Childbirth Education Program Study Guide

ICEA Vision:
A nurtured world through professionals trained in family-centered maternity and newborn care.

April 2020 Edition

Welcome to the ICEA Childbirth Educator Certification (ICCE) program.
Thank you for choosing to work with ICEA as we encourage the best health
for families during the childbearing year through education and support.

INTRODUCTION TO THE CHILDBIRTH EDUCATOR CERTIFICATION

PROGRAM CONTENTS:

Introduction to the ICCE Program
Part 1: ICEA
Part 2: Pregnancy and Healthy Lifestyles
Part 3: Labor and Birth
Part 4: Comfort Measures
Part 5: Postpartum and Newborn Care
Part 6: Teaching Skills
Part 7: Business

HOW TO USE THIS STUDY GUIDE:

This study guide was created so that you may:

- Have a better understanding of the role of a childbirth educator
- Understand the needs of the woman and her family throughout the childbearing year
- Learn about current, evidence-based practice in maternity and newborn care
- Develop a curriculum that meets the needs of those you teach
- Prepare for the certification exam and the important work that you will do with families.

When looking at the study guide, you will notice that it is in an outline format with the following key features to guide you as you study.

- **THE BIG IDEAS**– You should have a thorough understanding of these concepts once you have completed that section.
- **OBJECTIVES** – Each objective will be covered in the outline. Questions on the exam are directly related to the objectives. If you can answer the objectives you will do well on the exam.
- **OUTLINE** – The outline provides the framework of knowledge you will need to be certified as a childbirth educator. Please remember: this is an outline only. There is always more to learn!
- **REFERENCES** – These are not required reading, but are listed to provide you with reliable resources when you want to learn more.

Forms and Support Resources – Once you enroll in this program you will receive a confirmation email that will contain a *Study Guide* and the *Program Packet and Forms*. Other resources (such as webinars

and position papers) may be found on the ICEA webpage. Visit the ICEA website regularly and take time to familiarize yourself with all tabs to get the full benefit out of your certification.

Referenced reading statement:
ICEA in an international organization. Evidenced-based books and resources vary around the world and therefore ICEA has intentionally avoided the use of specific titles for worldwide required reading for certification. Instead we offer online references that are easily accessible.
No exam questions are based on the references. All questions are directly related to an objective and answers can be found in the outline. References are provided for clarification and deeper understanding.
The bibliography lists all of the references from each part with some additional texts that provided general information for this program. The main text references are:

- Amis, D., & Green, J. (2018). *Prepared childbirth: The educator's guide (*13th ed). The Family Way Publications, Inc.: www.thefamilyway.com.
- Bennett, S., & Indman, P. (2015). *Beyond the blues* (4th rev. ed.). San Jose: Moodswings Press.
- Simkin, P., Hanson, L. & Ancheta, R. (2017). *The labor progress handbook: Early interventions to prevent and treat dystocia* (4rd ed.). Danvers, MA: Wiley Blackwell.
- Simkin, P., Whalley, J., Keppler, A., Durham, J., & Bolding, A. (2016). *Pregnancy, childbirth, and the newborn: The complete guide (*5th ed.). NY: Meadowbrook Press.

Evidence-based research (**EBR**) or **Evidence-based practice (EBP)** is "the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research" (Sackett, 1997). This concept will be covered in depth in Part 6. ICEA makes every effort to ensure that the information we include in this program reflects current evidence-based research.

WHEN YOU HAVE QUESTIONS OR NEED ASSISTANCE:

If you need further assistance locating the content outlined in any of the seven parts, contact any ICEA Approved Trainer (IAT), the ICEA Mentor Program, or an ICEA Education committee member. We are here to help you succeed. Additional ICEA Certification support can be obtained from:

- ICEA Certified Professionals Support Facebook page - https://www.facebook.com/groups/286198764881017/
- ICEA board members – https://icea.org/about/icea-staff-board-2/
- ICEA management office – info@icea.org

Special thanks to Vonda Gates, Tamela Hatcher, Jennifer Callahan, Bonita Broughton, Megan Newhouse-Bailey, and Bonita Katz for their work in developing the childbirth education study guide.

Part 1: ICEA

BIG IDEAS

1. ICEA has a rich history (since 1960) of advocating for improved birth outcomes through collaboration and education.
2. ICEA frames birth as a normal life event that deserves a family-centered "circle of care" for the childbearing client and family.
3. The International Childbirth Initiative (ICI) promotes safe and effective care of the Mother Baby dyad which provides the best possible health outcomes and benefits with the most appropriate and conservative use of resources and technology.

OBJECTIVES:

At the completion of Part 1 the learner will:

1. List ICEA's Vision, Mission, Core Values, and philosophy.
2. Describe ICEA's Circle of Care and explain how it illustrates family-centered care
3. List the steps of the International Childbirth Initiative (ICI)
4. Compare and contrast two models of care (Biomedical Model vs. Social Model)
5. State 3 ways in which ICEA supports certified birth professionals
6. Define the role and scope of ICEA Certified Childbirth Educator (ICCE)
7. Identify the steps of certification for an ICEA Certified Childbirth Educator (ICCE)

LEARNING RESOURCES

- ICEA Position Papers
    - Family-Centered Maternity Care (FCMC) – https://icea.org/wp-content/uploads/2018/02/ICEA-Position-Paper-Family-Centered-Maternity-Care.pdf
    - Social Media – https://icea.org/wp-content/uploads/2015/12/Social-Media-HIPAA-PP-2017.pdf
- ICEA Mission, Vision, Philosophy, and Goals – http://icea.org/about/
- International Childbirth Initiative (ICI) – www.internationalchildbirth.com
- Baby Friendly Hospital Initiative
    - World Health Organization – https://www.unicef.org/nutrition/index_24806.html
    - AHRQ Breastfeeding Programs and Policies – https://effectivehealthcare.ahrq.gov/sites/default/files/cer-210-breastfeeding-summary.pdf

Contents

OUTLINE

I. About the International Childbirth Education Association (ICEA)

A. **ICEA VISION –** A nurtured world through professionals trained in family-centered maternity and newborn care.

B. **ICEA Mission** – To educate, certify, and support the birth professional who believes in freedom to make decisions based on knowledge of alternatives in family-centered maternity and newborn care.

C. **ICEA CORE VALUES –**

1. *Compassion* – We believe approaching maternity care with compassion and a nurturing spirit improves birth outcomes for all families.
2. *Collaboration* – We practice a culture of collaboration based on the knowledge that mindful engagement with diverse groups advances positive, family-centered maternity care.
3. *Choice* – We support freedom of choice by training professionals committed to empowering expectant families through informed decision making.

The 3 C's make up the ICEA Core Values:
Compassion
Collaboration
Choice

D. **ICEA GOALS** are to:

1. Provide quality education emphasizing compassion, collaboration, and choice.
2. Set the standards for the diversified birth professional.

3. Advance ICEA as a leader in the field of maternal child health.
4. Promote evidence-based options in maternal child health through collaboration and networking.
5. Improve birth outcomes for all families in the international community.

