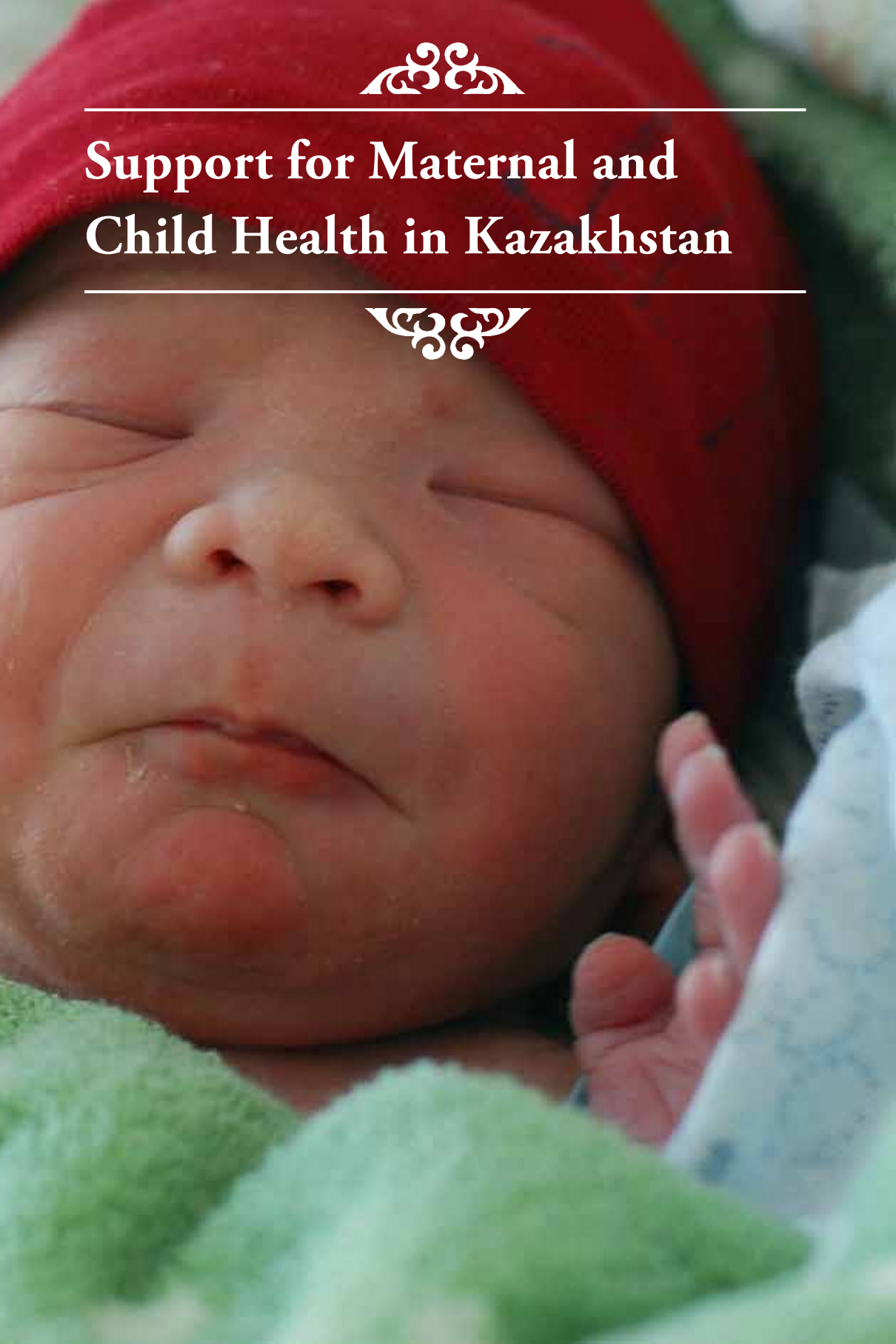


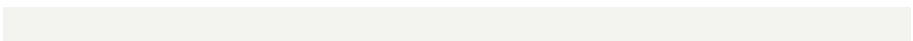


Support for Maternal and Child Health in Kazakhstan





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ABSTRACT

Every year thousands of Kazakh babies and children under five die due to untimely deaths. Many of them could have been saved using simple tools and techniques, and so could a large part of the women who die in childbirth. An ongoing project supported by the EU and the WHO strives to improve maternal and child health in Kazakhstan, and assist the Kazakh Ministry of Health in achieving the Millennium Development Goals.

