



Assessment of the safety and quality of hospital care for mothers and
newborn babies in Gaza strip: mission report

June 23, 2009

Assessment of the safety and quality of hospital care for mothers and newborn babies in Gaza Strip

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1. Executive summary

An assessment of the quality of hospital care for mothers and newborn babies (MN) was carried out between April 30 and May 16, 2009 in Gaza Strip within the framework of a broader project aimed at improving maternal and neonatal health. .

The objectives of the assessment were to:

1. to identify critical issues concerning the quality of MN care in selected hospitals (one regional hospital, one referral maternity and NICU and one referral paediatric hospital)
2. to suggest actions to improve MN quality at both central and health facility level, taking into account the underlying factors influencing quality of care.
3. to provide an opportunity for a national team of assessors to get familiar with the assessment tools and methods.

The assessment methods and tools were based on the experience gained in the use of the paediatric assessment tool, which was developed in 2001 by WHO and then widely used globally, including in the European Region, and in the use of the recently developed assessment tool for maternal and neonatal care.(WHO EURO, MPS). The assessment was carried out by a multidisciplinary team of international and national professionals in the hospitals of Al Aqsa , Shifa and Nasser. It included a visit to: inpatient and outpatient services in both maternity and newborn wards, delivery room and nursery; examination and discussion of selected cases among the admitted patients, examination and discussion of selected clinical records, interviews with health professionals and mothers, and a preliminary feedback to the local staff at the end of the assessment

The assessment showed that the quality of care for mothers and newborn babies was often satisfactory. However, there were some critical issues that need to be underlined:

- a) lack of updated knowledge of international standards;
- b) insufficient use of diagnostic and therapeutic protocols, even as far as simple rules for hygiene and sterility is concerned;
- c) lack of integration and continuity of care between professionals and services;
- d) important information for the care of patient is often not readily available;
- e) lack of a precise definition of roles and responsibilities across different professionals;
- f) poor support to women during labour,delivery and breastfeeding

There were also several examples of good and even excellent quality of care, showing that ensuring good quality of care is possible even in difficult contexts.

Recommended action in the short term include:

- a) technical support to the development dissemination and implementation of clinical guidelines and protocols
- b) training in evidence based medicine, effective perinatal care, quality improvement and clinical audit for professional teams.
- c) development and implementation of appropriate medical records and monitoring charts, and of a monitoring system for clinical activity based on process and outcome indicators.

1. Background and objectives

The overall aim of the assessment was to ensure safe childbirth through the enhanced availability, access and use of high-quality, skilled care for all women and their babies in the Gaza strip. As a result, infant and maternal morbidity and mortality should be reduced and long-term disabilities prevented.

The specific objectives of the assessment were:

1. to identify critical issues concerning the quality of MN care in selected hospitals (one regional hospital, one referral maternity and the NICU and one referral paediatric hospital).
2. to suggest actions to improve MN quality at both central and health facility level, taking into account the underlying factors influencing quality of care.
3. to provide an opportunity for a national team of assessors to get familiar with the assessment tools and methods, so that the experience can be replicated without external support.

2. Agenda, methods and participants

The agenda of the assessment visit, preparatory work and debriefing is reported in Annex 1a and Annex 1b. The international assessors had to arrange their agenda to meet their own professional commitments. As a result, assessment visits were only partially simultaneous.

The international team of assessors was composed by: Giuseppina D'Ottavio, obstetrician and gynaecologist, Head of the Prenatal Diagnosis and Therapy Unit, Institute for Maternal and Child Health, Trieste, Italy; Gabriella Grlica midwife, Prenatal diagnosis and Therapy Unit, Institute for Maternal and Child Health, Trieste, Italy; Rosalia Da Rioli, neonatologist, Neonatology and Neonatal Intensive Care Unit, University Regional Hospital, Udine, Italy.

The assessment methods and tools were based on the experience gained in the use of the paediatric quality assessment tool developed in 2001 by WHO and then widely used globally, and of the *Tool for assessment of quality of care for mothers and newborn babies in hospitals*, recently developed by WHO Regional Office for Europe within the Making Pregnancy Safer programme, with technical support from WHO Collaborating Centre in MCH, Institute for Maternal and Child Health, Trieste, Italy, and field tested in Albania in January, 2009¹⁻³.