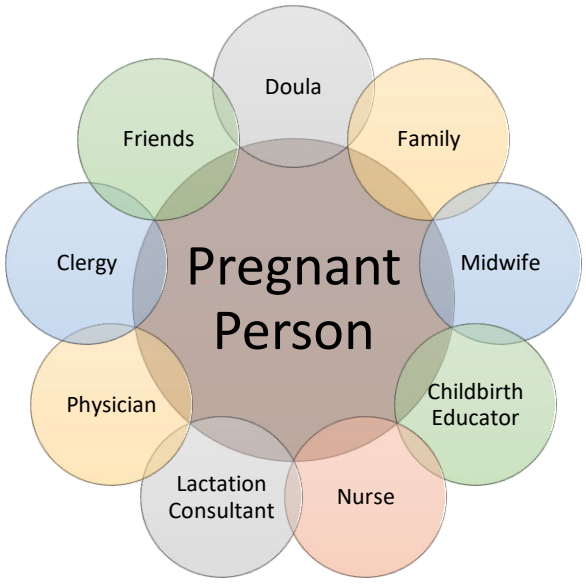
E. **ICEA PHILOSOPHY** – In 1986 ICEA adopted the McMaster University definition of Family-Centered Maternity Care (FCMC)

1. **Philosophy**: The birth of a baby also represents the birth of a family. The woman giving birth and the persons significant and close to her are forming a new relationship, with new responsibilities to each other, to the baby, and to society as a whole. Family-centered reproductive care may be defined as care which recognizes the importance of these new relationships and responsibilities, and which has as its goal the best possible health outcome for all members of the family, both as individuals and as a group.

> According to ICEA philosophy pregnant persons are free to make decisions based on knowledge of alternatives.

2. **Family-centered maternity care** consists of an attitude rather than a protocol. It recognizes birth as a vital life event rather than a medical procedure. It appreciates the importance of that event to the woman and to the persons who are important to her. It respects the woman's individuality and her sense of autonomy. It realizes that the decisions she may make are based on many influences of which the expertise of the professional is only one. It requires that all relevant information be made available to the woman to help her achieve her own goals, and that she be guided but not directed by professionals she has chosen to share the responsibility for her care.
3. **Practice:** The practice of family-centered maternity care is founded on this philosophy and encompasses birth practitioners, birth places, and maternity-newborn care, as determined by the needs and decisions of each woman and her family.

F. **CIRCLE OF CARE** – ICEA endorses the concept of the Circle of Care. The key person in the circle of care is the person seeking care. This individual is at the center of the circle and is responsible for selecting other members and soliciting information, advice, care, and support from them. Members of the circle may consult with one another and offer advice and suggestions, but the ultimate choice for care resides with the individual. In the case of care for pregnancy and birth that individual is the pregnant person herself.



Each family is unique and their different customs, values, and choices will be respected by the ICEA certified educator.

II. ICEA endorses the International Childbirth Initiative (ICI)

A. The 12 Steps of the International Childbirth Initiative are based on the results of best available evidence about the *safety and effectiveness* of specific tests, treatments, and other interventions for mothers and babies. Safe and effective care of the Mother Baby dyad provides the best possible health outcomes and benefits with the most appropriate and conservative use of resources and technology.

1. **"Safe"** means that care is provided through evidence-based practices that minimize the risk of error and harm and support the normal physiology of labor and birth.
2. **"Effective"** means that the care provided achieves expected benefits and is appropriate to the needs of the pregnant woman and her baby based on sound evidence.

B. **12 STEPS OF THE INTERNATIONAL CHILDBIRTH INITIATIVE**

1. Treat every woman and newborn with compassion, respect, and dignity, without physical, verbal, or emotional abuse, providing culturally safe and culturally sensitive care that respects the individual's customs, values, and rights to self-expression, informed choice, and privacy.
2. Respect every woman's right to access and receive non-discriminatory and free or at least affordable care throughout the continuum of childbearing, with the understanding that under no circumstances can a woman or baby be refused care of detained after birth for lack of payment.
3. Routinely provide the MotherBaby-Family maternity care model integrating the midwifery scope of practice and philosophy that can be practiced by all maternity care professionals in all settings and at all levels of care provision.
4. Acknowledge the mother's right to continuous support during labor and birth and inform her of its benefits, and ensure that she receives such support from providers and companions of her choice.
5. Offer non-pharmacological comfort and pain relief measures during labor as safe first options. If pharmacological pain relief options are available and requested, explain their benefits and risks.
6. Provide evidence-based practices beneficial for the MotherBaby-Family throughout the entire childbearing continuum, including, but not limited to:
    a. Allowing labor to unfold at its own pace, while refraining from interventions based on fixed time limits to keep track of labor progress.
    b. Offering the mother unrestricted access to food and drink as she wishes during labor.
    c. Supporting her to walk and move about freely and assisting her to assume the positions of her choice, including squatting, sitting, and hands-and-knees, and providing tools supportive of upright positions.
    d. Techniques for turning the baby in utero and for vaginal breech delivery.

e. Facilitating immediate and sustained skin-to-skin Mother Baby contact for warmth, attachment, breastfeeding initiation, and developmental stimulation, and ensuring that Mother Baby stay together.
f. Allowing adequate time for the cord blood to transfer to the baby for the blood volume, oxygen, and nutrients it provides.
g. Ensuring the mother's full access to her ill or premature infant, including kangaroo care, and supporting the mother to provide her own milk (or other human milk) to her baby when breastfeeding is not possible.

7. Avoid potentially harmful procedures and practices that have insufficient evidence of benefit outweighing risk for routine or frequent use in normal pregnancy, labor, birth, and the postpartum and neo-natal period. When considered for a specific situation, their use should be supported by best available evidence that the benefits are likely to outweigh the potential harms and should be fully discussed with the mother to ensure her informed consent. This may include, but is not limited to:
    a. Shaving
    b. Enema
    c. Sweeping of the membranes
    d. Artificial rupture of membranes
    e. Medical induction and/or augmentation of labor
    f. Repetitive vaginal exams
    g. Withholding food and water
    h. Keeping the mother in bed
    i. Intravenous fluids (IV)
    j. Continuous electronic fetal monitoring (cardiotocography)
    k. Insertion of a bladder catheter
    l. Supine or lithotomy (legs-in-stirrups) position
    m. Caregiver-directed pushing
    n. Fundal pressure (Kristeller)
    o. Episiotomy
    p. Forceps and vacuum extraction
    q. Manual exploration of the uterus
    r. Primary and repeat caesarean section
    s. Suctioning of the newborn
    t. Immediate cord clamping
    u. Separation of mother and baby

8. Implement measures that enhance wellness and prevent Illness for the MotherBaby-Family, including, but not limited to:
    a. Provide education about and foster access to good nutrition, clean water, and a clean and safe environment.
    b. Provide education in and access to methods of disease prevention, including malaria and HIV/AIDS prevention and treatment, and tetanus toxoid immunization.
    c. Provide education in responsible sexuality, family planning, and women's reproductive rights, and provide access to family planning options.

   d. Provide supportive prenatal, intrapartum, postpartum, and newborn care that addresses the physical and emotional health of the Mother Baby within the context of family relationships and community environment.
9. Provide appropriate obstetric, neonatal, and emergency treatment when needed. Ensure that staff are trained in recognizing (potentially) dangerous conditions and complications and in providing effective treatment or stabilization, and have established links for consultation and a safe and effective referral system.
10. Have a supportive human resource policy in place for recruitment and retention of dedicated staff, and ensure that staff are safe, secure, respected, and enabled to provide good quality, collaborative, personalized care to women and newborns in a positive working environment.
11. Provide a continuum of collaborative maternal and newborn care with all relevant health care providers, institutions, and organizations with established plans and logistics for communication, consultation, and referral between all levels of care.
12. Strive to achieve the 10 Steps to Successful Breastfeeding as described in the WHO/UNICEF Baby-friendly Hospital Initiative. (See Part 2 for more details.)
    a. Provide the Mother Baby with the best possible care, recognizing each other's particular competencies and respecting each other's points of view.
    b. Foster continuity of care during labor and birth for the Mother Baby from a small number of caregivers.
    c. Provide consultations and transfers of care in a timely manner to appropriate institutions and specialists.
    d. Ensure that the mother is aware of and can access available community services specific to her needs and those of her newborn.