Keywords

MATERNAL WELFARE
CHILD WELFARE
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Introduction: saving the lives of women and children

Every year thousands of Kazakh babies and children under 5 die untimely deaths. Many of them could have been saved using simple tools and techniques, and so could a large part of the women who die in childbirth.

An ongoing project supported by the European Union (EU) and WHO strives to improve maternal and child health in Kazakhstan, and assist the Kazakh Ministry of Health in achieving the Millennium Development Goals.

The maternal and neonatal mortality rates in Kazakhstan are several times higher than those in the European Union. Over 5000 children under the age of 5 years, out of which approximately 2500 are newborn, die each year in Kazakhstan, mainly due to perinatal conditions, infections, trauma and anomalies of development. WHO estimates that the lives of about a third of these children can be saved using simple tools and techniques.

Each year more than 100 women die because of bleeding due to aggressive labour management during childbirth, complications of abortions and extragenital pathologies concurrent diseases. Many of these deaths can be avoided by introducing and replacing the aggressive clinical management with simple, scientifically proven evidence based, cost-effective and efficient tools.



©Malin Bring: *newborn baby*

The project Support for Maternal and Child Health in Kazakhstan was launched in August 2009 with a time span of two years. The overall objective of the project is to improve the quality of health services for pregnant women, mothers, newborn babies and children, and, as a consequence, to support the government of Kazakhstan in achieving Millennium Development Goals. In particular, the project activities focus on Goals 4 and 5, related to the reduction of child mortality and the improvement of maternal health. Due to limited project funds, three pilot regions have been chosen for the implementation of the project: South Kazakhstan, Karaganda and Aktobe. The experience gained in the pilot regions will be used in the future as examples of good practice and extended to the remaining regions.

The project has four main directions:

- to support the Ministry of Health in developing and implementing a national strategy on maternal and child health;
- to improve continuity and quality of the provision of pre-, perinatal and child care, through the introduction of updated guidelines and protocols for the most common conditions and their complications;
- to strengthen the knowledge and skills of health providers at primary and secondary levels of care;
- to involve key stakeholders and partners, including families, communities and health care providers, in the reform process.

With this report, based on a mid-term analysis of the project, the WHO Regional Office for Europe presents six of the project activities in a more detailed and lively form. The Regional Office thanks all involved parties; policy-makers, partners and health care workers alike, and the European Union, which provided financial support for the project.



Background

With independence in December 1991, health care funding from public sources in Kazakhstan dropped considerably, and access to high-quality health services at all levels deteriorated.

Although improvements have been made, the Kazakh health care system still faces some difficulties. Informal payments for health services and regional differences in terms of per capita allocations for services, the lack of adequate motivation and support scheme for health providers are challenges that remain to be solved. The organization and delivery of health care services is dissimilar in urban and rural areas. There is a lack of strong links and continuity between primary and secondary care and the system is inefficient.

The quality of care offered to Kazakh women during the various stages of normal pregnancy and childbirth is still not in compliance with the latest international scientific standards and WHO recommendations. Identification and proper management of complications also remains a weakness. There is no appropriate referral system for perinatal care, including appropriate definition of tasks and guidelines, appropriate equipment and drugs at each level of care and provision of transportation. All these aspects impede the improvement of maternal and perinatal health in the country.

For this reason, the aim of the project Support for Maternal and Child Health in Kazakhstan is to raise the quality and continuity of maternal and child health care services to the level of international standards, to bring about the rational use of existing resources through health system reorganization (first in terms of establishing an effective referral system) and to strengthen community involvement. All three elements are crucial for improving the health care services and reducing maternal, infant and under-5 mortality in Kazakhstan.



Learning how to make a change

The WHO training course on effective perinatal care teaches midwives, doctors and nurses to question their normal routines and habitual way of thinking. The aim is to bring the quality of care they offer in line with the latest scientific knowledge.

The quality of care offered to pregnant and delivering women and their newborn babies in Kazakhstan is still not in keeping with WHO recommendations. Neither is the capacity of the medical staff to identify and manage complications in an appropriate manner. Pregnant women are often hospitalized unnecessarily, and given excessive medications. Obstetric complications occur as a result of outdated knowledge and poor skills of the health providers. The absence of evidence-based clinical protocols is another contributing factor.

