REGIONE TOSCANA

Centro Salute Globale
Regione Toscana

MEYER

RECOMMENDATIONS AND GOOD PROFESSIONAL PRACTICES CONCERNING ASSISTANCE TO PREGNANCY,CHILDBIRTH AND NEWBORN IN INTERVENTIONS OF INTERNATIONAL HEALTH COOPERATION

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Introduction

Health Cooperation interventions realized through the efforts of the Tuscany Region have the pressing requirement of pursuing efficiency and efficacy, for an ethical use of resources. This document, starting from physiological promotion practices and encompassing the treatment of the most frequent pathologies, represents a lean guide to good clinical practices, with particular attention towards:

1. Highlighting the most strongest general guidelines and recommendations, based on the best and most recent evidence (WHO and other institutions);
2. Leading the design, validation and monitoring process of projects aimed at improving clinical outcomes;
3. Providing an easy access to the most representative scientific papers and guidelines in a concise and practical form;
4. Presenting the good practices that have achieved success on the field.

We would like to thank all the professionals who contributed to the writing of this document under the coordination of the Global Health Center (CSG).. We hope that this work will prove itself useful to those who struggle with the promotion of maternal and neonatal health in the regions where giving birth, being born and growing up still are challenges that cannot be taken for granted.

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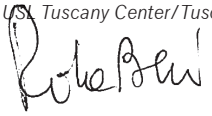
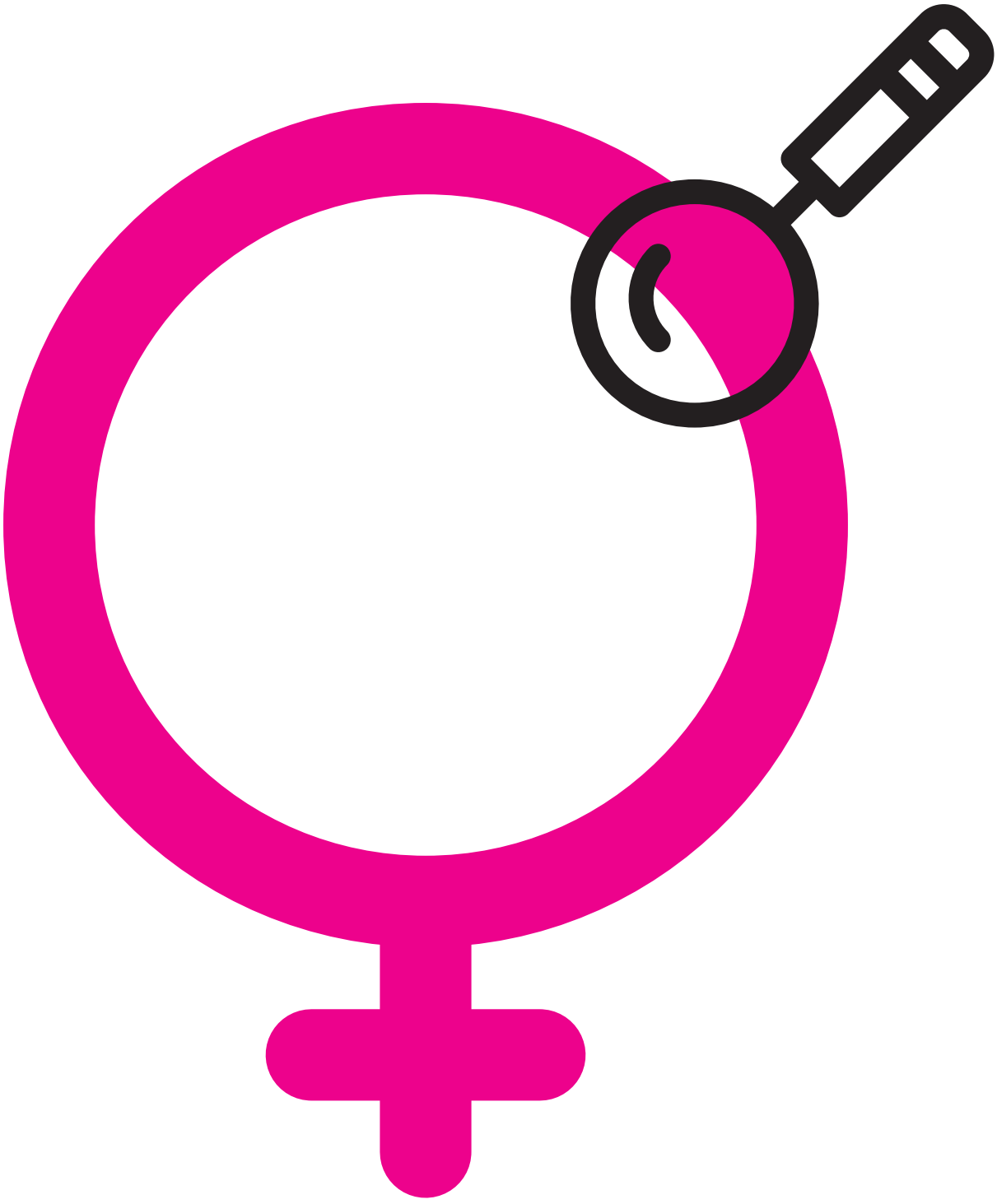


1.Institutional Vision



1.Institutional Vision

1.1 maternal health

Maternal mortality is still unacceptably high, despite a remarkable reduction in the last few years. It is estimated that in 2015 approximately 303.000 women will be killed by pregnancy or labour related complications (approximately 830 women per day).
In 2015, the maternal mortality rate in poor countries was 239 per 100.000 live birth, compared with 12 per 100.000 live births in industrialized countries. Almost all maternal deaths (99%) occur in poor countries, more than half of these deaths in sub-Saharan Africa and almost one third occur in southern Asia. This high number of maternal deaths in specific areas of the world reflects inequalities in the access to health services and highlights the gap between the rich and the poor. More than half of all the maternal deaths occur in fragile and deprived environments and most of them could be easily avoided by simple preventative and curative interventions.
The risk of maternal mortality is higher for girls under 15 and complications during pregnancy and childbirth are one of the main causes of death among teenagers in poor countries.