III. Role and Scope of the Childbirth Educator

A. **A CHILDBIRTH EDUCATOR IS ONE WHO**:

1. Provides information about the physiology, psychology, and sociology of pregnancy, childbirth, postpartum, and early parenthood.
2. Demonstrates skills to assist women and their support persons to cope with pregnancy, childbirth, postpartum, and early parenthood.
3. Encourages communication between the pregnant woman and other members of her health care circle.
4. Helps families better understand and value the experience of the transition to parenthood.
5. Advocates for expectant parents, infants, and families.
6. Supports the development of a maternal-child health care system that provides access for parents to safe, low-cost, and family centered evidence-based maternity care both within and outside the hospital.

ICEA certified childbirth educators are professional sources of information with skills to support parents as they prepare for pregnancy, labor, birth, and parenthood. Childbirth educators positively impact birth outcomes and parent satisfaction.

IV. Models of Maternity Care –

A. Models of care reflect a person's or institution's philosophy of pregnancy and birth. The table below assigns characteristics to one model or the other to make them easier to discuss and compare.

Biomedical Model (Also referred to as the Medical Model of Care)	**Social Model** (Also referred to as the Midwifery Model of Care)
Focus on physical	Focus on the whole person
Control and manage	Respect and empower
Expertise / objective	Relational / subjective
Environment is peripheral	Environment is central
Anticipates pathology	Anticipates normality
Technology as partner	Technology as servant
Objective facts	Intuition
Safety	Self-actualization

B. ICEA encourages childbirth educators and others involved in the care of childbearing women to consider how these differing philosophies of care influence practice.

V. Steps to becoming an ICEA Certified Childbirth Educator (ICCE)

A. **TRADITIONAL PATHWAY** –
   1. This pathway is the right choice if you:
      a. Have little or no experience as a childbirth educator
      b. Are a layperson who is committed to helping childbearing families
      c. You are a doula, nurse, or other birth professional who wants to expand your services to include childbirth classes
      d. You have allowed your certification to lapse two years or more.
   2. Steps to certification
      a. Enroll in the certification program.
      b. Attend an ICEA Professional Childbirth Educator Workshop or enroll in the online version of the certification program, which includes an online workshop (additional fees required).
      c. Review the certification study guide and referenced readings.
      d. Complete an evaluated teaching series of at least six hours.
      e. Observe a minimum of three labors and/or births.
      f. Apply to take the certification examination.

B. **EXPERIENCED PATHWAY**
   1. This pathway is the right choice if:
      a. You are currently certified with another childbirth educator organization approved by ICEA

   b. You have been certified as a childbirth educator within the last two years through ICEA or another childbirth organization approved by ICEA
2. Steps to certification
   a. Enroll in the certification program.
   b. Review the certification study guide and the referenced readings (provided after enrollment).
   c. Study specific ICEA position papers and pass post-tests.
   d. Apply to take the certification examination.
   e. If your certification has lapsed within the last 12 months. Submit proof of lapsed certification with ICEA or another childbirth educator organization recognized by ICEA.
   f. Submit the ICEA examination application form.

C. **ONLINE PROGRAM** – This program is offered especially for those who do not have access to a face-to-face workshop. You can choose this option when you enroll in the Traditional Pathway. Other steps in the Traditional Pathway must also be completed. The online workshop simply takes the place of a face-to-face workshop.

D. **Recertification** is required every three years. To recertify an ICCE must:
   1. Obtain a minimum of 24 Continuing Education Credits
   2. Teach three class series' of at least six hours each within the last three years
   3. Apply for recertification and pay the recertification fee

VI. ICEA supports childbirth educators in several ways.

A. The Board of Directors and staff of ICEA are just an email away. Contact us with questions and suggestions.
B. Your ICEA Approved Trainer (IAT) is happy to answer questions.
C. ICEA offers a mentorship program for those just beginning in this field.
D. ICEA offers several different opportunities for continuing education including conferences and online webinars.

It is important for educators to become life-long learners. Recertification is required every 3 years. Continuing Education (CE) hours are required.

Part 2: REPRODUCTION AND HEALTHY LIFESTYLES

BIG IDEAS

1. A healthy lifestyle including a nutritious diet and reasonable exercise promote optimal health for both mother and baby.
2. Education about potential dangers and complications of pregnancy can help minimize difficulties for pregnant women and their babies.
3. According to the World Health Organization (WHO), there are Healthy Birth practices that improve birth outcomes, including doula care and breastfeeding.

OBJECTIVES:

At completion of Part 2 the learner will:

1. List the stages of development: zygote, embryo, and fetus.
2. List and describe the main organs of the female reproductive system.
3. Describe ways in which women may make healthy lifestyle changes during pregnancy.
4. Compare and contrast the physical, emotional, and mental symptoms of stress.
5. List nutrients that influence a healthy pregnancy and the foods in which they are found.
6. List appropriate weight gains in pregnancy and how the weight is distributed.
7. Share information about and suggestions to cope with discomforts of pregnancy.
8. Recognize ACOG Guidelines for exercise during pregnancy.
9. List tests commonly performed during pregnancy.
10. Describe common complications of pregnancy.
11. Recall dietary requirements for clients with special needs in the childbearing year.
12. Describe potential dangers that may occur in the childbearing year.
13. List two Healthy Birth practices according to the World Health Organization that improve birth outcomes.

LEARNING RESOURCES

- ICEA Position Papers
    - Role and Scope of the Childbirth Educator – https://icea.org/wp-content/uploads/2015/12/Role-Scope-of-CBE-PP-2017.pdf
    - Role and Scope of the Birth Doula – https://icea.org/wp-content/uploads/2018/02/The-Role-and-Scope-of-Birth-Doula-Practice.pdf
    - Role and Scope of the Postpartum Doula – https://icea.org/wp-content/uploads/2015/12/Role-Scope-of-Postpartum-Doula-3.pdf
    - Harmful Environmental Substances – https://icea.org//wp-content/uploads/2015/12/Position-Paper-Education-on-Harmful-Environmental-Substances-2017.pdf
- Anatomy
    - Anatomy Zone reproductive anatomy videos – http://anatomyzone.com/category/tutorials/reproductive/
    - Spinning Babies anatomy – https://spinningbabies.com/learn-more/birth-anatomy/

