loans	Number of scholarshi	ips
2011/12	375	11,995	
2012/13	330	12,210	
		For vulnerable groups 2012/13	Total 1,615
		Students without parents	591
		Students with one parent	305
		Roma students	501
		Students with disabilities	96
		Students whose parents disappeared during the war	7
		Student refugees or deportees	114
		Readmittees	1

Source: Ministry of Education, Science and Technological Development

improvements in educational support; and social services that actively promote inclusion.

BASIC SUPPORT MEASURES

Child allowance is a long-established mechanism for targeting poor children but it needs improved targeting, coverage and modernization as well as being more strongly conditional upon the child's school attendance.

Meals and clothing are the basic needs of children from poor families. The current provision to poor children is too fragmented and unpredictable. Across the whole country, the system should provide clothing at least once and ideally twice a year as well as free snacks or meals in school.

A better support system for children from disadvantaged families is essential. This would include the free provision of textbooks in all grades and better targeting of scholarships and dormitory accommodation, as well as a new mentoring system.

IMPROVEMENTS IN EDUCATIONAL SUPPORT

Investing in preschool care is vital if Serbia is to modernize – it lags farther behind standard EU practice on this measure than on any other. Preschool places should be free for all families in receipt of child support and subsidies for preschool should be available to all vulnerable groups. **Remedial teaching** should be revised and modernized so as to eliminate major barriers to attainment and progression, reducing repetition and drop-out.

School libraries and ICT equipment should be much more available to students from vulnerable backgrounds, with longer opening hours, more proactive librarians and recruitment of parents as assistants.

School development plans should be harnessed to prevent students from dropping out and to foster provision for vulnerable children. Schools should receive small grants to pilot innovative new projects and campaigns to reduce drop-out.

SOCIAL SERVICES THAT ACTIVELY PROMOTE INCLUSION

Outreach services for the poor and excluded need to be systematically developed. At present, local provision is haphazard and dependent on donor funding and initiative. Minimum standards of provision should be introduced, as well as licensing of providers.

Centres for social work need to prioritize the education needs of vulnerable children, and **training in parenting** should be provided by the municipality to all families receiving child allowance.

The total annual cost of this package of proposed measures would involve increasing the budget of the ministry responsible for education by between 7.4 per cent and 10 per cent – between 0.33 per cent and 0.45 per cent of GDP. However, the measurable long-term benefit resulting from the introduction of these measures, expressed in terms of higher earnings and lower social welfare benefits, is estimated at about €7.8 billion and is about seven times higher than the initial investment. This is without taking into account the non-measurable but undeniable benefits that would potentially accrue to society in terms of better health, higher security and greater social cohesion.

The careful, detailed costing of this series of proposals – as well as the convincing case made by the researchers for the social returns on the investment – makes it more likely that they will be implemented. UNICEF and its government and non-governmental partners are already using the study to advocate for further development and implementation of equity-based education policies at all levels.

Research partners: Government of the Republic of Serbia; Social Inclusion and Poverty Reduction Unit, UNICEF.



SOUTH AFRICA

Preventing Exclusion from the Child Support Grant: A Study of Exclusion Errors in Accessing CSG Benefits



Patricia Martin, Justine Burns, Buyi Yeni and Andries Mangokwana

LINK TO THE FULL REPORT http://www.unicef.org/southafrica/SAF_ csgexclusion.pdf

SOUTH AFRICA'S CHILD SUPPORT GRANT

The children who slip through the net

Many of the South African children most in need of the Government's Child Support Grant (CSG) are not benefiting from it and new research reveals the barriers preventing it being claimed on their behalf. The study goes on to make a critical assessment of existing government attempts to redress the problem before recommending key policy and programmatic reforms.

The CSG was established by the South African Government in 1998 as a means-tested flat-rate cash transfer to the caregiver on behalf of their children. Over the years the age of eligibility for the CSG has gradually been increased so that, now, all children aged 0-18 years whose caregivers' income falls below the means test threshold are eligible to receive the grant. As a result of the changes to the eligibility rules, coverage of the CSG has risen to approximately 11 million children, which represents roughly two-thirds of all South African children younger than 18 years old. The CSG has proved to be one of the Government's most effective tools for tackling poverty and recent studies have unequivocally demonstrated its social and economic value. Access to the CSG mitigates child poverty, significantly improves childhood development, health and education, and reduces risky adolescent behaviour. But despite, or perhaps because of, the rapid expansion in CSG coverage in such a short time span, many eligible children are still slipping through the

net – particularly infants and a number of groups of vulnerable children.