Women in poor countries go through many more pregnancies than women in developed countries, and their risk of death during the reproductive age is very high. The likelihood that a woman will die for causes related to pregnancy is 1 out of 4.900 in developed countries, compared with 1 out of 180 in poor countries and even 1 out of 54 in countries identified as fragile states.*
*A state is fragile when it is unwilling or unable to assume the necessary means for fighting poverty, promote development, population security and the respect of human rights.

Maternal deaths occur due to complications during and after pregnancy and childbirth.
The major complications that are the cause of almost 75% of all maternal deaths are:

1. Serious bleeding (postpartum hemorrhage especially);
2. Infections (especially after childbirth);
3. High blood pressure during pregnancy (pre-eclampsia and eclampsia);
4. Various childbirth complications;
5. At-risk abortions.

Pre-existing pathological conditions become more serious during pregnancy: malaria, HIV / AIDS, anemia and malnutrition involve major maternal and neonatal complications and situations where the prevalence of these conditions is high see an increase in the likelihood of death. New data suggest that women who have been subject to female genital mutilation (MGF) are significantly more at risk of having complications during childbirth, and for this reason the condition must be identified on time. Gender violence, exposure to hazards at working site, depression at the end of pregnancy and during the postnatal period, are additional and often underestimated public health issues.

*OCSE:
«Uno Stato è fragile quando non intende o non è in grado di assumere le necessarie funzioni per la lotta contro la povertà, la promozione dello sviluppo, la sicurezza della popolazione e il rispetto dei diritti dell'uomo»

1.2 infant health

Globally, there has been a great deal of progress in reducing the mortality of children under the age of five years; however, there is a considerable number of children still dying for preventable causes such as labour and delivery complications, premature birth, pneumonia, diarrhea, sepsis and malaria. Nearly half of all the deaths under five years old are associated with denutrition.
The biggest challenge in reducing child mortality focuses on the time span set around birth; 45% of the deaths of children under five years old occur during the neonatal period, especially in the first, critical, 28 days of life.

In 2015, 2.7 million children died during the first 28 days of life and 2.6 million children were born dead. In sub-Saharan Africa, it is estimated that 900.000 children die during the last twelve weeks of pregnancy. Stillbirths are related to a series of causes, including maternal infections and complications during pregnancy.

Infants incur in consequences of pregnancy complications such as premature births and other factors that influence growth (eg congenital infections, fetal alcoholic syndrome). Family, context, and beliefs of the community affect health during pregnancy, whether positively or negatively. Some cultures promote special foods and rest during gestation, but in others pregnancy does not get any particular recognition.
In such cases women continue to work harshly, and nutritional taboos can deprive them of essential nutrients, adding new problems to chronic nutritional deficiencies (iron, protein and some vitamins).
However, most infant deaths are easily preventable by proven and readily available methods. The rate of reduction of child mortality can accelerate considerably if focus is set on the regions with the highest levels of mortality, like Sub-Saharan Africa and South Asia.

1.3 CSG's vision and recommendations

The Global Health Center (CSG of Tuscany Region) is the result of an innovative alliance between Health Authorities, Regional Government and Universities. It coordinates regional initiatives related to global health issues (migration and health, health inequalities and health systems, tropical diseases, international health care cooperation). With this reasoning CSG both promotes and realizes international health cooperation projects geared towards equity, the fight against social inequalities and the accessibility of health services, trying to strengthen local health systems as a whole. Projects are locally implemented by private and public health authorities, nonprofit organizations and various associations acting as a bridge between the ground of intervention and the CSG. The latter guarantees the strategy's efficacy and its adherence to the original vision.ì

The main areas of interest of cooperational projects are:

1. Training of health care staff;
2. Technical and institutional assistance;
3. Interventions on both hospitals and territory within a Primary Health Care logic;
4. Interventions in local communities;
5. Health education for local and migrant communities in Tuscany;
6. Scientific research and innovation in healthcare

Maternal and child health is a priority in international health care cooperation initiatives, and CSG, in line with national and regional cooperation strategies,is currently focusing on the intervention

1.Cornice istituzionale e vision del CSG

area on the closest geo-political quadrants, such as Sub-Saharan Africa and the Mediterranean.

The perinatal field is a key opportunity for healthcare professionals to provide care, support and informations to locals, a crucial moment to promote healthy behaviors and adequate lifestyles including good diets, breastfeeding, disease prevention and diagnosis, family planning counseling, child growth monitoring.
The same activities must be guaranteed to the migrant communities in Tuscany, so that they may become catalysts for the dissemination of informations in their countries of origin.