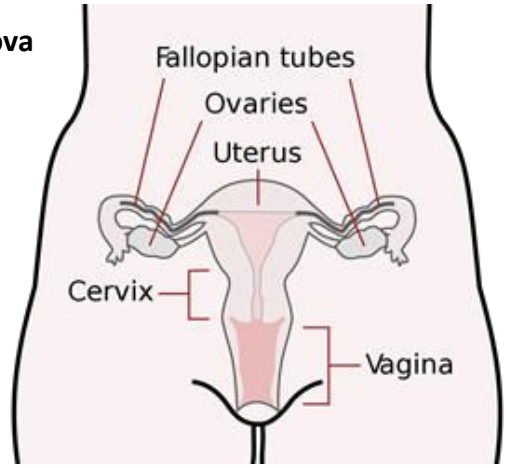
- ACOG – Methods for Estimating the Due Date - https://www.acog.org/-/media/Committee-Opinions/Committee-on-Obstetric-Practice/co700.pdf?dmc=1&ts=20191014T1942037265
- Exercise during pregnancy – https://www.acog.org/-/media/For-Patients/faq119.pdf?dmc=1&ts=20191002T1648496755
- Nutrition in Pregnancy –
  - https://www.glowm.com/section_view/heading/Nutrition%20in%20Pregnancy/item/97
  - https://medlineplus.gov/pregnancyandnutrition.html
- Gestational Diabetes –
  - https://www.stanfordchildrens.org/en/topic/default?id=gestational-diabetes-mellitus-gdm-85-P00337
  - https://medlineplus.gov/diabetesandpregnancy.html
- Intimate Partner Violence –
  - https://apps.who.int/iris/bitstream/handle/10665/85239/9789241564625_eng.pdf;jsessionid=E146F53F53645342E83686838E112164?sequence=1
  - https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4361157/pdf/jwh.2014.4872.pdf
- Substance abuse in pregnancy – https://www.marchofdimes.org/pregnancy/is-it-safe.aspx
- Infections in pregnancy - https://www.marchofdimes.org/complications/pregnancy-complications.aspx
- WHO recommendations: Intrapartum care for a positive childbirth experience – https://apps.who.int/iris/bitstream/handle/10665/260178/9789241550215-eng.pdf?sequence=1

CONTENTS

OUTLINE

I. Reproductive mechanisms

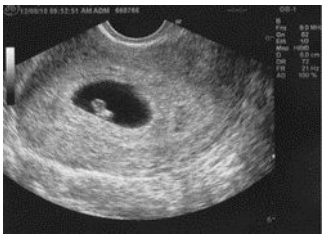
A. Female reproductive organs



1. **Ovaries** produce the female egg cells, called the **ova or oocytes**.
2. The ovum (singular) is then transported to the **fallopian tube (uterine tube or ovaduct)**.
3. The **uterus** (also known as the womb) is a hollow muscular organ located between the bladder and the rectum.
    a. The uterus is commonly divided into three regions:
        i. Fundus – the superior aspect (top) of the uterus. Fetal growth is often estimated by measuring from the pubic bone to the fundus.
        ii. Body – the central portion of the uterus
        iii. Cervix – the inferior (lower) portion of the uterus that extends into the vagina
    b. The uterus is also divided into three layers:
        i. Perimetrium – the outer layer
        ii. Myometrium – the middle layer which forms the bulk of the uterine wall.
        iii. Endometrium – the inner layer which is highly vascular; the endometrium is subdivided into layers – the one closest to the myometrium is permanent; the layer closest to the uterine cavity is shed with each monthly menstrual cycle.
    c. The uterus is where the fertilized ovum (**zygote**) implants and develops. The size of the uterus when a woman is not pregnant is approximately the size of her fist. The uterus grows as the baby grows. At the end of pregnancy the uterus is the largest muscle in the woman's body. It returns to its pre-pregnant size around six weeks postpartum.
4. The **vagina** (or birth canal) is a tube-shaped, muscular organ that extends from the cervix to the vulva.
5. The **vulva** is the external female genitalia including the clitoris, labia majora and labia minora.
6. The **perineum** is the external area between the thighs and buttocks which includes the vulva and the anus.
7. These organs are surrounded and held in place by various ligaments and muscles. For a more thorough understanding please see the videos from Anatomy Zone and the Spinning Babies web site listed under Learning Resources. While these resources will aid your understanding the only material that will be tested on the final exam will be what is listed in this outline.

B. Fertilization and fetal development

1. Human **fertilization** is the union of the female ovum and the male sperm and the fusion of their respective genetic material.
    a. Fertilization usually occurs in the outer third of the fallopian tube (closer to the ovary, farther from the uterus).
    b. Until 14 days after conception the fertilized ovum is referred to as a **zygote**.
    c. The zygote travels down the fallopian tube and implants in the uterine lining on day 6-7 after fertilization.
2. **Embryo** is the term used for the developing human from the beginning of the third week after fertilization until the eighth week.
    a. During week 5-6 of pregnancy the heartbeat can be detected.
    b. Arms and legs begin to grow week 7-8.
    c. Ultrasound measurement in the first trimester is the most accurate way to date the pregnancy.



3. After the eighth week the developing human is referred to as a **fetus**.

II. Nutrition

A. During pregnancy women are eager to initiate change for healthy lifestyles (exercise, healthy foods, and drinking plenty of water).
B. Developmental stages of pregnancy require adaptations
    1. As the fetus grows and develops, several anatomical changes must occur to the female body to accommodate the growing fetus, including placental development, weight gain, abdominal extension, breast enlargement, and posture changes.
    2. During the second trimester morning sickness subsides, the uterus expands up to 20 times its normal size, breasts enlarge, and movements of the fetus may be felt.
    3. During the third trimester the fetus grows most rapidly and final weight gain occurs. The abdomen drops and fetal movement can become quite strong. The woman feels ready to give birth.
C. Nutrition - This outline includes only a brief overview of the most necessary nutrients. For more information please see the reference for the Global Library for Women's Medicine listed under the resources. *Only material that is included in this outline is on the exam*.
    1. Macronutrients
        a. **Carbohydrates** are categorized as simple or complex.
            i. Simple carbohydrates are sugars. They are quickly broken down and metabolized.
            ii. Complex carbohydrates are more chemically complex (and are often accompanied by fiber) so they take longer for the body to process. This results in longer-lasting energy that is available over a longer period of time.
            iii. Carbohydrates produce 4 calories of energy per gram.
        b. **Protein** is essential for the growth and maintenance of our body's tissues. It provides the building blocks for many hormones, enzymes, and antibodies. Protein is responsible for the transportation and storage of many molecules and micronutrients.

i. When carbohydrate and fat stores are diminished, your body will begin to break down protein for energy.
ii. Recommended daily protein intake during pregnancy is 1.1 grams of protein per kilogram of pregnant weight.
iii. Protein produces 4 calories of energy per gram.

c. **Fat** is necessary for hormone production.
i. Saturated fats are most commonly solid at room temperature and come from animal sources. It is best to limit your intake of saturated fats.
ii. Polyunsaturated and monounsaturated fats usually come from plant sources and are liquid at room temperature
iii. Fats produce 9 calories of energy per gram.

