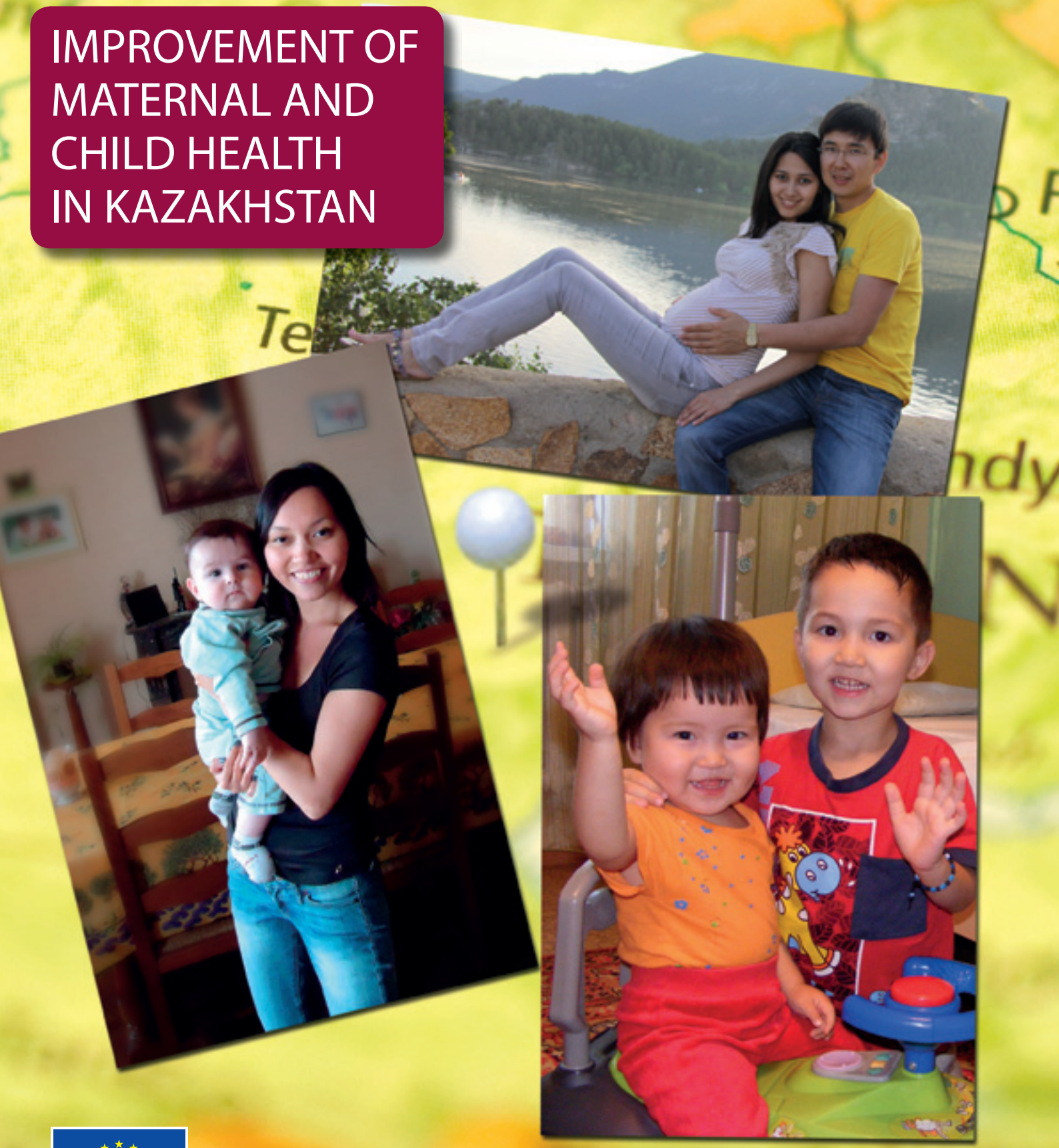
IMPROVEMENT OF MATERNAL AND CHILD HEALTH IN KAZAKHSTAN



OUTCOMES OF THE JOINT PROJECT OF THE EU AND WHO "SUPPORT FOR MATERNAL AND CHILD HEALTH IN KAZAKHSTAN"

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Division of Noncommunicable Diseases and Health Promotion
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WHO Regional Office for Europe
Scherfigsvej 8
DK-2100 Copenhagen Ø
Denmark
Tel: (+45) 3917 17 17
Fax: (+45) 3917 1818
www.euro.who.int/entrenous

Chief editor
Dr Gunta Lazdane
Editor
Dr James Drife
Editorial assistant
Jane Persson
Layout
Kailow Creative, Denmark.
www.kailow.dk
Print
Kailow Graphic

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THE *ENTRE NOUS* EDITORIAL ADVISORY BOARD

A MESSAGE FROM THE MINISTER OF HEALTH

Dr Salidat Kairbekova

In our two decades of independence, Kazakhstan has achieved significant progress in implementing large scale political, social and economic reforms to establish a democratic country with a market economy. The development of human potential became one of the national policy priorities and will remain so in the coming years.

Therefore, protecting mother and child health, increasing birth rates and reducing maternal and child mortality have been crucial strategic directions in Kazakhstan's policy development. The President and the Government of Kazakhstan consider health system strengthening a priority, and therefore increase health funding annually. In addition, Kazakhstan has a sound infrastructure, relatively high human resource potential, and a state guaranteed basic benefits package (with free health services) provided to the population including mothers and children.

Since 2007, there has been a positive shift in the main health and demographic indicators, such as a rise in the birth rate to 22.54 (from 20.79 in 2007), a natural increase of the population to 13.60 per 1000 people annually (10.57 in 2007) and a reduction in the mortality rate to 8.94 (10.22 in 2007), due to the consistent policy on improving the economic and sociopolitical situation in the country. An important step forward to meet international standards was introduction of the WHO live birth criteria in 2008. The country has been implementing WHO recommended programmes/strategies for strengthening mother, child and adolescent health – Making Pregnancy Safer, family planning and safe abortions, baby-friendly hospitals, protection, promotion and support of breastfeeding practices, and the Integrated Management of Childhood Illness strategy.

Thanks to these systemic measures, the country has decreased maternal mortality 1.5 times since 2004 and infant mortality 1.3 times upon introducing the WHO live birth definition in 2008. Nevertheless, maternal and infant mortality remain high and this is an issue of concern for the Ministry of Health (MoH) of the Republic of Kazakhstan. The Government sees that the situation will be improved by adopting international health standards focusing on primary health care and on improving the practices of maternal and children's hospitals.

In this regard, we have been receiving continuous support from international organizations, mainly UN agencies and particularly the WHO Regional Office for Europe (WHO/Europe). The WHO/Europe project, "Support for Maternal and Child Health in Kazakhstan", funded by the European Union, aimed at technically supporting the MoH to develop the strategy on mother and child health, to improve quality and provision of health services to pregnant women, mothers, newborns and children, and to build capacity and improve practices of health providers, based on international best practices. The project made a significant contribution in improving the health of mothers and children.

The Ministry of Health will continue good collaboration with WHO and other partners on strengthening mother and child health within the framework of the ongoing National Programme on Health Care Development of the Republic of Kazakhstan for 2011-2015 "Salamatty Kazakhstan".

Dr Salidat Kairbekova
Minister of Health of the Republic of Kazakhstan

A MESSAGE FROM THE EU AMBASSADOR

Norbert Jousten

The European Union has a marked interest in a political partnership and co-operation with Kazakhstan and Central Asia. One of the dimensions of such cooperation is a mutual interest in promoting social development. Health being an integral part of social development, the Delegation following a request from the country's authorities decided to join efforts with WHO to support this project aimed at improving maternal and child health care in the country.

On 1 July 2009, the European Union and the World Health Organization jointly with the Ministry of Health of Kazakhstan started a two-year project to support Kazakhstan's health system development through the provision of quality health services for pregnant women, mothers, newborns and children. As this project is coming to an end, I would like to express my appreciation of the progress made and of the results achieved in strengthening the health system and improving the well-being of mothers and children in Kazakhstan.

The aim of the project "Support for Maternal and Child Health in Kazakhstan", funded with 1.2 million euro from the EU budget, was to assist the Ministry of Health of the Republic of Kazakhstan in fulfilling the objectives of the National Programme on Health Care Reform and Development for 2005-2010. The project was aimed at reducing child mortality and improving maternal health in Kazakhstan, as envisioned in Millennium Development Goals 4 and 5.

In fact, the project outcomes went far beyond these objectives. The project has had a positive impact on the development of health policies as well as at grassroots level. It has contributed to the development and approval of the mother and child health strategy and an action plan of the new National Program on Health System Development "Salamatty Kazakhstan" for 2011-2015. Moreover, in South Kazakhstan the project has engaged local communities in solving mother and child health issues jointly with oblast authorities and health care managers. This multi-stakeholder approach has worked well and we are happy to be part of it.

This action is part of a larger programme funded by the EU with 4.5 million euro aimed at strengthening the health system in Kazakhstan and facilitating co-operation between the Ministry of Health of Kazakhstan and a number of correspondent structures in the EU.

I am very pleased to see that the sustainable efforts and dedication displayed by the Ministry of Health, supported by the EU financial assistance and WHO technical expertise, has resulted in a significant improvement of maternal and child health care and reduced mortality rates.

Norbert Jousten
Ambassador
Head of the European Union
Delegation to Kazakhstan

POLICY DEVELOPMENT IN KAZAKHSTAN

Vivian Barnekow

Following the agreement in the Tallinn Charter, strategy development and implementation in WHO's Member States are linked to the health systems approach. An intersectoral, strategic-level approach which focuses on health outcomes is central to implementation of maternal and child health policies.

In Kazakhstan there is high awareness and political commitment towards improving maternal and child health, increasing the fertility rate and decreasing infant and maternal mortality. Nevertheless, developing health strategies and programmes based on international standard methodology is a challenge. It is, however, realistic to improve maternal and child health in Kazakhstan, especially if there are national and regional political commitment and support to implement WHO-recommended effective interventions.

In September 2004 the National Programme of Health Care Reform and Development for 2005–2010 was adopted by Presidential Decree. One of the priorities of the programme is mother and child health, with a focus on implementing quality standards, norms and guidelines. The implementation rate of the national programme, however, was not high.

The strategic plan of the Ministry of Health for 2009-2011 identified three main strategic directions for further health system development: strengthening population health, establishing effective health system management, and developing human resources and reforming medical science. Specific objectives for these strategic directions were as follows:

- Strengthening population health includes improving mother and child health, decreasing the burden of socially significant diseases and accidents/trauma, maintaining a safe environment, and developing healthy nutrition and healthy lifestyles.
- Establishing effective health system management includes reforming health system financing and administration, optimization of health system infrastructure focusing on the primary health care level, increasing access and improving the quality of medicine supply.
- Developing quality human resources and reforming medical science based on new technologies.

Within the framework of the project "Strengthening Maternal and Child Health in Kazakhstan", which started in summer 2009, and with a focus on the strategic directions of the strategic plan of the Ministry of Health for 2009-11, the Ministry had used a number of WHO tools to review the situation on mother and child health in Kazakhstan for the period of 1999-2008. The Ministry prepared a report which included an analysis of existing policies and strategies, of the current state of reproductive and child health in Kazakhstan (including maternal and infant/under five mortality) and of health system functioning – resources, financing and service delivery – in the area of Maternal and Child Health (MCH). This report was important for identifying both barriers and necessary intervention.

The report was tabled for discussion at the first stakeholder workshop on national MCH strategy development, which was held in August 2009. The workshop gathered government representatives (including the vice-minister of health, heads of departments and units responsible for strategy development, health care services organization and quality control), international and national organizations, NGOs, professional associations, and national research institutions on MCH.

One of the actions agreed during the workshop was to establish a working group to develop a comprehensive strategy for MCH. The working group should have participation from the health sector at national and regional level as well as from other relevant sectors. International partners and NGOs were also to be involved.

In winter 2010, with the strategic plan for 2009-11 as a basis, the Ministry of Health embarked on developing the National Programme for Health Care 2011-2015. In order to support this process, WHO organized a series of meetings with partners relevant for the health sector, such as presidential administration, national commission on women and family and demographic policy, the Ministries of education, labor and social protection, internal affairs, environment, economy and budget planning, as well as international organizations working on MCH in Kazakhstan.

Concluding the process, the Ministry of Health and WHO jointly conducted a "round table" meeting on developing cross-sectoral and inter-ministerial collaboration on maternal and child health within the relevant parts of National Programme on Healthcare Development for 2011-2015. All concerned government bodies as well as international organizations were involved in the meeting.

Following the meeting there was a short and very busy timeframe to finalize the National Programme on Healthcare Development. Included in the new national programme are the priority areas of comprehensive policies and improvement of access to and quality of healthcare services for mothers and children, which are imbedded in the project "Strengthening Maternal and Child Health in Kazakhstan".

The remaining challenge ahead is to ensure adequate implementation of the state programme, and to ensure that the issue of health of mothers and children is also reflected in policies and state programs for other relevant sectors, such as education, transport and the social sector. National and regional policies and strategies on socio-economic development and improvement of health and the demographic situation are necessary if the goal is to achieve an equal distribution of health of mothers and children in Kazakhstan.

Vivian Barnekow
Programme Manager a.i.
Child and Adolescent Health and Development
Noncommunicable Diseases and Health Promotion
WHO Regional Office for Europe
vbr@euro.who.int

SUPPORT FOR MOTHER AND CHILD HEALTH IN KAZAKHSTAN

Gaukhar Abuova

Starting from 1st July 2009, the WHO European Regional Office has been implementing a two-year project on support for maternal and child health in Kazakhstan. It has been conducted jointly with the Ministry of Health, with financial support from the European Union. The project focuses on improving access to quality health care services to mothers, newborns and children under five, within the Making Pregnancy Safer and Integrated Management of Childhood Illness strategies.

The collaboration between WHO and Kazakhstan has been productive, with promising and measurable results which positively affect the country's health system. For more than ten years the WHO Regional Office for Europe has been providing technical support to the government of Kazakhstan within the framework of the joint medium- and short-term priority planning. Within this framework, strengthening mother and child health has always been an immediate priority and an indicator of the country's social and economic development.