The tool is intended to allow a problem based action-oriented careful assessment of all the major areas and factors which may have an impact on QoC such as infrastructure, supplies, organisation of services, and case management, focusing on the areas that have been shown to have the greatest impact on maternal and newborn mortality and serious morbidity, as well as on maternal and neonatal wellbeing. A scoring system (3 = good quality care, no need for improvement; 2 = suboptimal quality with no major health consequences; some need to improvement; 1 = suboptimal quality with potential for severe consequences; strong need for improvement; 0 = widespread poor quality of care) is used to facilitate the identification and prioritization of the areas that need improvement.

The items included in the assessment were chosen to provide a comprehensive assessment of the four dimensions of QoC as identified by the WHO European Strategic Approach for Making Pregnancy Safer: 1) be based on scientific evidence and cost/effective; 2) be family centered, respecting confidentiality, privacy, culture, belief and emotional needs of women, families and communities; 3) ensure involvement of women in decision-making for options of care, as well as

for health policies; 4) ensure a continuum of care from communities to the highest level of care, including efficient regionalization, and multidisciplinary approach.

For the purpose of the assessment in Gaza strip, the perinatal tool was slightly revised to adapt to local needs. The reference standards for the assessment were represented by the WHO Pocket Book on Hospital care⁵ by the IMPAC package of guidelines⁴⁻⁷ and by the WHO Regional Office for Europe Effective Perinatal Care training package⁸.

The international team got familiar with the tool prior to the meeting (Mrs. Grlica participated in the pilot testing in Albania) and met again after arrival in Gaza for a further briefing on how to present objectives and methods to the hospital staff. Logistical aspects and security issues were also discussed in the WHO office.

A briefing on aims and methods of the assessment and on the assessment tool was held with the staff of each hospital at the beginning of the assessment.

Prior to the visit, usually the night before, the assessment team discussed the main data (patient flow, available outcome and process indicators, infrastructure including availability of equipment drugs and supplies) from the questionnaires which had been sent to hospital managers and was completed by the hospital staff about one month before the assessment visit.

The assessment included a visit to the inpatient and outpatient services in both maternity and neonatal wards, delivery room and nursery; examination and discussion of selected cases among the admitted patients; examination and discussion of selected clinical records; interviews with health professionals and mothers. The assessors met at the end of the work to collect and discuss the main findings and to prepare the final synthetic presentation of the main findings to the local health professionals.

The assessment tasks within the team of assessors were distributed as follows: obstetrical assessment: Giuseppina D'Ottavio and Gabriella Grlica; neonatological assessment: Rosalia Da Riolo, and were carried out with collaboration and support of the WHO team: Lubna Al Sharif, Abdelnaser Soboh, Amani Jouda, Itimad Abu Ward and Silvia Pivetta

After the visit were completed, the international and WHO teams met together to assemble the information, discuss findings and recommendations, including for improvement of assessment methods and tools. A debriefing session was held in each hospital with representatives of neonatologists, obstetrician, midwives and nurses.

3. Results

Facility-specific findings

The main findings for the maternities wards in Al Aqsa and Shifa, and for the neonatal wards and NICU in Al Aqsa, Nasser and Shifa are reported in Table 1 and 2, respectively. Scores represent the average score of the items included in the respective areas. For each problem identified, a list of actions to address the issues is suggested. The list of suggested actions is the result of discussion within the assessors' team and with WHO team after the debriefing session with each hospital MoH team.

Tab 1-2. Summary of assessment of quality of maternal and neonatal care and relevant suggestions.

