QUALITY DEVELOPMENT IN PERINATAL CARE: THE OBSQID PROJECT

Report on a WHO Meeting

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EUROPEAN HEALTH21 TARGET 16
MANAGING FOR QUALITY OF CARE

By the year 2010, Member States should ensure that the management of the health sector, from population-based health programmes to individual patient care at the clinical level, is oriented towards health outcomes

(Adopted by the WHO Regional Committee for Europe at its forty-eighth session, Copenhagen, September 1998)

ABSTRACT

Continuous quality of care development entails (a) health care providers comparing their outcomes with those of their peers and (b) the identification, through data collection and analysis, of centres demonstrating best practice and the most rational use of technology in order that their knowledge and expertise may be disseminated and exploited. To this end, the Quality of Health Systems Programme has facilitated consensus across Europe on health indicators within various medical specialties. These indicators and variables are compiled in data collection forms at both case and aggregated levels. Case-based data are submitted to nodes that render the data anonymous and provide feedback to users, as well as the opportunity for self-analysis and comparison between sites. Through such comparison, health care facilities and health care providers will be motivated to continually improve their outcomes and the quality of their care. Anonymous aggregated data can be compared across local, regional and national borders at the website http://qct.who.dk/obsqid.htm. The Workshop also reviewed the results of the use of the OBSQID tools – the OBSQID Basic Information Sheet and the OBSQID Perinatal Aggregated Data Sheet, as well as satellite data collection activities in obstetrics and clinical practice.

Keywords

PERINATAL CARE
OBSTETRICS
DATA COLLECTION
QUALITY OF HEALTH CARE
HEALTH STATUS INDICATORS
APPROPRIATE TECHNOLOGY
EUROPE

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Executive summary

From 22 to 24 June 2000, the Quality of Health Systems project held the Sixth Workshop for quality development in perinatal care – the OBSQID project in Oporto, Portugal. The workshop was supported by the Portuguese Ministry of Health and was opened by Dr Jose Luis Castanheira, General Director of Health Services under the Ministry of Health.

All major OBSQID contributors and players were brought together to report and exchange information on current OBSQID national, regional, local, and satellite activities as well as twinning programmes. Working groups explored the possibility of new country-based applications and uses of OBSQID as well as potential satellite programme. These working groups demonstrated progress in the development of new quality basic information sheets (BIS) for specific perinatal issues, such as monitoring of maternal pathology, neonatology, blood safety in perinatal medicine and diabetes in pregnancy.

During the workshop, Dr Isuf Kalo, Regional Adviser of the Quality of Health Systems Programme, presented a critical review of the OBSQID programme, as well as the reforms currently under way at the WHO Regional Office for Europe with regard to the reorientation of country strategy and reshaping of activities to improve WHO’s response to the demands and needs of Member States. It was agreed that the OBSQID is a useful tool for quality development that should be used and adapted as necessary to each country’s situation. In this regard, it was agreed that countries should begin to establish national task forces at country level which utilize professional associations to mobilize support and implementation of OBSQID networks. The participants were assured that the Quality of Health Systems Programme will continue to support countries with technical tools such as software development, assistance in data systems management, training, international standardization of perinatal definitions, policy advocacy and a forum for perinatal health information international comparison and benchmarking. To assist countries in developing national OBSQID networks, Dr Kalo made available generic national programme implementation guidelines created by the Quality of Health Systems Programme.

The key achievement of the 6th OBSQID Workshop was gaining a commitment from the European Association of Perinatal Medicine (EAPM) to assume future stewardship of the OBSQID programme. This collaboration, proposed by Dr Karel Marsal, follows an extensive study conducted by the EAPM of the frequency of OBSQID indicators in vital registry and birth registry documents at country level throughout Europe. This collaboration with EAPM will serve to mobilize international and national professional associations to develop OBSQID networks and monitor the quality of perinatal care from a more generic or health system approach.
Introduction

History of the OBSQID Project

“By the year 2000, there should be structures and processes in all Member States to ensure continuous improvement in the quality of health care and appropriate development and use of health technologies. This target can be achieved through:

• combined strategies for the assessment and promotion of the quality of care, the selection, development and proper use of appropriate technology, and the training of personnel;
• international collaboration and information exchange on assessment procedures, care standards, training and technology development.”

WHO Health for All 2000, target 31, Quality of Care and Appropriate Technology

In the mid-1980s, the concept of using telematic information systems to collect perinatal data was developed. This came at a time when differences were being observed in maternal and child health throughout the European region which could not be attributed to genetic or socioeconomic factors. It was suggested that the aggregation of perinatal data at local, regional, and national levels as well as timely data analysis, feedback and comparison of results could assist in promoting quality of care and improving perinatal outcomes.

In 1984, the WHO Regional Office for Europe (WHO/EURO) was given a special mandate by Member States to collect more extensive data on maternal and child health in the region. A developmental strategy was initiated in 1986 by the Quality of Care and Technologies Programme and an action programme was carried out by the Office during the 1992–1993 biennium. An early version of a labour and delivery basic information sheet as well as a data collection software were developed as part of this action programme.

European Consensus Conference on Quality Indicators for Perinatal Care, Tübigen, Germany, 21–22 October 1993

The European Consensus Conference on Quality Indicators for Perinatal Care was a joint effort between WHO/EURO, the Institute for Medical Information Processing (IMI) in Tübigen, Germany, and the Robert Bosch Foundation in Stuttgart, Germany. Perinatal experts in the fields of obstetrics, neonatology, public health, and telematics representing 25 WHO European Member States participated in the meeting. Their main goal was to reach consensus on a set of key quality indicators based on existing practice which could be used for evaluating perinatal health care activities.

The main outcome of the meeting was the proposal of 21 indicators to be used by providers, national health authorities and third party contributors for evaluating quality and resource utilization in perinatal care. These indicators were compiled on the OBSQID perinatal aggregated data (PAD) sheet.

First Workshop on Quality Development in Perinatal Care, Hillerød, Denmark, 9–10 September 1994

The objectives of this conference were to discuss and evaluate the results of the PAD pilot test, conducted from October 1993 to September 1994 at 29 centres and 18 national facilities, and to
refine the indicators further. As a result, 23 indicators were finally agreed.\(^1\) PAD data collection activities were to continue through 1995.

The pilot revealed considerable differences in perinatal outcomes both between obstetric clinics/wards, countries and regions within countries. To investigate why there were these differences, participants recommended that a case-based data sheet should be developed to capture data on individual patient encounters and processes carried out in relation to birth.

**Second Workshop on Quality Development in Perinatal Care, Trieste, Italy, 6–8 October 1995**

This workshop was organized by the Instituto per L’Infanzia of the Bureau for International Health (WHO collaborating centre) in connection with the WHO/EURO course “Perinatal care: planning for appropriate equipment”. The objectives were to present the results of 1993–1994 PAD pilot testing, create a preliminary version of the OBSQID basic information sheet (BIS) for case-based data, and introduce the concept of benchmarking as a tool for QCD.

The OBSQID BIS evolved into a one-page form containing over 50 process and outcome variables related to the perinatal period. It was piloted in September 1996 in 11 clinics in 8 countries and data on more than 1200 deliveries were collected.

**Third Workshop on Quality Development in Perinatal Care, Trieste, Italy, 18–20 October 1996**

The Third Workshop focused on reviewing the data from the 1996 BIS pilot, discussing the advantages and disadvantages of OBSQID data collection systems, sharing experiences with data collection activities from various European countries, and proposing a logo for the OBSQID Project. The BIS variables and definitions were finalized. It was decided that indicators on maternal and fetal wellbeing would be included in data collection activities, that guidelines for the establishment of national perinatal QCD policies in member countries be developed, and that twinning projects be established.

**Basic information sheet for the central Asian republics and Kazakhstan**

In December 1996, a special version of the OBSQID BIS which included data on family planning was presented at a meeting in Tashkent, Uzbekistan, attended by representatives from Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. This BIS was produced in coordination with the WHO/EURO Sexuality and Family Health Programme. The BIS was presented to representatives of pilot districts from the central Asian republics and Kazakhstan (CARAK) with an invitation to test the tool at their clinics. The resulting pilot test collected data on approximately 1500 births from five of the six CARAK countries.

**The Fourth Workshop on Quality Development in Perinatal Care, Poznan, Poland, 23–25 October 1997**

The goals of the meeting were to discuss the results of the second OBSQID BIS pilot conducted from 15 May to 15 June 1997, assess the need for further modifications of BIS variables,

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\(^1\) The original “perinatal mortality” indicator was divided into antenatal death (after 27 weeks), fetal death in-partu, and early neonatal mortality (i.e. death within 0–6 days after birth), reflecting different responsibilities and in particular stressing the responsibility of the obstetrician in intrapartum death.
examine perinatal outcomes from recently collected PAD data, and increase twinning project activities. Participants also agreed on an OBSQID logo.

Recommendations were made to produce a separate neonatal BIS sheet because participants felt the existing BIS did not adequately record neonatology issues. In addition, working groups discussed specific sections of the BIS (ultrasoundography, anaesthesia, wellbeing, blood transfusion, diabetes and neonatology) and how the concepts and tools of OBSQID can be integrated into existing national data collection systems at the local, regional and national levels.

**The Fifth Workshop on Quality Development in Perinatal Care, Nof Ginossar, Israel, 29 October – 1 November 1998**

The participants in the Fifth Workshop critically examined the accomplishments of the first five years of the OBSQID Project and shared their experiences and ideas related to the development of quality of care technologies and practices in the field of perinatal medicine. Participants also examined both WHO and country specific models for data collection and management and discussed their merits and weaknesses. A number of participants reported on their practical experiences using the OBSQID BIS and made suggestions for further improving the form. An important topic discussed was how countries can develop national QCD policies based on existing perinatal QCD programmes. In addition, some participants considered how patient rights and confidentiality may be affected by the development of national and international clinical databases. Twinning project activities were reported and recommendations for creating case-based data collection tools for use in various perinatal specialties were made.

Lastly, participants identified the following future goals for the project:
- improve data reporting
- improve validity of reported data
- establish more twinning projects
- improve perinatal outcomes throughout the WHO European Region.

**Objectives of the Sixth Workshop on Quality Development in Perinatal Care**

The main goals of the Sixth Workshop were to:
- examine the accomplishments of the first seven years of the project and make a critical review of its successes and failures;
- examine WHO and country-specific models for data collection and management;
- present the activities conducted under the twinning projects;
- examine the implementation of electronic patient records (EPR) using the EPI-INFO data registration system, and discuss experience with using this tool (in centres where no such facilities exist, solutions will be sought to introduce EPR systems);
- discuss the progress made in developing the neonatal basic information sheet and the diabetes in pregnancy aggregated data sheet (DPAD) as well as the development of case-based data collection sheets within other specialties, and to suggest ways to promote the use of such sheets;
- provide participants with an opportunity to share their experiences and ideas related to the development of quality in perinatal care practices, outcomes and technologies;
- outline future goals for the project;
- reconfirm the formal collaboration between WHO/EAPM.
Opening address

Dr Manuel Strecht Monteiro

Welcome to Portugal and to Oporto. We wish you a pleasant stay in our country and thank you for choosing our city for this workshop.