2. Micronutrients – Vitamins and minerals are needed in small amounts, but are necessary for the chemical processes that keep our bodies functioning.
a. **Vitamin A** is supports healthy vision and immune function. Vitamin A deficiency in HIV-positive pregnant women has been shown to increase maternal-fetal transmission in parts of Africa. Dietary sources of vitamin A include leafy green and orange vegetables, carrots, sweet potato, squash, cantaloupe, and apricots.
b. **Folate (vitamin B9)** is a pregnancy superhero! Taking a prenatal vitamin with the recommended 400 micrograms (mcg) of folic acid before and during pregnancy can help prevent birth defects of baby's brain and spinal cord (neural tube defects). Dietary sources of folate include leafy green vegetables, orange juice, strawberries, dried peas, and beans.
c. **Iron** deficiency anemia is the most common form of nutritional deficiency. It is associated with a higher incidence of low birthweight infants and a shorter length of gestation, a higher perinatal mortality and increased maternal mortality and morbidity. Most of the body's iron is transported by hemoglobin, a protein on the red blood cells. Iron from animal sources is more easily absorbed. Plant sources are more efficiently absorbed when accompanied by vitamin C. Nutritional sources of iron include red meat, eggs, beans, and dried fruit.

Some providers will recommend an iron supplement for women who suffer from low hemoglobin.

3. Water is a non-nutritive, but essential substance during pregnancy. Dehydration may lead to pre-term labor. Adequate water intake is approximately 1.5 liters per day. More may be needed during vigorous exercise or hot weather.
4. Teaching about nutrition
a. Encourage families to bring healthy snacks and drinks to learning sessions, especially if they will be lengthy.
b. Food diaries can be a helpful way for mothers to evaluate their nutrition. It is not necessary for the educator to evaluate the mother's diet, but to give her a tool for self-evaluation.

D. Weight gain during pregnancy
1. Suggested weight gain during pregnancy is based on a person's **body mass index (BMI)** which is a ratio of her pre-pregnancy weight to her height.

	Pre-pregnancy BMI	Suggested weight gain	Suggested weight gain
Underweight	Less than 18.5	28 – 40 pounds	12.5 – 18 kg
Normal weight	18.5 – 24.9	25 – 35 pounds	11.5 – 16 kg
Overweight	25 – 29.9	15 – 25 pounds	7 – 11.5 kg
Obese	Over 30	11 – 20 pounds	5 – 9 kg

2. Distribution of weight gain during pregnancy. (Variation between kilograms and pounds reflects the different sources of information. All weights are approximate.)

Baby	7 – 8.5 pounds	3.5 kg
Placenta	1 – 1.5 pounds	0.7 kg
Uterus	2 pounds	0.9 kg
Amniotic fluid	2 pounds	0.9 kg
Breasts	1 pound	1.1 kg
Blood volume	2.5 pounds	1.5 kg
Fat	5-8 pounds	3.1 kg
Tissue fluid	6 pounds	1.1 kg
Total	27 – 31.5 pounds	12.8 kg

III. Exercise during pregnancy and postpartum

A. If you are healthy and your pregnancy is normal, it is safe to continue or start most types of exercise, but you may need to make a few changes. Physical activity does not increase your risk of miscarriage, low birth weight, or early delivery. However, it is important to discuss exercise with your obstetrician or other member of your health care team during your early prenatal visits. If your health care professional gives you the OK to exercise, you can decide together on an exercise routine that fits your needs and is safe during pregnancy.

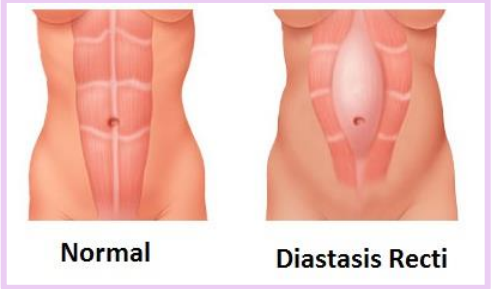
B. Physical changes during pregnancy that affect exercise:
   1. Joints become more relaxed due to the hormone relaxin. The effect of relaxin is very much what the name implies – it loosens (relaxes) joints. Avoid sudden movements (like bouncing or jerking) that could potentially move the joints beyond their normal range of motion.
   2. As a woman's pregnancy progresses and the weight in her abdomen increases her center of gravity shifts. This can affect her sense of balance and stability.
   3. As the baby grows in the uterus it takes up more space (especially toward the end of pregnancy) which can affect lung capacity. Pregnant people should listen to their bodies and discontinue exercise if they feel short of breath.

C. Precautions for exercise during pregnancy:
   1. Stay well-hydrated.
   2. Do not become overheated.
   3. Provide adequate support for breasts during vigorous exercise.
   4. Avoid lying supine (facing upward).

D. Exercise in the postpartum period.
    1. Check with healthcare provider for any concerns regarding routine activities
    2. Gradually ease back into an exercise routine. The hormone relaxin can remains in the body up to five months after having the baby.
    3. Practice good posture. Abdominal muscles have been stretched during pregnancy and will need time to tone up again.
E. Teaching about exercise
    1. Kegel exercises to strengthen the pelvic floor
    2. Pelvic tilt for lower back strength and optimal fetal positioning
    3. Squatting for lower back strength and optimal fetal positioning
    4. Hands and knees for optimal fetal positioning.

IV. Discomforts of pregnancy and postpartum

A. Nausea and vomiting
    1. Eating several small meals instead of large meals can help alleviate discomfort.
    2. Drinking fluids between meals rather than with meals helps some pregnant people
    3. Those who experience persistent vomiting (hyperemesis gravidarum) should be referred to a healthcare provider.
B. Heartburn – To minimize heartburn one can raise the head of their bed, lie on their left side, occasionally sleep in a recliner chair, avoid foods that aggravate heartburn (alcohol, chocolate, fat, citrus juices, etc.), and avoid lying down after meals.
C. Constipation – Eating a high fiber diet, drinking plenty of water, and exercising routinely can help relieve the discomforts of constipation.
D. Food cravings and pica
    1. Food Cravings – It's possible to have food cravings and still provide your baby with the nutrients she or he needs to grow. However, giving in too often to your desire for high-calorie foods may translate into too much weight gain. Eating a well-balanced diet along with exercising regularly will help reduce food cravings.
    2. Pica (craving substances with little or no nutritional value such as dirt, chalk, or clay)
        a. Poor weight gain, constipation, and anemia can result from pica
        b. Suggest replacing dirt or clay with milk powder. Frozen fruit pops or juice could be substituted for ice.
        c. Monitor your iron status along with other vitamin and mineral intake.
E. Sexuality – As the pregnancy progresses partners may need to try alternate positions during sexual intercourse.
F. Diastasis recti is a separation of the rectus abdominus muscle. The childbirth educator may refer the pregnant or postpartum person to a physical therapist.



V. Diagnostic testing in pregnancy

A. **Protein –** Urine will be tested for protein at every prenatal visit. Often protein in the urine is not problematic, but it can be a sign of preeclampsia.

B. **Chorionic villus sampling** can be performed between 10-13 weeks of pregnancy if congenital abnormalities are suspected. A tiny tissue sample is taken from the villi of the chorion, which forms the fetal part of the placenta.

C. **Amniocentesis** may be done between 15-20 weeks of pregnancy if a problem is suspected. A sampling of amniotic fluid is taken by inserting a hollow needle into the uterus.

D. **Glucose tolerance test (GTT) -** Between 24-28 weeks of pregnancy a two-hour, 75-gram oral glucose tolerance test (OGTT) is used to test for gestational diabetes. A healthcare provider will take a blood sample to test the pregnant person's fasting glucose level. After drinking 8 ounces of a syrupy glucose solution that contains 75 grams of sugar, the healthcare provider will draw blood at the one- and two-hour marks.