Kazakhstan has made commitments to achieve the Millennium Development Goals (MDGs) by 2015 – specifically, to reduce by two-thirds the under-five mortality rate (MDG 4) and reduce by three-quarters the maternal mortality ratio (MDG 5). Within the WHO European region, however, Kazakhstan is characterized as a country with relatively high maternal, infant and under-five mortality. Besides, there are discrepancies between urban and rural, and rich and poor, populations, especially in the regions with the highest mortality rates in southern and western parts of the country. Nevertheless, in most cases maternal and child health does not require expensive and highly technological care, and mortality could therefore be reduced by improving the quality of health services at the primary and secondary levels.

In recent years Kazakhstan has moved forward from piloting the WHO initiatives to their institutionalization and integration into the healthcare system. Starting from 2009, preparation for nationwide implementation of the Making Pregnancy Safer (MPS) and Integrated Management of Childhood Illness (IMCI) strategies has been technically supported within the WHO and EU project "Support for Maternal and Child Health in Kazakhstan". This project[1)] is a joint management action between the Ministry of Health of Kazakhstan and WHO/Europe with financial support from the European Union. The overall objective is to improve maternal and child health and support the government of Kazakhstan in achieving MDGs 4 and 5.

The sustainability of the project results is ensured in the National Programme on Health System Development, "Salamatty Kazakhstan", for 2011-2015. Within the National Programme, sustainability is secured by the development and adoption of a mother and child health strategy and an action plan with financing allocated at the national level.

Context

The project was developed to tackle the main mother and child health (MCH) challenges to mother and child mortality stipulated in the MDGs. Among these are outdated clinical management of major maternal, neonatal and pediatric diseases and their prevention; irrational use of existing resources due to poor management of health services provision (both at the facility and health system level); low public awareness and weak involvement of families and communities in solving MCH problems.

To tackle these, WHO identified the following priority areas:

1) Supporting the Ministry of Health in developing and implementing a comprehensive MCH strategy within the National Programme on Health System Development for 2011-2015;
2) Ensuring effective management and continuity of service provision for mothers, newborns and under five children at primary and secondary levels;
3) Strengthening existing partnerships and involving families and communities in improving MCH;
4) Improving knowledge and skills and changing the practice of health providers.

The WHO and the Ministry of Health agreed to focus implementation in three pilot regions in the south, central and western areas. South Kazakhstan, Karaganda and Aktobe are separate territorial and administrative units which could serve as a model for the whole country. Limited project funds allowed the implementation in only three regions. The selection was therefore based on the regional health needs and prior successful implementation of WHO interventions, considering the conditions determining the project's efficiency, such as the region's will and readiness, and its capacity.

The project coordination was directed by a Technical and Monitoring Group (TMG) at the national level and three regional working groups at the local level. TMG members representing the multidisciplinary group of international and national health professionals conducted regular field visits to the pilot sites. This approach strengthened the national experts' capacity and integrated peer review practice into the quality assurance of the health services provided.

1) Here and further we mean "Support for Maternal and Child Health in Kazakhstan" project.

Assel Mussa-galiyeva

Melita Vujnovic

Vivian Barnekow

Alberta Bacci

Aigul Kuttumu-ratova

In its turn, regional coordination stressed the leading role of health departments, ensuring ownership and sustained results. As such, each of three pilot regions appointed full-time MPS and IMCI coordinators financed from local government funds. The experience of the regional coordinators as a success story has been replicated by the Ministry of Health in other regions of the country.

The project's method of working on horizontal and vertical levels, with policymakers on the one hand and health providers and communities on the other, produced its results. To achieve its four desired results the project had an action plan to implement interventions spearheading the WHO efforts to assist the Ministry of Health in the following four areas:

1) contributing to the **development of a strategic framework** to facilitate and speed up the development and implementation of a national MCH action plan;
2) developing and implementing **a comprehensive set of tools** to assess and improve quality of care and to involve local professionals and policy makers in its development and implementation;
3) **improving the knowledge and skills of health professionals** as one of the key determinants of quality of care;
4) **providing information and information tools at the community level** to improve health-related behaviour of the target population.

Achievements

During its two-year implementation, the project has achieved significant results. A long-term strategy document and implementation plan for MCH has been developed, using the WHO strategic approaches and tools and endorsed by the Government as part of National Programme on Health System Development, "Salamatty Kazakhstan", for 2011-2015.

An effective referral system for mothers and newborns has been established at the regional level and effectively piloted in the three project regions. The results and positive experience have been summarized and disseminated at the national level.

A national pool of trainers has been established. An in-service training strategy on Effective Perinatal Care and IMCI has been developed, successfully piloted in three regions and is currently being implemented nationwide in 16 regions. In order to strengthen regional training capacity, a national trainers' roster of 25 national and 57 regional trainers has been prepared, and advanced training tools (IMCI computerized training software) have been developed and distributed.

WHO monitoring and evaluation approaches and tools, namely quality of care assessment (in 20 MCH hospitals) and a supportive supervision system, have been introduced and pilot tested, with replication at the national level.

The WHO confidential maternal mortality audit, "Beyond the numbers", has been implemented at the national level, and case review of critical obstetric complications has been introduced into the practice of six pilot maternities. The first national report on confidential enquiries into maternal deaths for 2009-2010 is being prepared.

Essential clinical protocols (nine obstetric and seven neonatal) have been developed and endorsed to support the development and implementation of key clinical guidelines on mother and child health.

The project has initiated and promoted WHO methodology on working with individuals, families and communities at the district level in South Kazakhstan. The result of this will be development of a joint action plan on reducing maternal and infant mortality and improving health of mothers and children, with active involvement of local communities, health managers and local authorities.

Conclusion

The WHO and Ministry of Health project has made a significant contribution to improving the quality of care for mothers and children. It was a pioneer in the country, and had a supportive environment and available financial and human resources. It is our hope that the best practices will be replicated nationwide and that the sustainable results and their ownership will benefit the country in the years to come.

Gaukhar Abuova
National Professional Officer
WHO Country Office in Kazakhstan
gaa@euro.who.int

Assel Mussagaliyeva
National Professional Officer
WHO Country Office in Kazakhstan
asm@euro.who.int

Melita Vujnovic
Head, a.i.
WHO Country Office in Kazakhstan
mev@euro.who.int

Vivian Barnekow
Programme Manager a.i.
Child and Adolescent Health and Development
Noncommunicable Diseases and Health Promotion
vbr@euro.who.int

Alberta Bacci
Regional Coordinator,
Making Pregnancy Safer
WHO Regional Office for Europe

Aigul Kuttumuratova
Medical Officer,
Integrated Management of Childhood Illnesses
WHO Regional Office for Europe
aku@euro.who.int

PARTNERSHIP FOR CHANGE: THE ROLE OF WHO AND HEALTH MANAGERS IN IMPROVING PERINATAL HEALTH SERVICES

Gaukhar Abuova

In 2011 Kazakhstan began nationwide implementation of the WHO *Making Pregnancy Safer* (MPS) programme, with the aim of strengthening maternal and neonatal health care. Sustainability of the MPS strategic approach is being ensured by including this component in the National Programme on Health System Development for 2011-2015, strongly supported by the Government. This article discusses the changes in the health system through the efforts of health managers and the technical support of WHO.

Overview of MPS implementation

In the past ten years Kazakhstan has gone from piloting to national dissemination of the MPS strategy. The positive results described in other articles in this issue of *Entre Nous* have been achieved by strong political will, international technical support, strengthened healthcare management and increased government funding.

The phases of Kazakhstan's approach in implementing MPS

The approach can be divided into three phases, the third of which is beginning in 2011.

Phase 1: Introduction (2002-2005)
The achievements of Phase 1 were:

- Training a critical mass of health providers in "new" approaches,
- Political support for pilot implementation,
- First positive experience at facility level (Zhezkazgan city maternity)
- Technical support from the USAID Zdrav Plus Project.

To ensure the policy guidance, two leading national perinatal institutions were involved in implementation. At the same time Effective Perinatal Care (EPC) training was started in selected maternities of the oblasts (regions) of Karaganda, South Kazakhstan and Kyzylorda, and the cities of Semey and Almaty, by WHO, UNFPA, and the USAID ZdravPlus Project.

Phase 2: Early implementation (2006-2010)
Based on the experience and lessons learned, it was decided, as a next step for MPS early implementation, to focus not only on the facilities but also to involve the regions as local government administrative units of the country. In 2006 South Kazakhstan, with support of the Ministry of Health (MoH) and international organizations (WHO, UNICEF, UNFPA), jointly initiated the programme on improving mother and child health, in line with WHO strategies. Implementation activities were scaled up, funded by development partners with technical support from the WHO. These included the EPC package, maternal mortality and morbidity audit using the WHO "Beyond the Numbers" approaches, and developing and monitoring perinatal regionalization.

Successful results were a turning point for developing the National Programme on Decreasing Maternal and Infant Mortality for 2008-2010, endorsed by the Prime Minister.

Phase 3: Expansion (2011-2015)
The preparatory stage for national scaling up started within the MoH and WHO/Europe two-year project "Support for Maternal and Child Health in Kazakhstan" financed by the European Union (EU). The project contributes to the National Programme on Health System Development for 2011-2015, ensuring the funds for strengthening implementation of MPS in three pilot oblasts and initial dissemination to the national level.

Prerequisites for success

There is a strong political will to decrease maternal and infant mortality and there is a need for relevant technical support. The country has sufficient resources to contribute to the goals, if their appropriate allocation is ensured. In this regard, WHO technical support has been provided based on situation analysis at every stage of implementation, considering the country's needs. Key components and activities were:

1) ***Advocacy at all levels*** involving the Ministry of Health, regional health authorities, health managers and providers: situation analysis on maternal and infant mortality determinants was the basis for orientation workshops for health managers, and the successful experience of South Kazakhstan region was presented to the top level policy makers and health authorities;
2) ***Regional capacity building:*** technical support to regions in developing and implementing their own strategies and action plans, namely: training strategy, internal quality management at the facility level, supportive supervision, peer review approach, and establishing an effective perinatal referral system (regionalization);
3) ***Long term sustainability and ownership:*** the MPS strategic approach is included in the national and regional programs on health system development, and it will be implemented based on the country's funds;
4) ***Successful implementation in pilot regions*** (South Kazakhstan, Karaganda) served as a model for other regions. Moreover, the resource persons from the pilot regions share best practice and challenges, and advise the "beginners".

Mindset change: perception of health managers

During a recent workshop, a group of health managers from different regions in Kazakhstan were asked to identify and discuss the driving forces for change. Participants stressed the importance of training that helped to develop a new vision and skills, key technical inputs from WHO, examples of implementation of best practice from other countries (such as Lithuania), and the motivation to achieve results that eventually led to healthy competition among project pilot oblasts. They agreed that strong support from the MoH, including increase in funds, was among the key factors of success. It was recognized, however, that without the willingness and motivation

Assel Mussa-galiyeva

Zhuma-gali Ismailov

Kairzhan Mabiyev

Askhat Balykov

Alberta Bacci

of the health managers and providers in the regions, this success would not be so complete, and certainly it could not be sustained for a long time. Below are quotes from the hospital managers.

When, in 1988, I became the head of midwifery services in Karaganda region, in all maternity hospitals the practices to assist mothers and newborn infants were not family oriented. Birthing rooms looked like operating theaters, they complied with strict sterility, women in labor were not allowed free position, and excessive numbers of drugs were used even for normal birth. Babies were immediately taken away from the mother to the neonatal ward. Mothers were separated from their babies: they could see the babies and communicate with them only during feeding at fixed times, every 3-4 hours during the day, and at night babies were given formula milk from a bottle by nurses. This seemed normal to us and we felt there was no need to change. In addition there was high maternal and neonatal mortality: each year in hospitals about a dozen women and many babies died. In 2000, I first learned of the existence of new technologies and the WHO Making Pregnancy Safer program.

Cardinal changes in the practice of facilities, such as (among others) a patient-centered approach, strengthening the roles of midwives and delegation of responsibilities to midwives and health nurses, focusing on care and not only on treatment, and completely new approaches to nosocomial infection prevention at the facilities, initially surprised and shocked the managers. They had to accept significant changes, which included new understanding of evidence-based practices, and related changes in clinical practice, organization and managerial support.

We were interested to learn more about this program, so the provincial health directorate asked the WHO Representative in Kazakhstan for assistance, and he sent to us WHO experts. That's when we first met the WHO international consultant, Dr. Gelmius Siupsinskas. He arrived in Karaganda and visited the largest maternity hospital, which has about 5000 deliveries per year. We were surprised and could not understand why he was talking with pregnant women who were in the wards being treated for various 'complications'. Gelmius asked them: "Do you know why you are here? Do you know for what diseases are you being treated and what treatment you are getting?" Gelmius did not understand why women did not have information about their condition and treatment, or why they could not receive visits from family members. They were communicating through a closed window with relatives, who were on the street and had no right to enter the maternity ward. We believed that visiting relatives are very dangerous and can cause infection in mothers and children, and we were sure that using medications to treat edema, prescribing therapy for threatened abortion and premature delivery and other methods of treatment would ensure good results.

The understanding came gradually, when the positive results became evident and patients happier, with health providers more satisfied.

Zhezkazgan maternity hospital was chosen for the implementation of WHO MPS. After three years we felt a real change, which contributed to significantly reducing infant mortality, complications of childbirth and deaths of mothers. Quoting from a health manager, the head of Zhezkazgan maternity Dr Nurlan Berikov: *The more I understand the importance of implementing effective perinatal technologies, the more supportive I am becoming, on both a personal and a professional level. A strange thought comes to me occasionally: how did we work before?*

As well as recognizing the weaknesses of the former system, health managers understood the importance of self-motivation for learning and improving knowledge and skills. According to Gulya Omarova, obstetrician-gynaecologist with 20 years of management experience in Karaganda oblast: *Looking back, we have to confess that maternal and perinatal mortality was always high – higher than the average now. There was no clear understanding of how to overcome this. With the introduction of Making Pregnancy Safer we compared the results and we were amazed how the low-cost and timely interventions could be so effective. This really was a life changing experience for me.*

The strategy for health managers' capacity building helps not only to educate, but also to "get them on board". Success largely depends on the willingness to change and the manager's personal and professional commitment to the problems of patients, health providers and the facilities.