One of Portugal’s historical characteristics is its ability to blend our knowledge with the knowledge of other countries. There was a time when we were proudly alone, and this led to a suspension of the growth of our culture and civilization. For twenty-five years, we have been making an effort to make up for this cultural and technical delay. Having changed our point of view and work procedures, we have aroused the attention of other countries. And the progress that we have made is not yet finished – we still have a long way to go.

We want to do more and to do it better, and so we joined OBSQID. Six years ago, and after accepting an invitation from the Northern Regional Administrative Board of Health, we have cooperated in this common project. I would like to thank this Board, and especially the Minister of Health for the opportunity given to the Julio Dinis Maternity to join this project to develop the quality of perinatal care.

Let me thank my prestigious colleague here at the Julio Dinis Maternity, Dr August Areias, Director of Paediatrics, for her participation in this important meeting. I must not forget to add Dr Umbelina, also a valued colleague. Over the last months, my colleague Dr Raul Nogueira has devoted much of his valuable time to the preparations for this event which I am certain will be a success.

Eight days ago I assumed directorship of the Board of Administration of the Maternity, and I will try to maintain the excellent working relationship and partnership with the organization. You can count on me, and on the Board of Administration, to work to develop this major project of obstetrical data collection and improvement of the quality of perinatal care. We would like to participate in this obstetrical “global village” with a great spirit of integration, without compromising on quality.

One of the tasks of the Directorship of the Maternity is the construction of the new Child-Maternal Hospital with 360 beds. We expect that in four to five years, construction of such a facility will be completed not only for Oporto but for all of the northern region, and we will look forward to receiving you in our new home. I would like to invite you to implement the next workshop in these new surroundings.

We look forward to implementing the conclusions and recommendations of the working groups of this meeting and to a fruitful exchange of obstetrical and neonatal knowledge to improve our maternal and perinatal care. Our Maternity is already endeavouring to improving the working conditions for all our technicians and for our clients. In this effort we plan to put together an informatics network which, under your guidance, will be compatible with all our services.

I wish you the very best for these two days of work and for your exchange of knowledge. Goodbye and thank you for coming to Oporto.

Implementation of the project at case-based and aggregated data level: a critical review of the project outcomes and successes and review of data entered into the WHO database
Implementation of the project at case-based and aggregated data level: a critical review of project outcomes and successes and review of data entered into the WHO database

Mr Visti Juncker, Dr Isuf Kalo, Dr Kirsten Staehr Johansen

Looking back at seven years of involvement in OBSQID, the critical questions to ask are: are we doing the right things? And are we doing things right?

The need for a quality development tool in perinatology was conceived of because obstetrical and perinatal care outcomes and practices vary widely between countries and within countries. To meet this perceived need, OBSQID was conceived to promote continuous development of quality in perinatal care through promotion of best practice. At this point in time, OBSQID has achieved the following:

- basic information sheet (BIS)
- perinatal aggregated sheet (PAD)
- server for intersite, interregional, and international comparison.

Following the 5th OBSQID Workshop, the prescribed action plans involved increased quality in data reporting, increased validity of reported data, the establishment of more twinning projects and improvement of perinatal outcomes throughout the WHO European Region. The progress achieved from these action plans has not been as positive as we hoped for. For example, we continue to have few data submitted to WHO server, there is some inconsistency in data quality, there is a lack of uniformity in applying international standardized definitions for perinatal outcomes, there is an under utilization of data for quality development purposes.

Our experiences show that the reasons for not reaching these goals generate from three types of obstacles. Firstly, providers have shown a low level of interest in participation at the clinical level. Secondly, the technical infrastructure is often lacking or limited. Lastly, there has been little motivation to implement national programme.

Taking into account our extensive experience and lessons learned, WHO/EURO is re-orientating country strategy by re-shaping activities to improve the response to demands and needs of Member States. In addition, there is a movement to move away from clinically based programmes to more “health systems” approach in health development. In accordance with WHO reforms we shall strive to establish national task forces at country level which utilize professional associations and WHO collaborating centres to mobilize support and action and implementation of OBSQID networks. WHO will continue to provide a supportive role towards national OBSQID programmes through the provision of technical tools, software, technical support in data systems management, international standardization of perinatal definitions and policy advocacy. The future of OBSQID will be determined by the dialogues and workings groups of this meeting. Let us now embark upon our task.

Report on the joint EAPM/WHO-EURO survey of perinatal indicators and variables in relation to OBSQID tools

Dr Karel Marsal

In 1996, a Study Group on Standardization of Birth and Perinatal Death Certificates was established within the European Association of Perinatal Medicine (EAPM) with aim to examine
possibilities to achieve a uniform reporting of perinatal events in Europe. The first step in the
work of the Study Group was to conduct an inventory of the present practices in reporting births
and perinatal deaths in European countries and to review the forms presently used as certificates
for reporting births to civic authorities. A questionnaire regarding the practices in collecting data
for authorities and medical registries was sent to all national delegates of the EAPM. In addition,
the delegates were asked to translate and send the certificate forms used in respective country.
After a second round of questionnaire distribution, 20 of 30 approached countries have
answered. It was immediately obvious that there are very big differences between the countries,
both with regard to the definitions used, number of variables and type of information routinely
collected. Only very few of the variables recommended by the EAPM Working Party on
Perinatal Audit & Evaluation could be identified in the collected forms.2

As many of the EAPM member countries participate in the WHO/EURO OBSQID project, the
EAPM Study Group meeting in Zagreb in 1998 decided to run the project aiming to standardize
the reporting of perinatal data as a joint effort between the EAPM and WHO/EURO. The 23
variables originally collected in the OBSQID perinatal aggregated data were sought in the
collected forms. In the 20 European countries which replied to the questionnaire, between 1 and
5 forms are routinely filled in at birth or in cases of perinatal death. Of 23 OBSQID variables,
median 12 items could be identified in any of these forms (range 1–21).

To achieve a better quality and representativeness of collected data, a third round of
questionnaires has been sent to OBSQID representatives and an additional seven countries have
so far responded, also those outside EAPM. An updated analysis of the survey is presented at
this meeting for discussion. The EAPM Study Group will have a meeting on the occasion of the
XVII. European Congress on Perinatal Medicine to analyse the results of the survey and to reach
conclusions and recommendations to be submitted to the Board of the EAPM. A report will be
prepared for publication in *Prenatal and neonatal medicine*.

The invaluable help of Dr Kristofer Hallberg, Dr Henriette Klarskov, Dr Jens Langhoff-Roos and
Ms Lisa Copple in collecting and processing the data from the survey is gratefully
acknowledged.

**Report on the activities of the European Association of Perinatal Medicine with
perinatal standards, databases and quality development**

*Dr Manuel R.G. Carrapato*

The European Association of Perinatal Medicine (EAPM) is affiliated to all national perinatal
societies and associations represented at the General Assembly. The EAPM represents its
members in WHO, WAPM, FIGO, ICM, IPA, MCI, EAGO and ESPR. Its activities are
composed of a European Congress every two years, the European School of Perinatal Medicine,
national and international courses on perinatal research and practice and study groups aimed at
specific targets.

The current EAPM study groups are:

- Standardization of birth certificates and perinatal death certificates
  
  **Chairpersons:** K. Marsal (Sweden), J. Langhoff-Roos (Denmark)

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• Lifestyle and environmental influences during pregnancy and outcome of children (EDAC)
  Chairperson: J. Koppe (Netherlands)
• Prevention of pre-term birth
  Chairperson: N. Patel (UK), E. Papiernik (France)
• Prenatal diagnosis
  Chairpersons: J.M. Carrera (Spain), G.C. Di Renzo (Italy)
• Perinatal biotechnology
  Chairperson: E.V. Cosmi (Italy)
• Perinatal transports
  Chairperson: G. Sedin (Sweden)
• Nutrition in the perinatal period
  Chairpersons: G. Putet (France), L. Weaver (United Kingdom), T. Hendriksen (Norway)
• Perinatal pathology
  Chairpersons: R. Laurini (Switzerland), A.J. Barson (United Kingdom)
• Perinatal behaviour
  Chairpersons: GHA Visser (Netherlands), J Murphy (Ireland)
• European Certificate of Experts on Perinatal diagnosis
  Chairperson: J.M. Carrera (Spain)
• International Liaison Committee of Maternal Infant Health
  Chairperson: J.M. Carrera (Spain)

The following study groups have been proposed:
• Intrapartum Fetal Assessment
  Chairpersons: K. Rosen, S. Arulkumaran (United Kingdom)
• Diabetic pregnancy Working Group
  Chairpersons: M. Hod (Israel), M.R.G. Carrapato (Portugal)

The EAPM has published the following booklets and guidelines:
• Carrera, J.M. & Campbell, S. Regulations for the use of Doppler technology in perinatal medicine. Barcelona, 1989;
• Toulon, J.M. & Di Renzo, G.C. Survey of research and teaching resources in perinatal medicine in the European countries. Lyons, 1990;
• Kurjak, A. & Levene, M. Rational use of high technology in perinatal medicine. Journal of perinatal medicine (Suppl), 1994;
Other current EAPM activities include:

- European programme of occupational risks and pregnancy outcome (EUROPOP) – BIOMED 1;
- Europe against lung immaturity (EURAIL) – BIOMED 2.

**Perinatal mortality and stillbirths 1945–1998 in the Slovak Republic: a comparison between national and local outcomes**

*Dr Martin Ditte*

The history of a country’s health status depends on its social situation. Over time, all medical statistics change. Such changes are closely dependent on the social and economic situation, as well as the level of technology available. This article shows how perinatal mortality and stillbirth rates are related to social changes in the Slovak Republic. The comparison of national statistics and those of our department, the Gynaecological and Obstetric Hospital in Bratislava, is an additional result of the study and shows one possibility of how to find prenatal care units with the best medical practice according to specific statistics.

The Slovak Republic underwent two radical social and economic changes. The first change was in the years 1948 to 1952, when the system turned from a democracy to a socialist dictatorship. The second period was the Velvet Revolution when democracy returned. The health care system also changed during the first period from one based on insurance to a social, state financed and regulated system which was free for all. During the second period, there was a return to the health insurance system.