One of the four main objectives of the project Support for Maternal and Child Health in Kazakhstan is therefore to strengthen the knowledge and skills of the medical professionals in the country. The eight-day training course on effective perinatal care (EPC) collectively trains obstetricians, midwives, neonatologists and nurses, and highlights examples of good practices that are both evidence-based and in consistency with WHO recommendations.



“What we teach is basically that all care should be family-centred and evidence-based, and that only essential, low-cost interventions should be made,” says obstetrician and Associate Professor Gelmius Siupsinskas, who heads the course, with two other international experts and seven national trainers.

Midway through the project, the EPC training course has taken place in two of the pilot sites. By the time the project closes in 2011, all three pilot sites will have received the training, including a follow-up workshops after around six months.

Gelmius Siupsinskas explains that the course consists of two parts: one theoretical week, including plenary sessions, case-studies and role-play, and one practical component, where the participants set out to implement the evidence-based practices they have just acquired. Working in an ordinary, functioning maternity, they begin the second week by redecorating the delivery rooms, in order to make them more pleasant and homelike. All non-essential items are removed, and gynaecological chairs are either put in a corner and covered, or taken out altogether.

Organized in teams, the participants are now ready to take on their first delivery. Since one of the key points of the EPC training is that the role of the midwife should be upgraded, the facilitators make an agreement with the hospital management and the participants: “During the course, the midwives manage all normal cases of labour and delivery. Only when there is a deviation from the normal process does the obstetrician in charge take over,” says Gelmius Siupsinskas.

The plans of action drafted by the participants are another important feature of EPC. To ensure that the insights gained during the course lead to tangible results, the participants are asked to choose which practices discussed during the training they would like to implement in their everyday practice. Next, they are asked to place them in order of preference and set a date for their implementation. In the follow-up that succeeds the first training session, the progress of the action plans is evaluated, and the next steps for improvement are identified.

In essence, what EPC does is to encourage the participants to question their own routines and discard some of the practices they have previously thought to be appropriate, explains Gelmius Siupsinskas. “Our most important task is to make them realize that they themselves can make a change,” he says.



Integrated Management of Childhood Illness (IMCI): reducing the distance between patient and doctor

The spacer helps 5-year-old, cough-ridden Ruslan to breathe more freely, and reduces the need to come back to the hospital for treatment. The nurse shows his mother how to repeat the procedure once they get back home, using a simple plastic bottle. This is a good example of IMCI at work, according to district paediatrician Polina Slugina.

Carefully following the nurse's instructions, Ruslan breathes into the spacer. His mother stands beside him, listening closely to the advice from the nurse, who is helping him to hold the spacer correctly. Little Ruslan breathes deeply into its open-ended bottom, inhaling the aerosol medication salbutamol. The scene is an outpatient paediatric ambulatory of the Osakarov district hospital of Karaganda region, the workplace of the district paediatrician and IMCI advocate Polina Slugina. IMCI is a strategy developed by WHO and the United Nations Children's Fund (UNICEF), now in use in over 100 countries over the world.

“One of the many assets of IMCI is that it teaches us how to reduce the distance between doctor and patient”, says Polina Slugina. “When I was at Medical school, they only taught us how to identify and conquer a disease, whereas very much in fact depends on how we communicate with parents and patients.”



©Malin Bring: *Ruslan and nurse, Polina Slugina*

IMCI focuses on reducing the most common causes of death, disability and illness among children below 5 years of age. It includes both preventive and curative elements, and focuses on improving the skills of health care staff as well as improving the health practices carried out by families and communities. As opposed to the more common single diagnosis method, IMCI is an integrated strategy that takes into account the variety of factors which can threaten the health of children, the logic being that children in countries with limited resources are often suffering from more than one condition at a time.

Kazakhstan was the first of the newly independent states (NIS) to introduce IMCI in 1999. The Karaganda region began implementing the strategy the year after, as one of two pioneering regions. Today, it has been carried out in 5 of Kazakhstan's 14 regions. In 2008, the Ministry of Health decided to adopt IMCI as an integrated, nationwide policy.