The health managers are optimistic: *"When there is a will, there is a way".*

Gaukhar Abuova
National Professional Officer
WHO Country Office in Kazakhstan
gaa@euro.who.int

Assel Mussagaliyeva
National Professional Officer
WHO Country Office in Kazakhstan

Zhumagali Ismailov
Head of Regional health department
South Kazakhstan oblast

Kairzhan Mabiyev
Deputy Head of Regional health department,
Karaganda oblast

Askhat Balykov
Head of mother and child health unit, Regional health department
Aktobe oblast

Alberta Bacci
Regional Coordinator
Making Pregnancy Safer
WHO Regional Office for Europe

EFFECTIVE PERINATAL TECHNOLOGIES: THE EXPERIENCE OF KAZAKHSTAN


Zoya An


Madina Maishina

Introduction

Since 2002 WHO has been implementing effective perinatal care (EPC) to improve the health of mothers and newborns in Kazakhstan, as part of the WHO Making Pregnancy Safer (MPS) initiative. This includes EPC training and follow-up courses, and assessment of the quality of maternal and neonatal care in the hospitals involved.

The EPC training package was designed for midwives, obstetricians/gynaecologists, neonatologists and paediatric nurses by the WHO Regional Office for Europe. The objective of EPC is to improve the quality and outcome of care for mothers and their babies by updating and upgrading the professional and managerial knowledge, skills and practice of healthcare providers at all levels. EPC covers essential midwifery, obstetric and neonatal care, and a number of areas of special care, such as pre-eclampsia, postpartum hemorrhage, perinatal asphyxia and infection control.

The format is based on multidisciplinary collaboration, adult learning methods, group work, plenary sessions and supervised clinical practice. The eight-day EPC course has two main components – theoretical and practical. Ideally, within 6 months after the course, participants should receive a follow-up visit for assessment of progress, reinforcement of skills and additional practice in their own hospitals.

Developing the training strategy

Kazakhstan went from piloting to nationwide dissemination of EPC in-service training under government funding. Initially, however, the EPC courses were conducted in pilot maternities with technical support from international organizations. The next step was to introduce the course into the curricula of postgraduate medical education. Additionally, to increase the number of trained healthcare providers, in-service training was initiated in the regions.

In 2009-2010, a training strategy was developed based on three pilot regions (Aktobe, Karaganda and South Kazakhstan) within the WHO/Europe and Ministry of Health joint project "Support for Maternal and Child Health in Kazakhstan", financed by the European Union. This included MPS coordinators at the regional, district and facility levels, assessment of training needs and establishment of training centres, in line with WHO requirements.

Later on, each region identified key maternities to spearhead the training efforts. A team of international and national experts then trained multidisciplinary teams of health providers from the selected maternities. The practice of the trained health providers was reinforced by follow-up visits of international experts. Additionally, national experts provided regular supportive supervision visits on a quarterly basis.

Development of the training strategy was possible with financial and political support of the Ministry of Health (MoH) and health departments at the regional level. The positive experience obtained helped the MoH to disseminate the results to the rest of the country within the National Programme for Health System Development "Salamatty Kazakhstan" for 2011-2015. Starting from 2011, each of 16 regions will have an EPC training centre and full-time MPS coordinators financed from local government funds.

In May 2011, a full-time national MPS coordinator was appointed by the MoH. A national EPC trainers' roster has also been developed to fulfill the country's training needs. The certification criteria for national trainers were: (1) successful completion of the EPC course, (2) its implementation in the workplace, and (3) working as a co-facilitator with international trainers. In total, 20 national and 19 regional multidisciplinary trainers have been certified by the international consultants to support the cascade of training in the regions.

Quality of care assessment for mothers and newborns

Quality of care (QoC) assessment and follow-up in key pilot maternities was carried out in November 2009 and April 2011 in the perinatal centres of Aktobe, Karaganda, and South Kazakhstan regions and at the National Research Centre for Maternal and Child Health in Astana city. The assessment was conducted using the new WHO-developed evidence-based tool, meeting international standards. The tool was intended to allow action-oriented assessment of all the major areas and factors which may have an impact on QoC, including infrastructure, supplies, organization of services, and case management. It focused on the areas that have been shown to have the greatest impact on maternal and newborn mortality and serious morbidity, and on maternal and neonatal wellbeing.

The aim of the assessment was twofold. First of all, the experts evaluated the progress of effective perinatal technologies implemented in the facilities, and secondly, they identified milestones for improving QoC in the maternities.

Assessment results

The assessment showed that QoC for mothers and newborn babies has undergone significant improvement. The assessment methodology used a scoring system from 0 to 3, where 3 is full compliance with the international standard, 2 is "mostly achieved", 1 is "needs significant improvement", and 0 is "does not meet the standard". As shown in Figure 1, almost all areas showed positive shifts in meeting the standard, with progress being made in the 18 months after the first assessment. In particular, the following practices have been improved:

- demedicalization of care for mothers and newborns, excluding unnecessary drugs and interventions,
- the proportion of caesarean sections under regional anesthesia has increased 2-3 times compared to 2008. In Aktobe 50%, in Karaganda 80%, and in South Kazakhstan 70% of all caesarean sections are done under local or regional anesthesia
- improved management of pre-term labour by using corticosteroids in all cases


Gul Omarova

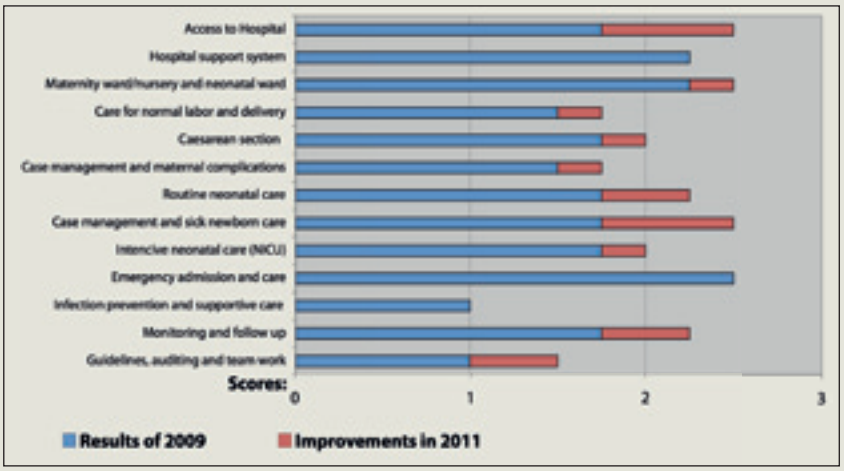

Meruyert Ermekova


Magripa Yember-genova


Narkul Boye-dilova


Alberta Bacci

Figure 1 Assessment of quality of care for mothers and newborns: comparative analysis in 2009-2011



- positive shifts in passive management of the third stage of labour.

Another positive aspect is active involvement of mothers in the care of low birth weight and sick newborns, including the early introduction of enteral feeding with expressed breast milk.

Additionally, readiness for emergency obstetric care was put into practice, namely: standards for severe obstetric hemorrhage and eclampsia, trained healthcare providers, round-the-clock operation of the intensive care unit, and availability and access to essential drugs and blood components.

Despite this progress, major challenges requiring immediate action remain. These are infection control in hospital, management of normal labour and obstetric complications, and essential care of the newborn (including thermoregulation).

Current infection control is still based on outdated approaches without evidence of effectiveness. These include liberal use of disinfectants, regular closure of maternities for cleaning procedures, and punishment of health providers when real statistics show "bad" data – which in turn, leads to data manipulation. As a result, infection control is ineffective. For instance, the rate of relaparotomy due to sepsis after caesarean section is high (1 in 200-300 cases) and the pattern of neonatal mortality shows a growing trend towards late neonatal deaths. Furthermore, there is no direct control over antibiotic use and there are no bacteriological laboratories available in maternities, even in large ones.

Regarding clinical management practices, simple and routine technologies, such as appropriate partogram use, hand washing and newborn temperature checking, are still ones that are hard to fulfill. At the same time, the persisting low threshold for intervention in the form of labour induction and caesarean section is one of the reasons for labour complications. Another issue of concern is inadequate monitoring of vital signs in the newborn.

Conclusion

Implementation of effective perinatal technologies in Kazakhstan has proved its effectiveness. Approaches developed by WHO for training, follow-up, supportive supervision and QoC assessment are helping the country to improve health services for mothers and newborns. The next steps in this regard should focus on: (a) updating the existing system of infection control at national level, based on international evidence-based approaches; and (b) internal management for improving quality of care, such as the WHO Near Miss Case Review approach discussed in a separate article in this issue of *Entre Nous*.

References

1. Piccoli M, Tamburlini G. *Tool for assessment of quality of care for mothers and newborn babies in hospitals*, IRCCS Burlo Garofolo, Trieste, Italy (the WHO Collaborating Centre) and the WHO Regional Office for Europe, Making Pregnancy Safer, 2009.
2. Report on *WHO training activities in Effective Perinatal Care 2009-2010*, implemented within the project "Support for Maternal and Child Health in Kazakhstan". Astana: 2010.

Zoya An
National MPS coordinator
National Research Centre for Maternal and Child Health
zojaan2106@yandex.ru

Madina Maishina
Obstetrician/gynecologist of labour department
National Research Centre for Maternal and Child Health
Madinakzastana@gmail.com

Gul Omarova
Regional MPS coordinator
Karaganda oblast health department
gul-omarova@mail.ru

Meruyert Ermekova
Head of labour department
National Research Centre for Maternal and Child Health

Magripa Yembergenova
Head, Maternal and Child Health Unit
Ministry of Health of the Republic of Kazakhstan
m.embergenova@mz.gov.kz

Narkul Boyedilova
Neonatologist
Research Centre of Obstetrics, Gynaecology and Perinatology
Ministry of Health of the Republic of Kazakhstan
boedilova_n@mail.ru

Alberta Bacci
Regional coordinator,
Making Pregnancy Safer
WHO Regional Office for Europe

WOMEN'S EXPERIENCE AND VIEWS OF CHANGES IN CHILDBIRTH

In November 2009 and April 2011, an assessment of the quality of maternal and neonatal care was conducted in key pilot maternities of the WHO/Europe Project "Support for Maternal and Child Heath in Kazakhstan" financed by the European Union. This assessment was performed within the framework for implementation of the Making Pregnancy Safer strategic approach, using a WHO/Europe tool "Making Pregnancy Safer – Assessment tool for the quality of hospital care for mothers and newborn babies" (1). One of the components of this tool is a questionnaire which is used by psychologists to enquire on family friendly healthcare services, as described in this article.

In Kazakhstan, as in many countries, the vast majority of deliveries take place in hospitals. There is no doubt that this allows great improvement in the management of complications of labour and delivery. Nevertheless, institutional deliveries transformed childbirth into a merely clinical event in which technical aspects received much more attention than the psychological well-being of mother and child.

Obligatory medical observation gave the pregnant woman a "patient" status which she assumed automatically upon entering a maternity hospital, losing her right to express emotions and attitudes in the labour and delivery period. The childbirth process was always separated from the social environment. The attitude to the newborn child as a human being with only physical needs led to a weakening of both the mother's instinctive reactions and the father's psycho-emotional interaction with the child.

Today, therefore, modern healthcare approaches focus on meeting and satisfying the emotional needs of mothers, fathers and newborn babies. This family-centered approach recognises that prerequisites for quality healthcare are family education and support, family involvement in decision making, a friendly environment during labor and delivery, mother and newborn rooming-in for successful breastfeeding practices and establishing mother-infant bonding.

In November 2009 and April 2011, assessment of the quality of maternal and neonatal hospital care was conducted in four pilot maternities of the project "Support for Maternal and Child Health for Kazakhstan". These institutions are the National Research Center for Maternal and Child Health, and Perinatal Centers of the Karaganda, Aktobe and South Kazakhstan regions.

Within the integrated assessment of care during normal birth and management of complicated cases, the evaluation of hospital care looked into the different aspects of demedicalization, empathy and psychological support to women during labor and delivery. Two professional psychologists, working in Astana and Almaty Perinatal Centres, carried out interviews as part of the multidisciplinary team of assessors, which included obstetrician-gynecologists, neonatologists and midwives. As a result, 25 health providers and 60 women, who gave birth years ago and recently, were interviewed to objectively compare the results.

Today we can confidently say that the implementation in practice of effective perinatal technologies recommended by the WHO is positively accepted and implemented, and completely supported by mothers. According to the mothers, this revolutionary process really made the delivery process easier and happier. Moreover, the new practices had a positive effect on health providers and resulted in a change in their mindset. Doctors and midwives gradually came to understand the importance of rejecting the traditionally-used methods of dictating to women and taking decisions on their behalf.

Below is the personal story of one woman, told to the psychologists a few days after delivery. She compares her three deliveries in different years and is excited to see the changes.

My first delivery was 9 years ago (2002), the second one 4 years ago (2007) and the last one just some days ago (2011) at this hospital. I feel great and excited about this latest one. My feelings could be described as shock and surprise, followed by happiness and admiration, literally 'such as one was caught up to the third heaven'. Many things have changed, the staff are more friendly, polite and communicative and most of all, they allowed my sister to accompany me as a partner in labor.

To recall, during previous deliveries I was all alone with my own pain. Today my close person is with me. The midwife came to the ward often and listened to the heartbeat of my baby. This time, the doctor did not examine me frequently, only 2-3 times during my stay here, within 8-9 hours after the delivery. They told me that everything is going well and there is no need for an injection. In my previous experience, nothing was explained and injection was obligatory

Anastassiya Dyadchuk

Gaukhar Abuova

Anvar Abzullin

after the order to lie down. And by the way, this last delivery was longer than the others, but I still liked it. I enjoyed the whole process of becoming a mother, when your baby is coming out through your body. This is an awesome feeling!

I learned about the labor during the classes for pregnant women, which I was asked to attend, having a slight risk for the baby. I was a bit shy since it was my third delivery, and well, I am already 38. But now I am more than grateful to the doctor who referred me there. It was an eye opening experience for me: to breathe, to do massage and to sit on the ball. Frankly speaking, at the same time I was afraid that I would not use that knowledge. The memory was fresh of the first two deliveries. But my fear was exaggerated. Everything was useful. What I liked most was delivering on the bed, when the doctor said it is up to me whether to bear down or not. It was scary at first, as in the last deliveries I made efforts only upon the doctor's command.

This time, it was all different. The hospital staff were there to support me. Initially I was lying on my side but my leg became numb all the time. Then the doctor suggested that I lie on my back and lift up my body. I was almost sitting. My sister was there holding my back. It was so convenient, and moreover, there was no tear or abrasion at the end. The atmosphere was so calm and soothing. At the moment when the baby was born, I immediately felt it on my tummy. This is unbelievable, so much happiness to feel that your child is healthy and it is your own effort. And later, when transferred to a post-delivery room, my son was always with me. I felt so close to him - to feed whenever he wanted, observe, dress him up – this is so interesting. Maybe this is not right but only in this delivery I felt myself as a real mother - a woman who is physically able and was given the supreme power to give a new life.

