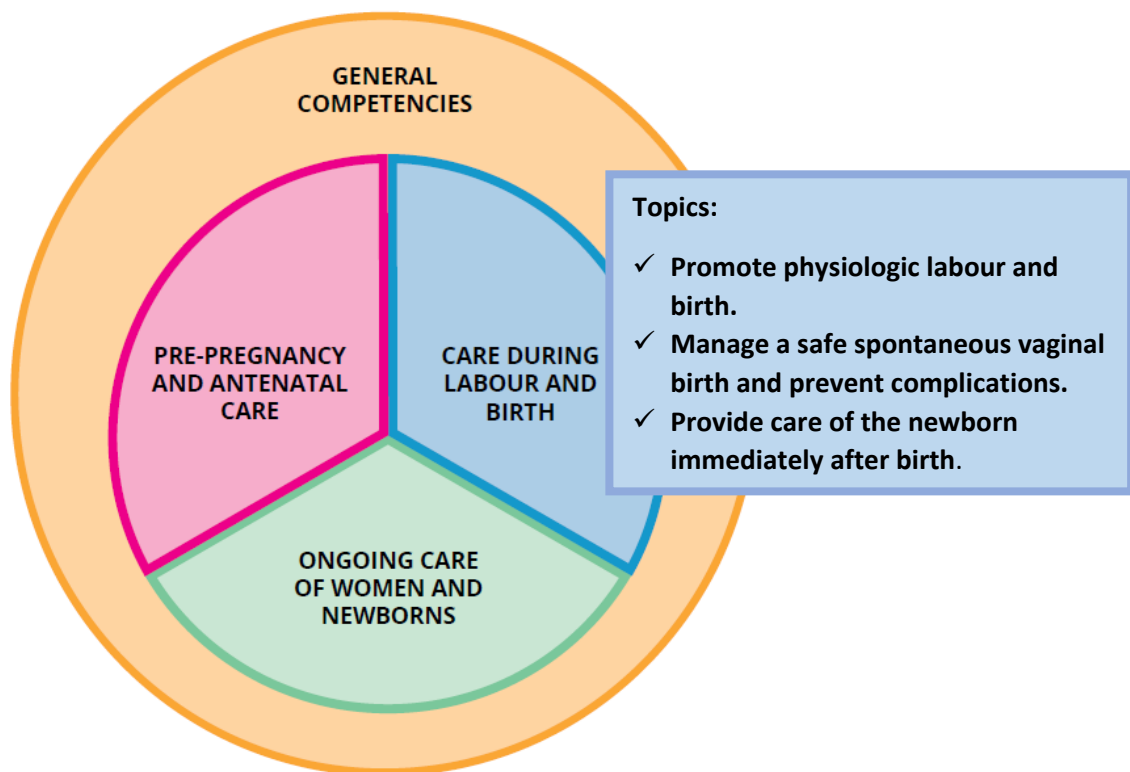


Additional file 2.

The ICM Essential Competencies for Midwifery Practice Framework – Topic related to care during labour and childbirth.

Competencies in this category are about assessment and care of women during labour that facilitates physiological processes and a safe birth, the immediate care of the newborn infant, detection of complications in mother or infant, stabilisation of emergencies, and referral as needed.

Source: The International Confederation of Midwives (ICM) Essential Competencies for Midwifery Practice, 2019 update. [Available from: <https://www.internationalmidwives.org/our-work/policy-and-practice/essential-competencies-for-midwifery-practice.html>].



Knowledge, skills and behaviours according to ICM Essential Competencies

Subject/topics <i>Promote physiologic labour and birth</i>	
Knowledge	Skills and behaviours
Anatomy of maternal pelvis and fetus; mechanisms of labour for different fetal presentations	<ul style="list-style-type: none"> • Provide care for a woman in the birth setting of her choice, following policies and protocols • Obtain relevant obstetric and medical history • Perform and interpret focused physical examination of the woman and fetus • Order and interpret laboratory tests if needed • Assess woman's physical and behavioural responses to labour • Provide information, support, and encouragement to woman and support persons throughout labour and birth • Provide respectful one-to-one care • Encourage freedom of movement and upright positions • Provide nourishment and fluids • Offer and support woman to use strategies for coping with labour pain, e.g. controlled breathing, water immersion, relaxation, massage, and pharmacologic modalities when needed • Assess regularly parameters of maternal-fetal status, and e.g. vital signs, contractions, cervical changes, and fetal descent • Use labour progress graphic display to record findings and assist in detecting labour delay or other complications • Augment uterine contractility judiciously using non-pharmacological or pharmacological agents to prevent non-progressive labour • Prevent unnecessary routine interventions, e.g. amniotomy, electronic fetal monitoring, directed closed glottis pushing
Physiologic onset and progression of labour	
Evidence about interventions in normal labour and birth	
Cultural and social beliefs and traditions about birth	
Signs and behaviours of labour progress; factors that impede labour progress	
Methods of assessing fetus during labour	

Knowledge, skills and behaviours according to ICM Essential Competencies

Subject/topics <i>Manage a safe spontaneous vaginal birth and prevent complications</i>	
Knowledge	Skills and behaviours
Methods of conducting birth to protect perineal integrity	<ul style="list-style-type: none"> • Support the woman to give birth in her position of choice • Ensure presence of clean necessary supplies and source of warmth • Coach woman about pushing to control expulsion of presenting part, avoid routine episiotomy • Undertake appropriate maneuvers and use maternal position to facilitate vertex, face, or breech birth • Delay cord clamping • Manage nuchal cord • Assess immediate condition of newborn • Provide skin to skin contact and warm environment • Deliver placenta and membranes and inspect for completeness • Assess uterine tone, maintain firm contraction, and estimate and record maternal blood loss • Inspect vaginal and perineal areas for trauma, and repair as needed, following policies and protocols
Evidence about conduct of third stage, including use of uterotonics	
Potential complications and their immediate treatment e.g. shoulder dystocia, and excessive bleeding	
Signs of placental separation; appearance of normal placenta, membranes, and umbilical cord	
Types of perineal and vaginal trauma requiring repair and suturing techniques	

Knowledge, skills and behaviours according to ICM Essential Competencies

Subject/topics <i>Provide care of the newborn immediately after birth</i>	
Knowledge	Skills and behaviours
Normal transition to extra-uterine environment	<ul style="list-style-type: none"> • Use standardized method to assess newborn condition in the first minutes of life (Apgar or other); refer if needed • Institute actions to support breathing and oxygenation • Provide a safe warm environment for initiating breastfeeding and attachment (bonding) in the first hour of life • Conduct a complete physical examination of newborn in presence of mother/family; explain findings and expected changes e.g. colour of extremities, moulding of head. Refer for abnormal findings. • Institute newborn prophylaxis e.g. ophthalmic infection, and hemorrhagic disease, according to policies and guidelines • Promote care by mother, frequent feeding and close observation • Involve partner/support persons in providing newborn care
Scoring systems to assess newborn status	
Signs indicating need for immediate actions to assist transition	
Appearance and behaviour of healthy newborn infant	
Method of assessing gestational age of newborn infant	
Needs of small for gestational age and low birth weight infants	