The South African Social Security Agency (SASSA) and UNICEF commissioned the study with the aim of identifying those children who are losing out, establishing the reasons for their exclusion and recommending how the situation could be improved.

The quantitative element of the research analysed material from three national datasets to establish the number of children eligible for the CSG, the proportion of those actually claiming it, and the geographical, demographic, social and economic factors contributing to their exclusion. The qualitative component of the study involved analysing the responses of 274 people in two provinces marked by high rates of exclusion.

THE EXCLUDED CHILDREN

The results show that, in 2011, up to 23.7 per cent (or 2.3 million) of eligible children were not receiving the CSG. Infants in the first year of life and adolescents were disproportionately affected (*see Figure 1*).

Contrary to what might have been expected, the highest rates of exclusion were in predominantly urban and wealthier provinces, particularly the Western Cape and Gauteng, though there was substantial variation between districts within provinces. In general, take-up rates were better in informal than in formal areas, whether in a rural or an urban context (*see Figure 2*). Exclusion tended to be higher among children who had dropped out of school, those whose mothers had no education or were teenagers. Orphans, particularly those who had lost both parents, were particularly at risk, as were children living on the street, refugees and those with limited mobility.

IDENTIFYING THE BARRIERS

Understanding exactly which groups of children are failing to benefit from this key anti-poverty measure is clearly essential, but it is even more vital to establish why this is the case. The researchers identified a number of common barriers that stood between vulnerable children and the CSG. Among these were:

Confusion over the means test:

misunderstandings over exactly who qualifies for the CSG have deterred many eligible caregivers from applying. The confusion is by no means only that of the general public – SASSA staff, other government departments and non-governmental organizations (NGOs) have all also suffered from a lack of accessible and accurate information on the topic.

- Lack of official documents: the requirement to produce papers such as birth certificates and identity documents remains a major stumbling block despite government efforts to relax the documentation requirements for potential applicants.
- Lack of time or motivation exacerbated by long queues: some caregivers – particularly those who are working, have new babies or have children

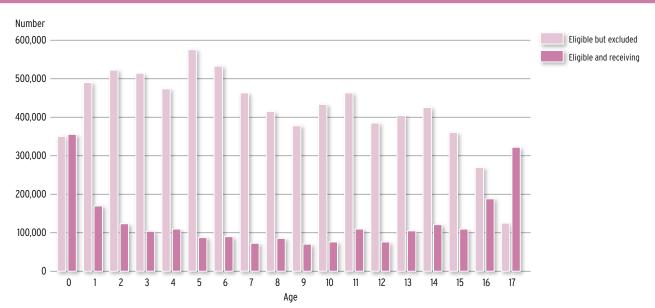


FIGURE 1: NUMBER OF ELIGIBLE CHILDREN RECEIVING/EXCLUDED FROM THE CSG IN 2011

who are sick – find it particularly hard to apply for the CSG, the more so because of an inhospitable environment and long queues at the service points.

- Distance from service points: caregivers in underserviced and remote areas need to travel long distances and often must make multiple trips due to inadequate integration of services.
- Prejudice and discrimination: some SASSA staff believe that refugees or teenage mothers should not receive the CSG. Some older children, meanwhile, do not apply because they feel there is a stigma attached to receiving the benefit.
- Difficulties in transferring the CSG between families: caregivers of children who move families, for example when their parent dies of AIDS, must apply afresh and the procedure can be problematic, especially if a change of province is involved.
- Confusion over whether children out of school qualify: the Government prefers children aged 7 to

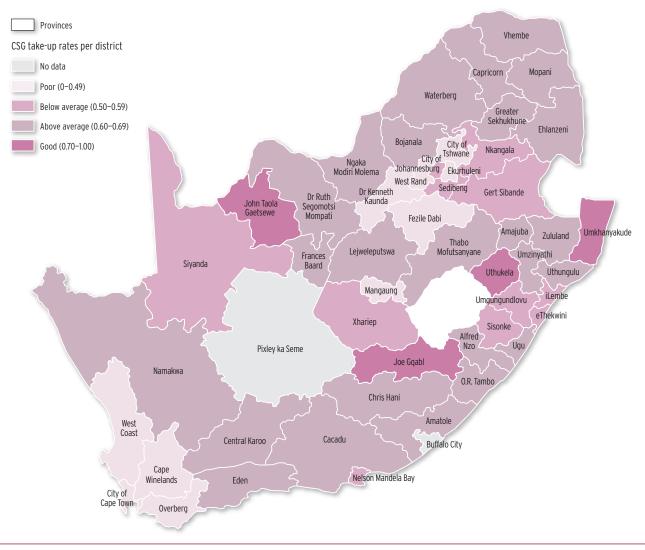
18 who are receiving the CSG to be in school and this has led many people mistakenly to assume that out-of-school children are ineligible.