In addition to the changes in perinatal mortality, there was also a change in the relationship between the ratio of stillbirths and live births, in favour of stillbirths. Prenatal care is oriented toward prevention of premature birth, prevention of hypoxemia during labour, prevention of hypotrophy, and prevention of complications from illnesses of the mother during the prenatal period and labour. The parameters and symptoms which are typical for stillbirths are still not known. The critical period is between 32 and 36 weeks, and the weight group is between 1950 to 2449 grams. (Alesandri 1993) With stillbirth has been associated third trimester bleeding, pre-eclampsia, eclampsia, chronic hypertension, syphilis, diabetes mellitus, Rh iso-immunization, more than four partusis in anamnnesis of mother, age more than 35 years of age, premature rupture of membrane, body mass index more than 29, anaemia of mother, previous abortion, and previous adverse prenatal outcomes. (Conde et al 2000) Only high quality prenatal care and paying attention to this risk factors could be effective in prevention of stillbirth. The comparison of results at the local level and national level, in the context of trends and knowledge of a few statistics, could identify places with good clinical practices. Complex look at prenatal care, and high quality preventative prenatal care activities could identify mothers at high risk and could create places or units with the best clinical practices.

**Implementation of OBSQID in the Trans Caucasus**

*Ms Jennifer Cain*

The Trans Caucasus Health Information Project is a tripartite agreement and collaborative effort between WHO/EURO, the Canadian Society for International Health (CSIH), the Ministries of Health of Armenia, Azerbaijan, and Georgia for increased and sustainable health information
system quality at the national level, regional and local levels of the health system in the South
Caucasus. The programme responds to the needs of the countries to improve patient outcomes
and improve the internal validity of health statistics. Its objectives are to promote sharing of
health information both within and between the three Caucasian countries, increase quality of
care and health information, provide training and capacity development in Health Information,
integrate gender equity in project activities, and promote reconciliation through health
information sharing.

The TCHIP project has undertaken a series of activities such as regional needs assessment,
coordination meetings between ministries of health, WHO-EURO and CSIH, teaching certificate
courses in health information systems within the countries, providing educational tours to
Canada, and establishing a network of pilot hospitals for the collection of data and training at
local levels.

To date, the project has trained 60 physicians from the South Caucasus in health information
systems, identified MCH and perinatology as priority areas for action in each ministry of health,
and adopted the OBSQID programme as a demonstration of health information in MCH and
perinatology. In Georgia, the Project has involved 11 participating hospitals in 3 regions, training
of 26 physicians in the OBSQID BIS and Epi-Info, systematic recording of births in pilot
hospitals, distribution of computers to all participating sites, and additional donor support. In
Armenia 5 participating hospitals in 3 regions are involved in the project, resulting in training 23
physicians in the OBSQID BIS and 4 physicians trained in Epi-Info. The greatest success in
Armenia to date is that the OBSQID programme has been designated by the Ministry of Health
as a national programme for perinatal quality development. Lastly, in Azerbaijan, 4 physicians
have been trained in OBSQID BIS and Epi-Info.

The OBSQID programme has successfully contributed to the development of health information
systems in TCHIP by the introducing QCD at the national and local levels, promoting intra-site
sharing of data, and facilitating intercountry sharing of perinatal data through the WHO-QHS
server. The TCHIP project demonstrates the potential for international and domestic partners`roles in providing financial and support in kind while establishing national OBSQID
programmes.

The national obstetric system in Malta

*Dr Line Janulova*

Located in the Mediterranean Sea, just south of Sicily, the Maltese archipelago consists of three
main islands: Malta, Gozo and Comino. The largest island is Malta, from which the archipelago
gets its name. The total area is 316 km². The total population of Malta is 380 000, giving a
population density of 1200 per km², which is one of the highest country population densities in
the world. Both Maltese and English are the official national languages.

Malta scores high on the Human Development Index with a life expectancy of 74.9 years for
males and 79.8 years for females. The crude birth rate is 13.27/1000 and the crude death rate is
7.4/1000. The male to female ratio is 0.98 and the dependency ratio is 0.5 (1997).
Obstetric services in Malta

Obstetric care in Malta is mainly delivered through an integrated and comprehensive public health care system, although there are also private facilities for maternity care and delivery. The recent trend is to receive a mixed (public and private) form of care.

There are two Government run general hospitals which house the public maternity services, one on the island of Malta which is the main public hospital offering a full emergency service and is equipped with a special care baby unit and the other is on the island of Gozo. There are a number of state run health centres in various localities on the island, which also offer antenatal services.

For five years there have existed three established private hospitals and one private clinic which offer maternity services mostly to mothers who are either covered by a private insurance scheme or can pay directly.

Qualified obstetricians, general practitioners and midwives provide maternity care and have access to both facilities. Home deliveries are not popular and have declined in recent years.

Obstetric information systems

1981: Data collection using internationally standard forms was first introduced at the main public hospital in conjunction with the International Fertility Research Programme (IFRP) (USA).

1983–1986: Following the experience gained with IFRP in standard data collection and processing, the Department of Health with Government Computer Centre (Malta) initiated the electronic batch processing of obstetric data at the main public hospital. This event orientated data capture continued for a period of 4 years.

1987–1990: In 1986 the Department of Health in collaboration with the WHO introduced a computer-based individual health profile, which was offered to the Department of Obstetrics and Gynaecology. Hence a computer-based medical record was introduced for its obstetric patients. Since at that time more than 95% of births in Malta occurred at this hospital, it was decided to capture the data on a set of standard sheets at source and then to forward these sheets to the Health Services Information Unit for processing.

1991–1998: A hospital-based computer-aided maternity information system (MIS) was jointly set up by the Department of Health Information and the Department of Obstetrics and Gynaecology at the main state hospital in 1991. This was an event orientated system where data collection commenced once the mother delivered her baby. Data capture was case-based where a standard MIS sheet was used for each parturient and this was forwarded to the DHI for data processing and inputting into a computer Dbase IV program. The main objective was to provide information on obstetric care and outcomes to clinical and managerial professionals.

National Obstetric Information System

1999 to date: In October 1998, WHO/EURO requested the DHI, Malta to collect and submit national perinatal data within the context of the OBSQID Project. In order to participate in this project and achieve national coverage of obstetric activity the health authorities in government agreed to extend the MIS to all government and private maternity centres on the islands.
Aggregated perinatal data (PAD) was collected at national level for the period of 1995–1998 and forwarded to WHO for use on the WHO OBSQID web site.

Following the success of receiving national PAD, it was decided after unanimous agreement from all maternity centres to actively participate in this project. The DHI developed the NOIS using standard epidemiological indicators, operational definitions of events and outcomes which are based on the MIS and the BIS of WHO/EURO-OBSQID project.

**The setting-up of the National Obstetric Information System**

At present there is no law that requests the specific collection of clinical obstetric and perinatal data at the national level. The Department of Health Information is the government agency responsible for the collection, processing and dissemination of national health statistics. Submission to NOIS is on a voluntary basis from private facilities and mandatory from the government hospitals.

Data Collection: All private and public birthing facilities  
Data Recording: The NOIS Sheet  
Data Transfer to DHHI: monthly by mail or hard delivery  
Data Management: Coding (ICD-10), centre codes, validations  
Data Storage : Dbase IV

**National Obstetric Information System information output**

- monthly, half-yearly and annual reports to all system partners  
- diabetes pregnancy joint clinic  
- HFA-2000-07-05 PAD submission to OBSQID  
- Malta Congenital Anomalies Register  
- http/www.magnet.mt/services/health/nois1.htm  
- various departments within the Ministry  
- media/ad hoc reports.

**The future**

The introduction of new data protection legislation may present further challenges to system regarding data collection and processing. It is envisaged that these will be met and overcome.

The implementation of statutory notification will help in overcoming these challenges and is presently being worked out.

Being a small country and having had an interest in collecting clinical obstetric information over the past 20 years, it is envisaged that NOIS will continue to improve within the context of the OBSQID project.
Potential areas for new satellite activities: what are the prospects?

Sentinel placenta and postmortem findings

*Professor R. Laurini*

There is still a resistance to integrate data on perinatal pathology to databases on perinatal health. Notwithstanding this, the EAPM has established a Study Group on Perinatal Pathology (Chairman: Professor R.N. Laurini) in order to integrate this subspecialty to the activities of the EAPM. The main aim is to profit from the data generated by a service in perinatal pathology in terms of clinical management including quality control, postgraduate education and epidemiological assessment of perinatal health and care. Unfortunately, at present there is a lack of perinatal pathologists that limits the development of this integration.

Therefore we have defined sentinel protocols for two target areas, placenta and postmortem findings, that can provide with the minimal data necessary for the above mentioned functions. A sentinel protocol is aimed at the collection of key data on indicators of perinatal health and care. Indeed, in order to make sense out of collected data we must know what the data consists of. For example, to know the number of stillbirths in a given population does not inform us about the pathology(ies) that caused these stillbirths.

Our previous experience with several perinatal audits has shown that such an exercise allows for the collection of data on the conditions affecting a given population as well as for the assessment of quality in the services provided. Furthermore, these audits also underlined the important role played by data on placenta and postmortems on the overall evaluation of the individual case and of the whole population. Undeniably, the placenta represents a form of “health book” for the foetal period and is particularly useful in assessing morbidity while the postmortem data adds to our knowledge on mortality and its causes.

Nevertheless, experience shows that is more feasible to collect data on placenta findings. Therefore I have developed a clinico-pathological classification of placental morphological findings that helps define the clinical importance of the different forms of placental pathology. This classification takes into consideration 3 groups: foetal deaths (up to 23 weeks gestation); late foetal deaths (24 weeks gestation to term) and live births.

Therefore, once again I propose that we add these two questions to the OBSQID BIS:

<table>
<thead>
<tr>
<th>Placenta examined</th>
<th>…..yes</th>
<th>…..no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postmortem</td>
<td>…..yes</td>
<td>…..no</td>
</tr>
</tbody>
</table>

This will allow for the collection of reports that can be analysed and classified by a panel of perinatal pathologists. This data can be then integrated to the individual case and population clinical database.

The absence of postmortem data can be (partially) covered by the use of the Wigglesworth classification.
The prospect of developing a multiple pregnancy section to the OBSQID Project demands attention to two major concerns. First, the high-risk nature of ALL multiple pregnancies must be stressed to all centres and their physicians as part of the ongoing educational activities of the regional office of WHO. Second, the data that is sought should attempt to address those questions which are inadequately addressed in the literature or which cannot be found in existing databases. Additionally, it seems reasonable to initiate this effort in those centres which are already, in the eyes of WHO/EURO, at a high level of data reporting. In this manner, the data of the first 6–12 months becomes a pilot study, as it were, to validate the questions and their ease of use by practitioners who must fill out the forms. If agreeable with Dr Mosha Hod and those persons responsible for the collection of data pertaining to diabetes, a special effort should be made to include diabetic centres as the literature is not clear on many aspects of the concomitant effects of diabetes and twinning.