E. **Imaging** – Ultrasonography and magnetic resonance imaging (MRI) are not associated with risk and are the imaging techniques of choice for the pregnant patient, according to updated recommendations from the American College of Obstetricians and Gynecologists (ACOG). Ultrasound in the first trimester is often used to date the pregnancy.

VI. Pregnancy Complications

A. Vaginal bleeding - Bleeding during pregnancy is common, especially during the first trimester, and usually there is no cause for alarm. Because bleeding can sometimes be a sign of something serious (miscarriage), it's important to be checked by your midwife or physician doctor to ensure the health of mother and child.

B. Ectopic pregnancy - When the fertilized egg implants outside the uterus (often in the fallopian tube) the zygote cannot continue to grow without causing problems for the mother. This is often accompanied by significant pain. This must be treated by a healthcare provider.

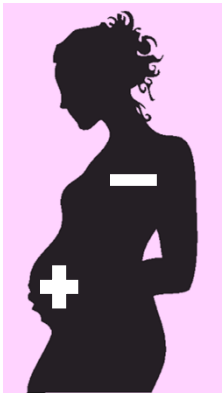
C. Fever can be a sign of infection. Consultation with a healthcare provider is recommended

D. Hyperemesis gravidarum - A severe type of nausea and vomiting during pregnancy that can result in weight loss and dehydration.

E. Gestational Diabetes Mellitus (GDM) – This is diabetes that occurs during pregnancy. It can often be managed by improving habits of diet and exercise. Left untreated the baby can become quite large, contributing to a difficult birth experience for the mother.

a. Approximately one in six pregnant women worldwide develop GDM.
b. Hormones produced during pregnancy can increase insulin resistance.

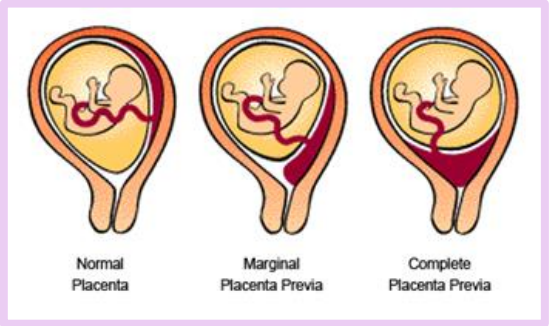
F. **Rh blood incompatibility** occurs when the pregnant person has no Rh factor (Rh negative blood) and the fetus has the Rh factor (Rh positive blood). Rhesus (Rh) factor is a protein found on the red blood cells. When the woman is exposed to Rh positive blood her body produces antibodies to the positive protein. If those antibodies cross the placenta, they attach to the fetal red blood cells and destroy them. This can lead to severe anemia for the newborn which may require blood transfusion.



G. **Hypertension** (high blood pressure) occurs in 5% - 10% of all pregnancies. It is one of the leading causes of maternal and infant illness and death worldwide. Complications in pregnancy may result from organ failure (kidney, heart, or liver), placental abruption, or stroke. Hypertension may also affect the perfusion of blood through the placenta reducing the amount of oxygen and nutrients available to the fetus.
    a. Risk factors for hypertensive disorders in pregnancy
        i. First time mothers
        ii. Family history of hypertension
        iii. Pregnant with multiples (twins, triplets, etc.)
        iv. People younger than 20 or older than 40
        v. People who were hypertensive prior to pregnancy
    b. Signs and symptoms of hypertensive disorders in pregnancy include increased blood pressure, swelling (edema), visual changes (blurred vision or double vision), nausea / vomiting, or changes in liver or kidney function tests.
    c. Types of hypertensive disorders in pregnancy
        i. *Chronic hypertension* is present in the pregnant person before pregnancy.
        ii. *Pregnancy Induced Hypertension* (PIH) (also known as gestational hypertension) is the development of hypertension in a pregnant woman after 20 weeks' gestation without the presence of protein in the urine or other signs of pre-eclampsia.
        iii. *Preeclampsia* typically occurs after 20 weeks gestation. Protein is present in the urine. (Please note: although preeclampsia most often occurs during pregnancy it may also occur in the postpartum period.)

H. Infections during pregnancy
    a. *Sexually transmitted infections* should be diagnosed and treated. Pregnant persons should be taught strategies to reduce their risk of repeated infections.
    b. *Bladder infection* is characterized by painful urination as well as urgency and frequent urination. Treatment is often a course of antibiotics.
    c. *Group B streptococcus (GBS)* is part of women's normal vaginal flora. When it is transmitted to the fetus as it moves through the birth canal, serious infant morbidity and even mortality can result.

I. **Placenta Previa** occurs when the placenta implants in the lower segment of the uterus partially or completely blocking the cervix. A complete placenta previa requires that the baby be born by cesarean.



J. **Placental Abruption** (or abruptio placentae) is the term used when the placenta detaches from the wall of the uterus. This serious condition results in compromised circulation to the fetus. The most common causes are hypertension, blunt trauma to the mother's abdomen (such as in a motor vehicle accident), and intimate partner violence.

K. **Preterm labor** is labor that begins before 37 weeks gestation. A baby born prematurely is at increased risk of breathing difficulties, jaundice, infections, difficulty regulating body temperature, and feeding problems. Preterm labor is characterized by:
   a. Uterine contractions that occur every ten minutes, or six contractions in one hour
   b. Continuous or intermittent menstrual-like cramps or pressure in the lower abdomen and thighs
   c. Dull ache in lower back that won't go away with position change
   d. Sudden increase or change in vaginal discharge
   e. General feeling that something isn't right

L. **Decrease in fetal movement** can be an indication of a baby in distress. The parent should contact a healthcare provider to investigate the baby's well-being.

M. **Pregnancy loss**
   a. Miscarriage – the spontaneous loss of a pregnancy before the 20th week.
   b. Stillbirth – fetal death after 20 weeks of pregnancy.

N. **Perinatal Mood and Anxiety Disorders (PMAD)** can occur anytime during pregnancy and/or throughout the first postpartum year. Please see Part 5 – V. Perinatal Mood and Anxiety Disorders for more information.

VII. Groups with special needs in the childbearing year

A. Adolescents –
   1. Adolescents are still growing themselves. Extra protein will provide for their growth and the growth of the baby.
   2. This group often lacks key nutrients such as calcium and iron, therefore a healthy snack to provide in a prenatal class would be calcium-fortified orange juice and nuts.

B. Vegetarians - A meatless diet can be healthy, but vegetarians -- especially vegans -- need to make sure they're getting enough vitamin B12, calcium, iron, and zinc. The Academy of Nutrition and Dietetics warns of the risk of vitamin B12 deficiencies in vegetarians and vegans. Vitamin B12 is generally only found naturally in animal products, so eating B12 fortified foods or taking a B12 supplement is necessary for vegans.

C. Obese people - Being overweight or obese increases your risk for high blood pressure. Maintaining a healthy weight can help you control high blood pressure and reduce your risk for

other health problems. A balanced diet and moderate exercise can reduce risks during pregnancy.