- Administrative hurdles during registration: the complexity of the application process can intimidate some caregivers.
- Inadequate programme rules: teenage mothers are not allowed to receive the CSG on their child's behalf as well as their own; and although there is no explicit ban, a child who heads the household cannot apply for their siblings.

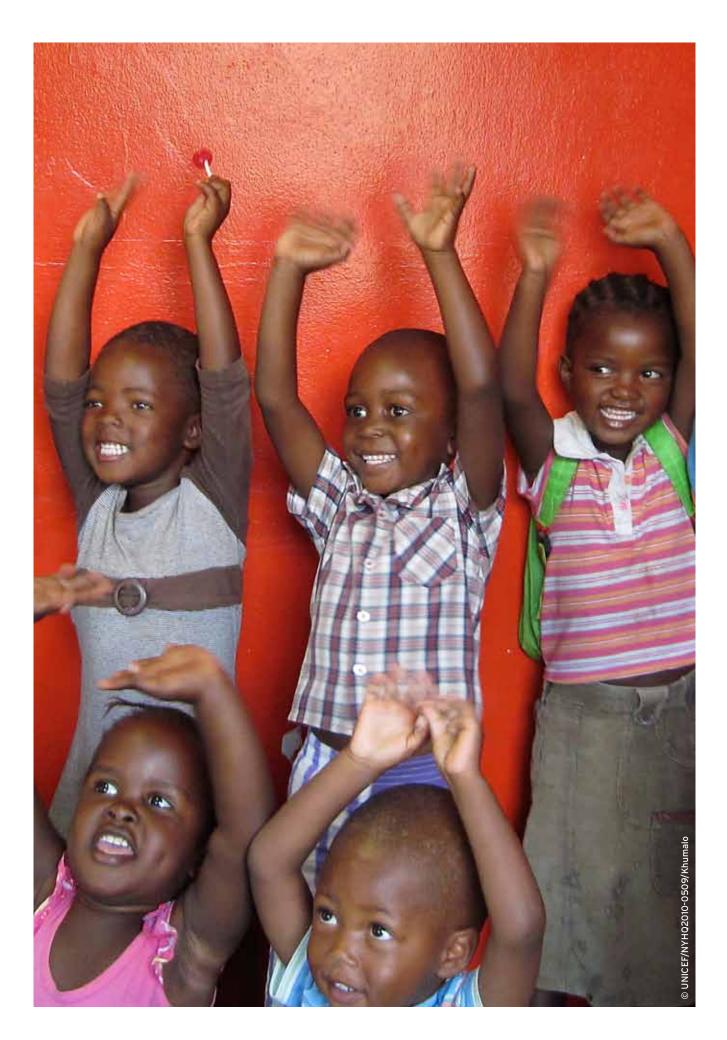
IMPROVING ACCESS

SASSA has already implemented programmes, policies and networking innovations that have addressed a number of these barriers and improved access. The researchers evaluated the success of these measures and recommended further improvements.

FIGURE 2: COMPARATIVE CSG TAKE-UP RATES BY DISTRICT, ALL AGES



Source: National Income Dynamics Study - NIDS, 2010



BETTER OUTREACH

In general, distance from offices where people might access the CSG is still a major problem. SASSA's Integrated Community Registration Outreach Programme has improved accessibility and take-up in a number of rural areas marked by high levels of vulnerability; but its targeting of areas of low take-up is still insufficient and extra localized outreach initiatives targeting vulnerable households have been hamstrung by the lack of a clear CSG-related mandate. In addition, the outreach programme has not been effective in addressing urban barriers, which are not the same as those in rural areas.

SASSA works with some other government departments but has yet to build formal bridges in health, labour, youth and further education. Even the agreements that it has concluded rarely cascade down to the local level in the way they should.

ADDRESSING DOCUMENTATION BARRIERS

The Social Assistance Act now has a provision allowing people to use alternative documents when applying for the CSG, yet the lack of documents remains one of the most common barriers to access. Part of this problem seems to lie with the delays incurred by other government departments, for example Home Affairs, in issuing the necessary identity documents. However, some SASSA staff are rejecting alternative documents owing to insufficient training or fear of fraudulent applications.