The following are the major areas of interest for data collection:

- mode of conception: the obvious (and easiest) choices for this field would be:
  - spontaneous
  - ovulation induction
  - IVF
  - ICSI
  - the rank order of the therapeutic trial or IVF attempt, and
  - the total duration of infertility in years when assisted reproductive technology is used
    (while it is tempting to suggest that data be collected on the type of medication, dose and timing, this may add an unmanageable level of complexity);
- diagnostic method: potential methodologies included ultrasound, physical assessment, biochemical perimeters and delivery room;
- embryonic fetal demise: the timing and method of ascertainment (i.e. ultrasound or passage of tissue) of this event must be clear and documented in terms of gestational weeks;
- familial twinning: the number and types (MZ/DZ) of twins on the maternal and paternal sides should be recorded, as well as the number of generations back that this has occurred for each of the parents;
- assessment of chorionicity and zygosity by observation of the placentas and membranes: the numbers and types of placentas should be established with special emphasis on fusion and number of membrane layers using simple clinical observations that can be made in any delivery room;
- special art-related questions: attention should be given to recording the number of embryo transfers to establish the true zygotic twinning rate in the embryo/fetus ratio.
Blood transfusion vs. alternatives
Dr G. Gabra

Rational transfusion therapy and the use of alternatives

Quality of care
Quality development in clinical care is a concept which aims at establishing systems for continued monitoring of the process and outcome of clinical care. It relies on repeated cycles consisting of data collection, analysis, comparison, evaluation, intervention and repeating data collection for a second cycle, and so on. This leads ultimately to stepwise quality improvement.

The management of this approach to quality improvement depends on standardized data collection tools built around validated quality indicators, that could be measured against evidence-based benchmarks. The outcome of this strategy is to develop guidelines and policies that ultimately promote best practice, resulting in improvement of the quality of care given to patients.

Feedback to clinicians and their subsequent involvement in formulation of the resulting consensus guidelines are the pre-requisites of the success of this strategy.

Guidelines have maximum effect when generated and implemented at local level, highlighting the concept of ownership as a crucial factor for its success, and when the implementation is supported by education.

Difficulties in enforcing some guidelines
In theory, as consensus views guidelines should all be evidence-based. However, many are produced by panels of experts, based on global assessment and secondary observations or retrospective hospital records with suspect validity often removed from patient/physician encounter.

The constraints leading to non-compliance must be examined carefully and measures taken to promote debate and introduce innovative and creative approaches to facilitate the adoption and implementation by clinicians.

These efforts to improve the quality of decision-making process of physicians will also depend on the close application of the guidelines to the point where the request is made and where the decision is then taken, for example, to give a transfusion.

The need to reduce inappropriate transfusion
National audit figures in some countries show that at least 20% of transfusions are unnecessary. Blood transfusion saves lives, but this benefit has to be measured against the risks involved in using blood and blood products.

A recent report in the United Kingdom confirmed, for the third year running, that over 50% of the serious hazards of transfusion are due to wrong blood being given to the wrong patient. Even when we exclude the causes of these errors, transfusion of allogeneic blood has major immunological hazards, including acute and delayed transfusion reactions, acute lung injury, graft-versus-host disease. Transfusion-transmissible infections depend on the residual risks in the blood donor population, in spite of all the measures introduced for screening.
Unnecessary transfusions constitute a substantial financial cost and a waste of resources. Promoting the use of alternatives can control all the costs of management of complications, litigation and the loss of human life.

The role of the individual prescriber

The basic principles for rational transfusion is to provide the factors needed to correct the impaired functional properties of the patient’s circulating blood, and not simply to correct the figures and values as assessed and measured by laboratory means.

This can only be achieved when the decision to transfuse is taken by a senior, experienced member of the treating team and when the reasons for the decision are documented in the patient’s notes.

The clinician should be aware of all relevant transfusion hazards, including the risks of transfusion-transmissible infections and prescribe blood where the benefits are likely to outweigh the risks and only when no other alternatives are available.

Transfusion practice continues to be unrelated to clinical outcomes and evidence suggests that transfusion can be reduced substantially without compromising clinical outcome. Experience shows that the mere requirement to document the reason for transfusion can lower the rate of blood usage. Clinicians, in particular, when provided with feedback on their performance in comparison with others, they will often reduce blood consumption.

The role of national health authorities

Little attention has been given to improving the quality of transfusion practice and to reducing the use of blood, in spite of the availability of effective and safe alternatives to replace the various complex activities of blood and blood products. Every national health authority should have in place a national transfusion policy forum which will be responsible for establishing a national clinical blood policy and national guidelines. This forum will be required to support their implementation with regular training programmes and effective information technology systems. Reliable databases are essential to manage and improve the quality of transfusion practice and the quality of patient care.

Rational transfusion in obstetrics

Transfusion in pregnancy has not only risks for the mother, but also additional risks for the foetus, such as parvovirus and cytomegalovirus infections. The identification of high-risk patients is particularly important in women with history of caesarean sections and previous placental abnormalities, in order to refer them to special units with appropriate facilities for monitoring and management of major haemorrhage and complications. Active management by senior staff of the third stage of labour is essential. Meticulous surgical technique when surgery is required is an essential preventive measure to reduce the use of blood. Adequate nutrition and supplementation with iron and folic acid allow natural recovery of haemoglobin.

Resuscitation of women with major haemorrhage must be initially with oxygenation and rapid infusion of volume expanders up to a volume of 1.5–2.0 litres. Intervention must be timely, with prompt attention to treatment of the underlying obstetric problem.

The maternal haemoglobin level should not be the sole deciding factor, and values of 65 g/l may be safely tolerated in most women who have no other complicating factors. Erythrocyte
transfusion should only be given for severe ongoing haemorrhage, in situations where high risk of imminent recurrent major haemorrhage, to correct symptoms of impaired tissue oxygenation following establishment of normovolaemia or if normovolaemia was difficult to correct. Transfusion, when used, should be on a unit-by-unit basis according to symptoms. One unit may just be adequate. However, it is important to ensure that any attempt to reduce blood use must not increase maternal morbidity. The incidence of transfusion rarely exceeds 5% in complicated delivery, and is often less than 0.5% for low-risk mothers.

**Working groups: implementation of proposed satellite activities**

Working groups met to discuss practical implementation of the proposed OBSQID satellite projects. This concerned most importantly the identification of indicators and variables. Each working group set up a task force to be responsible for the design of a BIS and pilot activities to test this sheet.

**Working group 1: Sentinel placenta and postmortem findings**  
*Moderator: Professor Ricardo Laurini*

**Participants**

Dr C. Alafakis-Tzannatos  
Professor G. Bartfai  
Dr T. Beritashvili  
Dr P. Delvoye  
Dr M. Maresh  
Dr T. Premru-Srsen  
Dr M. Russu  
Professor C. Sen  
Dr Z. Sevkovskaya  
Dr P. Soares  
Dr E. Sobral  
Dr P. Stratulat

**Introduction**

Eight members participated in the meeting. Professors Bartfai and Sen and Dr C. Alafakis-Tzannatos joined the group after the event.

Each member was given a number in order to organize the collection of available data on placenta and postmortems at the corresponding centres (Table 1).

In view of the significant availability of data among the participants it was considered feasible to carry out a study following the principles discussed during the presentation on sentinel placenta and postmortem findings.
Table 1. Expected availability of data

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Placentas</th>
<th>Postmortems</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr P. Soares (Portugal)</td>
<td>Clinical</td>
<td>&gt; 50%</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dr E. Sobral (Portugal)</td>
<td>Clinical</td>
<td>&gt; 50%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Dr M. Russu (Romania)</td>
<td>Stillbirths</td>
<td>&gt; 50%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Dr P. Stratulat (Romania)</td>
<td>Stillbirths</td>
<td>&gt; 50%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Dr Z. Sevkovskaya (Belarus)</td>
<td>–</td>
<td>–</td>
<td>Health manager interested in perinatal databases</td>
</tr>
<tr>
<td>6</td>
<td>Dr M. Maresh (United Kingdom)</td>
<td>Clinical</td>
<td>&gt; 50%</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Dr T. Premru-Srsen (Slovenia)</td>
<td>Clinical</td>
<td>± 50%</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>P. Delvoye (Belgium)</td>
<td>Clinical</td>
<td>&gt; 50%</td>
<td></td>
</tr>
</tbody>
</table>

a Placentas sent for examination  
b Percentage of cases (deaths) with postmortems.

**Pilot study**

1. Prospective collection of sentinel findings in placenta and postmortem from the participating centres. Eventually, a trial run based on retrospective data to test the system.
2. Include perinatal deaths as from 22 (eventually 23 depending on definition of fetal viability) weeks of gestation.
3. Placentas from live births following Professor Laurini’s classification of risk cases.
4. The BIS must include the two questions proposed by Professor Laurini. This will allow the collection of available pathology reports.
5. Review of the available reports by an expert panel (perinatal pathologists) including classification following Laurini (placenta) and Wigglesworth (perinatal deaths without postmortem).
6. Feedback to the participating centres and WHO.

**Working group 2: Multiple pregnancy**

*Moderator: Dr Charles Savona-Ventura*

**Participants**

Professor Gyorgy Bartfai  
Dr Jurate Buinauskiene  
Dr Rony Chen  
Dr Martin Ditte  
Dr Gloria Gaspar  
Dr Lina Janulova  
Dr Henriette Klarskov  
Dr Halim Kosova  
Dr Jens Langhoff-Roos  
Dr Paula Ramoa  
Dr Charles Savona-Ventura  
Dr Petr Velebil
The Working Group was attended by 11 participants representing 8 countries.

**Goals**

- To set up a task force which will be responsible for the design of a BIS and pilot activities to test this sheet.
- To identify the variables and indicators which are relevant to multiple pregnancy.

**Discussion**

The first general point was whether the OBSQID MultiBIS should be a stand-alone data sheet or an add-on data sheet to OBSQID BIS. It was decided that while the OBSQID MultiBIS was to use the same format as much as possible as the OBSQID BIS, it should be able to stand alone. This would allow eventual contributing centres to decide whether to collect information about multiple pregnancies separately or as part of a wider data collection system.

It was also pointed out that several “new” variables introduced in OBSQID MultiBIS will need to be clearly defined.

A draft OBSQID MultiBIS was then presented and each variable was discussed as to relevance to multiple pregnancy. Some variables discussed were considered irrelevant, while others were proposed for inclusion.

The task force responsible for the development of the OBSQID MultiBIS would be composed of the participants in the working group and any others who may present themselves later, as under:

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Future agenda

The group decided that the OBSQID MultiBIS will be re-formulated along the lines of the discussion during the working group. The data sheet will be forwarded to all interested partners for approval and any further amendments. It is hoped that the sheet structure will be finalized in the coming months. Once finalized, it will be translated into an Epi-Info software database and circulated to all partners for piloting. In the meantime, a list of potential indicators pertinent to multiple pregnancy will be drawn up and discussed prior to the next OBSQID meeting in Hungary by correspondence.