D. Those with Gestational Diabetes Mellitus (GDM) –
    1. During pregnancy the placenta releases hormones that increase insulin resistance. This causes diabetes during pregnancy (GDM).
    2. About seven out of every 100 pregnant women in the United States get gestational diabetes. Most of the time, it goes away after you have your baby, but it does increase your risk for developing type 2 diabetes later on.
    3. Risks of GDM
        a. Macrosomia – the baby may grow larger than normal. This may complicate the birth of the baby.
        b. Hypoglycemia – Because the mother's blood sugar levels are high, once the baby is born s/he may produce an excess of insulin resulting in low blood sugar.

E. Low income clients –
    1. Many low income clients are at risk for poor nutrition.
    2. In the US Women, Infants, and Children (WIC) provides supplemental foods, nutrition education, and health care and social service referrals to low-income pregnant, breastfeeding, and postpartum women, to infants, and to children one to four years of age who are at nutritional risk. In the United States, almost half of all infants and one-quarter of all children one to four years of age participate in the WIC program.

VIII. Potential dangers in the childbearing year

A. Stress
    1. Stress initiates hormone changes that can result in various physical, emotional, and mental changes. Depression, anxiety, heart attacks, stroke, hypertension, immune system disturbances that increase susceptibility to infections have been linked to stress.
    2. Develop culturally appropriate skills for coping with stress:
        a. Eat a healthy, well-balanced diet
        b. Exercise regularly
        c. Get adequate amounts of sleep
        d. Talk to others who understand and empathize
        e. Avoid drugs, alcohol, and other forms of toxic relief. While these may provide temporary relief, they increase stress over time.

B. Intimate Partner Violence (IPV)
    1. Worldwide 35% of women have experienced either physical and/or sexual intimate partner violence or non-partner sexual violence.
    2. Those who have been physically or sexually abused by their partners report higher rates of a number of important health problems. They are:
        a. 16% more likely to have a low-birth-weight baby.
        b. Almost twice as likely to experience depression
        c. In some areas they are 1.5 times more likely to acquire HIV, compared to women who have not experienced partner violence

3. Women who experience IPV are more likely to engage in risky behaviors such as smoking or alcohol/drug abuse, and are less likely to seek prenatal care.

C. Substance abuse
   1. Tobacco –
      a. For the mother smoking increases her risk of cardiovascular disease, lung disease, and cancer.
      b. During pregnancy, smoking increases the risk of preterm labor and problems with the placenta.
      c. Babies exposed to smoking in utero and after birth are at increased risk of birth defects and Sudden Infant Death Syndrome (SIDS).
   2. Alcohol – No safe level of alcohol consumption during pregnancy has been established. Alcohol consumption during pregnancy can lead to fetal alcohol spectrum disorder (FASD). FASD may result in premature birth, hearing impairment, or intellectual or developmental disabilities.
   3. Illegal drugs can have a variety of effects on the pregnant woman and the developing fetus. Using illegal drugs may result in miscarriage, preterm birth, or stillbirth. Babies may be born prematurely and/or have low birthweight. Once born the babies may suffer from neonatal abstinence syndrome (NAS) which means the baby experiences withdrawal symptoms.

D. Hot tubs and saunas - Sitting in a hot tub or sauna can raise your body temperature to a level that can be dangerous for your developing baby.

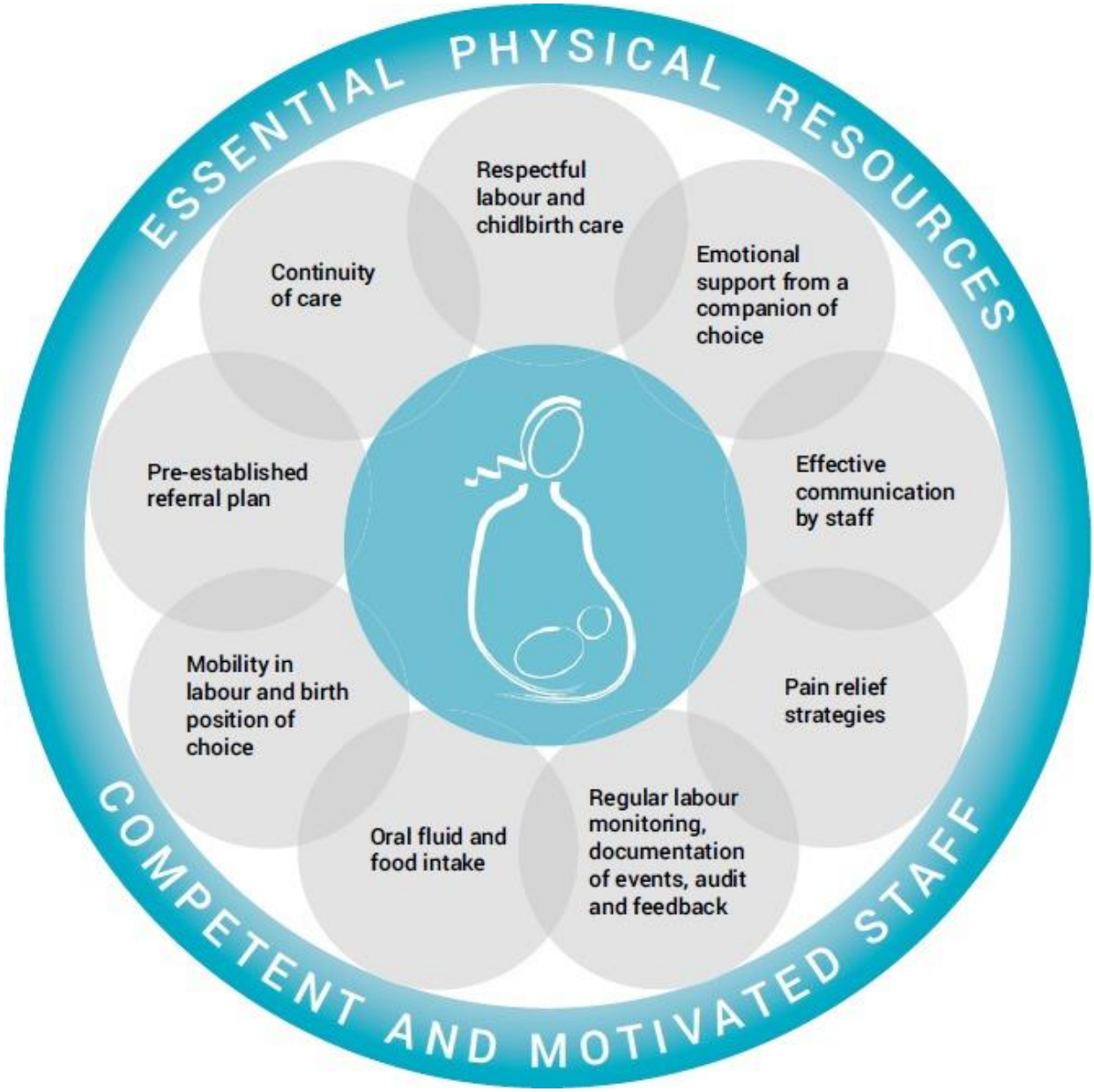
E. Infectious diseases
   1. Toxoplasmosis - The solid wastes/feces of cats may contain a parasite that can cause toxoplasmosis, a rare but serious blood infection. Undercooked meat can also contain this parasite.
   2. Lyme disease - Lyme disease is caused by a bacteria carried by an infected blacklegged tick (also called a deer tick) Untreated Lyme may cause complications during pregnancy, include: stillbirth, heart defects, urinary tract defects, and problems with baby's blood leading to jaundice.
   3. Listeria – - Listeria is a bacteria found in soil, water, and some animals, including cattle and poultry. Listeriosis (the infection caused by this bacteria) can cause mild, flu-like symptoms such as fever, chills, muscle aches, and diarrhea or upset stomach. You also may have a stiff neck, headache, confusion, or loss of balance. Even if you do not feel sick, you can pass the infection to your fetus.
   4. Malaria – this parasite is transmitted by infected mosquitoes and is a serious threat to women and children in sub-Saharan Africa. Malaria infection may result in low-birthweight infants, anemia during pregnancy, and lowered immune response. Preventive measures include use of an insecticide-treated net and intermittent preventive treatment during pregnancy.
   5. Human Immunodeficiency Virus (HIV) – this virus attacks the immune system. It is contracted through body fluids such as blood, semen, and breastmilk. There is no cure,

but effects of the symptoms can be reduced with appropriate treatment. Treatment during pregnancy reduces the risk of transmitting the virus to the baby.