Online hospital birth registration has improved birth certification but this has not yet had a discernible impact on improving the rate of CSG take-up on behalf of infants, which suggests that caregivers have other documentation concerns or experience other barriers. SASSA should assess the feasibility of using its biometric registration programme to eliminate many of the barriers associated with documentation and the means test. Pre-birth registration should be considered as a means of improving the low take-up of the CSG on behalf of infants.

TARGETING CHILDREN AFFECTED BY AIDS

Although there is a multifaceted package of programmes aimed at supporting access to the CSG for orphans and other children affected by HIV and AIDS, these are poorly systematized and implemented. In particular, the transfer of the CSG to an interim caregiver on the death of a parent is not working smoothly enough, while children who head households continue to be hampered in their attempts to claim the CSG. SASSA staff and drop-in centres are not trained well enough on the social security rights of such children.

GREATER FLEXIBILITY

SASSA provides home visits for caregivers who are elderly or disabled but not to mothers rendered immobile by cultural practices, post-birth conditions or other onerous domestic responsibilities. After-hours services at local offices are often unavailable for working caregivers. Feasible ways to enable adolescents with no caregivers to access the grant should be explored.

SASSA has been upgrading its local offices and prioritizing vulnerable caregivers and those who have children with special needs so that they do not have to queue too long. But caregivers with infants and small children are given no special attention despite being especially vulnerable to exclusion.

BETTER COMMUNICATION, TRAINING AND DATA COLLECTION

SASSA's programming, communication and training are currently too generic to focus sufficiently on recognizing and meeting the needs of excluded children and their caregivers. Its information management system is also currently not nuanced enough to be able to collect data on the rate of access for different groups of vulnerable children, which makes strong and strategic evidence-based planning impossible.

CONCLUSIONS

Overall, it was felt that the programmes are not being used optimally. The extent of exclusions (such as teenage mothers and children heading households) indicates the need for an intense review of policy, focusing on the changes necessary to unblock legal impediments to the CSG. The research team therefore made three overarching recommendations: the legislative oversight that hinders child-headed households and teenage mothers from simultaneously receiving grants for themselves and their own children must be resolved; the Social Assistance Act should be amended to align it with the Children's Act and enable adults to apply for the CSG on behalf of the children under their supervision; and lastly, legislation should guarantee the inclusion of caregivers of orphans and other children separated from their parents.



LOW- AND MIDDLE-INCOME COUNTRIES

Health Sector Priority Setting at Meso-level in Lower and Middle Income Countries: Lessons Learned, Available Options and Suggested Steps



David B. Hipgrave, Katarzyna Bolsewicz Alderman, Ian Anderson and Eliana Jimenez Soto

LINK TO THE FULL REPORT www.sciencedirect.com/science/article/pii/ \$0277953613006680

HEALTH Spending In Poorer Countries

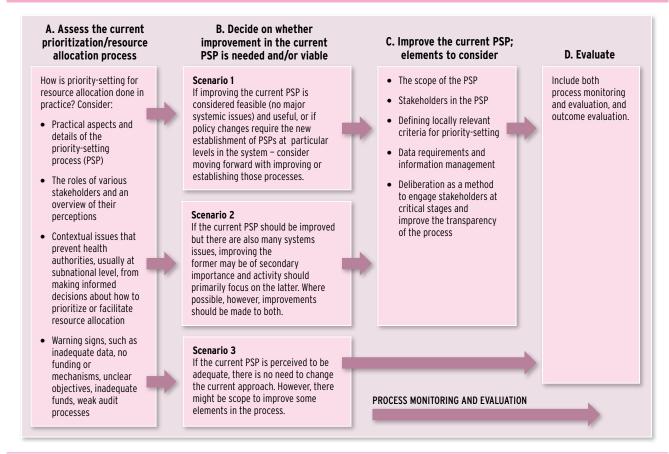
How to decide what matters most

Health needs always exceed the available resources, in every country in the world, so allocating those resources inevitably involves prioritizing some needs over others. This is a difficult process, in developed as well as developing countries, and is rarely achieved to the satisfaction of all. Where systematic prioritysetting does exist, it is generally at the national (or macro) level and takes little account of the difficulties faced by states, provinces or districts (the meso level) in deciding exactly which and how interventions are to be delivered. Recognizing this deficiency, UNICEF contributed to a research project that undertook a comprehensive survey of related literature and emerged with a road map that will help guide decision makers in low- and middle-income countries to set local priorities that are equitable and just, as well as efficient and cost-effective (see Figure 1).