The ongoing project Support for Maternal and Child Health in Kazakhstan, funded by the EU and supported technically by the WHO Regional Office for Europe, is taking the strategy one step further in three pilot regions, to strengthen health system support and continuum of quality care from pregnancy to birth and childhood. Around 50 paediatricians from all regions in the country have been trained as IMCI master trainers. They will subsequently educate medical staff, thereby extending the strategy to the national level.

By now Ruslan has finished his breathing exercise. Waving goodbye to the nurse and the paediatrician, he leaves the hospital with a proud expression on his face, with his mother by the hand. Polina Slugina comments that IMCI has taught her how to explain complicated matters in simple language to the patients. "The apparent simplicity of IMCI is only the exterior; inside there are hundreds of years of knowledge. A medical person needs to have proficient knowledge and a large soul to explain things simply."



IMCI: considerate and child-friendly care

“Giving warmth and affection to sick children is one of the most valuable parts of IMCI to me,” says paediatrician Sholpan Zhumativa, the 37-year-old paediatrician from the IMCI centre of the Regional Children’s Hospital in Shimkent, Kazakhstan, after taking part in a course on how to use the hospital-based IMCI approaches in her work at a children’s hospital.

Next door a group of midwives and nurses are practicing the correct position for breastfeeding on a life size baby doll, and in an adjacent room a staff member is arranging brightly coloured plastic cups on a shelf, demonstrating how simple kitchenware can serve as toys. Apart from giving courses on IMCI, the centre advises parents on how to care for and stimulate their children at home, for instance by using inexpensive household utensils as toys.

Sholpan Zhumativa is in fact no newcomer to IMCI. Besides working as a paediatrician here at the hospital, she sometimes functions as a trainer at the centre, facilitating courses on IMCI at primary health care level. A while ago, she intensified her knowledge by taking a five-day training course on how to implement IMCI in paediatric hospital care. “Even though I already knew the basics, I was impressed with how useful the information was,” she says. The five days of training were packed with presentations, videos, clinical cases and practical sessions on how to provide proper assessment, timely and qualified help, and treat patients according to evidence-based best practices. Throughout



©Malin Bring: *Children on a hospital bed*

the course the participants discussed and compared their own practices with the IMCI guidelines, often recognizing cases of “over-classification” and excessive prescription of medicines in their respective hospitals. Changing one’s professional attitude towards a more child-friendly and considerate approach was another element of the course, tying in with the recommendations not to make any unnecessary medical interferences to one’s patients.

Sholpan Zhumativa appreciates the pocket book of hospital care for children that was handed out to the participants at the course, which presents up-to-date clinical guidelines adapted to the country’s needs. A pocket-sized manual published by WHO, it focuses on the major causes of childhood mortality and their treatments, in accordance with the guidelines of IMCI. Learning that it was acceptable for her to consult this manual, or any other reference book, in front of a patient, was something of a revelation to her.

“One thing that was instilled in us [in the past] was that we must not lose face with a patient”, says Sholpan Zhumativa. “After this course, though, I feel free to check with the Pocketbook when I’m in doubt about a prescription or symptom. I’m comfortable with sharing both my knowledge and uncertainties with colleagues.”

At any rate, this kind of reaction is understandable and will phase out with time, she feels.

In 2008 the Ministry of Health adopted IMCI as an integrated national strategy, and the two-year project to improve child and maternal health in Kazakhstan will most certainly help institutionalize and integrate these approaches into primary and secondary care.

While Sholpan Zhumativa has been talking, her coffee has grown cold. She pushes the cup aside and says it is time for her to go back to her ward. “After the five days of training, I was eager to get back to work and start practicing my new insights. It takes time, and we need to develop new skills to do it, but gradually we will get there,” she says.



Beyond the Numbers: breaking down the barriers of fear

For years on end, fear of punishment hampered any attempts to find the root causes behind maternal mortality and morbidity in Kazakhstan. The tool 'Beyond the Numbers' offers methods to investigate such cases in a confidential manner, and enables the necessary actions to be taken on the results.

The WHO tool Beyond the Numbers (BTN) was first introduced in Kazakhstan in 2004. At present, the project Support for Maternal and Child Health is scaling up the activities related to conducting confidential inquiries of cases where women have died or been disabled in childbirth. BTN consists of five different types of audits, suitable for various kinds of settings, all with the objective of reducing maternal deaths and disability, without apportioning blame. The near-miss case review (NMCR) deals with cases where women had life threatening complications but survived.