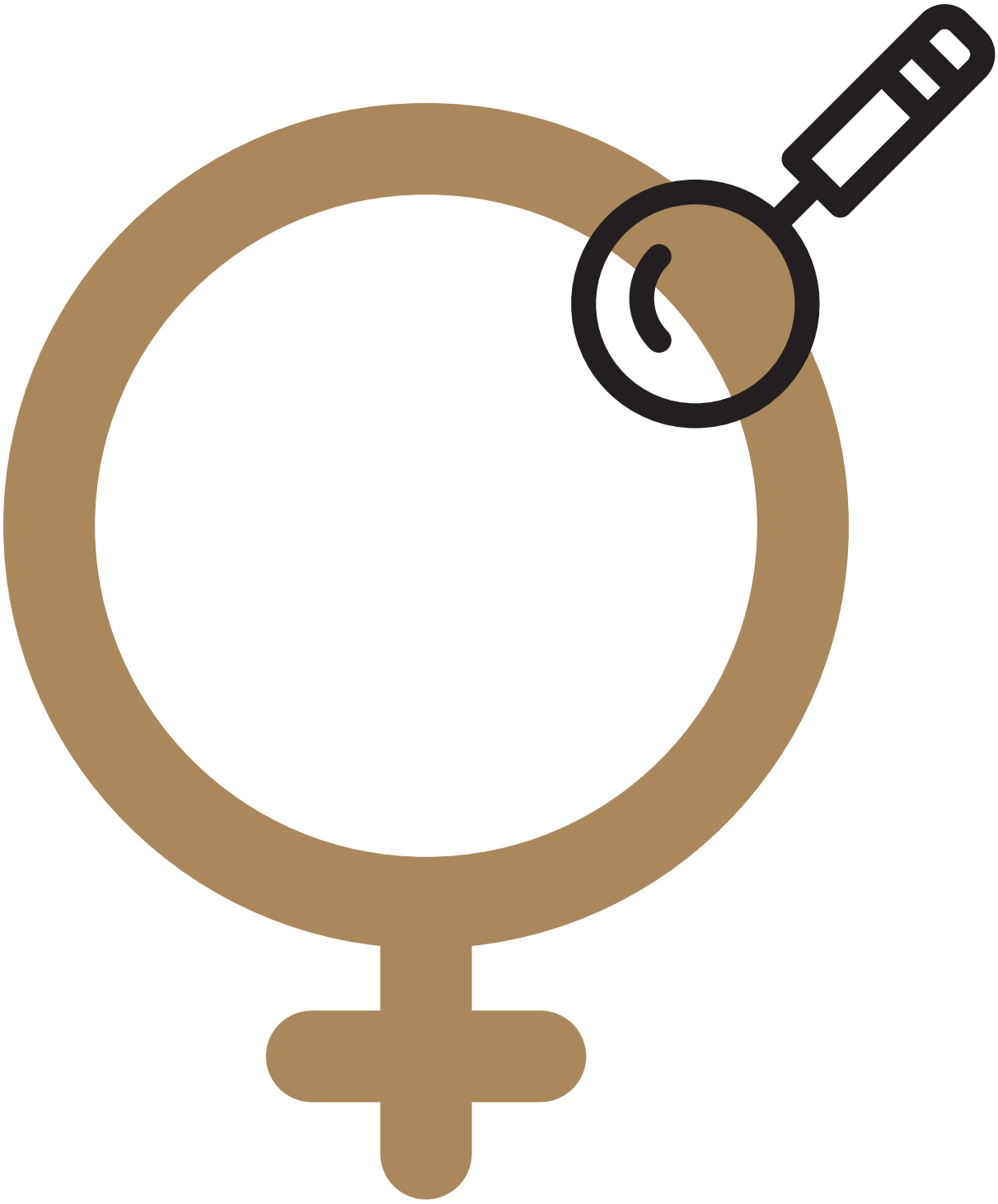
In order to share basic culture, to make healthcare effective and homogeneous, to give visibility to the good practices that have been successful, and to the valuable work that the groups have conducted for years (often in situations of great discomfort) CSG makes available this document. This tool aims at facilitating healthcare practitioners in the conduction of their ground work, and is realized in collabouration with the same operatives involved in the field.

A participative method was used for writing the document, through group working on defined topics. Participation was spontaneous, and the work was subdivided into 4 groups that developed the different chapters of the document:

- INSTITUTIONAL FRAMEWORK AND VISION OF CSG
- ANTENATAL CARE
- INTRAPARTUM CARE
- POSTNATAL CARE

http://www.who.int/pmnch/knowledge/publications/policy_compendium.pdf
http://apps.who.int/iris/bitstream/10665/128219/1/WHO_RHR_14.25_eng.pdf
http://apps.who.int/iris/bitstream/10665/42590/6/9241562218_ita.pdf?ua=1&ua=1
http://www.who.int/topics/breastfeeding/en/

2. Antenatal Care



2. Antenatal Care

2.1 Good Practices and Recommendations for the assistance of pregnant women and for a positive birth experience

At the dawn of the era of Sustainable Developmental Goals (SDGs) *, preventable pregnancy-related mortality and morbidity rates remain unacceptably high. Although significant improvements have been made, involved countries need to consolidate and improve these advances, and to expand their agendas beyond mere survival, adopting a vision centered on maximizing the health and potential of their populations. Quality and safety of the care received and the positive woman's experience are the keys to improve prenatal care and to create prosperous families and communities.

*Development Goals common to all countries around the world, promulgated by the United Nations in 2016 and valid until 2030.

2.2 WHO's new guidelines

http://www.who.int/mediacentre/news/releases/2016/antenatal-care-guidelines/en/
http://www.who.int/reproductivehealth/publications/maternal_perinatal_health/anc-positive-pregnancy-experience/en/
http://apps.who.int/iris/bitstream/10665/250800/1/WHO-RHR-16.12-eng.pdf

The World Health Organization has issued in November 2016 a new series of recommendations to improve the quality of Prenatal Consultations. Its goal is to prepare for birth and parenthood as well as prevent, detect, relieve and manage the three major health issues affecting mothers and children during pregnancy:

- Complications of the pregnancy itself;
- Pre-existing conditions that may worsen during pregnancy;
- Effects of unhealthy lifestyles.

Prenatal visits (ANC: antenatal clinic) are defined as the set of care that a woman receives during pregnancy, depending on her individual situation in order to ensure a favorable outcome of the pregnancy, for both herself and her newborn.
Specifically, ANC have the following health objectives:

- Reducing the risk of complications during pregnancy and maternal morbidity / mortality;
- Reducing the risk of stillbirths;
- Helping women to have a positive experience of pregnancy and birth.

Focusing on a positive pregnancy experience, the new guidelines aim to ensure not only a safe pregnancy for the mother and baby, but also an effective passage to a positive labour and birth and, finally, to a positive experience of maternity.