Anastassiya Dyadchuk
Psychologist
Almaty Perinatal Center
amarilis.me@mail.ru

Gaukhar Abuova
WHO National Professional Officer
WHO Country Office in Kazakhstan
gaa@euro.who.int

Anvar Abzullin
Psychotherapist
National Research Center for
Maternal and Child Health
abzullin@gmail.com

Reference

1. Making Pregnancy Safer – Assessment tool for the quality of hospital care for mothers and newborn babies, WHO Regional Office for Europe, 2009 – available in Eng and Rus - http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/maternal-and-newborn-health/publications2/2009/making-pregnancy-safer-assessment-tool-for-the-quality-of-hospital-care-for-mothers-and-newborn-babies

REGIONALIZATION OF PERINATAL CARE IN SOUTH KAZAKHSTAN OBLAST

Gelmius Šiup-šinskas

During the 1970s, in an effort to improve the outcome of high-risk pregnancies, a number of countries (US, Canada, UK) started developing systems of regionalized perinatal care. The concept was articulated in the March of Dimes report "Towards Improving the Outcome of Pregnancy" in 1976. A major goal of regionalizing perinatal care is to minimize differences in outcome attributable to geographic location (1).

Regionalisation – the international experience

In the 1990s, France put into place a regionalization policy which was made official in 1998. Level I care is usually reserved for normal births, level II for managing moderate obstetrical problems and preterm births >32 weeks, and level III for severe obstetrical problems, specialized medical conditions and preterm births <32 weeks. Maternity hospitals are required to sign agreements with a reference level III maternity unit and organize maternal transfers to these units (2).

The aim of regionalized perinatal care was to achieve delivery in perinatal centres for as high a proportion as possible of newborns weighing <1500 g. These are known as very low birth weight (VLBW) infants and there is evidence that delivering a sufficient number of these patients (>50 per year) is associated with decreased neonatal mortality. The mortality of infants weighing <1000 g increases incrementally as the hospital level decreases (3, 4).

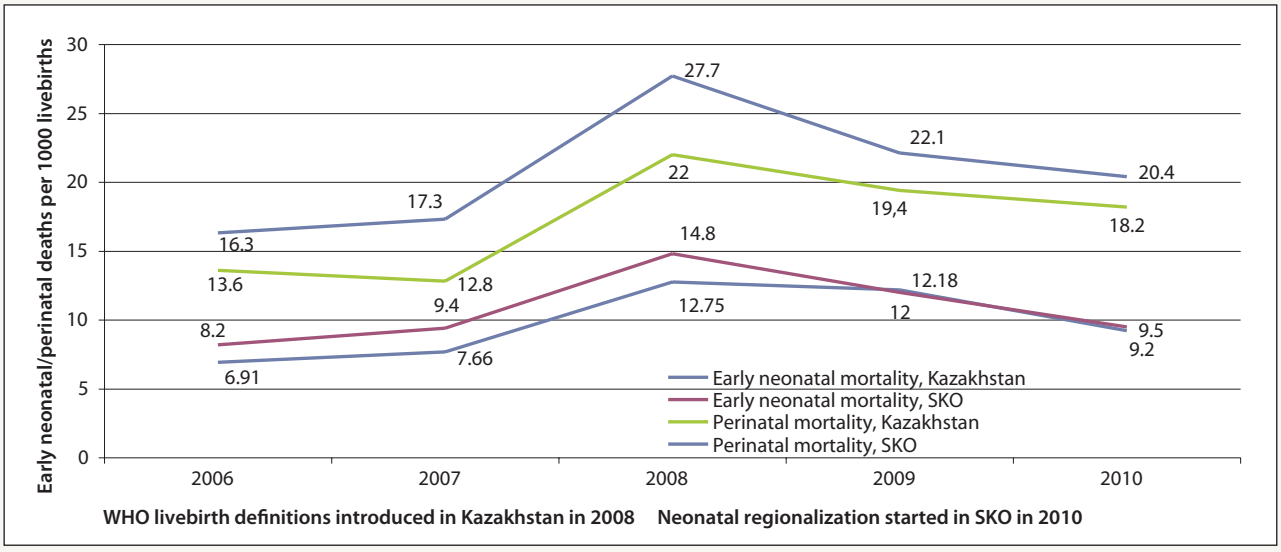
It is generally agreed that very preterm infants should be delivered in maternity hospitals with an on-site neonatal unit that is capable of providing full intensive care (IC). The American Academy of Pediatrics recommends that deliveries that occur before 32 weeks of gestation take place in such specialized units, and most European countries have passed laws or issued recommendations based on this premise. Uniform definitions of levels of care have significant advantages: standard definitions will permit comparisons among institutions for health outcomes, resource utilization, and costs. Also, they facilitate the development and implementation of consistent standards of service provided for each level of care (5).

Many, but not all, countries in Europe have clearly designated levels of care that make it possible to define specialised maternity units where high-risk babies should be born. Most of these countries also have data on their place of birth. On the other hand, until late 2003 in the USA, 15 states and the District of Columbia had no formal definitions of levels of perinatal care (5, 6).

The proportion of very preterm infants who are delivered in maternity units with on-site IC has recently been proposed as a quality-of-care indicator for comparing perinatal health systems across Europe. There is less of a consensus, however, on the optimal structural characteristics of a perinatal unit, such as the minimum size or workload for achieving the best health outcomes for very preterm infants. Some studies find better outcomes in larger, more specialized units. In some settings, however, delivery and hospitalization in small units have led to similar outcomes for very preterm newborns, indicating that concentration of VLBW newborns alone (number of patients in neonatal ICU) is important but not sufficient in itself to achieve substantial improvement of outcomes (3, 4).

Few preterm infants need intensive care. Those that do are mostly the 0.7-1.4% of infants who are born before 30-32 weeks' gestation (7). Most infants born after approximately 32 weeks of gestation or with a birth weight >1500 g need special care only while they establish oral feeding and grow to sufficient maturity so that they can be safely discharged. Often the infant's mother is a major care-giver. Intensive care for these infants is expensive, needing input from a skilled multidisciplinary team and costly facilities and equipment. These

Figure 1. Perinatal and early neonatal (below 7 days) mortality in Kazakhstan and South Kazakhstan oblast (SKO)




Audrius Mačiulevičius


Inna Glazebnaya


Magripa Yembergenova


Gaukhar Abuova


Alberta Bacci

resources are limited. Neonatal nurseries may have transitional care facilities to allow mothers to stay with their infants, particularly when they are establishing breast feeding.

Regionalisation in Kazakhstan

In January 2008 Kazakhstan introduced the WHO live-birth definition at national level. Just before that, in December 2007, the Ministry of Health (MoH) issued an Order on regionalization of perinatal care in Kazakhstan. A real process of regionalization did not begin, however, because of huge differences among regions, an inadequate transportation system, a lack of human resources and specific equipment, and undefined economic stimuli.

In February 2008 South Kazakhstan oblast (SKO) was first in the country to step forward with functional regionalization by adapting the national Order of the MoH and introducing a three-level referral system. A multidisciplinary working group of local and international experts, with support from WHO and UNFPA, elaborated region-specific estimates for patient flow, defined detailed criteria for referral of pregnant and delivering women, and also defined the equipment and staffing necessary to fulfill the requirements for relevant levels of care.

With improvement of the overall economic situation in the country and substantial state investment in perinatal care, the administration and professionals in SKO have taken a second fundamental step – regionalization of neonatal care started in March 2010. First of all, very preterm and ill babies are transported as early as possible to referral centers of level II (preterm babies >32 weeks, and those with mild health problems or non-life-threatening conditiond) and level III (<32 weeks of gestation and those requiring intensive care). Newborns with congenital anomalies are transferred to the oblast pediatric hospital for surgical treatment as needed.

During 6 months in 2010 there were 213 transfers of ill newborns. Of this total, 93 patients were transferred to level III, almost half of them under artificial ventilation.

At the same time other changes were occurring. In 2006, professionals from SKO started to implement the WHO Effective Perinatal Care approach, focusing on evidence-based case management at facility level and on family-centered care. Later, with the support from the EU-funded and WHO-implemented project "Support for Maternal and Child Health in Kazakhstan for 2009-2011" further refinement of clinical practice took place through additional training and quality improvement mechanisms.

SKO is responsible for more than 20% of overall births of Kazakhstan – ie. 76,543 of a total of 372,092 births in 2010. The dynamics of perinatal indicators (Figure 1) show promising trends. Relying on the experience of SKO, two other oblasts – Karaganda (in 2010) and Aktobe (in 2011) – have started to build their own systems for perinatal regionalization.

References

1. Meuli RL et al. Regionalization of perinatal care. Public Health and Preventive Medicine. Wes J Med 1984; 141:695-97.
2. Zeitlin J et al. Risk factors for not delivering in a level III unit before 32 weeks of gestation: results from a population-based study in Paris and surrounding districts in 2003. Paediatr Perin Epid. 2008; 22(2):126–35.
3. Rogowski JA et al. Indirect vs direct hospital quality indicators for very low-birth-weight infants. JAMA 2004; 291(2):202-9.
4. Roberts CL et al. Trends in place of birth for preterm infants in New South Wales, 1992–2001, J Paediatr Child Health 2004; 40:139–43.
5. American Academy of Pediatrics. Policy Statement: Levels of neonatal care. Pediatrics 2004; 114(5):1341-7
6. Van Reempts P et al. Characteristics of neonatal units that care for very preterm infants in Europe: Results from the MOSAIC Study. Pediatrics 2007; 120(4):815-25.
7. Zeitlin J, MohangooA. European perinatal health report: data from 2004 (2008).
8. Roger A et al.Outcomes of Regionalized Perinatal Care in Washington State. West J Med. 1988; 149(1):98–102
9. Šiupšinskas G,Liubšys A. Perinatal care in Lithuania (1991-2004). Entre Nous: The European Magazine for Sexual and Reproductive Health 2005; 60:28-9.

Gelmius Šiupšinskas,
Obstetrician, International consultant,
Switzerland
s.gelmius@sunrise.ch

Audrius Mačiulevičius,
Neonatologist,
Lithuanian University of Health Sciences

Inna Glazebnaya,
Chief neonatologist,
South Kazakhstan oblast,
Kazakhstan

Magripa Yembergenova,
Head, Maternal and Child Health Unit,
Ministry of Health of the Republic of Kazakhstan

Gaukhar Abuova,
National Professional Officer,
WHO Country Office in Kazakhstan

Alberta Bacci,
Coordinator Making Pregnancy Safer,
WHO Regional Office for Europe,
Copenhagen, Denmark

Some examples of effective implementation of perinatal regionalization

In 1971 the state of Wyoming had one of the highest infant mortality rates in the USA, ranking 48th among the 51 reporting areas, including the 50 states and the District of Columbia. In 1980 Wyoming ranked second in the USA for low infant mortality (8).

Lithuania, after regionalization of perinatal care was launched in 1991, had an early neonatal mortality rate of 9.47 per 1000 live births (1992). After 11 years (in 2003) it was 2.59/1000, with approximately 70% of all the country's births <32 weeks happening at tertiary level (9).

DIRECT OBSTETRIC CAUSES OF MATERNAL MORTALITY: THE FIRST EXPERIENCE AND OUTCOMES OF CONFIDENTIAL AUDIT IN THE REPUBLIC OF KAZAKHSTAN

The introduction of a confidential audit of maternal mortality in Kazakhstan has allowed a fresh look at maternal deaths and has contributed to identifying their real causes. This brings great credit to the obstetrical community and the medical community as a whole.

In the past, the official investigation conducted on maternal deaths did not give useful results. The traditional system did not allow an understanding of all the nuances of the case and it concluded with the imposition of punishment. Fear of censure led to the concealment of the true causes of the incident and to falsification of documentation, for self-protection of medical staff. The true cause of death remained hidden.

The need was recognized for a confidential professional audit of maternal mortality in the Republic of Kazakhstan based on WHO's "Beyond The Numbers" approaches and the experience of other countries. It was important to answer the question "why did this happen?", and not "who is to blame?".

When the new Committee started discovering facts that are hidden behind the official statistical data, but which influenced the negative outcome, it realized the need for a new approach to audit in order to produce appropriate recommendations. The result was the publication of a full report covering two years (2009-2010) of confidential enquiries into maternal deaths in Kazakhstan, which includes recommendations for action to health providers, managers and the Ministry of Health.

The audit results

As a result of joint work with the support of the Ministry of Health of the Republic of Kazakhstan, and international organizations, 57 cases of death from hemorrhage, 36 from sepsis and 16 from pre-eclampsia were audited by the Committee for the period 2009-2010. In addition to the medical records, the Committee examined anonymous questionnaires filled by medical personnel who participated in the care, and also questionnaires filled by relatives of the women who died.

It was found that the main causes of maternal deaths in the country are direct obstetric causes: hemorrhage, hypertension, and obstetric sepsis. Therefore the main efforts should be aimed at reducing these complications.

In 2009, hemorrhage was the cause of 30.7 % of recorded maternal deaths, sepsis of 19.9% and pregnancy hypertension of 6.0% of cases. In 2010, the contribution of bleeding to the structure of maternal mortality was 29.0 %, that of sepsis was 17.2%, and pregnancy hypertension 11.8%.

Hemorrhage

Hemorrhage during labor occupied a prominent place in the structure of maternal mortality and accounted for nearly one-third of total maternal deaths according to the confidential audit.

Of the 57 cases of hemorrhage 26.4% took place before labor and 73.6% in the postpartum period. It should be noted that uterine rupture was present in 26.3% of the cases of hemorrhage. Audit of maternal mortality from uterine rupture indicated that the main causes of this complication were inappropriate methods of induction with prostaglandins and/or oxytocin, excess dosages of these drugs, and no attention to contraindications.

Among women who died from obstetric hemorrhage, one in five had hemorrhage during and/or after cesarean section. In 40% of cases there was no proper monitoring of the condition of the uterus after vaginal or surgical delivery.

According to the confidential reports from medical workers, one of the contributing factors was inaccurate calculation of blood loss during childbirth and caesarean section. This contributed to an underestimation of the condition of the woman, delay in activities to provide haemostasis and inadequate replenishment of blood loss.