It is hoped that by the next OBSQID meeting in Hungary, the working group will be in a position to present the results of the Pilot Study assessing the MultiBIS, and propose an OBSQID MultiPAD for general use as aggregated data.

Working Group 3: Transfusion vs. alternatives
Moderator: Dr Gamal Gabra

Participants

Ms Jennifer Cain
Dr Rony Chen
Dr Victor Costa
Dr Franco Cracolici
Dr Anne Dawson
Professor Hudita Decebal
Dr Mario Postiglione
Dr Simion Pruna
Findings

1. Quality of transfusion practice needs to be evaluated.
2. Collection of reliable data is required to establish protocols and guidelines to assist in better decision-making.
3. The current form used to collect data on transfusion in obstetrics does not need to be changed.
4. An additional BIS is required for transfusion events with blood, components or volume expanding fluids.
5. These additional forms should be available as paper forms and also as electronic additional forms to be available as part of the OBSQID reporting system.
6. Quality of transfusion practice also needs monitoring by developing BIS sheets for particular medical disciplines and possibly for particular procedures if required.
7. The relevant indicators should include:
   - Hb in the third trimester
   - Hb pretransfusion
   - MCV
   - HCT
   - HB and parameters after transfusion.
8. Symptoms:
   - dizziness
   - shortness of breath
   - fatigue
   - signs of low blood pressure
   - raising of pulse
   - pallor.
9. Targets for transfusion including parameters to be corrected:
   - signs
   - symptoms
   - laboratory findings.
10. Alternative strategies:
    - volume expanders
    - saline
    - colloids
    - even alternative strategies used.
11. Plan of action for implementation and compliance:
    - prepare BIS
    - circulate to group for comments
    - invite participation by general distribution
    - review pilot trial.
Data analysis: identification of centres of best practice and twinning activities – the example of Russia/Kyrgyzstan/United Kingdom
Dr Philip Banfield, Dr Janna Gorodnitcheva

Making safe motherhood a reality; lessons from a partnership model with the Russian Federation apply to changing practice in the United Kingdom

Over the last ten years there has been a progression from clinical audit to clinical governance via evidence-based medicine, with little regard for testing the basic data required. It seems accepted that bigger, better (and expensive) information systems will lead to better, more effective care, although this is unproven.

The use of data for inter-hospital comparisons in maternity care has been established for intervention and complication rates. As more reliable data become available in the United Kingdom, hospitals will have to face scrutiny from outside. Mortality rate confidence intervals can be compared for small numbers. If the intervals do not overlap (implying a true difference in outcomes), a maternity unit must have the means to analyse its clinical practice and case mix. Many hospitals have believed previously that excellence and improvement were implicit, but they must have formal mechanisms to respond to such data.

During the past two decades the maternal and perinatal mortality rate has declined but is still high in central European countries and the newly independent states that formed the old USSR. The OBSQID project, overseen by WHO/EURO, uses consensus quality indicators to monitor, compare and evaluate the structure, process and outcome of perinatal care. It uses a minimum data set that is easily collected on one side of A4 paper or electronically.

The United Kingdom/Russian Federation/Kyrgyzstan twinning project has assessed the use of this minimum data set for quality assurance and aims to implement it across the whole of eastern Europe. Collection of these valid data may improve the perinatal care. The low maternal and perinatal mortality in Wales (Table 2) could be an example for improvement of the perinatal care system in other hospitals, by using the United Kingdom data as a reference point for education of regional centres in the Russian Federation for dissemination to the territories.

After implementation of the OBSQID BIS for individual pregnant women, data were collected in a PAD sheet. Following comparison of the preliminary data, a training seminar programme was established and a seminar on high risk pregnancy and perinatal care was held in Bishkek with the active participation of the Moscow centre. Comparison of the process and outcomes for “standard” and similar cases using these basic data has allowed analysis of practice between countries. The same principle could be used within the United Kingdom, but the issues are clouded by politics and case-mix issues.

5 Quality development in perinatal care – the OBSQID project: report on the fourth workshop. Copenhagen, WHO Regional Office for Europe, 1998 (EUR/ICP/QCPH 03 02 03(A)).
Table 2. Comparative birth statistics (1998)

<table>
<thead>
<tr>
<th></th>
<th>Wales, United Kingdom</th>
<th>Ivanovo, Russian Federation</th>
<th>Chuvashia, Russian Federation</th>
<th>Udmurtia, Russian Federation</th>
<th>Bishkek, Kyrgyzstan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, millions</td>
<td>2.927</td>
<td>1.256</td>
<td>1.359</td>
<td>1.633</td>
<td>4.665</td>
</tr>
<tr>
<td>Birth rate/1000 population</td>
<td>11.9</td>
<td>6.7</td>
<td>9.4</td>
<td>9.4</td>
<td>22.0</td>
</tr>
<tr>
<td>Maternal mortality/100 000 live births</td>
<td>11.0</td>
<td>48.0</td>
<td>46.8</td>
<td>71.5</td>
<td>76.4</td>
</tr>
<tr>
<td>Perinatal mortality, %</td>
<td>7.4</td>
<td>15.5</td>
<td>14.7</td>
<td>16.1</td>
<td>11.8</td>
</tr>
<tr>
<td>Caesarean section rate, %</td>
<td>21.0</td>
<td>12.8</td>
<td>12.1</td>
<td>14.4</td>
<td>17.0</td>
</tr>
<tr>
<td>Number of deliveries in primary care</td>
<td>2485</td>
<td>2135</td>
<td>1282</td>
<td>1813</td>
<td>2000</td>
</tr>
</tbody>
</table>

In an exercise at Glan Clwyd reviewing the intrapartum stillbirths from the previous eight years to a similar standard of the CESDI enquiries, we found that 1:3 might have been preventable through very simple measures. This implies that “centres of excellence” should continually review their own basic practice and not hide behind complex issues of case mix.

Achieving change through simple measures requires a willingness to consider a change in practice – probably the biggest obstacle. Our hypothesis is that perhaps 90% of health care improvement might be made through basic education, matching practising clinicians from different institutions, and in clinical audit using some very basic tools, rather than in expensive technologies that apply to a very limited number of patients.

**Reports on OBSQID-related activities**

**Neonatal BIS (basic information sheet for case-based data) pilot project**

*Dr Janusz Gadzinowski*

The NeoCare project was designed to monitor the quality of care of the neonate. WHO’s former Quality of Care and Technologies (QCT) programme (now Quality of Health Systems programme) helps countries and groups of interest to create and develop the tools which can be used for monitoring of quality of care. According to WHO/QHS, the continuous monitoring of health care is the chain of proceedings which appear one by one: collecting data, analysing data, evaluation, comparison, intervention. The evaluation can be performed thanks to indicators which are possible to obtain due to data collected previously.

**Basic information sheet**

The BIS is a tool which allows data to be collected on a single case basis. It is one sheet of paper which contains 62 items divided into two parts: one regarding the healthy neonate, the second regarding the sick one. This clear and systematic structure helps it to be filled in. The questionnaires are read automatically by scanner, and special software allows the data to be placed directly in the database. There are a number of ways to analyse the data based on indicators, e.g. perinatal mortality, rate of prematurity, incidence of MAS. Additionally, the clinical outcomes and costs of the hospitalization can be analysed based on the number of basic procedures which were performed, e.g. X-rays, number of supplemental transfusions, number of exchange transfusions.
Centres and hospitals who are willing to join this database are assured that they become anonymous the moment they are joining the study. They know their own code, which is only a number to others. This enables the hospital/department staff to compare their results with others or with mean calculated values.

**NeoBIS**

The NeoBIS was used for the first time in 2000, in two regions of western Poland (Wilekopolska and Lubuskie). There are about 50,000 deliveries per year in these two regions. So far, 13,496 deliveries from 53 centres and hospitals have been analysed. Based on the data from NeoBIS there will be a possibility of creating and analysing the neonatal indicators which are called Neonatal Aggregated Data (NAD). We hope that the WHO workshops will help us to establish the consensus regarding the NAD.

Dr Gadzinowski presented selected preliminary data.

**DPAD (diabetes in pregnancy perinatal aggregated data sheet) European pilot project**

*Dr Moshe Hod*

The WHO/EURO OBSQID Project is based on the concept of continuous quality of care development through comparison by perinatologists of their outcomes in relation to peers’, and the identification, through data collection and analysis, of centres demonstrating best practice and the most rational use of technology in order that their knowledge and expertise may be disseminated and exploited. Consensus has been achieved across Europe on obstetric health indicators and variables which are compiled in data collection forms at both case-based and aggregated levels. Case-based data are submitted to nodes, which anonymize the data, and provide feedback to users as well as the opportunity for self-analysis and intersite comparison of the use of technology and outcomes of care. Through such comparison, health care facilities and health care providers may be motivated to continually improve their outcomes and the quality of their care.

**Aim**

The aim of the pilot project is to summarize the data collected to date, giving preliminary results of the pilot project of the Diabetes Perinatal Aggregated Data (DPAD) Sheet, with analysis and feedback to data submitters.

**Subjects and methods**

Some 21 centres (11 local, 6 regional and 2 national) have contributed data using the DPAD form, covering a total of 141,259 deliveries (in 12 centres), 4,870 of which were complicated with diabetes.

**Results**

Of the 4,870 diabetic pregnancies analysed, 1,193 (32%) were pre-GDM and 3,677 (68%) were GDM. Some selected outcomes (out of the 20 variables studied) are as follows. Pre-pregnancy consulting was given in 0–92% of the pregnancies in the different centres. The caesarean section rate was between 11% and 76% for GDM and 29% and 85% for pre-GDM. The incidence of
macrosomia was 15% and 16% in the GDM and pre-GDM groups respectively. Major anomalies were present in 1.5% and 6% of the GDM and pre-GDM groups respectively. The remainder of the variables were presented in graphs presented.

Conclusions

According to the St Vincent Declaration Diabetes Programme launched jointly by WHO/EURO and the International Diabetes Federation (Europe) in 1989, the ultimate goal for the management of the pregnancy complicated by diabetes should be an outcome for both mother and infant approaching that of the nondiabetic population.

The database created is imperative for the comparison and continuous evaluation of outcomes, and serves the goal of optimizing treatment and outcomes in diabetic pregnancies. The OBSQID Project has now focused on the establishment of a pan-European database on diabetic pregnancies. This pilot demonstrates the benefit to clinicians of evaluation of data on outcomes. It also implies that efforts should be directed towards the recruitment of more perinatal centres willing to share their data and establish a pan-European data base of diabetic pregnancy. This will allow a more accurate evaluation of management and thus will result in better outcomes for the mother and the offspring.