An important feature of these guidelines is their comprehensiveness. Not only do they provide recommendations on standard maternal and foetal assessments, but also on nutrition during pregnancy, on prevention and treatment of physiological problems commonly experienced during pregnancy (e.g. nausea, heartburn, etc.), and on preventative interventions for certain contexts (e.g. malaria and/or HIV endemic areas). The guidelines also include recommendations on counselling and supporting women who may be experiencing intimate partner violence. Guidance on how antenatal care services can be provided more effectively and in different contexts is also included.

Prenatal care is a key opportunity for healthcare professionals to provide care, support and information for pregnant women, for promoting a healthy lifestyle, for disease detection and prevention, and finally a great consulting opportunity for promoting family planning.

The new guidance increases the number of contacts a pregnant woman has with health providers throughout her pregnancy from four to eight. Recent evidence indicates that a higher frequency of antenatal contacts by women and adolescent girls with a health provider is associated with a reduced likelihood of stillbirths. This is because of the increased opportunities to detect and manage potential complications. Eight or more contacts for antenatal care can reduce perinatal deaths by up to 8 per 1000 births when compared to 4 visits.

www.who.int/reproductivehealth/news/antenatal-care/en/

A woman's 'contact' with her antenatal care provider should be more than a simple 'visit' but rather the provision of care and support throughout pregnancy. The guideline uses the term 'contact' as it implies an active connection between a pregnant woman and a health care provider that is not implicit with the word 'visit'.
The term "contact" implies an active relationship between a pregnant woman and those who take care of her.

2.3 Basic recommendations for Prenatal Consultations:

- Antenatal care model with a minimum of eight contacts recommended to reduce perinatal mortality and improve women's experience of care;
- Counselling about healthy eating and keeping physically active during pregnancy;
- Daily oral iron and folic acid supplementation with 30 mg to 60 mg of elemental iron and 400 µg (0.4 mg) folic acid for pregnant women to prevent maternal anaemia, puerperal sepsis, low birth weight, and preterm birth;
- Tetanus toxoid vaccination is recommended for all pregnant women, depending on previous tetanus vaccination exposure, to prevent neonatal mortality from tetanus;
- Recognition and management of pregnancy related complications, especially preeclampsia;
- Recognition and treatment of pre-existing or concomitant illnesses that may complicate during pregnancy;
- Promotion of the use of medicated mosquitoes tents and intermittent preventive treatment of malaria during pregnancy (IPTp);
- One ultrasound scan before 24 weeks' gestation (early ultrasound) is recommended for pregnant women to estimate gestational age, improve detection of fetal anomalies and multiple pregnancies, reduce induction of labour for post-term pregnancy, and improve a woman's pregnancy experience;
- Health-care providers should ask all pregnant women about their use of alcohol and other substances (past and present) as early as possible in the pregnancy and at every antenatal visit;
- Informing and educating on the recognition of danger signs for women and newborns and providing collaboration on the planning for hospital transportation in case of emergencies, or for reaching healthcare facilities at the end term or at the start of labour;
- Helping the pregnant woman and her partner prepare for the baby's birth and care, especially for the beginning of breastfeeding alone;
- Promote postnatal family planning.

http://www.who.int/pmnch/media/publications/aonsectionIII_2.pdf

Prenatal care facilitates the identification and management of complications of pregnancy, especially of pre-eclampsia. It also favors the recognition and treatment of concomitant diseases, even sexually transmitted ones and especially syphilis and HIV infections, and the monitoring of mental health. Prevention of malaria during pregnancy, and in particular the promotion of the use of mosquito nets impregnated with insecticide, increases the mothers' awareness of their self-care needs, theirs and their newborn's health and of theirs home's hygiene.
The provision of information about the detection of danger signals and the preventive focus on logistical and financial issues related to the need for an emergency transfer, helps families prepare themselves in time by developing a plan for childbirth and for possible complications.
During the meetings the benefits of prolonged breastfeeding are never overlooked, as with family planning and the need to distance the pregnancies, seeking also to involve the partner and to consider its supportive role during the entire experience.

2.4 Il calendario delle visite prenatali

Le visite devono essere organizzate secondo il seguente calendario.

1st contact:	**Before the 12th week**
SECOND TRIMESTER	
2nd contact:	**20 week**
3rd contact:	**26 week**
THIRD TRIMESTER	
4th contact:	**30 week**
5th contact:	**34 week**
6th contact:	**36 week**
7th contact:	**38 week**
8th contact:	**40 week**
HOSPITALIZATION FOR BIRTH AT THE 41st WEEK	

On 1st contact, 12/13th week
Routine, anemia evaluation, HIV test, syphilis, hepatitis B, check for clinical signs of tuberculosis, check for asymptomatic bacteriuria, antitetanic vaccination control and vaccination if needed (as per calendar).

On 2nd contact, 20th week
Routine, Ultrasound (if available), Antielmintic Treatment, antimalarial prophylaxis, bacteriuria treatment if detected.

On 3rd contact, 26th week
Routine, anemia evaluation, bacteriuria treatment if detected, antimalarial prophylaxis

On 4th contact, 30th week
Routine, antimalarial prophylaxis

On 5th contact, 34th week
Routine, bacteriuria check, antimalarial prophylaxis

On 6th contact, 36th week
Routine, anemia evaluation, antimalarial prohylaxis

On 7th contact, 38th week
Routine

On 8th contact, 40th week
Routine, antimalarial prophylaxis

Hospitalization at the 41st week
if childbirth has not occurred

2.5 Interventions and activities to be carried out during prenatal visits.

At every contact or prenatal visit

- Counseling aimed at collecting information about the woman's psychosocial status and possible domestic violence.
- Counseling on nutrition and healthy lifestyles (caffeine, tobacco, alcohol and drugs compsuntion)
- Re-confirm the Daily Supplement of Iron and Folic Acid
- Evaluation of glycemia, proteinuria
- Weight Evaluation, BP
- Antimalarial treatment from the second quarter, once a month, target is at least four doses
- Antenatal controls:
    - Leopold's maneuvers (second and third trimester)
    - Symphysis-fundus height measurement (from the 24th week)
    - Fetal heart rate auscultation (from second control)
- Evaluation and treatment of accessory problems:
    - Gastric pain
    - Varicose veins
    - Sciatica
- Inform about the recognition of danger signs for themselves and the newborn
- Compile the maternal file, to be delivered to the woman
- Establish the date of the next check