As part of the undertaking, a team of national and international experts have attended NMCR sessions in six pilot maternities, and provided feedback and recommendations to the local team of professionals. One of the maternities visited was the National Scientific Centre for Mother and Child Health in Astana, where Kanat Sukhanberdiyev works as an obstetrician. Kanat Sukhanberdiyev is also the national coordinator of the NMCR. He feels the method has had a significant impact on his work. For one thing, it has improved the relationships on the maternity ward.



©Malin Bring: *Father and son*

“My attitude towards the midwives has changed, and so has the contact I have with my patients. I have even changed some of my clinical practices,” he says. “Before the introduction of this tool, doctors and midwives never sat down together to discuss work matters. Now even the cleaners participate at times, so BTN has really broken down some barriers.”

BTN was developed by WHO to help professionals understand why cases of mortality and morbidity occur, and thus to determine what can be done to prevent or avoid them. The approach is perhaps particularly called for in the NIS, where the health care system had been geared towards finding and punishing culprits whenever a serious mistake was made by a medical professional. Penalties up to dismissal have been imposed on health care workers who are found guilty of causing maternal death, perinatal mortality or severe obstetrical complications in a patient. Faced with the risk of losing their jobs or severely damaging their careers, many doctors, nurses and midwives try to cover up their mistakes by falsifying the medical records. This obstructs efforts to investigate the underlying causes of what went wrong.

In contrast, BTN encourages the development of a trustful culture, where colleagues can report errors without the fear of punishment. This is not achieved in one day, however, says Kanat Sukhanberdiyev: “It took quite a long time to convince my colleagues on the ward that there really was no threat of punishment, and obtaining the support of the management was absolutely essential.” Building a good team is another important brick, he feels, as well as retaining one’s enthusiasm: “I have spent so much time and effort on BTN that it might even be the cause of my life.”



Best chances of survival for every baby

Arguments fly across the room as a group of health professionals, hospital managers and representatives from the regional administration discuss the new referral system in their province. Beneath the apparent discord there is a growing consensus, however: regionalization is the way forward to reduce maternal and infant mortality in Kazakhstan.

The term “perinatal regionalization” describes to a method whereby existing health care services are rationalized to ensure that each pregnant woman and newborn infant is cared for in an appropriate facility. Maternities are divided into three levels of care: the first provides for normal pregnancies and healthy newborn babies; the second, for pregnancies at moderate risk; and the third is a regional referral centre with a neonatal intensive care unit. Bringing all the high-risk infants together at the third level enables the necessary expertise to develop here, so that each baby can have the best chances of survival. In addition, a referral system is created, with clear criteria indicating where women of different risk categories should give birth, and directions for transport from one level to another.

Perinatal regionalization was officially introduced in 2008 and implementation started in the South Kazakhstan region in 2009. This workshop is the third in a sequence organized by the WHO Regional Office for Europe in this province. Since it has begun producing better organization and improved health



©Malin Bring: *Meruert Ziyabekova*

outcomes for babies and mothers, the Ministry of Health has decided to extend the regionalization process to the whole country.

On the maternity ward, there are clear signs that the process has been initiated, but there is still some way to go before it functions as intended. The maternity hospital is a third-level institution, but several of the postpartum wards are overcrowded to a degree which suggests that far too many women are being admitted without a sound medical reason.

Meruert Ziyabekova has just given birth to a little boy, who is now sleeping beside her in one of the cramped postpartum wards. She is a farmer's wife and no more than 25 years old, but already a mother of four. Her first three children were delivered in the local maternity back home, but this time there were some complications, which is why she has been referred to the regional centre. She is happy to have been given this opportunity: "Even though it is a bit crowded, they take good care of you here, and if a problem arises they know how to deal with it," she says.

Around the workshop table, the debate continues. Madina Kokenova, who is head of a second maternity hospital in Shimkent, feels the project has been too hurried, but that the bottom-up approach is positive: "Everything is not in place yet, and it's important that the authorities listen to the needs of us workers, who face reality every day," she comments.

Leila Ukibayeva, chief obstetrician/gynaecologist of the South Kazakhstan Regional Health Department, is enthusiastic: "This is a revolutionary process and in the beginning many old professionals were sceptical, but now no one is openly against it any longer," she says.