The majority of women (all except 2 cases) received blood or blood components: lack of blood and its components was identified in 22% of cases.

One in four cases of death from obstetric hemorrhage revealed a lack of availability of health facilities to assist in emergency situations.

Sepsis

Among the 36 cases of fatal septic complications, 24 deaths occurred in the postpartum period, 6 after unsafe abortion and 6 after a spontaneous miscarriage. Among the deaths in the postpartum period, 54.2% happened after caesarean section.

It was established that late diagnosis had a significant impact on the outcome in 61.2% of cases, delay of treatment in 41.7%, non-compliance in 36.1%, and late hospitalization in 19.5%.

Timely diagnosis of septic complications after cesarean section is essential. It ensures a timely decision on a radical operation – hysterectomy – in order to improve the outcome for the mother. According to the information from the anonymous questionnaires, medical professionals themselves noted that there were delays in the timing of re-laparotomies, and a lack of coordination among the staff.

Among the factors which contribute to obstetric sepsis was a failure to correctly provide clinical diagnosis and to comply with treatment protocols for premature rupture of membrane at a gestational age less than 34 weeks. This included induction of labor with no appropriate indication, which can lead to premature detachment of the placenta. The next step in this chain of events was cesarean section without appropriate indication, which was complicated by postoperative development of obstetric sepsis.

On the other hand, the Committee also found unjustified expectant management of gestation less than 26 weeks,


Gauri Bapayeva


Zoya An


Alberta Bacci

in settings and facilities where survival of extremely low birth weight newborn babies is very low. This management also can contribute to the development of sepsis after childbirth.

Information and communication with patients and pregnant women about possible obstetric complications are also important. There were reports of misunderstanding and lack of support from the family, who were late in seeking medical help.

The majority of health professionals in the anonymous questionnaires identified the lack of protocols for septic complications after vaginal birth or cesarean section as a factor which greatly complicates their work.

The Committee considers all cases of maternal death from sepsis to be potentially preventable, because they were related to basic factors of improper care, which had a significant impact on the poor outcome.

Unfortunately, during these 2 years a significant number of deaths were linked to "illegal" abortion. This indicates lack of awareness about family planning, accessibility and anonymity of "safe" abortion, which in some cases leads to concealment of pregnancy and abortion by women who are not married.

Pregnancy hypertension

Among the cases of pregnancy-induced hypertension analyzed by the Committee, 10 (43.5%) were wrongly diagnosed. Over-diagnosis led to unjustified inductions of labour or abdominal delivery, which were further complicated by hemorrhage or a septic process. Regarding these cases the confidential audit of medical records and questionnaires identified problems related to clinical management:

1. Failure to use appropriate criteria for the diagnosis of preeclampsia, resulting in unjustified hospitalization, inappropriate treatment, use of multiple drugs (polypharmacy), massive infusion therapy, unjustified induction of labor, and surgical delivery without proper indication.
   The outcome of these excessive obstetric interventions was an increase in the number of bleeding and septic complications in the postpartum period.
2. Diagnosis and management of pre-eclampsia without evidence of effectiveness and safety. For example, inappropriate massive infusion/transfusion therapy (crystalloids, solutions of hydroxylated starches, fresh frozen plasma, albumin) finally led to overhydration – cerebral edema and/or pulmonary edema). In many cases caesarean sections were performed using general anesthesia, which can entail a high risk of developing cerebral haemorrhage and upper airway oedema.

Based on these findings the Committee classified all cases of maternal death from preeclampsia as "category 3": preventable.

Recommendations

1. Reducing obstetric interventions:
   Revise clinical management and professional attitude towards caesarean section and induction of labor, involving both medical staff and the patient.
   Provide full information to patients about possible risks of induction and cesarean section.
2. There is an urgent need for the preparation and implementation of national guidelines on sepsis and medical abortion.
3. A focus on provision of quality care at facility level is needed, including professional skills and sound organizational activities. This should include attention to blood supplies, and compliance with facility-based standards including proper monitoring of women after birth and caesarean section.

Thus, the first experience of a confidential audit has helped to identify the true causes of maternal mortality in the country. It has also demonstrated the willingness of health workers to discuss the real contributing factors and the need to improve quality of care for pregnancy and childbirth, to reduce the risk of maternal mortality and make pregnancy safer.

References

1. Drife J. Maternal mortality in well resourced countries: is there still a need for confidential enquiries? *Best Practice & Research Clinical Obstetrics and Gynecology* 2008; 22: 501-15.
2. Bacci A., Lewis G., Baltag V., Betran A. "Beyond the Numbers": introduction of maternal mortality and severe morbidity audit in the European Region. *Reproductive health matters*. October 2007.
3. World Health Organization. *Report on BTN implementation in Kazakhstan*. Copenhagen: WHO European Regional Office, 2008.

Gauri Bapayeva, MD, PHD
Chief Scientific Adviser, Department of Obstetrics and Gynecology,
National Research Center of Motherhood and Childhood
Astana, Kazakhstan
Secretary of the Central Commission for Confidential Audit
gauri@inbox.ru

Zoya An, MD
Head of Obstetrical Department of the National Scientific Center of Maternity and Childhood
Member of the Central Commission for Confidential Audit
zojaan2106@yandex.ru

Alberta Bacci, MD
Regional Coordinator
Making Pregnancy Safer
WHO Regional Office for Europe

INITIAL EXPERIENCE OF NEAR MISS CASE REVIEW: IMPROVING THE MANAGEMENT OF HAEMORRHAGE

Kanat Sukhanberdiyev

Kazakhstan has a well-developed health infrastructure, a sufficient number of health providers and good geographical access to health services, coupled with a state-guaranteed basic benefits package to the population. Despite these advantages, the quality of care remains inadequate, due to ineffective and non-evidence-based approaches to health system organization and management. One of the ways to solve this problem is a process of continuous improvement of care at the facility level, such as the WHO-recommended Near Miss Case Review (NMCR) approach. This form of audit has been implemented in Kazakhstan since 2009 within the project of the Kazakhstan Ministry of Health and the WHO Regional Office for Europe "Support for Maternal and Child Health for Kazakhstan" financed by the European Union. This article presents the 2009-2010 results of NMCR implementation, with particular reference to haemorrhage.

Methodology

This method of audit allows health providers to be involved in defining and solving the problems they face. It also allows sharing of responsibility among both managers and staff. All participants in the clinical case are involved in conducting a multidisciplinary audit which analyses the chain of events "from door to door" and helps everyone to understand and accept the missed opportunities in each case. The main feature of NMCR is that the end result is not the evaluation of the case but the action taken after that evaluation.

The piloting process of NMCR started in Kazakhstan in 2007 with the direct technical support of the WHO Regional Office for Europe, after a large amount of preparatory work.

To maintain coordination, the Ministry of Health (MoH) established a national working group and appointed a national coordinator. At the initial stage, obstetric hemorrhage and severe pre-eclampsia were selected as the complications to be considered for NMCR audit. Accordingly, national clinical protocols and standards for emergency obstetric care in critical cases of hemorrhage and severe pre-eclampsia were developed and adopted.

Six maternities in Astana and Almaty cities and South Kazakhstan region were chosen for piloting. They are: the National Research Center for Maternal and Child Health in Astana, the city perinatal centre and the city maternity of Almaty, the regional and city perinatal centres of Shymkent and the city perinatal centre of Turkestan in South Kazakhstan region. Of these, three are specialized level III facilities (in accordance with the regionalization of perinatal care) with 6000-7000 births annually. The others are level II city maternities with 5000 births per year, and a research centre for highly specialized care with up to 4000 births per year. The criteria for choosing these facilities were successful implementation of the WHO effective perinatal technologies, and showing initiative in NMCR participation.

The next step was to define critical cases of hemorrhage and pre-eclampsia. Taking into account the special characteristics (level and technical capacity) of each maternity, the audit definitions varied from facility to facility (Table 1). Direct implementation of NMCR audit in the pilot maternities started in 2009, after training of the health providers responsible for NMCR in selected facilities.

The number of critical cases in the pilot maternities also varied – from 20 to 70 per year. At the beginning, the teams tried to cover all critical cases for investigation according to the adapted audit criteria. This approach eventually led to team overload and inconsistency due to repetition of the situations in the analyzed cases. Thus, every pilot organization had a different number of audit sessions, not more than 10 per year on the average.

The effectiveness of NMCR implementation in the pilot facilities was evaluated based on the indicators of postpartum hemorrhage, hysterectomy and volume of blood transfusions.

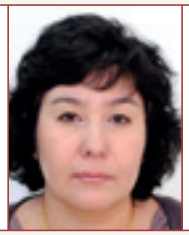
One of the key components of NMCR success in Kazakhstan was technical support to the pilot facilities by a team of international and national consultants. They made an evaluation of progress and provided methodological support to the local teams by directly observing NMCR sessions each year in May 2010 and 2011. We should point out that at the beginning all pilot maternities had similar barriers to conducting NMCR, namely: not everybody was involved in the case review and discussion, interviews with patients were conducted only occasionally, "authorities" within the team dominated the discussion, and the standards of care were not always used.

In addition, annually conducted national meetings on NMCR review and progress allowed participants to share experiences and discuss common pitfalls, and in all these ways to improve the pace of implementation at the facilities.

Results

As a result of the audit, the effectiveness of emergency care for obstetric haemorrhage and severe pre-eclampsia has been strengthened in various ways, namely:


Ardak Ayaz-bekov


Arman Issina


Gaukhar Abuova


Stelian Hodoro-gea


Alberta Bacci

1) **monitoring in the postpartum period:** monitoring forms have been developed and introduced into practice;
2) **recording blood loss in parturient and puerperal women:** weighing of blood using measuring vessels as well as weighing dressings and disposable linen and documenting these weights systematically;
3) **supply of drugs and blood components:** availability and control over blood and its components, and prostaglandins and uterotonics, at the facility;
4) **readiness for emergency care provision:** developing emergency care algorithms and conditions for transportation from remote areas, training health providers from the facility and from the emergency hospital; improving time management skills; identifying the person responsible for the readiness of the emergency kit in each facility;
5) **rational use of staff** by internal redistribution/optimization of human resources at the maternity, as well as by reducing the working hours to 12 hrs/day;
6) **equipping maternity staff with mobile devices** for timely alert and warning.

In addition, the case analysis showed the need to adapt the national protocols to the capacity and level of the facilities, and it identified additional areas for detailed scrutiny.

During the implementation, the NMCR team faced difficulties in identifying the issue which led to the critical case. As clinical practice has gradually been improved and the obvious mistakes in haemorrhage management have been eliminated, searching for causes which led to the critical case is not an easy task. Therefore, the need became evident for the permanent presence of an experienced obstetrician-gynaecologist in the team and for continuous external support from the national experts.

In conclusion, it is important to point out that NMCR has proved its practical relevance and effectiveness in improving the practice of healthcare providers in the facilities.

References

1. Pattinson RC, Hall M. Near misses: a useful adjunct to maternal death enquires. British Medical Bulletin 2003; 67: 231-43
2. Prevention and Management of Postpartum Hemorrhages. Society of Obstetricians and Gynaecologists of Canada. SOGC clinical practice guidelines 2000; N88: April http://sogc.medical.org/sogcnet/sogc_docs/common/guide/pdfs/ps88.pdf

Kanat Sukhanberdiyev
Obstetrician/gynaecologist
Regional Coordinator on NMCR
National Research Center for Maternal and Child Health
Astana, Kazakhstan
kana6@msn.com

Ardak Ayazbekov
Obstetrician/gynaecologist
City perinatal center
Turkestan, Kazakhstan
Ardak1981@mail.ru

Arman Issina
Obstetrician/gynaecologist
MBA student, Astana Medical University
a.issina@yahoo.com

Gaukhar Abuova
National Professional Officer
WHO Country Office in Kazakhstan
gaa@euro.who.int

Stelian Hodorogea
Assistant Professor
Department of Obstetrics and Gynecology
State Medical University
Chisinau, Republic of Moldova
stelian21@hotmail.com

Alberta Bacci
Regional Coordinator
Making Pregnancy Safer
WHO Regional Office for Europe

Table 1.
Definition and selection criteria for critical cases of haemorrhage in the pilot maternities

	Pilot 1	Pilot 2	Pilot 3	Pilot 4	Pilot 5	Pilot 6
1st criterion	Blood volume > 1000 ml	Blood volume > 1500 ml	Blood volume > 1500 ml	Blood volume > 1500 ml	Hysterectomy	Hemorrhagic shock
2nd criterion	Systolic blood pressure less than 80 mm per mercury column	Hysterectomy	Hemorrhagic shock	Hysterectomy	Blood transfusion	Blood transfusion
3rd criterion	Pulse more than 100	Blood transfusion	Blood transfusion	Blood transfusion		
Selection criteria	If it meets one of the criteria	If it meets all three criteria	If it meets one of the criteria	If it meets one of the criteria	If it meets one of the criteria	If it meets one of the criteria

INDIVIDUAL, FAMILY AND LOCAL COMMUNITY INVOLVEMENT IN IMPROVING MOTHER AND CHILD HEALTH: PILOT EXPERIENCE IN SOUTH KAZAKHSTAN OBLAST

Improving continuity and quality of mother and child health (MCH) care services by reorganising the health system and strengthening community involvement were identified as crucial for improving maternal, newborn and child health (MNCH) in Kazakhstan. In 2003, the WHO Making Pregnancy Safer initiative proposed a strategic framework called Working with individuals, families and communities to improve maternal and newborn health (1) – the "IFC framework". Based on the Health Promotion approach of the Ottawa Charter (2), it asserts that working with individuals, families and communities is a critical link in ensuring the continuum of care throughout pregnancy, childbirth and the postnatal periods for women and newborns (3).

Implementing the IFC framework in Kazakhstan

Implementation was initiated in South-Kazakhstan oblast. The preparatory phase consisted of building the ground for introducing the IFC work as part of National MNCH programmes. Advocacy among health and public communities was a key step. A first workshop, aimed at orienting health programme managers at both national and oblast levels, was organized on the key concepts and processes.

The next phase was the Participatory Community Assessment (PCA) process. This is designed to explore community needs, set priorities and develop a rayon (district) IFC plan. The methodology was adapted to Kazakhstan and is summarised in Figure 1. The process was initiated in Suzak rayon in South Kazakhstan Oblast, with the support of a team composed of representatives of the National and Oblast IMCI Centre, the Healthy Lifestyles Centre and the Child Rights' Protection Department. Their capacity was developed through a "learning by doing" approach throughout the process implementation.