Assessment summary results
Obstetric and Gynaecology units
Al Aqsa Martyrs and Shifa Hospitals

Areas	Aqsa	Shifa	Main strengths	Main problems	Actions
Hospital health statistics	1	1,5	In the in patient wards medical records are well design, updated, clearly written	- In the delivery room insufficient data collection, incomplete filling about performed procedures on medical records -General lack of analysis and related decision making - Information from antenatal records, previous admission and intrapartum records are not available to staff	- develop a list of indicators to be collected and analyzed - Make use of home-based records (Antenatal follow up card)
Drug availability	2,5	2,5	Most useful drugs are currently available	- Misoprostol unavailable in the hospital - Drug supply has been improved only after the war: availability can be limited by political/economic constraints	- Misoprostol should be included in the EDL and procured - Supply should be guaranteed
Equipment and supplies	1	1	Most essential equipment and supplies are available	- CTG and US machines are not properly used - Insufficient number of CTGss - US machines are old and without pulsed Doppler - Lack of foetal stethoscopes -Maintenance of equipment / instruments is neglected	-Improve availability and use of essential equipment - Maintenance should be improved
Availability and use of lab support	2	3	Essential lab tests available and timely delivered	Sometimes reagents are not available (Aqsa)	Improve reagent supply
Basic infrastructure	1	2	-Hot water and electricity normally available. -SHIFA: separate 24h emergency department	- SHIFA: Separate room with 2 beds for admitting infectious cases but without a separate toilet - AQSA: Insufficient space and condition in delivery room - No isolation room in the obstetrical department	- Improve conditions and better use of available space - Reorganisation of space among different departments (e.g. according to BOR)
Maternity ward (organisation and equipment)	1,5	2	-Newborns are roomed in with their mothers -SHIFA: Seriously ill women are cared for in a section with closer attention	- Mattress and beds are old and unsafe - Bathrooms are few and shared with staff - Shortage of number of beds - AQSA: Intensive care of seriously ill patients done in labour room.	-Improve essential equipments, beds and mattresses - Reorganisation of spaces within the hospital

Normal Labor	0,5	1	<ul style="list-style-type: none"> - Capacity to respond to emergency is good SHIFA: Good human resources especially midwives - Good professional knowledge and skill 	<ul style="list-style-type: none"> - Lack of protocols for care of normal births (i.e. PARTOGRAM IS NOT USED!). - Inappropriate use of existing equipments (e.g. CTG) - Inadequate management of normal labour (excess of vaginal examinations, clinical records are not appropriately filled and used for clinical management) - Privacy not respected - Equipments old and rusty, difficult to clean - Women are left alone during labor (AQSA) and delivery <p>AQSA: Midwife role is neglected (i.e. mother support, management of normal labour and delivery, post partum counselling and support)</p> <ul style="list-style-type: none"> - Dangerously inadequate achievement of sterility - Very poor cleanliness 	<ul style="list-style-type: none"> -Development and use of local protocols in normal birth - Use of partogram - Guidelines for performing and interpreting CTG - Use of stethoscope for intermittent auscultation if CTG not available - Improve midwife role (e.g. Job description, training) - The patient mother (or another relative) allowed to stay in the delivery room for help and support. - Improve manoeuvres for sterility and cleanliness - Improve organization of hospitality and attitude of staff -Wall chart with APGAR score -Training locally and abroad
Cesarean Section	2,5	2,5	<ul style="list-style-type: none"> -Excellent surgical skills -Reasonable CS rate 	<ul style="list-style-type: none"> - Cleanliness and sterility to be improved -Antibiotic prophylaxis is not done (post surgery therapy) -Lack of clock in CS surgery room (SHIFA) 	<ul style="list-style-type: none"> -Improve basic low cost equipment supply -The use of antibiotic prophylaxis to be reconsidered
Maternal complications	2	1,5	<ul style="list-style-type: none"> - Good knowledge -AQSA: Appropriate therapy in PPRM 	<ul style="list-style-type: none"> - Neither national clinical guidelines nor local protocols based on evidence are available. (correct procedures are performed but not scheduled) - No screening strategy SHIFA: Inappropriate Antibiotic therapy in PPRM 	<ul style="list-style-type: none"> - Development and use of protocols from national guidelines -Improved curricula training and continuous medical education (quality improvement concepts and evidence based approach)
Emergency care	2	2	<ul style="list-style-type: none"> Good professional knowledge and skills SHIFA: Good organization AQSA: Appropriate antibiotic therapy in PPRM 	<ul style="list-style-type: none"> No national clinical guidelines, no local protocols (correct procedures are performed but not scheduled) AQSA: Emergencies are managed in the labour ward (narrow space) Lack of written list of procedures SHIFA: Poor filing system 	<ul style="list-style-type: none"> -Development and use of local protocols adapted from national guidelines - A wall chart or job aid should be located in emergency area to identify and treat patients by severity of conditions