The experience with DPAD in the United Kingdom

Dr Michael Maresh

Results from two regional surveys in England have shown that perinatal mortality and congenital malformations in diabetic pregnancies are about five times higher than the general population. As a result of these findings, a number of initiatives are being undertaken, initially aimed at obtaining better information about outcomes.

The British Diabetic Association is exploring ways of obtaining nationwide data on the outcome of all diabetic pregnancies. While this initiative is being taken forward, a number of other regions in the United Kingdom are developing their own regional surveys, albeit with more limited data. These are supplementing the other two existing regional surveys and ones in Scotland and Northern Ireland.

In order to determine what outcomes might be achieved it was felt that surveying specialist centres would be helpful as it has been claimed frequently that centres with a special interest in diabetic pregnancy have better outcomes. Clinicians from seven tertiary centres (Cardiff, Edinburgh, Leeds, Liverpool, Manchester, Oxford and Sheffield) were able to provide basic data and were prepared to share it in an anonymous way.

The results of the 573 pregnancies over 24 weeks gestational age were analysed. Perinatal mortality was 19.2/1000 (odds ratio 2.31, 95% confidence interval 1.15–4.14) and the stillbirth rate 12.8/1000 (odds ratio 2.56, 95% confidence interval 0.98–5.03). Congenital malformation rates were raised at 56.1/1000 (odds ratio 5.87, 95% confidence interval 4.04–8.25) and were associated with worse diabetic control. Delivery before 37 weeks occurred in 35% of cases and 65% of babies were born by caesarean section. Birth weight greater than the 90th centile occurred in 36% of cases.
It appears that perinatal mortality is reduced in tertiary centres despite them tending to look after the worst cases of diabetes. However, congenital malformations, macrosomia and operative delivery remain high.

**Violence and pregnancy – interim results of a comparative study**  
*Mrs Sophia Drengsted Nielsen, Dr Charles Savona Ventura*

**Background**

Worldwide, it has been estimated that violence against women is as serious a cause of death and incapacity among women of reproductive age as cancer, and a greater cause of ill health than traffic accidents and malaria combined. In addition, several studies have suggested that violence against pregnant women is associated with perinatal outcomes such as premature birth, pre-term labour, and low birth weight. Violence during pregnancy has been recognized as an important risk to the health of both mother and infant.

**Objectives**

The objectives of this in-depth comparative study were:

- to identify risk factors and markers for domestic violence by examining sociobiological variables such as educational level, age, fertility and employment in different cultural and regional settings;
- to compare perinatal outcomes in women suffering from domestic violence with the general population;
- to use the data for establishing effective strategies for prevention and intervention, and thus reduce adverse birth outcomes.

**Methodology**

To fully understand the phenomenon of gender-based violence, a multi-method design has been adopted utilizing quantitative and qualitative techniques.

The qualitative part gave a social context to the violent events and reflected women’s experiences of battering. It also helped to understand the differences between the way in which women from different cultures perceive domestic violence.

The triangulation method was used in the surveys in order to verify the soft data. This made clear that no matter whether it is culturally accepted or not, the women’s reaction to and their health consequences of being abused are the same in different cultural settings.

The quantitative part is based on surveys from different European countries.

The study was carried out by the administration of a self-administered anonymous questionnaire to postpartal women delivering over a specified period of time. The questionnaire is a modified version of the classical assessment for women’s abuse (with permission); it combines event-related questions (“Has anybody hurt you during the last year?”) and interpretative questions (“Are you afraid of your partner?”). Earlier experience and life events, such as family history, exposure to violence in childhood, etc., were also registered. The infant outcome was also noted.
Results

Malta

The prevalence of domestic spouse abuse in the Maltese community (1000 questionnaires distributed, response rate 39.3%) was assessed to approximate 11.7% of the pregnant population. The abuse varied from psychological (6.9%) to physical (2.3%).

There was a strong history of experience of domestic violence/abuse during childhood in both the victim and perpetrator suggesting that a “circle of abuse” may play a role in some cases.

The sociobiological characteristics of the victim did not appear to markedly predispose towards a higher risk for domestic abuse, though single mothers were statistically more likely to report a history of domestic abuse. Abused women were more likely to smoke during pregnancy than their counterparts.

The perpetrator was more likely to be unemployed, smoke and drink alcohol. There was no statistical correlation between a history of spouse abuse and the educational level attained by both the victim and perpetrator.

A history of domestic abuse had an adverse effect on the pregnancy with a higher risk of premature birth and its attendant complications.

| Table 3. Premature births to abused and non-abused mothers, Malta |
|---------------------|-----------------|-----------------|
|                     | Non-abused      | Abused          |
| Pre-term births     | 20 (6.3%)       | 7 (18.9%)       |
|                     | $p = 0.0167$ significant |

About a third of the women interviewed were unaware of the domestic violence services being offered in their community, emphasizing the need for an information drive. The antenatal period, with the distribution of leaflets and antenatal classes, is an opportune time to promote the support services available in the community.

Eastern European countries

Three countries participated in the study: Poland (481 answered questionnaires), Georgia (104 questionnaires) and Albania (150 questionnaires).

In these surveys the history of physical violence during the last year was used as the main outcome variable in order to be able to compare the magnitude of violence between the countries. However, other variables on non-physical abuse (emotional, psychological, economic, etc.) were included and analysed.

In spite of the limitations of our study, the results in three transition countries suggest that domestic violence is an important problem in the region. The prevalence of domestic spouse abuse for 1999 was assessed at approximately 7% in Poland, 10.6% in Georgia and an average of

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6 In publication.
16% in Albania. In spite of cultural and prevalence differences between the countries participating in the study, some common sociobiological features were noted. There was a strong history of experience of domestic violence/abuse during childhood in both the victim and perpetrator in all countries.

The sociobiological characteristics of the victim did not appear to markedly predispose towards a higher risk for domestic abuse, though low education level were statistically more likely to report a history of domestic abuse in some cases (Georgia, Poland). Abused women were more likely to smoke.

The perpetrator was more likely to be unemployed, drink alcohol and smoke. There was no statistical correlation between a history of spouse abuse and type of employment either of the victim or perpetrator.

The survey in the three countries also confirmed that physical abuse might have an adverse effect on pregnancy outcomes with a higher risk of premature birth (Table 4).

| Table 4. Premature births to abused and non-abused mothers in Albania, Georgia and Poland |
|---------------------------------|-----------------|-----------------|-----------------|
|                                  | Poland          | Georgia         | Albania         |
|                                  | Non-abused      | Abused          | Non-abused      | Abused          | Non-abused      | Abused          |
| Premature birth                  | 21 (4.8%)       | 2 (8%)          | 9 (1.1%)        | 1 (9.1%)        | 9 (8.8%)        | 1 (33.3%)       |

Further research with bigger population-based samples is needed in order to verify the data.

The majority of the women interviewed did not know where to go in case of violence. This is alarming and emphasizes the need for developing services for victims of violence, including assistance through the legal system and assistance in finding ways to leave a violent situation.

Pregnancy (the antenatal and postnatal periods) gives a window of opportunities to assess for violence. For this purpose, the training of medical professionals in management of the victims of abuse is needed.

Action within the health sector is just one part of tackling domestic violence. A major step in primary prevention of violence can be achieved by working together with other institutions fighting violence generating conditions.

**Malformation, neural tube defects and ultrasound**

*Dr Asim Kurja*

**EuroFetus Study**

From 1990 to 1993, a 61-centre level 2 routine ultrasonography study, the EuroFetus study, was conducted to assess the performance of routine ultrasonographic screening of pregnancies (*American journal of obstetrics and gynecology*, 181 (1999)).
Objectives

The purpose of the EuroFetus study was to evaluate the accuracy of antenatal detection of malformation by routine ultrasonographic examination in an unselected population.

Goal

The main goal of the study was to assess the reliability of routine ultrasonographic screening.

Study design

The following were the parameters of the study:

- multicentre study, 61 European obstetric units;
- duration three years (1990–1993);
- prospective recording of malformations;
- the main recommendation for screening was at least one systematic examination of the fetus between 18 and 22 weeks;
- recording of malformations after birth or abortion (confirmation of diagnosis);
- ultrasonographic examinations were carried out by qualified personnel with high quality equipment and could be considered as “level 2”.

Results

The results were as follows:

- total number of malformed fetuses: 3885;
- total number of malformations: 4815;
- 2262 fetuses had received diagnosis during pregnancy (sensitivity 61.4%);
- 2593 malformations were detected (sensitivity 56.2%);
- total detection sensitivity for major malformations 73.7% (age of detection 24.2 weeks);
- total detection sensitivity for minor malformations 45.7% (age of detection 27.6 weeks);
- for the major abnormalities there was better detection for the central nervous system (88.3%) and urinary tract (84.8%) but lower for the heart and great vessels (38%);
- detection of minor abnormalities was also effective of the urinary tract (89.1%) but not for the heart and great vessels (20.8%) or the musculoskeletal system (18%);
- the accuracy of detection depended on the organic system.

Conclusion

Systematic ultrasonographic screening during pregnancy can detect a large proportion of fetal malformations, although some still escape detection.
OBSQID project implementation in the Black Sea Area – how to improve data exchange through better use of information technology

Dr Simion Pruna

The information technology benefit to the health care systems in the Black Sea area is that it facilitates improved quality of health care by providing relevant quality information to the primary care physician in collaboration with a specialist, at very low cost.

In obstetrics and gynaecology the present state comprises the clinics or hospitals, with various computer/software systems for:

- office support (word processing, spreadsheet, graphics, etc.), patient administration systems
- financial (accounting, billing)
- various electronic patient records (pathology, radiology, pharmacy)
- quality programmes (OBSQID).

These systems tend to be separate (i.e. not linked up at all). This is a problem for health care professionals in obstetrics for the following reasons:

- inefficient methods and practices are still employed;
- productivity is not as high as it could be;
- contemporary technology has much to offer, much of which is being ignored;
- the software is still more complicated than it needs to be (resulting in higher training costs, low ease-of-use, lower productivity), and
- quality information (in particular PAD) cannot currently be retrieved electronically by the clinicians and downloaded for health service management or public health programmes.

In Romania and other Black Sea countries, computer education in general has had rather low priority among medical personnel for a number of years. It has been realized, however, that this is now counter-productive for long-term quality of health care and so a training programme has been started.

To address these problems the Telemedicine Centre in Romania, in collaboration with WHO/EURO, is making every effort to implement the OBSQID project in the Black Sea region using the most advanced internet and computer programming technology in the field of health care records for the benefit of the health care community and ultimately for the good of patients. We have implemented many of the requirements of the health care industry regarding developing software for:

- automatic extraction of PAD from OBSQID.rec files (SincroPAD – freely accessible on our server: http://www.telemed.ro/), automatic extraction of Diabcare Aggregated Data from Diabcare.rec files (SincroDAD); complete electronic patient record system (Black Sea TeleDiab – BSTD) built around open-component standards.