One of the workshop facilitators, neonatologist Audrius Maciulevicius, notes that things have really begun to move in the province: "There is a noticeable change already, and we can expect more dramatically improving figures of maternal and infant mortality in one or two years."



Entering a higher stage

From improving practices on the ward, WHO moves on to a more system-oriented approach. A new tool encourages all involved levels, from nurses and doctors to managers and politicians, to go beyond merely thinking about their individual workplace and begin evaluating strengths and weaknesses of the entire system.

“With this workshop we enter a new and higher stage,” commented Kulyaisha Yernazarova, head physician of the Turkestan maternity. She had just attended a two-day workshop on revising Kazakhstan’s national strategy, and was impressed with the new concept.

In the first years, the WHO programme on Making Pregnancy Safer (MPS) and its IMCI strategy focused on training health professionals and changing practices and clinical guidelines at work floor level. Less successful and consistent actions were taken to improve drug supply, supportive supervision and regular monitoring after training.

Initial efforts to strengthen the health system were made within the IMCI strategy implementation in 2005, when local stakeholders, with the support of the WHO Regional Office for Europe, made an analytical review and plan of action to strengthen health system support for the implementation of the programme.

A few years later, when the results from the initial years had created confidence with the health authorities, the Regional Office started the systemic approach. The first step was taken in Catania in 2008, where a leading WHO experts meeting created the European strategic approach for making pregnancy safer¹. Bringing all the earlier MPS components together, it defines some principles and key issues, and serves as a guide for countries in developing or revising their national policies to improve maternal and infant health within a health system reform.

The next step was to develop a tool to make the new strategic document operational: the tool for assessing the performance of the health system². This instrument helps stakeholders and partners identify weak areas and priority actions in their health care system, and to plan, set a timeline, and identify the responsible agent for the completion of these actions.

¹ European strategic approach for making pregnancy safer (2008). Copenhagen, WHO Regional Office for Europe, 2008 (<http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/maternal-and-newborn-health/publications2/2008/european-strategic-approach-for-making-pregnancy-safer-2008>, accessed 24 February 2011).

² Making pregnancy safer – Tool for assessing the performance of the health system in improving maternal, newborn, child and adolescent health. Copenhagen, WHO Regional Office for Europe, 2009 (<http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/maternal-and-newborn-health/publications2/2009/making-pregnancy-safer-tool-for-assessing-the-performance-of-the-health-system-in-improving-maternal,-newborn,-child-and-adolescent-health>, accessed 24 February 2011).



©Malin Bring: *Two mothers*

“The whole idea behind this method is that the participants understand all the steps needed to be taken in order for a change to take place,” says paediatrician and WHO expert Giorgio Tamburlini, one of the main architects of the tool.

During a two-day workshop in Astana in August 2009, around 40 participants, from medical professionals to managers and politicians, worked first on a revision of Kazakhstan’s national strategy, and subsequently with the assessment tool. The workshop formed part of the project Support for Maternal and Child Health in Kazakhstan.

Working in groups and using the performance assessment tool, the participants identified gaps and obstacles to improvement and then selected their three or four main priorities for action, discussed necessary actions, chose agents responsible for the activities and set a realistic timeline for the process.

“They were all burning issues, but we discussed them in a constructive way,” said senior expert Magripa Yembergenova from the Kazakh Ministry of Health at the end of the two days. “This kind of exercise helps people engage in developing a common understanding.”

In February 2010, the process continued when a second stakeholder meeting was held in Astana, involving government bodies and international organizations. At the round-table meeting, the participants further discussed and developed the recommendations for effective future collaboration.



The WHO Regional Office for Europe

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“The problems of mother and child health are high on our agenda. We are not happy with the rate of reduction of the maternal and infant mortality in Kazakhstan. We know the WHO has some very effective tools to deal with these problems, which is why we have engaged in this joint project.”

Tamara Voschenkova, Vice Minister of Health of Kazakhstan, Astana, August 2009

“The European Union has a marked interest in a political partnership and co-operation with Kazakhstan and Central Asia, for several reasons. One of the reasons is our interest in promoting social development, which is why we have engaged in this project. Health is an integral part of social development.”

Norbert Jousten, Ambassador, Head of the European Union Delegation to Kazakhstan



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