Supportive care/Infection prevention	1	1	- No routine use of drugs of unproven effectiveness - Blood is only given when indicated	- Hand washing is not appropriately done - Lack of GBS screening and prophylaxis - Improper use of both sterile and disposable gloves - Insufficient and improper cleaning of floors and bathrooms	-Information on hand washing technique should be put above the wash bowls -Gloves should be changed for each manoeuvre if contaminated
Monitoring and follow up	2	1,5	-Seriously ill patients are reassessed by doctor at the admission and reviewed twice daily AQSA: Follow up is correctly planned particularly for at risk patients	-The risk of early discharge is not mitigated by any measure - Lack of standard monitoring charts SHIFA: Follow up in case of previous maternal complications is suggested but not planned	-Counselling mothers before discharge - Establish criteria for discharge -Plan follow up for at risk patients - Coordination with PHC
Guidelines and auditing	0	0		Neither protocols or guidelines are available Nurses and midwives are not involved in staff meetings	-Development and use of local protocol -Improve team work and auditing -Periodical Meeting to be planned including all health professional figures
Access to hospital care	3	3	No hospital fees No unofficial payments Good geographical access		
AVERAGE SCORE	1	2			

Assessment summary results
Neonatal Units
Al Aqsa Martyrs, Naser and Shifa Hospitals

Areas	Al Aqsa	Naser	Shifa	Main strengths	Main problems	Actions
Basic infrastructure	1	1,5	2	Hot water and electricity normally available	Infrastructure is old, maintenance is not adequate. Lack of space and, sometimes, inappropriate use of it : -in Al Aqsa the position of room for outpatient visits doesn't follow the key recommendations for infection prevention and control -in Shifa there is no place where admitted newborns' mothers can rest. - In Nasser NICU air conditioning system is too close to Incubators.	-Improve conditions, -More rational and efficient use of space. - Attention should be given to the factors of conductance and radiance in heat transfer.
Hospital health statistic	1	1	2	Computer based information system on patient flow and perinatal indicators in Shifa Hospital	Paper based information system, on patient flow and perinatal indicators, not completed -No computer based information system on patient flow and perinatal indicator in Al Aqsa and Nasser Hospital) -Data collection is intended essentially for administrative use, not for improving and monitoring clinical work.	An essential basic indicators common system should be adopted and used - statistical analysis should be used also for monitoring case management - More detailed information for death diagnosis of Suspected Metabolic Disease -More data on local epidemiology of Inborn Errors of Metabolism is needed
Medical records	1	1,5	2	One Therapy Sheet to prescribe and to administer medication is used	Different and partially substandard clinical records keeping in the three Hospital -In AlAqsa , the PNA MoH NICU Admission Form is not used. -Information from antenatal records or from previous admissions is not easily available to staff providing care to newborn	Disseminate and use existing MoH good models of clinical records, the same in the three Hospitals. Improve clinical records keeping, involving all different professionals

