Effective Perinatal Care (EPC) package
Facts Sheet

Quality of Care (QoC) is recognized as a neglected issue in the international health agenda, particularly with respect to care around childbirth. In the WHO European Region there are still huge differences in maternal and newborn mortality and morbidity among different countries.\(^1\),\(^2\) Progress in maternal and neonatal health outcomes are regarded as insufficient in many settings, despite the increasing access to institutional births, thus suggesting deficiencies in perinatal QoC.\(^1\),\(^2\) Gaps in quality of maternal and newborn health care and underlying challenges have been highlighted in a number of reports, including direct in-country assessments.\(^3\),\(^4\)

The WHO Regional Office for Europe, in collaboration with several other partners, developed a set of tools and strategies for quality improvement (QI) relevant to perinatal care, including: i) tools for quality assessment at hospital\(^5\) and at outpatient level;\(^6\) ii) training packages;\(^7\) iii) strategies for clinical case reviews such as confidential enquiries into maternal death at national level and near-miss case reviews at facility level;\(^8\) iv) support to countries for the implementation of evidence based clinical guidelines.\(^9\) Technical support has been provided to countries for the implementation of these strategies.

The Effective Perinatal Care (EPC) is a training package developed by WHO Regional Office for Europe in the framework of the Making Pregnancy Safer (MPS) strategic approach.\(^10\) The overall aim of EPC includes both improving the knowledge and skills of health professionals and managers on evidence-based recommendations on perinatal health care, and, most importantly, stimulating critical thinking on existing practices. This dual aim contributes in a practical way to driving a process of implementation of changes within a QI cycle. EPC also aims at improving providers’ attitude towards users of health services, respecting of service users rights to care, and overall equity in service delivery.

The EPC training package aligns with the principles of the WHO Regional Committee for Europe Health 2020 A European policy framework and strategy for the 21st century,\(^11\) which recommends an early investment in health, focusing on pregnancy and early child development, as windows of opportunity for future health outcomes and wellbeing. EPC, in consistency with Health 2020 strategy, focuses on “improving performance of the existing health workforce, as this immediately affects health service delivery and, ultimately, population health”.\(^12\) EPC is also contributing, in

1  http://data.euro.who.int/hfadb
2  http://www.euro.who.int/__data/assets/pdf_file/0007/98233/E91397.pdf
3  http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3245221/
consistency with Health 2020 strategy, to “moving to a more evidence-informed, and people-centred approach and team-based delivery of care”, and in promoting the “appropriate use of medicines and health technologies which will enhance the quality of care and make more efficient use of scarce health care resources”.

The first edition of this training course was developed in 2003 by the WHO Regional Office for Europe in collaboration with USAID/JSI. During the period 2003-2013 the course was delivered in a number of countries within the WHO European Region: Albania, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Turkmenistan, Uzbekistan and Ukraine, and in UN Administered Province of Kosovo (Image 1). Additional countries where the need for EPC training has been recently identified include: Bulgaria, Montenegro and Romania.

Other agencies using the EPC package for training purposes included the UNICEF, UNFPA, USAID, and others.

The EPC package was designed for midwives, obstetrician-gynecologists, neonatologists, pediatric nurses and policy-makers. Contents include essentials of midwifery, obstetric and neonatal care. Training methods of EPC promote the building of a “perinatal team” of health professionals: multidisciplinary collaboration is promoted through out the entire course. The course includes theoretical sessions, role plays, group work and several hours of the “hands on” clinical cases aiming at developing practical skills through putting into practice the new knowledge. Recommendations for improvement of quality of care are developed by participants at the end of each EPC course.

The initial EPC training is usually delivered over a two week period. As the course structure allows for flexibility, selected parts of EPC can be delivered separately based on local needs/priorities, or for reinforcement training. The EPC package also includes material for the training of trainers (TOT), usually delivered over one week.

The EPC package has been utilised widely within projects aiming to improve the perinatal QoC, where the EPC component was either the main component or one out of several components within a more comprehensive QI. Case studies on the impact
of EPC package in the WHO European Region are presented below. Overall the EPC training package has been recognised as very effective tool in improving maternal and newborn health.  