Step 1: The PCA process was introduced to the rayon health and administrative authorities to gain their support. The rayon team prepared an analysis of the MNCH situation, describing the rayon general context, the MNCH indicators, the main causes of morbidity and mortality, service coverage and the various MNCH interventions in the rayon.

A rayon level multisectoral team, composed of health workers and managers, education sector, interior department (gender based violence issues – women's rights) and NGO representatives, was trained to conduct the PCA process. The main focus was to develop their skills to facilitate roundtable discussion in the community and analyse the findings.

Step 2: Five roundtable discussions were conducted in the rayon, each with 15-18 participants from the following groups:

- women of reproductive age,
- mothers, mothers-in-law and grandmothers,
- husbands or partners of women of reproductive age,
- community leaders
- health-care providers.

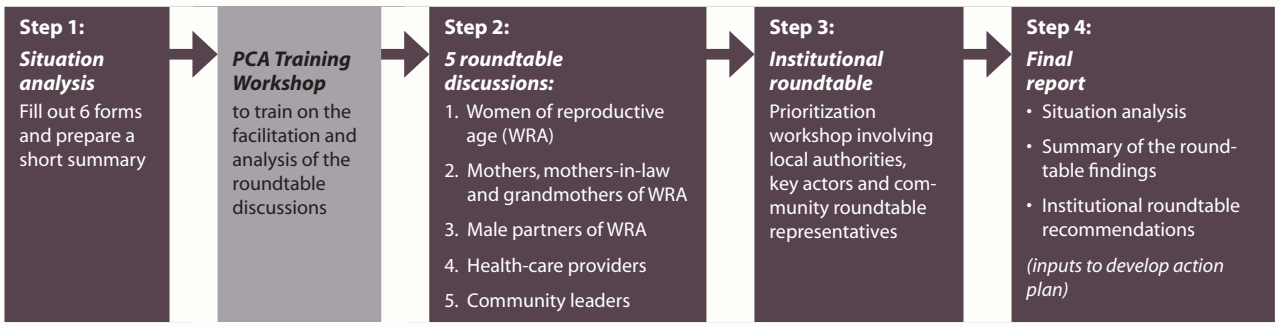
Different segments of the population were represented in terms of socio-economic status, ethnic groups and distance to health facilities.

The participants discussed the current situation in their community in the 4 areas of the IFC framework shown in Table 1. They identified a list of problems in each area, and the available opportunities. They then prioritised the problems, using one criterion, i.e. the problems that most affect the health of women, newborns and children, particularly among the most disadvantaged groups. They selected 3 problems for each area and identified the actions that should be taken.

Step 3: The next PCA step was the institutional roundtable, which gathered together community representatives, decision-makers of relevant institutions such as rayon administrative authorities, health, education, and transport authorities, mass media and NGOs working in health, especially in MNCH. The objective was to review the findings of the community roundtable and obtain a consensus on priority problems and key actions for working with individuals, families and communities.

Step 4: The outcome of the institutional roundtable is the IFC rayon plan, where the key actions are translated into activities, main actors and necessary resources. This plan involves close coordination between sectors, engagement of different actors to improve MNCH, and possibly adjustments in the usual service delivery patterns. It includes a monitoring and evaluation plan, usually integrated into the rayon MNCH plans with specific budget allocation. It involves all stakeholders under the guidance of an intersectoral IFC group which is a sub group

Figure 1: Participatory Community Assessment (PCA)



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Aigul Kuttu-muratova

Gaukhar Abuova

Bayan Babayeva

of the rayon MNCH committee, and concerns the process as well as the impact of the IFC approach.

Perspectives

The IFC approach is new in Kazakhstan. At rayon level the concept of involving communities to improve MNCH was perceived as very innovative and will require a shift in thinking at several levels, and most probably time to adopt this approach.

There are several implications that at times challenge how the health sector works with communities:

- The readiness of providers to engage in dialogue with women, families and communities to exchange information, identify problems and develop solutions is an ongoing process. Some professionals may find it difficult to appreciate the expertise and abilities brought by women and communities. Different skills, existing attitudes and a biomedical culture limit a broader application.
- These empowering approaches also imply a new role for healthcare providers in health education. The emphasis is put upon facilitation, dialogue and creating knowledge, rather than providing messages and solutions. Building the capacities of health professionals in these areas is necessary
- Bringing together women, families and communities with healthcare providers is not easy, but evidence exists that, unless they begin to work more closely together, MNCH cannot be improved.
- Involvement of other sectors may be another challenge, as health is seen as the responsibility of the health sectors. Strong advocacy that creates awareness of the different MNCH issues is required among the various sectors and rayon authorities.

Table 1

Thematic areas of the IFC Framework	Issues identified during the roundtables in Suzak
1. Developing **CAPACITIES** to stay healthy, make healthy decisions and respond to obstetric, neonatal and child emergencies	• Nutrition and care in the home of the pregnant woman, the woman after birth of the newborn and of the child. • Recognition of the danger signs of obstetric and neonatal complications and of the sick child • Transportation problems during childbirth and situations of obstetric or neonatal complications • Poor families have problems in maintaining heating at home • Low quality of patronage visits for newborns and children • Lack of communication and agreement between mother-in-law and daughter-in-law
2. Increasing **AWARENESS** of the rights, needs and potential problems related to maternal, newborn and child health	• Lack of awareness of human, gender and child rights, sexual and reproductive right; women's opinions are neglected • The role of men (husband/father) in the health and care of the newborn and the child • Lack of participation of the community and social networks in maternal and perinatal death audits, MCH improvement • Lack of health promotion, health education activities, disease prevention • Absence of local NGOs to support vulnerable families
3. Strengthening **LINKAGES** for social support between women, families and communities and with the health delivery system	• Transport systems as a factor hindering access to and utilization of MNH services. • Lack of community groups that could support needs of women and adolescents • Difficulties in access to specialized care • Poor linkages between health care facilities and other sectors • Local administrations insufficiently support health providers
4. Improving **QUALITY** of care, health services and interactions with women, families and communities	• The perspective of women, families and communities on the quality of health services. • Lack of satisfaction with quality and continuity of care for mothers and newborn babies • Situations when shortages of free of charge drugs happen • Poor hygiene, sanitation and water conditions in hospitals • Out-pocket payments (some examination tests) • The interpersonal and intercultural skills of health-care providers

Piloting the IFC approach in Suzak rayon is a milestone in the MNCH programmes in Kazakhstan. The capacity of the Oblast team has been developed in conducting the PCA process. Close monitoring and documentation of the process will be necessary to learn and replicate the approach in other districts and possibly other oblasts.

References

1. World Health Organization. Working with individuals, families and communities to improve maternal and newborn. Geneva, World Health Organization, 2003 http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/RHR_03_11/en/
2. Ottawa Charter, World Health Organization, 1986. http://www.who.int/hpr/NPH/docs/ottawa_charter_hp.pdf
3. Portela A, Santarelli C. Empowerment of women, men, families and communities: true partners for improving maternal and newborn health. British Medical Bulletin 2003; 67: 59-72.

Isabelle Cazottes
WHO international consultant
cazottes.isabelle@orange.fr

Aigul Kuttumuratova
Medical Officer, Integrated Management of Childhood Illnesses
WHO Regional Office for Europe
aku@euro.who.int

Gaukhar Abuova
National Professional Officer, WHO Country Office in Kazakhstan
gaa@euro.who.int

Bayan Babayeva
Head of the regional IMCI centre, South-Kazakhstan region
bbabaeva@mail.ru

INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS STRATEGY IMPLEMENTATION – FROM THE POSITIVE EXPERIENCE IN SOUTH KAZAKHSTAN TO THE NATIONAL SCALE

Background

The global WHO/UNICEF strategy of Integrated Management of Childhood Illness (IMCI) is an integrated approach to child health that focuses on the well-being of the whole child. It aims to reduce death, illness and disability, and to promote improved growth and development among children under five years of age. The IMCI strategy combines curative care with preventive aspects including nutrition, immunization, psychosocial stimulation of child development and proper care for children at home. The strategy engages families and communities as well as health facilities to provide better care of children, especially those who are most at risk.

Over the last decade Kazakhstan has increasingly improved services for children, updated national policies and strategies, and introduced effective interventions aimed at reducing child mortality. The IMCI strategy was introduced in Kazakhstan in 1999, starting with adaptation of clinical guidelines and training of medical staff responsible for prevention and treatment of common childhood diseases. Implementation has been expanded from 2 pilot districts to 28 districts in four regions. Sustained improvement of coverage and efficiency of child health services, however, can be achieved only by full integration of effective programs and interventions into primary health care (PHC). The need for rapidly increased coverage, with health workers trained in evidence-based integrated child care, was clearly stated by the Ministry of Health (MoH), taking into account existing geographical challenges.

South-Kazakhstan oblast was one of the pilot oblasts of the project "Support for Maternal and Child Health in Kazakhstan", funded by the EC and managed by the WHO. One of the project components aimed at strengthening the capacity of PHC providers to deliver quality health services to sick and healthy children and support families in providing adequate care at home.

Implementation of IMCI strategy in South-Kazakhstan

Introduction

Initial activities to start the project consisted of providing organizational support for coordinated implementation of the strategy, orienting key stakeholders in IMCI and defining existing resources, needs and targets:

- Local budget sources were used to set up full time oblast coordinators on integrated child care/IMCI implementation;
- A needs assessment of IMCI implementation at the oblast level was conducted: training needs and resources were reviewed and an action plan drafted;
- Orientation and planning workshops involving oblast decision-makers were conducted to ensure the project's effective implementation. Participants in the meeting were representatives of the oblast and district health departments, heads of the oblast, city and district facilities, school teachers, and leading health professionals in field of maternal and child health (MCH).

Guidelines and capacity building

High coverage with effective training of health staff responsible for the management of sick and healthy children in PHC facilities is critical for equity, access and quality of care.

The innovative WHO software, IMCI Computerized Adaptation and Training Tool (ICATT), was adapted by national experts with technical support from WHO/Europe. This tool can be used for regular adaptation of IMCI clinical guidelines at national level, and for intensified increase of IMCI training coverage through providing and organizing more effective training opportunities (in-service, pre-service, distance learning etc). Using ICATT allowed shortening of the IMCI standard training course from 11 to 9 days without affecting the overall quality of training, and incorporation of additional clinical areas such as care for child development and growth monitoring.

In November 2009, key paediatricians from oblast, city and district health facilities from the project regions including South-Kazakhstan oblast were trained in IMCI using ICATT. The main objective was to train core clinical staff for implementation of evidence-based management of major childhood illnesses. The results of the training showed high effectiveness of the selected approach. All participants successfully completed the training, responding correctly to 90% of the test questions. The training was followed by a planning session, with participation of the oblast health department, on rolling out further training in each oblast. In 2009-2010, 1325 health workers from PHC facilities and district children's hospitals were trained at 82 IMCI training courses, resulting in 40% of health facilities in the oblast having more than 60% of their health workers trained.

Trainees' feedback on the ICATT courses:

- Computerized approach reduces time and eases logistics and organization of the training course
- Speeds up adaptation of generic guidelines for country use. Currently this is a long and cumbersome process
- Ensures periodical updates of national and sub-national IMCI guidelines to respond to local health needs
- Increases the number of available training options and hopefully as a result, the coverage of training, which currently is still insufficient to make a significant impact
- The tool can be effectively used for efficient follow-up visits and monitoring

Support after training and progress achieved

In order to support trained professionals in implementation of the WHO clinical guidelines at their hospitals, a cycle of follow-up visits was conducted in late 2009-2010.

Implementation of IMCI guidelines into clinical practice of the oblast PHC facilities had a measurable impact on mortality and improvement of child health. Comparative analysis of infant and child mortality during 2008-2010

Aigul Kuttu-muratova

Gaukhar Abuova

Zaure Ospanova

Bayan Babayeva

showed a significant improvement, with infant mortality due to acute respiratory infection decreasing by 62% and under-five mortality due to pneumonia reducing by 71%.

IMCI implementation in South-Kazakhstan moved beyond the health facilities and developed more effective ways of reaching families with children with well-proven interventions to prevent mortality and morbidity. These covered all three IMCA components: (i) improving clinical skills of health workers, (ii) strengthening support at health facilities and (iii) improving practices in families and communities and strong community-based approaches. The progress made in improving quality of IMCI care in first level hospitals and active involvement of communities in improvement of MCH is highlighted elsewhere in this issue.

To address health system limitations on IMCI implementation, the project supported the development of a new policy and tools on supportive supervision of MCH services, selecting South-Kazakhstan oblast as a pilot region. The MoH recognized the need to make it more sustainable, integrated, and regularly used by decision-makers, after the national experts determined that the existing supervisory system in the MCH services is fragmented, frequently based on project-specific schemes, and punitive rather than supportive. The policy document provided for a system in which both internal and external supervisors will serve as vital links between service management and service delivery. Self-assessment by health workers will be an integral part of the system. The key areas of integrated and supportive MCH supervisory policy will include: (i) administrative review; (ii) information system review; (iii) quality of clinical care review, (iv) referral system review, (v) community and patient involvement review; (vi) capacity building of clinical staff, (vii) problem-solving related to clinical work; and (viii) in-depth MCH programme review. The policy document and package of tools will be finalized with technical support from WHO.

Perspectives and the way ahead

Strong political commitment, sustainable financing, properly trained human resources, integrated and coordinated program management, and effective decentralization are an essential basis for effective reduction of child mortality.

Drawing on the cumulative experience gained over the last decade of IMCI implementation in Kazakhstan, and in particular on the comprehensive pilot implementation in South-Kazakhstan, Karaganda and Aktobe oblasts, the MoH has developed and approved a policy document that endorses a country-wide implementation of integrated care for children under 5 years of age (MoH decree N. 137, 31 March 2011).

The MoH has created an enabling political and logistic environment, and resource support for the implementation of integrated child care throughout the country, by

i) setting up a supportive policy with clearly defined priorities and targets,
ii) providing all children younger than 5 years with free-of-charge IMCI standard medicines,
iii) instituting continuous training in provision of quality care for children through 16 regional training centres;
iv) ensuring that resources are available, not only for time-limited projects but in the longer term, and budgeting for the integration of IMCI activities into PHC and first referral hospitals in all regions.

The experience of scaled-up IMCI implementation and the effectiveness of policies and strategies needs to be systematically assessed, documented and widely disseminated. It should generate major interest not only in Kazakhstan but also throughout the Region.