Equipment and supplies	1	1,5	2	Reasonable good availability of basic equipment and tools.	-Significant differences among hospitals regarding basic equipment availability. -Lack of transport neonatal incubators in the three Hospital - Lack of US machine in Shifa NICU -Significant problems in the three hospitals for maintenance (lack of specialized technicians and irregular reagent supply)	Improve essential equipment and maintenance .
Drug availability	2,5	2,5	2,5	Good availability of drugs and supplies	Al Aqsa: Fentanyl and Surfactant not available Naser: Fentanyl and Phenobarbital not available Shifa: Surfactant and Trophamine not available	Ensure availability of missing drugs
Laboratory support	3	3	3	Essential laboratory tests available and timely delivered	Inadequate maintenance of facilities Lack of specialized technicians and of constant reagent supply Lack of ammonemia analyzer in AlAqsa and Nasser	Ensure essential equipment and maintenance .
Guidelines and auditing	1	0	1,5	Good medical knowledge and skill. Some nursing protocol in AlAqsa not easily accessible Neonatal Resuscitation guidelines on some wall posters in Shifa	Lack of adequate and update guidelines on neonatal care in the three Hospital -No audits are performed to review cases of death and complications Only occasional and very restricted staff meeting are hold to discuss some cases. -Inadequate frequency of multiprofessional clinical audits (in Al Aqsa only morning round is carried out)	Implementation of national clinical guidelines and local protocol on neonatal care Protocols, dosages, etc. should be easily accessible and possibly visible in all treatment areas Supply WHO and MoH manuals Multiprofessional clinical audits, aimed to improving quality of care, must be implemented.
Routine neonatal case	2	2	2	Good medical knowledge and skill Good staff collaboration	Inadequate breastfeeding support. -No guidelines to teach mothers to care the baby at home -Privacy and confidentiality not always respected	Development and use of national clinical guidelines and local protocols on breastfeeding support.

						<p>Better use of available space</p> <p>Development and use of national clinical guidelines and local protocols on breastfeeding support.</p>
Case management and sick newborn care	2	2	2	<p>Good medical knowledge and skill</p> <p>Good case-management of medical complication</p> <p>Appropriate approach to emergencies</p>	No national clinical guidelines and no local protocols based on evidence	<p>Development and use of national clinical guidelines and local protocols on major complications</p> <p>-Improved curricular training and continuous medical education (evidence based approach)</p> <p>-Improved counselling /communication skills with mothers and families</p>
NICU	SCBU	1,5	2	<p>Good medical knowledge and skill</p> <p>Good case-management of medical complication</p> <p>Appropriate use of drugs</p>	<p>No national clinical guidelines and no local protocols based on evidence</p> <p>Lack of management strategies to prevent neonatal pain and stress</p> <p>Shortage of staff, inadequacy of equipment, stressful work reduce nurses and doctors motivation.</p>	<p>-Use of national clinical guidelines and protocols on major complications</p> <p>-Development and use of national guidelines on preventing and treating pain and stress among infant in NICU</p> <p>-Improved continuous medical and nursing education on neonatal care.</p> <p>-Improve involvement of nurses in neonatal and parents care</p>

Infection, prevention and supportive care. Mother and neonates friendly service.	1	1	1	<p>Good knowledge about infection prevention and control.</p> <p>In Shifa NICU each newborn in incubator has a stethoscope dedicated</p> <p>In Nasser NICU alcohol based hand gel is sometimes available</p>	<p>Hand washing is not appropriately done.</p> <p>Disposable towels and antiseptic with hopper are not always available in the three hospitals</p> <p>Lack of attention for basic needs of admitted babies' mothers (e.g. lack of access to a toilette or to a space where to rest in Shifa H. for NICU newborns' mothers)</p>	<p>Implementation and internalization on hand washing protocols</p> <p>Ensure the continuity of disposable towels and antiseptic products supply.</p> <p>Improve knowledge of neonatologists on developmentally supportive care.</p> <p>-Application of Baby Friendly Hospital principles</p>
Monitoring and follow up	1	1	1	<p>Monitoring actions are regularly performed</p>	<p>-Monitoring actions are not appropriately recorded</p> <p>-For some severe conditions monitoring not frequent enough</p> <p>-Early discharge not mitigated by any measure</p>	<p>Improved record keeping and communication within staff</p> <p>-Disseminate to all hospitals existing good models of clinical records</p> <p>-Discharge criteria, counselling to mothers, plan follow up</p>
Average score	1,50	1,54	1,91			

Area-specific findings

Neonatology:

1. Too early neonatal discharge after birth could be unsafe for newborn babies, especially if mothers information and support are lacking.
2. There is a lack of transport incubators in the three neonatal units.
3. There is insufficient attention to the needs of mothers of admitted babies and insufficient knowledge on developmentally supportive care for newborn babies.
4. There is a lack of exchange of experiences and discussions about transferred patients between the three neonatal units.
5. The role of the neonatal nurses in clinical activity and for mothers' support is underestimated.
6. Nurses' shift rotation is mainly determined by organisational needs and not by training and skills, thus reducing the competences and favouring their demotivation.