The BSTD system enables multiple databases to be integrated, creating a virtual patient record in which the individual health care facilities still own and manage their own data while making it accessible to others who have treated the same patient. As the open standards gain acceptance, BSTD can work together with systems at multiple health care organizations. At the same time, security of the data is maintained so that public networks may be safely used, if desired, and
patients’ privacy and confidentiality are ensured. This system provide the necessary linkage between the needs and expectations of diabetologists and practitioners and the key items of DiabCare developed by WHO.

Our experience in collaboration with different clinics proves that we should be able to work more effectively without working any harder. Software does not need to be as complex and difficult to use as it is. The recent progress in information technology has led to the development of new Internet-related programming languages (Java, SQL Server, ASP). These allow multiple functions accessible by users with no previous specialized computer training. We should be able to simplify electronic interactions with the outside world and ideally have just one simple method of sending and receiving information electronically. BSTD provides an interface (which can replace the conventional Windows interface), and gives easy access to many things such as system administration, patient records system, e-mail, clinical messages, various aggregated data, graphs, statistics, benchmarks, clinical guidelines and clinical protocols.

In conclusion, we should not need to have multiple access methods just to access multiple third parties. We should be able to receive various aggregated data and benchmarks without manual intervention. When they are ready to be sent, they should be sent promptly. We should be able to share and exchange patient information between software packages and readily between appropriate clinicians or institutions.

We need to motivate clinicians and gain their commitment because no clinicians, no data – no data, no management quality of care. How nice would it be to have just one consolidated (patient-oriented) electronic health record in obstetrics!

Moving ahead – strategies and targets for further implementation of ongoing OBSQID activities

Participants joined working groups for a detailed introduction to the ongoing projects by the moderators, discuss concrete possibilities of integrating the OBSQID indicators in their settings, and make commitments to support data collection, analysis and comparison within the OBSQID project or its satellites.

Working group 1: The OBSQID Project – PAD and BIS implementation at local and national levels
Moderator: Dr Isuf Kalo

Participants
Dr György Bartfai
Dr Tia Beritashvili
Dr Martin Ditte
Dr Halim Kosova
Dr Jens Langhoff Roos
Dr Karel Maršal
Dr Kirsten Staehr Johansen
Dr Alvi Tellman
Dr Petr Velebil

The group sought to understand the obstacles associated with OBSQID implementation and devise a clear strategy for future implementation. Key obstacles sited for OBSQID success have
been health care providers, administrators and managers as well as limited health care resources. It was suggested that the missing link in all of these failures was the lack of motivation. From this perspective, the group proposed methods to increase motivation. The first proposal for overcoming the motivation gap was to increase the visibility of OBSQID at the national, regional, and local areas. This involves stimulating key players and organizations and action amongst national opinion leaders which are able to disseminate information and enthusiasm, national professional association and societies, and international professional associations, such as the EAPM. To strengthen this motivation, participants recommended that the advantages of OBSQID be both clarified and disseminated, such as the benefits of using standardized definitions for quality development, to utilize an outcome oriented perspective, identification of best practices and emphasizing provider ownership of data. Given these factors, the group agreed that creating national task forces to mobilize members of the Ministry of Health, providers and opinion leaders to action. Implementation strategies should have short term and long term objectives and should strive to find ways to collaborate with third party payers.

**Working group 2: Neonatal BIS pilot project**

*Moderator: Dr Janusz Gadzinowski*

NeoCare is a “sister” project to OBSQID, not a satellite. NeoCare has its own tools which allow it to achieve its goals: monitoring and improving neonatal care. These are the NeoBIS – the neonatal basic information sheet, and NAD – neonatal aggregated data sheet (under construction).

Centres which are already participating in OBSQID project do not need to fill in the lower part of the OBSQID questionnaire (the neonatal part) and can just fill in the NeoBIS.

Based on our own experience, we have proposed to use telematics instead of paper-based questionnaires. It is cost-effective in the long term, less time-consuming and more accurate (there is less risk of errors made by the person filling in the questionnaire when entering the information into the computer).

The biggest advantage of having both projects run together is the possibility of comparing the obstetrical period with the neonatal and have very clear results of cross-correlation of different variables.

The following are the proposed variables for the neonatal aggregated data sheet (NAD):

1. Number of deliveries
2. Number of infants born
3. Early neonatal death
4. Late neonatal death
5. Total neonatal death if 3 and 4 not available
6. Prematurity (<32 weeks)
7. Prematurity (32-36 weeks)
8. Major congenital malformations
9. Lethal congenital malformations
10. Apgar ≤ 6 @ 5 minutes (> 31 weeks)
11. RDS  
   a) grades I and II 
   b) grades III and IV
12. Neonatal seizures within 7 days
13. Newborns from multiple pregnancies
14. Newborns from pregnancies without antenatal care
15. Newborns from deliveries unattended by professional health care providers
16. Newborns from caesarean section
17. Newborns from vacuum extraction
18. Newborns from caesarean section and vacuum extraction if 16 and 17 not available
19. Newborns from mothers with insulin-dependent diabetes mellitus
20. Newborns from mothers with non-insulin-dependent diabetes mellitus
21. Newborns from mothers with GDM.

Existing indicators which might be used:
1. Birthweight: a) ≤ 499g; b) 500–749g; c) 750–999g d) 1000–1500g
2. Chronic lung disease or BPD
3. Perinatal infections
4. Mechanical ventilation
5. L&D resuscitation
6. MAS and/or stained amniotic fluid
7. Vaccination if legally required
8. Intraventricular haemorrhage grade III & IV and PVL.

**Working group 3: DPAD pilot project**

*Moderator: Dr Moshe Hod*

**Participants**

Dr Anders Ole Agger  
Dr Angela Augugliaro  
Dr Philip Banfield  
Dr Ilaria Casalidio  
Dr Rony Chen  
Dr Victor Costa  
Dr Anne Dawson  
Dr Graziano DiCiani  
Dr Gloria Gaspar  
Dr Moshe Hod  
Dr Lina Janulova  
Dr Antonio Lobo  
Dr Michael Maresh  
Dr Tanja Premru-Srsen  
Dr Manuela Russu  
Dr Sandra Paiva  
Dr Zinaida Sevkovskaya  
Dr Ermelinda Sobral  
Dr Savona-Ventura

The presentation given earlier by Professor Moshe Hod was discussed at length at the working group session on diabetic pregnancy chaired by Professor Hod.

The decisions taken by the group included the following:
1. Dr Philip Banfield accepted the invitation to accurately define the variables/outcomes included in the DPAD.

2. Every participating centre in the project has to define precisely how it defines GDM.

3. Dr Michael Maresh will prepare his proposal for a Minimum Diabetic Pregnancy Data Set to be discussed in the near future as a possible tool for case-based data collection.

4. It was decided to add to the DPAD another variable for evaluation - Post pregnancy counselling/evaluation.

5. It was unanimously agreed to accept the DPAD as the preferred tool for the establishment of the data base.

6. It was decided to form a steering committee for the DPAD – OBSQID Project:

   Professor Moshe Hod (Chairman) Israel
   Dr Rony Chen (Secretary) Israel
   Dr Dina Pfeifer (Epidemiologist) Croatia
   Dr A. Ole Agger Denmark
   Dr Philip Banfield United Kingdom
   Dr Anunziata Lapolla Italy
   Dr M. Maresh United Kingdom
   Professor Giorgio Mello Italy
   Dr Tamar Perry Israel
   Dr Manuela Russu Romania
   Dr C. Savona-Ventura Malta
   Dr Tanja Premru-Srsen Slovenia

The data base will be set up at the WHO collaborating centre for quality management and development in perinatal care, Perinatal Division, Rabin Medical Centre, Israel.

Professor Hod was mandated to present the WHO/EURO OBSQID – DPAD Project at the Diabetic Pregnancy Study Group (DPSG) of the EASD at its annual meeting in September in Nof-Ginossar, Israel. Professor Carrapato and Professor Hod, recently appointed by the EAPM to chair the Working Group on Diabetic Pregnancy, will also present the project to the members of the association.

It is anticipated that this activity will result in the recruitment of most of the leading centres in Europe to the DPAD project and in the continuous expansion of the database.

**Working group 4: Violence in pregnancy**

*Moderator: Ms Sophia Drengsted Nielsen*

**Participants**

Ms Sophia Drengsted Nielsen
Professor Postiglione
Dr Anne Bille
Dr Cracolici
Dr Eleonor Tiblad
The participants represented different disciplines (social sciences, public health, psychiatry, psychology, and alternative medicine (acupuncture)) and the discussions were characterized by the multidisciplinary approach.

The main questions discussed were:

- How and when to screen victims of violence;
- What screening/diagnostic tools to use?
- Is depression an indication for violence both for victims and perpetrators?

**Management of victims**

As mentioned above (Savona-Ventura and Drengsted-Nielsen), pregnancy is an opportune time for screening for violence during antenatal and postnatal visits. However, active screening through confrontation still requires careful consideration, even when facilities for referral are available. Training of the medical staff (first of all, midwives) on the management of the victims is of paramount importance. Existing protocols should be used carefully, according to the concrete cultural setting and women’s safety should be taken into consideration as a priority.

Depression might be a sign for abuse for women, but more often than not the abused women presented with symptoms of anxiety and post-traumatic stress disorder (PTSD) as well. The suggestion was to use WHO-5 Well-Being Questionnaire, and if the score (wellbeing) is low, then to go further and use other already tested screening tools for depression, anxiety and PTSD. Screening can and should be performed by primary health physicians, or midwives. Referral to the mental health professional should be made as the last resort, as this can be used against the victim.

The suggestions for treatment of depression ranged from traditional medication, individual psychotherapy, group or family therapy, to application of methods of alternative medicine, such as acupuncture.

As far as the perpetrators of violence are concerned, the discussions reflected two approaches existing in the field of gender-based violence and consequently two opinions were expressed:

- medical/disease model for violence (violent behaviour arising out of individual psychopathology);
- social learning theory (violence as a socially learned behaviour).

While the first approach views battering as a disease and is more likely to refer batterers (as well as victims) to individual psychotherapy, family therapy, or alcohol/drug treatment, the second approach opts for referral primarily to specialized intervention programmes for batterers. They argue that only a minority of perpetrators have mental health problems and would benefit from the medication in addition to specialized treatment for batterers.

However, the importance of male involvement in tackling the problem of domestic violence is clear as well as the role of physicians in identifying men who batter (to make subsequently informed referrals).