Aigul Kuttumuratova
Medical Officer,
Integrated Management of Childhood Illnesses
WHO Regional Office for Europe
aku@euro.who.int

Gaukhar Abuova
National Professional Officer
WHO Country Office in Kazakhstan
gaa@euro.who.int

Zaure Ospanova
Head of the National IMCI centre in Kazakhstan
Almaty, Kazakhstan
zaure_ospanova@ok.kz

Bayan Babayeva
Head of the Regional IMCI centre in South Kazakhstan oblast
Shymkent, Kazakhstan
bbabaeva@mail.ru

THE WHO APPROACH FOR INTERSECTORAL COLLABORATION: THE VIEW FROM KAZAKHSTAN

In today's globalizing world, collaboration is not just a trend but a necessity. Governments establish public-private partnerships and involve civil society to shape policies and receive feedback. Even large investments in health do not come solely from national budgets. Multinational corporations are at the forefront of the health development agenda, investing millions of dollars in areas requiring immediate funding.

Leadership for health is essential in this complex situation. International organizations have the technical and health management expertise but often lack the financial capacity to invest in implementation. WHO technical expertise, backed by strong political support and partner financing, enables effective collaboration. Conditions may differ in countries, but the need for integration is universal.

Addressing inequities

The Tallinn Charter: Health Systems for Health and Wealth focuses on equity in access to health services, and intersectoral collaboration. It sees health systems as holistic, integrating programmes and "providers, institutions and settings" across sectors (1). A health system has four functions: service delivery, financing, resource generation and stewardship. The first three are tangible but the last is more obscure and needs a detailed look. Stewardship is responsible for policy and regulation, performance monitoring and building coalitions within and outside the health sector (2). The results can be measured by national health plans and a country's socioeconomic development indicators. Intersectoral collaboration is directed to tackle inequities and bring about better health outcomes for the population, and is a performance indicator of all the Ministries concerned. Thus, intersectoral collaboration involves all whose actions directly and indirectly influence health outcomes.

Let us identify the actors involved. They are the government and its bodies, professional associations and research institutions, academia, non-governmental organizations (NGOs), the media, UN agencies and international donor organizations working on health. Our focus will be on mother and child health (MCH) stakeholders.

In 2010, the Ministry of Health (MoH) of Kazakhstan asked WHO to comment on the final draft of the National Programme for Health System Development "Salamatty Kazakhstan" 2011-2015. WHO commented that chapter 5.1, on increasing effectiveness of intersectoral and interministerial collaboration, could be strengthened by the argument that people's health is affected by their living conditions: e.g. poverty, social abandonment, unemployment and poor housing. This means shifting efforts within the health care sector and working with other sectors.

Despite increased per capita health financing, from KZT 8740 (approx. USD 60) in 2004 to KZT 30373 (approx. USD 208) in 2009 (3), allocation of funds has remained an issue. Key challenges are access of target populations and vulnerable groups to quality health services. They are a priority in the National Programme 2011-2015, and in the WHO Project. Health as a whole, and the health of mothers and children in particular, was considered to be at the forefront of intersectoral collaboration initiatives.

Existing MCH partnerships

There are various MCH-related partnerships in Kazakhstan. Intersectoral partnership is regulated by the National Coordination Council, set up by the Government of Kazakhstan and chaired by the Minister of Health. Inter-agency partnership includes international organizations working on MCH, primarily UN (WHO, UNICEF, UNFPA, World Bank) and USAID. The UN inter-agency partnership has a successful collaboration history in Kazakhstan but still fails to offer effective mechanisms for delivery of results by all partners.

Government-agencies partnership is important because it ensures government ownership of all programmes implemented by partners. The MoH is the body responsible for health, including prevention and treatment, whereas the Government is responsible for overall health policy guidance and cross-cutting political, economic, social and legal issues. There are three coordinating structures: the National Coordination Council on health protection (Government), the Republican Board on urgent measures to decrease maternal and infant mortality (Ministry of Health), and the Inter-ministerial Commission on the rights of children (Ministry of Education) – established to promote intersectorality. While they exist *de jure* they are not legally binding. Lack of effective partnership experience at the national level underlines the vital importance of collaboration between the MoH and partners in MCH, and was addressed in the WHO project.

Twin approaches

The project worked from the top political level to develop and implement the MCH strategy within the broader national health plan. At the same time, a bottom-up approach was used in working with health providers and communities (see the separate article in *Entre Nous*). Below we provide three examples of project influence at policy and strategy level.

July 2009 saw the first coordination meeting between the MoH and partners, aimed at improving government-agency partnership mechanisms. This mapped areas and interventions to improve MCH. Recommendations were presented using the SWOT (strengths, weaknesses, opportunities and threats) analysis, and the MoH and partners came to a common understanding and agreement on complementary, non-duplicating activities for strengthening MCH.

The next step was to develop a comprehensive strategy on MCH. At the project launch in August 2009 a two-day national workshop on MCH strategy development was held with stakeholders. It reviewed MCH challenges and defined priority areas. WHO adviser Giorgio Tamburlini acquainted participants with the tool for assessing performance of the health system in improving maternal, newborn, child and adolescent health.


Assel Mussa-galiyeva


Gaukhar Abuova


Melita Vujnovic


Vivian Barnekow


Azhar Tule-galiyeva

The third policy initiative took place in February 2010 through a round table discussion, when the MoH had been developing the new National Health Programme 2011-2015. WHO was called in to provide technical support and the round table was an opportunity to define and develop intersectoral collaboration on MCH and incorporate it in the National Programme. The crucial element was that before the event WHO had had high-level bilateral meetings with the Presidential Administration, and the Ministries of Health, Economy and Budget Planning, Interior, Labour and Social Protection. The meeting was instrumental for defining "who does what" and what were the common MCH-related concerns.

As a result of the policy interventions, we achieved the following:

1) MCH strategy and action plan with allocated funding developed and adopted by the government [part of the National Programme 2011-2015];
2) Quality of maternal, neonatal and paediatric care in 20 health facilities in Karaganda, Aktobe and South Kazakhstan regions, and Astana and Almaty cities was improved;
3) Family and community involvement in MCH is strengthened;
4) Capacity of health services to provide quality care was increased; and the roster of national trainers developed.

Conclusion: the way forward

To make long-term collaboration work, we provide three proposals for action, adapted from the negotiation approaches by Robert J. Aumann, winner of the 2005 Nobel Prize in economics (4).

1: "Repetition enables co-operation". We know that existing collaboration is not effective. It is difficult to ensure that partners work together without adequate leadership, motivation and binding regulations (coercion).

Concrete action: An official body with legal status needs to be established – a National Commission on Intersectoral Collaboration (NCIC). The Head of Commission would be appointed by the President while the executive body would be the MoH and other relevant Ministries. International organizations, NGOs and mass media would have observer status. The decisions of the NCIC would be obligatory for implementation, as enforced by the Government.

2: "The players must not be too eager for immediate results". Here we need to identify a time span for producing results. We also need to have a method of working and a benchmark to achieve.

Concrete action: The time span should coincide with the first phase of the National Programme implementation 2012-2013. Performance indicators for the National Programme were signed in a Memorandum of Understanding by involved Ministries and need to be specified for each Ministry within the NCIC. Indicators would include maternal and child mortality and improved access to health services.

3: "Perfect equilibrium". The threat of punishment has to be credible, so even if punished, the partners will have incentives to continue co-operation.

Concrete action: Every Ministry will report on progress and milestones on a bimonthly basis. Ministries will invite civil society and the media to jointly promote key issues and interventions. For instance, reduction of child injury and death as part of road safety (MoH and Ministry of Interior), exclusive breastfeeding practices and healthy workplaces for pregnant and lactating mothers, healthy nutrition campaigns (MoH, Ministry of Labour and Social Protection and Ministry of Information) etc. Public monitoring and transparency will be ensured by existing e-government instruments (websites, ministerial blogs) and public press conferences. Members of Parliament can participate to represent public opinion. Finally, moral incentives are directly connected with patriotism and the internal motivation of "feeling good by doing well". This is an intrinsic and not a measurable factor, but in the end this is what is remembered after any reform/political tenure of a Minister or any other decision maker is accomplished.

References

1. The Tallinn Charter: Health Systems for Health and Wealth, 2008, p. 3.
2. How health systems can accelerate progress towards Millennium Development Goals 4 and 5 on child and maternal health by promoting gender equity, WHO European Regional Office, 2010, p. 15
3. National Programme on Health System Development of the Republic of Kazakhstan "Salamatty Kazakhstan" for 2011-2015, p. 10.
4. Aumann, R. "War and Peace: what can game theory teach us?" Full text available at http://nobelprize.org/nobel_prizes/economics/laureates/2005/aumann-lecture.pdf, accessed 18 May 2011.
5. For more information, please see the articles by Vivian Barnekow and Aigul Kuttumuratova et al.

Assel Mussagaliyeva, MA, MPP
National Professional Officer
WHO Country Office in Kazakhstan
assel.m@mail.ru

Gaukhar Abuova
National Professional Officer
WHO Country Office in Kazakhstan
gaa@euro.who.int

Melita Vujnovic
Head, a.i.,WHO Country Office in Kazakhstan
mev@euro.who.int

Vivian Barnekow
Programme Manager a.i.
Child and Adolescent Health and Development
Noncommunicable Diseases and Health Promotion
vbr@euro.who.int

Azhar Tulegaliyeva
Head, Department for Healthcare Services Organization
Ministry of Health of the Republic of Kazakhstan
a.tulegaliyeva@mz.gov.kz

ASSESSING AND IMPROVING QUALITY OF PAEDIATRIC HOSPITAL CARE IN KAZAKHSTAN

In countries where there are no major barriers to access to health care, such as most Central and Eastern Europe (CEE) and Commonwealth of Independent States (CIS) countries, quality of care is the key issue to be addressed in order to decrease mortality and long term sequelae, avoid unnecessary pain and suffering and minimize costs for both families and health systems (1,2).

Previous assessments showed that paediatric hospital care in many CEE/CIS countries was not as safe, effective and patient-centred as it should be, and since then WHO and the Ministries of Health (MoH) have started programmes to improve quality (3). Such programmes have included the following:

- changing legislation, norms and regulations which were in contrast with international standards – for example, regarding limitations to mothers' access to hospital, or minimum duration of hospital stay;
- providing better infrastructure, equipment and essential drugs and supplies;
- introduction of WHO guidelines on hospital care for children (4) in pre-service and in-service training.

Quality improvement approaches have been introduced both in maternal and neonatal care and in paediatric care, and have been based on assessment tools developed by WHO (5,6). The tools are aimed at:

a) guiding the assessors in the collection of valid information in all key areas which have an major impact on maternal and neonatal outcomes;
b) identifying the areas where infrastructure, equipment, drugs or supplies are inadequate or lacking, and, most important, where poor or substandard care is provided; and
c) involving hospital managers and staff, and the MoH, in identifying and prioritizing actions needed to improve quality of care (QoC) both at facility level and at higher decision-making level.

The tool includes 4 different sources of information: hospital statistics, medical records, direct observation of cases, and interviews with staff and with patients/users. Through a combination of different sources, the tool allows us to build an overall assessment of quality of care and to single out those areas that represent obstacles to QoC (Table 1).

Assessment in Kazakhstan

Based on the tool, 15 hospitals were assessed in March 2010 in 4 Oblasts: Aktobe, Karaganda, South Kazakhstan and Almaty. National assessors carried out the assessment jointly with international assessors. Detailed feedback and recommendations were provided at local level and the main findings and policy implications were presented and discussed in a two-day workshop with health authorities, the Ministry of Health, academia and international partners in Almaty.

A number of interventions followed, focussing on the weak points. The same sample of hospitals was reassessed after 14 months, once again by national assessors in collaboration with the same international assessors, in order to measure change and identify barriers and contributing factors. The findings showed significant improvement in a number of areas, including availability of essential drugs and supplies, organization and guidelines for emergency triage and assessment. However, they showed marginal or no improvements in case management of common acute and chronic conditions, such as pneumonia, asthma and anaemia, and in information provided to mothers (Table 2). This led to further measures at both local and national levels.

Where inputs were stronger, for example in emergency triage assessment and treatment, results were evident even after a relatively short time. Organization of hospital care and links with primary care need to be improved to reduce admissions, and pocket book guidelines need to be incorporated in pre-service training. Supervision needs to be combined with training to ensure implementation of guidelines, and financing mechanisms need to be revised to avoid providing incentives to inappropriate practices such as over-admission, and to reward virtuous practices such as reduced admission rates, short stay and appropriate use of drugs.

The way forward

Ensuring quality of hospital care for both mothers and children requires that all main pillars of the health system are in place, since quality cannot be ensured if there are major deficiencies in key components such as management, human resources, information systems and financing (7). The debate on what are the most effective approaches is still open, and the best options are likely to differ based on a country's health systems and the characteristics of its professional organizations (2).

Our experience in several CEE/CIS countries shows that action-oriented systematic assessments conducted on a sample of hospitals, with supportive and non-judgmental peer review, promote quality improvement measures at local level and useful indications on specific gaps to be addressed at national level. They also promote the shift of mentality from a control and punishment approach to a supportive approach to professional development. The assessment also provided an opportunity for capacity building at national level, through the establishment of a national team of assessors who became familiar with the assessment tools and methods, and are now able to lead or contribute to further assessments.

In October 2010, an Intercountry

Giorgio Tamburlini

Table 1.

Main features of the WHO tool for systematic assessment of quality of hospital care for children
1. based on international standards (4)
2. covers all main areas of paediatric care
3. collects information through 4 different sources
4. identifies weak areas through a semi-quantitative scoring method
5. is based on external assessment by peers
6. is non-judgmental and aimed at identification of actions to improve care
7. includes feedback at both local and national levels
8. can be used for internal assessment and quality improvement approaches as well as for formal accreditation systems at national level

Table 2.

Quality of hospital care for children in Kazakhstan. Sample of 15 hospitals in 4 oblasts: Main areas assessed and change 2010-2011.
• *Infrastructure:* substantially improved in many sites, renovation or new building ongoing in others
• *Equipment, Drugs and Supplies:* substantially improved in most sites
• *Emergency Triage and Assessment:* substantially improved in most sites
• *Case Management of Common Illnesses:* marginal or no improvement: still weak implementation of case management guidelines, over-admissions and long stay in hospital, polypharmacy
• *Supportive Care including Nutrition:* marginal improvement: still insufficient attention to nutritional needs
• *Mother and Child Friendly Care:* some improvement, still insufficient information to mothers and attention to avoid unnecessary pain and stress.