Obstetrics:

1. The role of midwife is not well defined, mainly due to lack of indications by the central level. Moreover, there are three different levels of training with different duration and acquired skills.
2. The use of partograph is lacking. The consequence is "personal" medical management of labour (plenty of vaginal examinations in a short period of time, lack of coordination in action).
3. The needs for privacy and dignity of the woman are not sufficiently taken into account.
4. The parturient is left alone during the labour (Aqsa) and/or delivery (Aqsa and Shifa) and early discharge is due to the shortage of beds which are also old and uncomfortable. The lack of linkage with primary care structures, and the lack of precise, written recommendations make the discharge unsafe.
5. There is plenty of useless ultrasound examinations, due to lack of protocols defining a risk-based patient selection.

Common critical aspects

Irrespective of the specificities of each area of care (obstetric, midwifery care and neonatal care) the assessment in the three hospitals identified several common critical aspects:

1. The paper-based information system on patient flow and perinatal indicators is not adequate: data collection is intended for administrative use only, and is not used for improving and monitoring clinical work.
2. Outpatient care is provided by several components of the health systems, including hospitals, without clear definition of roles. Hospitals should take care of follow-up visits for previously admitted patients, antenatal visits for women at risk, specialist consultations and, of course, emergencies. They should not take care of low risk pregnant women, women and children with common symptoms. This overlap of functions between primary care and hospital care (which can be found in several health systems including in EU countries), does not necessarily result in poor care, but certainly in inefficient use of financial resources.
3. Emergency care is provided without a clear distinction between true emergencies and general outpatient visits, which may cause real emergencies not to be dealt with promptly and appropriately.

4. Although case management of most common conditions and complications is well conducted and generally in accordance with established international standards in both obstetric and neonatal care, written guidelines and protocols are lacking
5. No multi-professional audits are performed to review cases of death and complications and only occasional and very restricted staff meeting are held to discuss clinical cases and review procedures.
6. In the obstetrical area inappropriate use of drugs is frequently observed, including unnecessary antibiotic therapy in case of minor surgery, admittedly to compensate the lack of sterility, or- in case of caesarean section- instead of preoperative prophylaxis.
7. In the neonatal area, the lack of strategies to prevent neonatal pain and stress is one of the main concerns.
8. Although medical records are generally well kept and include the key information, in the obstetric / midwifery area they are not always filled in and used appropriately. There is frequent lack of continuity of information within and among different levels and components of maternal and neonatal care so that information potentially crucial for maternal or neonatal case management is missed.
9. Maintenance and updating of equipment instruments is not adequate. The supply of drugs and laboratory materials is not constant.
10. Hand washing is not appropriately done and key recommendations for infection prevention and control are not completely implemented.

Findings from the interviews

Although limited in number due to time, and language constraints, the interviews with health professionals (4 obstetrician/gynaecologists, 3 neonatologists, 2 midwives; 3 nurses (two NICU nurse, one neonatology ward nurse) provided interesting insights into issues related with quality of care. The most frequent cause of deaths or severe complications (“near miss”) were reported to be haemorrhage and puerperal sepsis, with underlying factors being mostly late presentation of patient. As for newborn deaths, the most frequent causes were congenital anomalies, neonatal sepsis, birth asphyxia and prematurity. Critical issues for quality were consistently identified in: a) lack of basic infrastructure, hygiene of toilets and washing facilities for patients, quality of the food for patients; b) lack of supplies (paper towels and non-alcohol gel) and equipment (cardiotocography, ultrasounds, equipment for assisted ventilation, transport incubator); shortage of staff and lack of motivation ; d) insufficient training both on the job and through scheduled CME events.

A feeling of being left alone both during labour and delivery, is the outmost evidence which arises from mothers' interviews.