The research was conducted by UNICEF and academics from three separate Australian universities, who reviewed relevant literature from scientific and informal sources. They emerged from this survey concluding that, although each of the existing models for priority-setting processes (PSPs) – 'accountability for reasonableness', 'multi-criteria decision analysis' and 'programme budgeting and marginal analysis' – have promising elements, evidence of their usefulness in low- and middle-income countries is too limited for any of them to be unequivocally recommended.

In addition, other tools and approaches considered – including 'developing a business case', the Lives

FIGURE 1: A POSSIBLE ROADMAP FOR ASSESSING AND IMPROVING HEALTH PRIORITY-SETTING AT LOCAL OR NATIONAL LEVEL



Source: Hipgrave et al (2014), Social Science and Medicine 102

Saved Tool and the Child Health and Nutrition Research Initiative methodology – either lack an actual framework for decision-making, or are not yet supported by evidence.

Given this context, the researchers suggest that careful examination of the systems and other contextual influences on health resource allocation in low- and middle-income countries is more important than abiding by overarching priority-setting principles.

A NEW ROAD MAP

However strongly prioritized, it is generally not possible to implement programmes unless known problems within the health system are rectified, and so where major systemic obstacles are evident, local health authorities would ideally address those before moving to implement costly or complex interventions.

In the meantime, however, health authorities must continue to make decisions on allocating resources. The researchers therefore recommend that where there are deep and unresolved systemic barriers to effective health priority-setting, these barriers should be dealt with in parallel with improving the PSP itself.

The report proposes a road map that aims to provide specific guidance to health authorities. This involves research at each step to ensure that the process is appropriate to the particular context, using four key steps:

- Assess the current prioritization/resource allocation process: the evidence suggests that improvements in priority-setting may not be realized unless they are preceded by a sound analysis of the existing situation. A mix of partners from public and non-state sectors, civil society, private providers and development agencies should be engaged early in this assessment and in subsequent policy work. Experience suggests that the actual practice of setting priorities often deviates from written policy.
- Decide whether improvement in the current PSP is needed and/or viable: there is no simple guideline for this. However, common systemic factors may act as barriers to an approach that



is legitimate and fair, and warning signs of problems may exist. Policymakers should consider improvements to the PSP only when these barriers can be adequately overcome.

- Improve the current PSP: a set of tangible elements should be included when considering any improvement to the existing PSP at the subnational level. They are not intended to be prescriptive, however, and should be adapted to the individual country situation and to the specific approach.
- Evaluate the process adopted: very few approaches to health priority-setting have been evaluated but the study suggests common principles, processes and outcomes that could provide a starting point for any such evaluation. The study recommends that all authorities engaged in priority-setting – whatever the level or the setting – include careful and preferably independent monitoring and evaluation as a routine element of their work.

The researchers acknowledge that focusing primarily on priority-setting can be controversial. Is it politically acceptable to favour improving the PSP and resolving systems issues over funding specific health activities? Will new funds allocated to the health sector be lost if they are not spent on programmes with objectively measurable outcomes? Is it feasible to resolve the sociocultural obstacles to priority-setting?

However, in the context of diminishing resources yet increasing expectations in lower- and middle-income countries, focusing on the fundamentals of prioritysetting, at the least in parallel with institutional reforms, may sustainably improve resource allocation as well as health outcomes.

THE PRIVATE-SECTOR FACTOR

The report acknowledges that there is a key issue that has been little discussed and requires future research – the extent to which health services are provided by the private sector. The implicit assumption behind setting health resource priorities is that the process will have a substantive impact on health outcomes.

However, not only does this usually ignore the influence of social and other determinants of health,

it is only true to the extent that the public sector dominates health-service delivery or that governments are able to effectively influence and regulate private practice. This is clearly not the case in many nations in South and East Asia, where private providers deliver a large proportion of health services, mostly unregulated and for profit. In prioritizing the allocation of resources for health, therefore, the extent to which both public providers and the private sector are well regulated, participate in the PSP and pursue the same priorities should be considered – and, if this is not the case, parallel measures to improve the situation may be necessary.

TAKING ACCOUNT OF CONTEXT

According to the researchers, whether or not it is stating the obvious that countries should 'tidy the house and check with the bank before commencing a renovation', the problem remains that many donors and national authorities are expecting meso-level decision makers to introduce interventions or fund activities before it is feasible to prioritize them.