Notes and clarifications:

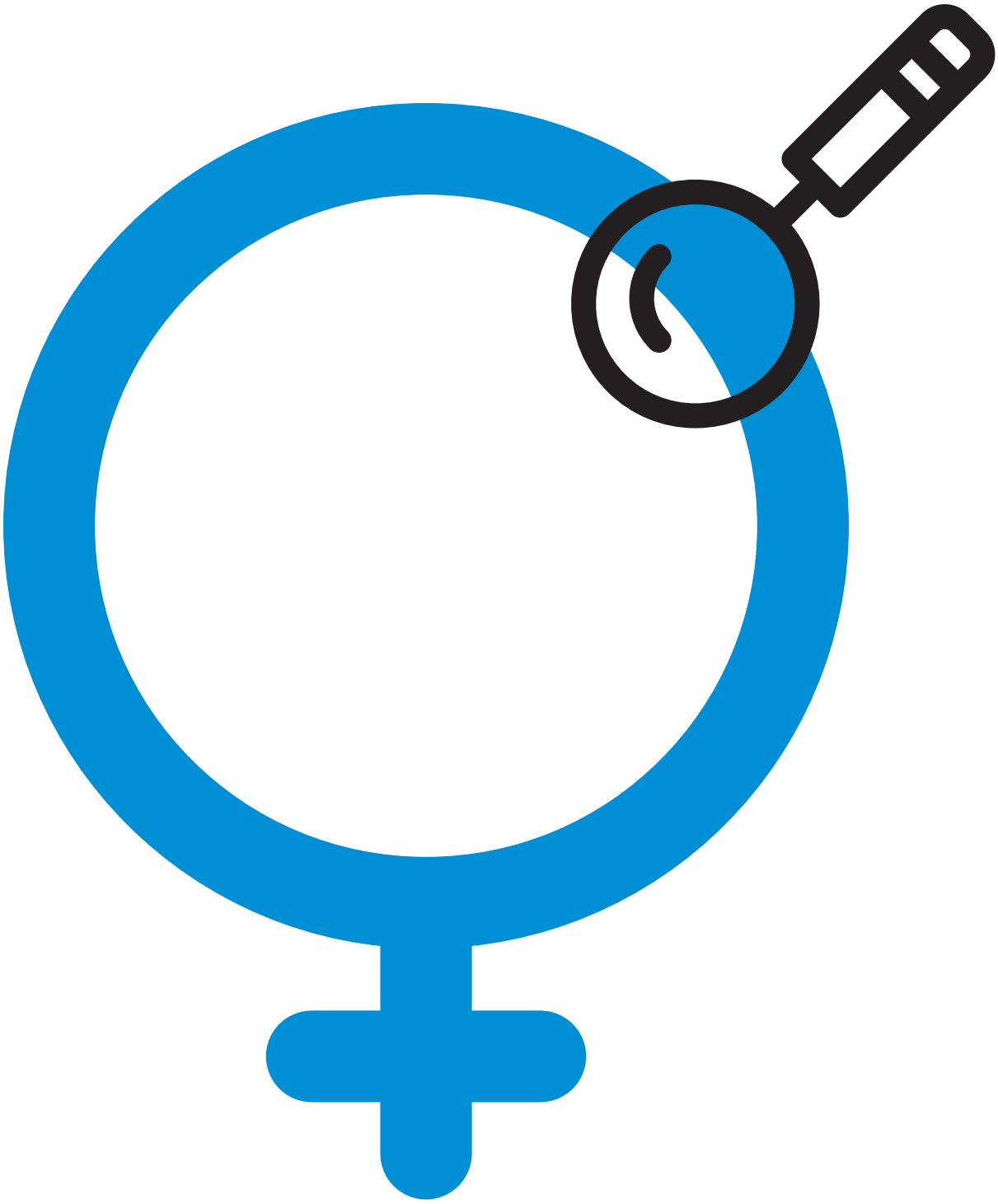
Anti-tetanic Vaccination (ATV) according to the following schedule:

1st dose: at first contact
2nd dose: 1 month after the first
3rd dose: 6 months after the second (or a subsequent pregnancy)
4th dose: 1 year after the third (or a subsequent pregnancy)
5th dose: 1 year after the fourth (or a subsequent pregnancy)

Intermittent preventive treatment in pregnancy:
Sulfadoxine pirimetamine is given from the second trimester, once per month, until at least four doses are achieved

Antihelminthic treatment:
Mebendazole is given at the 16th week, and can be subsequently repeated at the 32nd week.

3. Intrapartum care



3. Intrapartum care

3.1 Essential intrapartum and newborn care / EINC

The set of practical recommendations below cover the most crucial aspects of childbirth and newborn care, focusing on the so-called Essential Intrapartum and Newborn Care (WHO / UNICEF 2015) and deepening the topics specifically related to:

- WHO Safe Childbirth Checklist
- Partogram use
- Timing umbilical cord clamping
- Skin contact between mother and baby

The EINC practices are evidenced-based standards for safe and quality care of birthing mothers and their newborns, within the 48 hours of Intrapartum period (labour and delivery) and thr first week of newborn's life. Developed and field tested by international and local experts, EINC practices reflect current knowledge. EINC distinguishes the necessary from the unecessary practices in delivery and care for newborn and mother.