4. Conclusions and recommendations

How to improve the quality of care for mothers and newborn babies in Gaza hospitals.

Despite insufficient infrastructure, lack of updated equipment and shortage of hospital staff, the quality of care seems to be acceptable due to good individual knowledge and skills and to dedication showed by the vast majority of professionals. Case management, including diagnosis, medical and surgical therapy is generally satisfactory.

Nevertheless, significant improvements in the quality of care could be achieved by addressing a few critical issues:

- a) Guidelines development and implementation
- b) Training and CME for doctors, midwives and nurses
- c) Data collection and use
- d) Integration and continuity of care between professionals, services and levels of care
- e) Infrastructure and hygienic facilities and supplies.
- f) Support to women during labour, delivery and breastfeeding, and to mothers of admitted newborns

Specific recommendations to be considered include the following actions:

- Develop a list of indicators to be collected and regularly analysed
- Make use of home-based records, of antenatal and follow up cards
- Improve availability and maintenance of essential equipment and supplies such as beds and mattresses
- Improve conditions and make better use of available space
- Implement protocols and guidelines (use of partograph, correct use of CTG, neonatal resuscitation flow chart etc.)
- Improve midwife role (identification of action and responsibilities)
- Implement the role and competences of nurses in NICU
- Improve procedures for sterility and cleanliness
- Improve general knowledge about key recommendations for infection prevention and control , especially regarding hands washing
- Training stages, both locally and abroad
- Introduce information and advice to mothers before discharge
- Plan follow up for at risk patients in coordination with primary health care services.
- Improve team work and auditing through periodical meetings to be planned including all professional figures.

B. How best to conduct the assessment: lessons learned

1. **The availability of a full multidisciplinary team** both on the external evaluator's side and the internal /national team is crucial. In this case, due to some difficulties of national assessors in evaluating their own colleagues, we were forced to renounce to their collaboration. Furthermore, there was an incomplete overlap of international assessors' visits. In spite of all this, the experience was considered very favourably by the local team and the staff of the hospitals that were assessed.

2. **The interviews to staff and mothers** have a great potential to get insights into dimensions of care that otherwise would be only superficially evaluated. To be fully utilized, the interviews need to be numerous, therefore require time and interviewing skills, particularly in mothers' ones. In our assessment, a great effort was made to obtain the best possible results given the available time and human resources, taking also into account the need for translation, to ensure confidentiality, etc.

3. **The assessment tool** proved to be excellent instrument to guide the assessment and to provide relevant, focused, action-oriented information in the assessed health facilities. The international team was already familiar with the content of the tool but, with one exception (the midwife) was never involved in its use before. Nevertheless the whole team was quite satisfied with the performance of the tool in relatively "new hands". The hospital staff expressed positive comments on the structure and overall philosophy of the tool.

4. **The preparatory phase of the assessment** was crucial to the assessment success, in terms of local involvement, participation and ownership. During this phase, which lasted for about 6 weeks, a local multiprofessional technical team – with WHO facilitation – carried out a throughout revision of the assessment tool and its adaptation to the local context, the data collection of data from routine hospital statistics and its preliminary analysis. Also, the standards of care utilized by the assessment tool have been discussed in advance and endorsed.

5. **The immediate follow up phase of the assessment**, during the two weeks following the assessment, included: a) a priority setting exercise, with the identification by the Technical Team of some problematic areas – among those spotted by the assessment - to be prioritized and talked during the first quality improvement cycle of the program; b) the development of a detailed plan of action related to each hospital unit, by the Hospital teams; c) the involvement of the relevant policy makers and support teams (e.g. H general directors, directors of supply and maintenance department etc.) through a workshop, where the assessment findings and the plans of actions were presented and discussed.

The international team thanks the hospital staff of SHIFA, NASSER and AL AQSA.