Ukraine case study  

In Ukraine, a nation-wide project, the Mother and Infant Health Project (MIHP), for improving practice in maternity hospitals was implemented by John Snow, Inc, based on WHO MPS strategic approach and tools, in nine provinces during 2002-2006. The following key problems were identified in MIHP maternities: lack of evidence-based protocols; overuse of medical interventions; inadequate routines for avoiding newborn hypothermia; poor equipment for resuscitation; and rigid routines for care during delivery. The main intervention was the provision of training through EPC. Obstetricians, neonatologists, midwives, pediatric nurses, pediatricians and anaesthesiologists were trained with initial EPC (two weeks), plus follow-up EPC (three days), plus reinforcement sessions. National protocols in accordance with WHO recommendations were developed, and maternities were provided with basic equipment. Three of the 20 maternities participating in MIHP were chosen as pilot sites for evaluation of the project, with an intermittent time series design (four evaluations, one every three months). Main results of the project are depicted in Image 2. The use of the partogram and the presence of a companion during the delivery progressively increased during the study period in all maternities (p<0.0001). In parallel, there was a significant decrease in the number of caesarean sections (p<0.0001), in the number of women receiving episiotomy (p<0.0001), in the induction of labour (p<0.0001), and in artificial rupture of membranes (p<0.0001). The number of children with hypothermia significantly decreased (p<0.0001), as well as the cases when a low room temperature was detected in the deliver room (p<0.0001).

Image 2. Selected outcomes for the EPC implementation in Ukraine

data from Berglund et al, 2010, presented as mean values

13 http://www.jsi.com/JSIIInternet/
Kazakhstan case study

Kazakhstan went from piloting to nationwide dissemination of EPC in-service training. Initially, the EPC courses were conducted in pilot maternities. Later, the course was introduced into the curricula of postgraduate medical education. In 2009-2010, a training strategy was developed based on three pilot regions (Aktobe, Karaganda and South Kazakhstan) within the WHO/EU and MoH joint project “Support for Maternal and Child Health in Kazakhstan”, financed by the EU. This included coordinators at the regional, district and facility levels, assessment of training needs and establishment of training centres. Each region identified key maternities for the intervention, health professionals were trained with the EPC course plus follow up sessions; supportive supervision was given on a quarterly basis.

An evaluation of the impact of the intervention was carried out in November 2009 and April 2011 in the perinatal centres of Aktobe, Karaganda, and South Kazakhstan and at the National Research Centre for Maternal and Child Health in Astana city. 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 Image 3, almost all areas showed positive shifts in meeting the standard. In particular, the following practices were improved: i) demedicalization of care for mothers and newborns, excluding unnecessary drugs and interventions; ii) the proportion of caesarean sections under regional anesthesia increased 2-3 times; iii) In Aktobe 50%, in Karaganda 80%, and in South Kazakhstan 70% of all caesarean sections were done under local or regional anesthesia; iv) improved management of pre-term labour by using corticosteroids in all cases. Readiness for emergency obstetric care was put into practice, namely: standards for severe obstetric hemorrhage and eclampsia, trained healthcare providers, round-the-clock readiness of the intensive care unit, and availability to essential drugs and blood components.

The positive experience helped the MoH in expanding the project to the rest of the country within the National Programme for Health System Development “Salamatty Kazakhstan” in 2011-2015

Image 3. Results of the EPC implementation in Kazakhstan

Albania case study\textsuperscript{15,16,17}

The Ministry of Health of Albania carried out a maternal, newborn and child health (MNCH) care reform project with the assistance of WHO and financing from the Spanish Agency for International Cooperation and Development. The main objective was to improve maternal, newborn and child QoC, using a health system approach ensuring continuity of care. The project was initially piloted in three regions: Shkoder, Korçë and Vlore, with the objective to learn lessons for nation-wide scaling up. The first assessment of the maternity services revealed the need to improve QoC through the development and application of evidence-based clinical guidelines as well as to improve the interpersonal aspects of care and women’s satisfaction. Following this first assessment the EPC package was used to train health staff. An evaluation of the impact of the intervention was carried out in November 2009 and October 2011 using the WHO Quality Assessment Tool.\textsuperscript{5} Main results are reported in Image 4. Most outcomes showed a positive improvement, although challenges and problems remained.

Image 4. Results in Albania

Comments from participants and other data on the EPC course can be found at http://www.euro.who.int/__data/assets/pdf_file/0016/126115/MPS_success_stories_brochure.pdf

Future directions

The use of EPC from 2003 onwards in many countries of the WHO European Region resulted in improvement of care and maternal and newborn health. In order to sustain the achievements, to expand the practices, and to reinforce the underlying concept of the evidenced based care, it is important that the EPC materials are kept up-to-date. As the EPC was developed over a decade ago, a technical update is currently ongoing with the technical support of the WHO Collaborating Centre for Maternal and Child

\textsuperscript{17} Maternal, Newborn and Child Health Care Reform, Albania final project technical Report, October 2007 to July 2012
Health Trieste and other international experts to revise the course based on all the latest WHO guidelines and other international recommendations.\textsuperscript{18}