3.2 The EINC practices during Intrapartum period

- Continuous maternal support, by a companion of her choice, during labour and delivery
- Moving during labour
- Position of choice during labour and delivery
- Non-drug pain relief, before offering labour anesthesia
- Spontaneous pushing in a semi-upright position
- Episiotomy will not be done, unless necessary
- Active management of third stage of labour (AMTSL)
- Monitoring the progress of labour with the use of pantograph

3.3 Recommended EINC practices for newborn care at the time of birth

- Immediate and thorough drying of the newborn
- Early skin-to-skin contact between mother and the newborn
- Properly-timed cord clamping and cutting

3.4 Unnecessary interventions during labour and birth

The unnecessary interventions during labour and delivery, which do not improve the health of mother and child, are eliminated.
For the mother:

- Enemas
- Shavings
- Fluid and food intake restriction
- Routine insertion of intravenous fluids.

Fundal pressure to facilitate second stage of labour (Kristeller manoeuvre) must be no longer practiced, because it resulted in maternal and newborn injuries and death.

For the newborn:

- Routine suctioning
- Early bathing
- Routine separation from the mother
- Foot printing
- Giving pre-lacteals or artificial infant milk formula or other breast-milk substitutes.

http://www.healthynewbornnetwork.org/hnn-content/uploads/Every_Newborn_Action_Plan-ENGLISH_updated_July2014.pdf
https://www.everynewborn.org/
http://www.healthynewbornnetwork.org/resource/every-newborn-action-plan/

3.5 WHO Safe Childbirth Checklist

With regard to the over 130 million pregnancies that occur every year, it is estimated that the maternal deaths are 303,000. As for the children, 2.6 million are stillborn, and about half of them are fresh stillbirths; subsequently 2.7 millions suffer a neonatal death within the first 28 days of birth. Most of these deaths occur in deprived environments and could be avoided.

In response to this unacceptable situation, WHO has developed the Safe Childbirth Checklist, which asserts and points out the essential practices for maternal and perinatal care.
Childbirth is characterized by routine and unexpected events, and complications for the mother, the newborn or both can happen unpredictably. The WHO Safe Childbirth Checklist helps healthcare providers ensure the essential care practices at birth are provided, taking into account specific "Critical moments" that can be addressed through a sequence of coded practices that have been shown to reduce damages to mothers and infants. Every item in the Checklist represents a key action which, if missed, can cause serious damage to the mother, the baby or both. The instrument has been developed following a rigorous methodology and has been tested in ten countries in Africa and Asia, with a randomized and controlled multicentric study supported by WHO.

The checklist indicates how to deal with:

- the main causes of maternal mortality (haemorrhage, infections, dystocia and hypertensive disorders)
- causes of intrapartum neonatal death (inadequate assistance during delivery)
- neonatal deaths (asphyxia, infections and complications related to premature birth)

During the design of the checklist, the routine event flow was taken into account, and the birthing process was divided into four specific sections, called Pause Points.

Pause Point 1: On admission

Checking the mother at the time of admission is important to detect and treat complications that she may already have, to confirm whether she needs to be referred to another facility, to prepare her (and her companion) for labour and delivery, and to educate her (and her companion) about danger signs for which she should call for help.

Pause Point 2: Just before pushing (or before Caesarean)

Checking the mother just before pushing (or before Caesarean) is important to detect and treat complications that can occur during labour and to prepare for routine events and possible crisis situations that may occur after birth.

Pause Point 3: Soon after birth (within one hour)

Checking the mother and newborn soon after birth (within 1 hour) is important to detect and treat complications that can occur after delivery, and to educate the mother (and her companion) about danger signs for which she should call for help.

Pause Point 4: Before discharge

Checking the mother and newborn before discharge is important to be sure that the mother and newborn are healthy before discharge, that follow-up has been arranged, that family planning options have been discussed and accepted by the mother (and her companion), and that education on danger signs to look out for, both in the mother and her baby, has been given in case immediate skilled care is needed.

Each Pause Point has a set of essential conditions to be met, and the checklist compilation guides care givers in controlling the completeness of the care provided (see below).
These Pause Points not only help the providers protect mothers and newborns against dangerous complications, but also direct the health care professionals to take their time to carry out the appropriate controls.

check list

http://apps.who.int/iris/bitstream/10665/199179/1/WHO_HIS_SDS_2015.26_eng.pdf?ua=
http://apps.who.int/iris/bitstream/10665/199177/1/9789241549455_eng.pdf?ua=1
http://www.who.int/patientsafety/implementation/checklists/childbirth/en/
http://www.who.int/maternal_child_adolescent/epidemiology/stillbirth/en/

postpartum hemorrhage prevention and treatment:

http://apps.who.int/iris/bitstream/10665/75411/1/9789241548502_eng.pdf

3.6 Partograph use

Prolonged labour is one of the main causes of death among mothers and infants in developing countries. If labour does not progress normally, the woman may experience serious complications such as dehydration and fatigue, up to obstructed labour and uterine rupture.
In addition, there is a greater likelihood of maternal and neonatal infections, hemorrhages and recto-vaginal fistulas.
Usage of the partograph is recommended for the routinary labour monitoring, and helps the providers to identify slow labours, and to initiate appropriate interventions aimed at preventing a prolonged and obstructed childbirth.
The partograph is an inexpensive tool designed to provide a continuous and panoramic view of the ongoing labour, and has proven itself able to improve results if used correctly. It helps to foresee potential deviations from normal labour, and upholds a timely intervention, furthering the empowerment of the health worker assisting the woman.
It is comprised of a single sheet of paper that contains information on the fetal state, maternal condition, the progression of labour.
The partograph compilation begins at the start of the active phase, from 4 centimeters onwards, in the event of regular contractions (diagnosis of labour), and requires a stringent registration on the graph of the required data.
In developing countries, the partograph still represents the recommended procedure for safely monitoring the labour, and for deciding with sufficient advance when to transfer the woman from the peripheral structures to a higher level structure where caesarean section and other appropriate interventions can be guaranteed.

http://pdf.usaid.gov/pdf_docs/Pnact388.pdf
http://books.mcai.org.uk/2.3.%20Managing%20normal%20labour%20and%20delivery.1.5MB/part3.htm
http://www.open.edu/openlearnworks/mod/oucontent/view.php?id=272&printable=1

3.7 Umbilical cord clamping time

The optimal timing for umbilical cord clamping has been a subject of debate in scientific literature for at least a century, and most common behaviors around this practice are still not aligned with current evidence.
It is defined as “premature” the clamping carried out in the first 60 seconds after birth (more commonly in the first 15 to 30 seconds); it is defined as “delayed” the clamping performed more than 1 minute after birth or when the umbilical cord pulsation has already ceased.

http://www.who.int/nutrition/publications/guidelines/cord_clamping/en/

Since 2012, WHO recommends that in term or preterm newborns who do not require positive pressure ventilation, the cord is not to be clamped before 1 minute after birth (strong recommendation). In addition, WHO recommendations for the prevention and treatment of postpartum bleeding (both in vaginal delivery and CS) call for a delayed clamping (performed about 1-3 minutes after birth).