Dr Thabit Al Masry	Shifa H	Head, NICU Neonatologist
Dr. Monzer Ghazal	Shifa H	Ob/ Gynae cologist
Ms Buthina Shaikh Khaleel	Shifa H	Head- Labour Ward Midwife
Ms Visa Za'aneen	Shifa H	Supervisor- Midwifery
Dr Majdya Juda	Pediatric H	Head NICU Neonatologist
Dr Saed Barakat	Pediatric H	Head of NICU Neonatologist
Dr. Khalid Al Najjar	Aqsa H	Head NICU Neonatologist
Dr. Yagoub Al Najjar	Aqsa H	Deputy Head NICU Neonatologist
Dr Mohammed Doweedar	Aqsa H	Head Ob/Gyn (Ward 2)
Mr Iyad Abu Shammah	Aqsa H	Head Nurse- NICU Nurse
Dr Salwa Abu Salem	Aqsa H	Head Ob/Gyn (Ward 1)

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Annex IA

Assessment tool for the quality of hospital care for mothers and newborn babies Agenda
Giuseppina D'Ottavio and Gabriella Grlica - May, 3 to May, 16 2009

Sunday, 3 may

Arrival in Amman

Monday, 4 may

8:30 – 15.15 Israeli Consolat . Then Travel to Jerusalem

Tuesday, 5may

Traveling to Gaza

Wednesday, 6 may

8:30 - 14:30 assessment in Shifa

Venue: Hospital area

15:00 - 18:00 processing first data collected

Venue: WHO office

Thursday, 7 may

8:30 - 14:00 assessment in Shifa

16:00 - 18:00 assessment in Shifa

Venue: Hospital area

Friday, 8 may and Saturday, 9 may

Data processing and report preparation

Sunday, 10 may

8:30 - 11.30 completion data collected

Venue: WHO office

12:00 - 14:00 finalization of result and how to improve care with dr Monzer Ghazal and preparation of debriefing

Venue: Hospital area

Monday,11 may

8:30 - 11:00 internal meeting team of expert and Who staff (preparation of debriefing)

Venue: WHO office

12:00 - 14:00 _Debriefing with hospital team

Venue: Hospital area

Tuesday, 12 may

9:00 - 14:00 Assessment in Al Aqsa

Venue: Hospital area

15:00 - 18:00 processing first data collected

Venue: WHO office

Wednesday, 13 may

9:00 - 16:00 Assessment in Al Aqsa

Venue: Hospital area

Thursday, 14 may

8:30 - 10:30 internal meeting team of expert and Who staff (preparation of debriefing)

Venue: WHO office

12:00 - 14:00 Debriefing with hospital team

Venue: Hospital area

Friday,15 may and Saturday, 16 may _Departure from Gaza to Amman / Departure from Amman to Italy

ANNEX 1B

Assessment tool for the quality of hospital care for mothers and newborn babies Agenda
Rosalia Da Riol - 30 April to 09 May. 2009

Thursday, 30 April

Arrival, office orientation, agenda discussion and security up date.

Saturday, 02 May

Assessment in Al Aqsa Martyrs Hospital

Sunday, 03 May

Assessment in Al Aqsa Martyrs Hospital and debriefing with Dr. Khalid Al Najjar , Head of Neonatal ICU, dr. Yagoub Al Najjar Deputy Head NICU

Neonatologists, Neonatologist staff and Mr Iyad Abu Shammah Head Nurse- NICU

Monday, 04 May

Assessment in Nasser Pediatric Hospital Gaza City

Tuesday, 05 May

Assessment in Nasser Pediatric Hospital Gaza City

debriefing with dr. Saeed Barakat, Head of NICU Neonatologist Dr Majdya Juda , Head NICU Neonatologist and Neonatologist Staff

Wednesday, 06.May

Assessment in Shifa Hospital Gaza City

Thursday, 07.May

Assessment in Shifa Hospital Gaza City

Saturday, 09 May

Assessment in Shifa Hospital Gaza City

debriefing with the Head of NICU , Dr Thabit Al Masry, Neonatologist Staff and Mr Zead Ismail Morgan, Head Nurse- NICU

May, 10 May

Discussion of the preliminary report with Lubna Al Sharif, WHO Quality of health care National officer – Gaza office and Dr Silvia Pivetta, Program manager.

Departure.