This review of the literature concludes, therefore, that priority-setting in low- and middle-income countries is complex, difficult and currently unsatisfactory from most objective viewpoints. It recommends considering systems and contextual issues during the process of priority-setting, particularly at the meso-level. Global health partners are keen to devise and recommend processes or pathways that can be feasibly implemented in low-resource settings, to improve efficiency, equity and health outcomes. However, allocating precious resources to strategies or programmes before systems and contextual issues have been effectively resolved risks further waste of these resources – as well as failure to improve health outcomes.

Research partners: WHO; Partnership for Maternal, Newborn and Child Health – University of Queensland.

The Best of UNICEF Research is an annual exercise which promotes the sharing and recognition of good research. The call for submissions opens every December and the finalists are announced in the following June after internal and external assessment. In 2014 the 12 studies summarized in this publication were identified as examples of quality research on children, supported by UNICEF.

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MULTI-COUNTRY

The UN Convention on the Rights of the Child: A study of legal implementation in 12 countries Laura Lundy, Ursula Kilkelly, Bronagh Byrne and Jason Kang www.unicef.org.uk/documents/publications/unicefuk_2012crcimplentationreport.pdf

BOLIVIA

WASH in Schools Empowers Girls' Education in Rural Cochabamba, Bolivia: An assessment of menstrual hygiene management in schools Jeanne Long, Bethany A. Caruso, Diego Lopez, Koenraad Vancraeynest, Murat Sahin, Karen L. Andes and Matthew C. Freeman English: www.ungei.org/files/WASH_Bolivia.pdf Spanish: http://www.unicef.org/wash/schools/files/WASH_en_escuelas_-_higiene_menstrual_en_las_escuelas.pdf

CHINA

Effect of Iron Deficiency Anemia in Pregnancy on Child Mental Development in Rural China

Suying Chang, Lingxia Zeng, Inge D. Brouwer, Frans J. Kok and Hong Yan http://pediatrics.aappublications.org/content/131/3/e755.full.html

CHINA

Poor Complementary Feeding Practices and High Anemia Prevalence among Infants and Young Children in Rural Central and Western China David Hipgrave, Xulan Fu, Hong Zhou, Ye Jin, Xiaoli Wang, Suying Chang, Robert W. Scherpbier, Yan Wang and Sufang Guo www.nature.com/ejcn/journal/vaop/ncurrent/full/ejcn201498a.html

EAST ASIA AND THE PACIFIC REGION

Analytical Report for the Project "Development of Regional Costing Model to Estimate the Economic Burden of Child Maltreatment in the East Asia and Pacific Region" Xiangming Fang, Derek Brown, Phaedra Corso www.unicef.org/eapro/Child_Maltreatment.pdf

MONGOLIA

Reducing Preventable Child Deaths from Pneumonia, Diarrhoea and Newborn Complication in Mongolia Ginger Johnson and Juliet Bedford www.unicef.org/mongolia/2145_21246.html

PALESTINE

Effects of the Palestinian National Cash Transfer Programme on Children and Adolescents: A mixed methods analysis

Paola Pereznieto, Nicola Jones, Bassam Abu Hamad and Mohammed Shaheen with Elsy Alcala

http://www.odi.org/sites/odi.org.uk/files/odiassets/publications-opinion-files/8936.pdf

SERBIA

Policy Impact Analysis: Providing Additional Support to Students from Vulnerable Groups in Pre-University Education

UNICEF and the Government of the Republic of Serbia

www.unicef.org/serbia/POL ICY-IMPACTANALYSIS-Providing-Additional-Support-to-Students-from-Vulnerable-Groups-in-Pre-University-Education.pdf

SOUTH AFRICA

Preventing Exclusion from the Child Support Grant: A study of exclusion errors in accessing CSG benefits

Patricia Martin, Justine Burns, Buyi Yeni and Andries Mangokwana http://www.unicef.org/southafrica/SAF_csgexclusion.pdf

UGANDA

The Adolescent Girls Vulnerability Index: Guiding strategic investment in Uganda Sajeda Amin, Karen Austrian, Michelle Chau, Kimberly Glazer, Eric Green, David Stewart, Marie Stoner www.unicef.org/education/files/PGY_AGI_Uganda_2013.pdf

ZAMBIA

Zambia's Child Grant Program: 24-month impact report

David Seidenfeld, Sudhanshu Handa, Benjamin Davis, Gelson Tembo http://www.air.org/sites/default/files/Zambia_Child_Grant_Program_Report_20131.pdf

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