Delayed clamping should not be confused with the milking of the cord. The terms are not necessarily synonyms (milking means physically squeezing blood from the cord). There are several recent studies that evaluate the effect of milking but they need further elabouration. However, milking has been proposed as an alternative to a delayed cutting, especially for premature babies.

The WHO Guidelines recommend active labour management including:
- Checking for the absence of a twin;
- Using a uterotonic drug, preferably oxytocin. If not available use ergometrine / misoprostol (not in hypertensive women);
- Clamping the cord between 1 and 3 minutes after birth;
- Performing a controlled cord traction or an uterine massage (if experienced staff is available);
- Early clamping is generally contraindicated.

http://www.who.int/elena/titles/full_recommendations/cord_clamping/en/

3.8 Skin to skin (SSC) contact between mother and newborn

Newborns are often separated from their mothers immediately after birth, or kept wrapped or dressed while in the arms of the mother.
Skin-to-Skin (SSC) calls for the baby to be naked on her mother's chest immediately after birth (immediate, within 10 minutes) or soon after (early).
Immediate or early placement in this method improves neonatal adaptation, supports the systems that govern the transition towards extrauterine life, promotes bonding and prolonged breastfeeding.
Children handled with SSC have less thermoregulation problems, weep less, return earlier to the acid-base homeostasis, have better glycemic levels and are more calm.
These benefits can also be enjoyed by women who give birth with a caesarean section.
Children placed in this condition should be positioned correctly, with free airways, and supervised; must be protected against cold, in order to avoid cardio-respiratory complications (ALTE / SUPC) that may occur and have been reported.
Parents need to be informed about the safe positioning of the newborn, and educated at recognizing the danger signs.

http://www.cochrane.org/CD003519/PREG_early-skin-skin-contact-mothers-and-their-healthy-newborn-infants
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3979156/
https://www.ncbi.nlm.nih.gov/pubmed/?term=Safe+Sleep+and+Skin-to-Skin+Care+in+the+Neonatal+Period+for+Healthy+Term+Newborns

4. Postnatal care

4. Postnatal care

4.1 Good Practices and Recommendations for post-natal care

The term “postnatal care” (PNC) is used for all matters related to the mother and baby up to 6 weeks (42 days) after birth. This terminology, suggested by the WHO, allows us to overcome the use of “postpartum” with reference to maternal themes and “post-natal”, with reference to neonatal themes. (Postnatal care for mothers and newborn/Essential intrapartum and newborn care / EINC)

http://www.who.int/pmnch/media/publications/aonsectionIII_4.pdf

4.2 The context

The first six weeks after birth are crucial for the health and survival of a mother and her baby, and the very first few hours and days after birth are the most vulnerable period for both.
Nearly half of all maternal deaths occur within the first 24 hours, 66% of them during the the first week after childbirth.
Lack of care in this period can lead to death or disability, and missed opportunities for promoting healthy behaviors regarding women, babies and children.
Many African women and many of their infants do not have access to health care during the early postnatal period, increasing the risk of disease and death.
The fact that 18 million women in Africa currently do not give birth in a healthcare facility pose a challenge for the planning and implementation of postnatal care (PNC) for women and their babies.
Sub-Saharan Africa has the highest rates of neonatal mortality in the world and has shown the slowest progress in reducing neonatal mortality, especially during the first week of life. In 2013, 2.7 million newborns died during the first month of life, and 1 million on the first day.

Consequences on women:

The main cause of direct maternal mortality in Africa (34% of the dead) is hemorrhaging, especially postpartum hemorrhage. Sepsis and postnatal infections constitute further 10% of maternal deaths.
In the postnatal period, adequate information and access to family planning (Post Partum Family Planning PPFP) is very important, and the lack of this opportunity increases the risk of multiple and not distanced enough pregnancies.
The postnatal period is particularly stressful for mothers, and the availability of emotional and psycho-social support is important to reduce the risk of depression.

Consequences on infants:

Asphyxia is the cause of many newborn deaths on the first day; most of the deaths due to premature birth occur during the first week. 38% of children in Sub-Saharan Africa die of infections, especially after the first week of life, and most of these are of low birth weight, often pre-term. At least one in four of the deaths occurring under one year of life occur during the first month, ie before health services begin to provide assistance. Low coverage of care in the postnatal period negatively affects children’s health. For example, lack of support for correct and healthy behaviors such as breastfeeding, may have negative effects on the baby such as infections and malnutrition.

http://www.who.int/maternal_child_adolescent/publications/WHO-MCA-PNC-2014-Briefer_A4.pdf

4.3 "Postnatal care for mothers and newborns. Highlights from WHO, 2013" guideline

Divided into 13 recommendations, and specifically:
1-2-3 concerning every mother and newborn
4-5-6-7 concerning newborn care
8-9-10-11-12-13 concerning maternal care from them
are obtained the **Best Practices** described below