Meeting on Improving Pediatric Hospital Care was held in Yerevan, Armenia, to exchange experiences on lessons learned in the Region (8). The meeting emphasised the importance of providing technical support to Ministries of Health in building national capacity for carrying out systematic quality assessment of hospital care for children, incorporating international guidelines on case management in pre-service and in-service training, supporting supervision and implementation of quality of care improvement concepts, and building on the global experience achieved so far by WHO (9).

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References

1. Cataneo A, Gafurov I, Bomester T, Bacci M, Kumar S, Popovic D, Tamburlini G. Progress towards the achievement of MDG4 in the Commonwealth of Independent States: uncertain data, clear priorities. Health Research Policy and Systems, 2010, 8:5.
2. Legido-Quigley H, McKee M, Nolte E, Glinos IA. Assuring the quality of health care in the European Union. A case for action. WHO on behalf of the European Observatory for Health Systems and Policies. Copenhagen, 2008.
3. Duke T, Keshishiyan E, Kuttumuratova A, Ostergren M, Ryumina I, Stasii E, Weber MW, Tamburlini G. Quality of hospital care for children in Kazakhstan, Republic of Moldova, and Russia: systematic observational assessment. Lancet. 2006;367(9514):919-25.
4. Pocket book of hospital care for children: guidelines for the management of common illnesses with limited resources (www.who.int/child-adolescent-health/publications/CHILD_HEALTH/PB.htm).
5. WHO. Improving the Quality of Hospital Care at First Referral Level. Geneva, Switzerland: World Health Organization/Department of Child and Adolescent Health and Development, 2001.
6. WHO. MPS assessment tool for the quality of hospital care for mothers and newborn babies (http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/maternal-and-newborn-health/publications2/2009/making-pregnancy-safer-assessment-tool-for-the-quality-of-hospital-care-for-mothers-and-newborn-babies, accessed April 26, 2011).
7. WHO European Ministerial Conference on Health Systems: "Health Systems, Health and Wealth", Tallinn, Estonia, 25–27 June 2008. Report http://www.euro.who.int/InformationSources/Publications/Catalogue/20090122_1.
8. WHO. Intercountry Meeting on Improving Pediatric Hospital Care. Yerevan, Armenia, 19-21 October, 2010.
9. Campbell H, Duke T, Weber M, English M, Carai S, Tamburlini G; Global initiatives for improving hospital care for children: state of the art and future prospects. Pediatrics 2008; 121(4):e984-92

Giorgio Tamburlini
European School for Maternal Newborn Child and Adolescent Health, Trieste, Italy
tamburli@burlo.trieste.it

MIDWIVES' PERCEPTIONS OF KEY CHANGES IN CHILDBIRTH

Introduction

In the not-so-distant past, practices in obstetric care had much in common worldwide. Childbirth was regarded as a disease which required medical interference, a long stay in hospital separating the woman from her family, confinement to bed, separation of mother and child and a high level of hypermedicalisation. As time passed, however, practice in various countries started to differ fundamentally. New approaches based on the principles of evidence-based medicine came early to Nordic countries, whose indices considerably improved, in marked contrast to others. Health professionals elsewhere started asking questions: What is happening in those countries? What do they do differently? What technologies do they use? We realised that we had to do better and gradually developed a desire to change practice in our countries, including Kazakhstan.

Therefore, the WHO Regional Office for Europe, concerned about the high rate of morbidity and mortality of mothers and newborn children in the region, began introducing the "Making Pregnancy Safer" strategy and conducting Effective Perinatal Care training courses. These courses used a team approach and for the first time all participants in the childbirth process – obstetrician-gynaecologist, midwife, neonatal physician and paediatric nurse – were trained together. The training required not only reconsideration of health providers' practice in view of modern approaches, but also an increased role for the midwife in managing physiological childbirth. It was an innovation for us that among the facilitators were not only an obstetrician-gynaecologist and a psychologist, but also a midwife.

The new role of the midwife

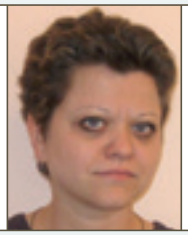
Previously, a midwife was considered to be just performing a doctor's instructions. She was not supposed to wonder what she was doing, how or why she was doing it, and she was not allowed to use the skills and knowledge she had acquired after receiving her professional training. In reality, however, midwives do have something to say and to share, and would like to discuss some situations with a doctor and participate in decision-making during the physiological childbirth process. Midwives understand women's concerns and worries as they are close to women during pregnancy and childbirth. Therefore, we very enthusiastically accepted the approaches offered by the WHO to increase the role of the midwife in labour management, and we actively studied the new practice.

Change of practice did not happen overnight, however. After participation in the seminars, we needed time for understanding efficient perinatal technologies. "My practical experience started many years ago," says Elena Tyrtyshnaya, a midwife with 18 years of experience, sharing her impressions:

> *"I was so proud when saying to the family members that our maternity clinic was of 'the closed type'. At that time I did not think about a family as a comprehensive whole. It seemed to me that only the mother was my concern, and even the child was beyond my scope of work. A woman was left alone with her fears and pain. I did not understand why patients asked me not to leave them alone in the pre-delivery room and what could go wrong with them, as we were nearby and would come when required. It seemed that we were the most important people in the childbirth process, that it was a medical procedure and that a woman could not deliver a baby without us. After the training, however, I realised that there was another practice. A family member attends the delivery; he/she supports, helps, consoles, shares emotions and rejoices together with the woman. A child is delivered not by doctors or midwives; a child is delivered by his or her mother. And for this, the woman has to mobilise all her moral and physical forces, which requires complete commitment from her."*

Now, for privacy, comfort and sanitary and epidemiological safety, it is preferred that childbirth takes place in an individual delivery room, which is close to home conditions but with everything available for emergency medical care. All women feel pain during childbirth, but it is expressed differently depending on the individual characteristics of the woman's body. An important factor for minimising pain is the emotional support provided to a woman before, during and after delivery, both by family members and by health providers. A woman can be distracted from pain by taking control of her breathing, relaxing, using different

Irina Stepanova



Yulia Korsunova

Nurbakhyt Narik-bayeva

Maya Kasymova

massage techniques, changing position during the delivery or listening to music. But the most significant factor in the emotional aspect of the delivery process is the presence of a close family member. Therefore, psychoprophylactic preparation for childbirth starts during the antenatal period.

An expectant mother, a woman in labour or a recently confined woman will be calmed by a respectful attitude to her and her family on the part of health providers. When consulting a patient and her relatives, one should use a simple vocabulary, speak calmly, and observe confidentiality regarding cultural and religious views. One of the goals of psychoprophylactic preparation is to teach a woman how to shift her attention from pain to something else, such as correct breathing. Such self-control makes the delivery easier. The preparation aims at eliminating negative emotions and the fear of childbirth and pain, thus making it possible to reduce the amount of analgesic drugs used. The presence of a supportive person at childbirth, especially one who underwent preparation together with the woman, makes the complicated delivery process easier. We have learned all this at the WHO courses. We see how happy women are, and this also reassures us of our ability to introduce effective perinatal care.

Change in childbirth practices

Since ancient times, women have delivered in the position convenient for them. The most widespread and convenient positions were kneeling, squatting, sitting, standing, etc. In the 16th century, surgeons started using obstetric interventions, replacing the role of midwives. Women began to think that health professionals could improve the natural process of childbirth. Later, technologies such as forceps and anaesthesia started to be applied at childbirth, also limiting the choice of labour position. It became customary to accept delivery in the lying-back position. Moreover, this position was more convenient for health providers, since it was easier for them to listen to the fetal heartbeat, conduct vaginal examination, watch over and protect the perineum, and apply forceps or vacuum in the event of complications.

In the 1960s, however, women expressed a desire to control their body position in childbirth. Health providers came to understand and welcome alternative positions, thanks to receiving evidence of the advantages of other positions during the first and the second stages of labour. These included avoiding disturbance of the utero-placental circulation, reducing the risk of fetal distress, helping the woman to feel more free and self-confident, and increasing her satisfaction with the delivery process.

Now, women in many developed countries are informed about the choice of position at childbirth. At courses and schools of preparation for childbirth, women and their families learn about choosing and changing the position. The technique which allows a woman to freely choose her position is included in the WHO Effective Perinatal Care training course, and is recommended for practice as safe, efficient and cost saving. Every woman in childbirth should be offered a choice of the position she finds most comfortable and appropriate. During the expulsive stage of labour, a woman should not be forced to adopt the supine or semi-prone position. The best position at childbirth is the one that she chooses herself. The midwife informs her about possible positions and their advantages, offers different options and helps her decide which is the most comfortable in her situation.

Thus, the tasks required of a midwife have changed considerably. Many unnecessary procedures and ones that endanger the life of the woman and her child have been taken out of practice. Now one of the main duties of a midwife is a consultation with an expectant mother and her family on various issues of modern technologies used during childbirth. Regrettably, at the time when we received our basic medical education, we were not taught the fundamentals of consulting technique. This is what we have learned at the WHO courses. In our practice it is very important to understand and to listen. Quite often we are unable to talk to the patient in an appropriate way and to provide him/her with the required information. The knowledge we have obtained facilitates our work considerably, reassures us and often helps to avoid conflict situations. Today we would like to see the training course on consulting expectant mothers and their family members included in pre- and post-service training programmes for all health providers.

During our extensive work experience, we became convinced that the technologies offered by WHO and used in childbirth are acceptable and wanted, primarily by women and their families. They are the most important component in the health providers' work, since people's satisfaction with health care services, support and promotion of a woman's health, and delivery of a healthy child are the main indicators of the quality of our work.

Reference

1. Enkin M et al. A guide to effective care in pregnancy and childbirth, Oxford University Press, 2000.

Irina Stepanova
Midwife
Medlife Clinic, Perm, Russia
Step44@yandex.ru

Yulia Korsunova
Midwife
National Centre of Obstetrics, Gynaecology and Perinatology, Almaty
julicka-76@mail.ru

Nurbakhyt Narikbayeva
Midwife
National Research Center for Maternal and Child Health, Astana
1886gunner@mail.ru

Maya Kasymova
Midwife
Perinatal Centre of the Karaganda Region
Karaganda

RESOURCES

Beyond the numbers: reviewing maternal deaths and complications to make pregnancy safer, WHO, 2004.

An excellent toolkit directed at health care providers, policy makers and managers working in maternal and neonatal health that provides approaches for examining reasons behind maternal deaths and complications as a means to improve quality of care. Available in English, French, Russian and Spanish at:
http://www.who.int/making_pregnancy_safer/documents/9241591838/en/index.html

Working with individuals, families and communities to improve maternal and newborn health, WHO, 2010.

A new publication from the WHO's Making Pregnancy Safer Initiative that proposes a framework for use at the individual, family and community level to improve maternal and newborn health through focusing on 4 key areas: developing capacities, increasing awareness, strengthening linkages and improving quality of care/services. Available in Arabic, English, French, Russian and Spanish at:
http://www.who.int/making_pregnancy_safer/documents/who_fch_rhr_0311/en/index.html

Managing complications in pregnancy and childbirth: a guide for midwives and doctors, WHO, UNFPA, UNICEF and The World Bank, 2003.

An extremely useful, easy to use, manual that can be used in a variety of clinical settings in both high and low resource environments. Available in Arabic, English, French, Indonesian, Italian, Russian and Spanish at:
http://www.who.int/making_pregnancy_safer/documents/9241545879/en/index.html

European strategic approach for making pregnancy safer: improving maternal and perinatal health, WHO Regional Office for Europe, 2008.

This document identifies a regional strategy for improving maternal and perinatal health in the WHO European Region. Available in English and Russian at:
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

Making Pregnancy Safer: Tool for assessing the performance of the health system in improving maternal, newborn, child and adolescent health, WHO Regional Office for Europe, 2009.

Aimed at health professionals, policy makers and managers this document provides tools for assessing and identifying health systems areas for improvement to strengthen maternal, newborn child and adolescent health. Available in English at:
http://www.euro.who.int/__data/assets/pdf_file/0011/98795/E93132.pdf

Making pregnancy safer: assessment tool for the quality of hospital care for mothers and newborn babies, WHO Regional Office for Europe, 2009.

A useful semi quantitative tool that can be used as a component of quality improvement strategies to improve perinatal health. Available in English and Russian at:
http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/maternal-and-newborn-health/publications2.html

European Strategy on Child and Adolescent Health and Development, WHO European Regional Office, 2005.

The strategy is a comprehensive framework that gives a range of policy options based on the best evidence, and encourages countries and regions to set their own targets and indicators. It is based on a life course and cross sector approach. A set of tools for implementation of the strategy is available. The tools focus on assessment, information, action and gender. Available in English and Russian at:
http://www.euro.who.int/__data/assets/pdf_file/0020/79400/E87710.pdf
http://www.euro.who.int/en/what-we-do/health-topics/Life-stages/child-and-adolescent-health/publications2/2005/european-strategy-for-child-and-adolescent-health-and-development

IMCI information package, WHO; UNICEF, 1999.

Sheets providing a concise overview of the Integrated Management of Childhood Illnesses strategy, rationale and components, clinical training of health care providers, global implementation and research priorities. The process of planning national IMCI implementation and process of the adaptation of IMCI clinical guidelines are also described. Available in English at:
http://www.who.int/child_adolescent_health/documents/chs_cah_98_1a/en/index.html

IMCI Computerized Adaptation and Training Tool (ICATT), WHO, 2010.

A computerized software application based on existing standard training course on Integrated Management of Childhood Illnesses. It provides the possibility of adapting the IMCI guidelines, including translation into various languages. Available in English at:
http://www.icatt-training.org/

Pocket book of hospital care for children; Guidelines for the management of common illnesses with limited resources, WHO, 2005.

A pocket-sized manual for use by health workers who are responsible for the care of young children in hospital settings. It presents up-to-date clinical guidelines on the inpatient management of the major causes of childhood mortality, such as pneumonia, diarrhoea, severe malnutrition, malaria, meningitis, measles, HIV infection and related conditions. Available in English, French, Portuguese and Russian at:
http://www.who.int/child_adolescent_health/documents/9241546700/en/

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Scherfigsvej 8

DK-2100 Copenhagen Ø

Denmark

Tel: (+45) 3917 17 17

Fax: (+45) 3917 1818

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