Recommendations included screening for paternal wellbeing of both men and women as a first step.
Working group 5: Perinatal wellbeing/depression  
*Moderator: Dr Anne Bille*

**Participants**

Dr Anne Bille  
Dr Eleonor Tiblad

Dr Eleonor Tiblad from the department of Obstetrics and Gynecology, Lund University Hospital briefly presented a study of the wellbeing of parents during pregnancy and postpartum as measured by the WHO Well-Being Index.

The objectives of the pilot study were to evaluate wellbeing of parents during late pregnancy and in the early postpartum period and to test the applicability of the WHO wellbeing questionnaire.

To measure the wellbeing of the participants we used the WHO Well-Being Index and questionnaire. The questionnaire was distributed to 600 individuals. The individual scores were analysed and related to social and medical information from medical records. Subjects in group 1 (n=63) were recruited from attending controls at four selected antenatal clinics and filled in the questionnaire at the 36th gestational week and at 2 weeks postpartum. Subjects in group 2 (n=98) were recruited at the delivery ward at Lund University Hospital and responded only at 2 weeks postpartum.

Of the 600 questionnaires distributed, 161 persons responded (26.8%): 82 mothers and 79 fathers. The median age of mothers was 32 years (23--42 years). Median week of delivery 40+1 (36+0 – 44+4), 41 nulliparous, 32 multiparous, median birthweight 3560 g (2515 g – 4820 g) and 2 SGA children. All infants reported Apgar 5 min >7. In 11/82 there were some kind of medical complication during pregnancy. All, except one couple, were living together. 71/82 mothers had employment, were students or on parental leave and data were incomplete in 9 cases.

The WHO wellbeing scale is ranked from 0 to 100. A score under 52 indicates poor wellbeing and risk for depression. Of the respondents, 31.7% reported an index <52 at least one time during the period. Fathers participating in the study had a moderate level of wellbeing. There was no difference in wellbeing before and after birth of the child. There was a significant difference in wellbeing between fathers and mothers postpartum. The study showed that the wellbeing of the father correlates to the wellbeing of the mother. We found no difference in scores between fathers having their first child and those experienced with pregnancy and childbirth. The wellbeing index did not correlate to the mode of delivery.

Although the study did present a few pitfalls, such as low percentage of participation, suggesting bias of selection, healthy selection, and control of confidentiality between the parents, the WHO questionnaire is practical and easy to use, but better compliance should be obtained in future studies.

Drs Bille and Tiblad subsequently joined working group 4.
Hands on: a parallel session on how to work with Epi-Info and the Internet – an interactive approach
Moderators: Ms Jennifer Cain, Mr Visti Juncker, Dr Simion Pruna

As a parallel activity to the working group sessions, the above moderators introduced and demonstrated OBSQID data collection tools and databases online to interested participants.

Summary of the workshop

The key achievement of the Sixth OBSQID workshop was the commitment by the European Association of Perinatal Medicine to assume future stewardship of the OBSQID project. This collaboration, proposed by Dr Karel Marsal, follows an extensive study EAPM has conducted of the frequency of OBSQID indicators in vital registry and birth registry documents at country level throughout Europe. This collaboration with EAPM will serve as a mobilizing agent for international and national professional associations to develop OBSQID networks and will monitor the quality of perinatal care from a more generic or health system approach.

OBSQID and EAPM have common goals:
- promotion of the quality of care
- improvement of the perinatal outcome

The future tasks of the OBSQID-EAPM project include:
- to gain acceptance among perinatologists of the new OBSQID/EAPM concept and responsibility for the project;
- to increase motivation among data collectors;
- to continue/improve data collection;
- to identify existing sources of data and, if necessary, to develop the technical infrastructure at local/regional level;
- to establish a European network between perinatal databases;
- to provide timely analysis and feedback;
- to enable access to stratified perinatal data for comparisons of local/regional/national data;
- to revise the quality indicators to ensure that relevant information is being collected;
- to promote general acceptance of WHO perinatal definitions.

The OBSQID-EAPM project is committed to:
- promotion at all levels (national professional organizations, authorities, opinion leaders)
- identifying regional/national coordinators
- setting up a regional/national task force consisting of all interested parties.

The task force is committed to:
- formulate a strategy or action plan and short- and long-term objectives
- initiate quality improvement activities using OBSQID data
- find the best practice.
Next OBSQID workshops

Dr Gyorgy Bartfai of Hungary kindly offered to host the 2001 OBSQID workshop in Budapest, Hungary.

Dr Graziano di Cianni of Italy kindly offered to host the 2002 OBSQID workshop in Pisa, Italy.
Annex 1

SCOPE AND PURPOSE

In continuation of activities undertaken at the Fifth OBSQID Workshop to implement the concept and content of the project in concrete terms, the Sixth Workshop will focus on obtaining firm commitments at local, regional and national levels to carry out data collection, analysis and feedback to data submitters, in order that inter-site comparison can be conducted and centres of best demonstrated practice can be identified. Also important will be the personal commitment of individual OBSQID Workshop participants to data collection, the identification of centres of best practice and the facilitation of twinning projects between these centres of best demonstrated practice with centres requiring knowledge and expertise to improve the quality of their perinatal care.

Likewise, the meeting will review the activities undertaken to promote the development and testing of a NEOCARE case-based sheet, as well as the preliminary results of a pilot project of the DPAD (Diabetes Perinatal Aggregated Data Sheet).

The OBSQID project will seek the assistance of the Ministries of Health of the Member States of the WHO European Region in identifying and officially designating appropriate focal points for project implementation.

Consolidation of contacts made with FIGO and EAPM will be undertaken with a view to defined collaborative activities and the establishment of joint targets and objectives.
Annex 2

PROGRAMME

Thursday, 22 June
18.00–19.30 Welcome reception
Introduction to Oporto and to the workshop

Friday, 23 June
08.30–09.00 Registration
09.00–09.30 Opening
Welcoming addresses: Host (Dr M. Strecht Monteiro) and the WHO Regional Office for Europe (Dr I. Kalo)
Election of Chairperson and Rapporteur
Adoption of programme
09.30–10.00 Implementation of the project at case-based and aggregated data level: a critical review of project outcomes and successes and review of data entered into the WHO database (Dr I. Kalo, Dr K. Staehr Johansen, Mr V. Juncher)
10.00–10.15 Report on the joint EAPM/WHO EURO survey of perinatal indicators and variables in relation to OBSQID tools (Dr K. Marsal)
10.15–10.30 A briefing on the activities of the European Association of Perinatal Medicine within perinatal standards, databases and quality development (Dr M.R.G. Carrapato)
10.30–11.00 Coffee break
11.00–11.10 Perinatal mortality and stillbirths 1945-98 in the Slovak Republic: a comparison between national and local outcomes (Dr M. Ditte)
11.10–11.20 Implementation of OBSQID in the South Caucasus (Ms J. Cain)
11.20–11.30 The National Obstetric System (NOIS) in Malta (Dr L. Janulova)
11.30–12.30 Potential areas for new satellite activities: what are the prospects? Sentinel placenta and postmortem findings (Dr R. Laurini)
Multiple pregnancy (Dr L. Keith)
Transfusion vs. alternatives (Dr G. Gabra)
12.30–13.00 Questions and discussion
13.00–14.30 Lunch
14.30–14.45 Introduction to working groups (Dr I. Kalo)
14.45 – 16.00 Working group sessions:
Working groups will meet to discuss practical implementation of the proposed OBSQID satellite projects. This will most importantly concern the identification of indicators and variables. Each working group will set up a task force which will be responsible for the design of a Basic Information Sheet and pilot activities to test this sheet.
16.00 – 16.45 Reports of working groups
16.45 – 17.00 Summing up (Dr K. Marsal)
Saturday, 24 June

09.00 – 09.15  Introduction to the day’s agenda *(Dr I. Kalo)*

09.15 – 09.30  Data analysis: identification of centres of best practice and twinning activities: The example of Russia/Kyrgyzstan/United Kingdom *(Dr P. Banfield and Dr J. Gorodnitcheva)*

09.30–10.30  Reports on OBSQID-related activities:
- Neonatal BIS (basic information standards for case–based data) pilot project *(Dr J. Gadzinowski)*
- DPAD (diabetes in pregnancy perinatal aggregated data sheet) European pilot project *(Dr M. Hod)*
- The experience with DPAD in the United Kingdom *(Dr M. Maresh)*
- Violence and pregnancy – interim results of the comparative study *(Ms S. Drengsted Nielsen and Dr C. Savona Ventura)*
- Malformation, neural tube defects and ultrasound *(Dr A. Kurjak)*
- OBSQID project implementation in the Black Sea Area: How to improve data exchange through better use of information technology *(Dr S. Pruna)*

10.30 – 11.00  Coffee

11.00 – 11.15  Introduction to working groups *(Dr I. Kalo)*

11.15 – 13.00  Working group sessions. Moving ahead – strategies and targets for further implementation of ongoing OBSQID satellite activities
- The OBSQID Project – PAD and BIS implementation at local and national levels *(Moderator: Dr I. Kalo)*
- Neonatal BIS (basic information sheet for case-based data) pilot project *(Moderator: Dr J. Gadzinowski)*
- DPAD (diabetes in pregnancy perinatal aggregated data sheet) pilot project *(Moderator: Dr M. Hod)*
- Violence in pregnancy (basic information sheet pilot project) *(Moderator: Ms S. Drengsted Nielsen)*
- Perinatal wellbeing/depression (WHO Well-being (Five) Scale and other tools) *(Moderator: Dr A. Bille)*

Participants will join working groups for a detailed introduction to the ongoing projects by the moderators, discuss concrete possibilities of integrating the OBSQID indicators in their settings, and make commitments to support data collection, analysis and comparison within the OBSQID project or its satellites.

Hands on: a parallel session on how to work with EpiInfo and the Internet – an interactive approach *(Moderators: Ms J. Cain, Mr V. Juncher, Dr S. Pruna)*

13.00 – 14.30  Lunch

14.30 – 15.30  Reports from Working Groups

15.30 – 15.45  Summary and commitment *(Dr K. Marsal)*

15.45 – 16.00  Closure: Our role in developing the quality of perinatal care through the OBSQID project *(Dr I. Kalo)*
Annex 3

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Annex 4

**DEFINITION OF CONGENITAL MALFORMATION**

(R. LAURINI)

Coding the presence of congenital malformations purely on the bases of lethal/non-lethal or major/minor (ICD-10; EUROCAT) does not express the overall incidence or the clinical/counselling significance.

The diagnosis and classification of errors of morphogenesis must follow the strict definitions available in the international literature, for example the *Journal of Pediatrics* 100(1): 160–165 (1982). In this way we can differentiate between malformations, disruption, deformation and dysplasia. Furthermore, we will be able to differentiate between the polytopic field defects, a sequence, a syndrome and an association.

Therefore a malformation must be registered as either isolated or multiple (when minor malformations are to be registered), and a possible aetiology (chromosomal, syndrome, sequence, association) defined.