4.4 Summary of the contents of Recommendations no. 1-2-3, concerning both mothers and children:

- If the delivery takes place in a healthcare facility, the mother and the newborn must remain there for at least 24 hours. (This recommendation is an update of the 2006 version, which provided for a minimum stay of 12 hours);
- Evidence suggests that 24-hour discharge is acceptable only if maternal blood loss is under control, the mother and child have no signs of infections or others diseases, and breastfeeding is well under way;
- It is important to provide postnatal care during the first 24 hours to all mothers and infants, regardless of where the birth has occurred;
- A complete clinical examination should be done about 1 hour after birth, after the first breastfeeding. Both mother and baby must be checked again before being discharged;
- If the birth happened at home, the first postnatal contact should take place as early as possible: within 24 hours from birth. An additional contact at 24-48 hours is desirable;
- Every mother and child need at least four postnatal controls in the first 6 weeks. (This recommendation is an update of the 2006 version, which provided for three postnatal control visits within 6 weeks after birth);
- In addition to postnatal care that include two full evaluations on the first day, three further visits are recommended: day 3 (48-72 hours), between days 7 and 14, and 6 weeks after birth;
- These contacts may take place at home or in a healthcare facility, depending on the context. Additional contacts may be needed to address possible underlying issues;
- Postnatal home visits must be carried out by qualified, trained and supervised health professionals

Related Highlights from Other WHO Guidelines

- Encourage women to deliver with the help of a skilled birth attendant at a health facility, so that they may receive quality intrapartum and postnatal care, including uterotonics drugs during the third stage of labour. Professional care is important for all women and newborns during labour, childbirth and the first day after birth.
- Promote respectful and women-centred maternity care, where women are treated with kindness, dignity and respect. Respectful maternity care is an essential part of postnatal care, particularly in health facilities. It promotes the implementation of best practices (such as rooming-in where separation is not medically necessary), recognizes that women and their families should be fully informed on all aspects of care, and values counselling as an opportunity to answer questions and address concerns.

4.5 Summary of the contents of Recommendations no. 4-5-6-7, concerning newborns:

- Strengthen postnatal care through visits at home and healthcare facilities;
- In each of the four postnatal control visits, newborns should be evaluated on the presence or absence of nine clinical signs (listed in Recommendation 4 in Table 2), identified as danger signs;
- Continue to promote exclusive breastfeeding (EBF) during all postnatal visits, offering counseling on common nursing problems and their related management;
- Caring of the umbilical stump by keeping it dry and clean is a valid recommendation for birth in healthcare facilities or at home, ie in contexts where neonatal mortality is low. In environments with a high neonatal mortality (30 or more dead for 1,000 live births) the recommendations are to apply chlorhexidine at the expected concentration;
- Chlorhexidine may be considered as a replacement for a traditional but harmful substance;
- Reinforce key messages such as the lack of need for after-birth bath and the importance for the newborn of skin-to-skin contact and of vaccinations;
- Be vigilant in order to identify preterm or low weight infants, given their particularity vulnerability

Postnatal care-related recommendations on newborn care from other who guidelines

- Immediately at birth, all babies should be dried thoroughly and their breathing assessed. The cord should be clamped and cut only after 1–3 minutes, unless the baby needs resuscitation. Routine suctioning must not be done.
- During the first hour after birth, the baby should be in skin-to-skin contact with the mother for warmth and the initiationof breastfeeding.
- A full clinical examination (including weight, danger signs, eyes, cord) and other preventive care should be done around 1hour after birth, when the baby has had his/her first breastfeed. This care includes giving vitamin K prophylaxis and hepatitis B vaccination as soon aspossible after birth (within 24 hours).
- When skilled health personnel attend the newborn, whether at home or in a facility, additional care should be provided. This care includes basic newborn resuscitation with bag and mask for newborns not breathing spontaneously and full clinical examinations at the recommended times.

4.6 Summary of Recommendations no. 8-9-10-11-12, concerning mothers:

- Strengthen postnatal care for mothers through home and health facilities visits;
- Postnatal contact includes counseling on family planning, maternal mental health, nutrition, hygiene and gender violence.

Supplementary mother-related recommendations linked to other WHO guidelines

- Continue to guarantee to all women, as part of their care, the active management of the third stage of thelabour and a careful monitoring after birth. This practice reduces the risk of postpartum hemorrhage during the postnatal period.

Slide:

https://cdn2.sph.harvard.edu/wp-content/uploads/sites/32/2015/12/Bernadette-Daelmans.pdf

GENERAL REFERENCES AND TREATMENTS OF PATHOLOGY

The global library of women's Medicine

www.glowm.com

Biblioteca OMS

http://www.who.int/maternal_child_adolescent/documents/community/en/

Managing complication pregnancy and childbirth WHO

http://apps.who.int/iris/bitstream/10665/43972/1/9241545879_eng.pdf

Essential obstetrics and newborn care MSF 2015

http://refbooks.msf.org/msf_docs/en/obstetrics/obstetrics_en.pdf

Integrated Management of Pregnancy and Childbirth (IMPAC)

http://www.who.int/maternal_child_adolescent/topics/maternal/impac/en/

Primary surgery (cap 19 – 20 – 21 – 22)

http://global-help.org/publications/books/help_primarysurgery.pdf

Essential drugs MSF 2016

http://refbooks.msf.org/msf_docs/en/essential_drugs/ed_en.pdf

Managing newborn problems : a guide for doctors, nurses, and midwives

http://www.who.int/iris/handle/10665/42753http://www.who.int/iris/handle/10665/42753

Newborn health

http://www.who.int/maternal_child_adolescent/topics/newborn/en/

Caring for newborns and children in the community · Package of resources

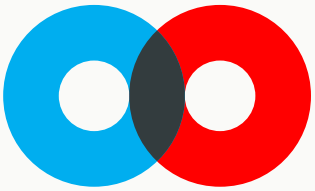
http://www.who.int/maternal_child_adolescent/documents/community-care-newborns-children/en/

Midwifery care

http://www.who.int/maternal_child_adolescent/topics/maternal/en/

Guidelines Neonatal Resuscitation ILCOR 2015
Document PDF

http://circ.ahajournals.org/content/132/18_suppl_2/S543



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