IX. Recommendations for a positive childbirth experience

A. The World Health Organization (WHO) has compiled a list of practices that support a positive childbirth experience. We mention only two here, but will refer to others throughout the program. Please note how closely these practices intersect with the **International Childbirth Initiative (ICI)** described in Part 1.

1. Doula Care
    a. Definition – a doula is a nonmedical person who assists a woman before, during, or after childbirth by providing information, physical assistance, and emotional support. She may also assist the partner and/or family.
    b. Benefits of birth doula care include:
        i. Shorter labors
        ii. Reduction in C-section births
        iii. Higher breastfeeding rates
        iv. Less pain medication used
    c. Postpartum doulas can help families adjust after the birth. Ideally a family should try to hire a postpartum doula before the birth.
2. Breastfeeding
    a. Breast milk is uniquely suited to the human infant's nutritional needs. It is a living substance with unparalleled immunological and anti-inflammatory properties that protect against a host of illnesses and diseases for both mothers and children.
    b. Baby Friendly Hospital Initiative (BFHI) – BFHI is based on ten steps that form a broad framework that guide the Baby-Friendly Hospital Initiative. They were developed by a team of global experts and consist of evidence-based practices that have been shown to increase breastfeeding initiation and duration. Please see Part 5. I – The Baby Friendly Hospital Initiative – for more information.



Schematic representation of the WHO intrapartum care model

http://www.who.int/reproductivehealth/intrapartum-care/en/

PART 3 LABOR AND BIRTH

BIG IDEAS

1. Birth is a normal physiologic process. Hormones have an impact on the birth process and postpartum period.
2. Childbirth educators are aware of common medical practices in their community.

OBJECTIVES:

At the completion of Part 3 the learner will:

1. Describe pregnancy and birth as a normal, healthy, continuous process.
2. Outline four sequential stages of labor including physical and emotional changes associated with each stage.
3. List three measures of physiologic progress in birth.
4. Describe how hormones influence the normal, physiologic process of birth and the postpartum period.
5. Compare and contrast possible and positive signs of labor.
6. Describe how a contraction is measured.
7. Compare and contrast different methods of pushing in the second stage of labor.
8. Identify the elements of the APGAR score.
9. List the benefits of skin to skin care after birth.
10. Define delayed cord clamping.
11. List benefits, potential risks, and alternatives for common medical interventions used in your community and country of practice.
12. Outline current information about cesarean birth.
13. Summarize the benefits and potential risks of VBAC (vaginal birth after cesarean).
14. Identify the seven steps of the grief process.

LEARNING RESOURCES

- ICEA Position Papers
    - Induction – https://icea.org//wp-content/uploads/2016/01/Induction_PP.pdf
    - Episiotomy – https://icea.org/wp-content/uploads/2015/12/Episiotomy-PP-2017.pdf
    - Cesarean Childbirth – https://icea.org//wp-content/uploads/2016/01/Cesarean_Childbirth_PP.pdf
- ACOG – Safe Prevention of the Primary Cesarean Delivery – https://www.acog.org/Clinical-Guidance-and-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery?IsMobileSet=false
- High Intervention Birth and Mother's Mood – https://womenshealthtoday.blog/2017/08/06/high-intervention-birth-and-mothers-mood/
- Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide – https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31472-6/fulltext
- Fetal heart rate monitoring

  - ACOG – https://www.acog.org/Patients/FAQs/Fetal-Heart-Rate-Monitoring-During-Labor?IsMobileSet=false
  - Stanford – https://www.stanfordchildrens.org/en/topic/default?id=fetal-monitoring-90-P02448
- Labor induction –
  - ACOG – https://www.acog.org/Patients/FAQs/Labor-Induction?IsMobileSet=false
  - March of Dimes – https://www.marchofdimes.org/pregnancy/medical-reasons-for-inducing-labor.aspx
  - AWHONN – https://www.health4mom.org/zones/go-the-full-40/
- Bishop score – http://perinatology.com/calculators/Bishop%20Score%20Calculator.htm
- Eating during labor - https://www.asahq.org/about-asa/newsroom/news-releases/2015/11/eating-a-light-meal-during-labor
- Maternal positioning - https://spinningbabies.com/start/in-pregnancy/the-3-principles-in-pregnancy/
- Pushing/bearing down methods for the second stage of labour – https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD009124.pub3/full
- Cesarean birth
  - WHO – https://apps.who.int/iris/bitstream/handle/10665/161442/WHO_RHR_15.02_eng.pdf;jsessionid=6212EC38B2ECE513B8CB1A5C837F3005?sequence=1
  - ACOG – https://www.acog.org/Clinical-Guidance-and-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery?IsMobileSet=false
  - Consensus bundle on Safe Reduction of Primary Cesarean – https://dl.uswr.ac.ir/bitstream/Hannan/68065/1/2018%20JoMWH%20Volume%2063%20Issue%202%20March-April%20%289%29.pdf
- VBAC Education Project - https://icea.org/about/the-vbac-education-project/
- Preterm birth – https://www.who.int/news-room/fact-sheets/detail/preterm-birth
- Stillbirth – https://www.who.int/reproductivehealth/topics/maternal_perinatal/stillbirth/en/
- Grief – https://stillbirthfoundation.org.au/is-there-a-right-way-to-grieve/

CONTENTS

OUTLINE

I. Physiologic Birth Introduction

A. **Birth is a normal physiologic process for most women**. Physical changes in the mother are obvious. Emotional adaptations may not be as obvious but are no less significant. Physical characteristics of physiologic birth include:
   1. Spontaneous onset (usually at 38-41 weeks of pregnancy) and progression of labor
   2. biological and psychological conditions that promote effective labor
   3. results in the vaginal birth of the infant and placenta
   4. results in physiological blood loss
   5. facilitates optimal newborn transition through skin-to-skin contact and keeping the mother and infant together during the postpartum period
   6. supports early initiation of breastfeeding

B. Emotional responses to birth experiences are varied.
   1. The childbearing year is a time of developmental change for parents as they begin to integrate the concepts of parenting and family into their lives in a new way.
   2. Anticipating parenthood can bring about changes in relationships with parents, spouse/partner, and other close friends/family.
   3. Memories of previous pregnancies and labor and birth experiences are profound and enduring.
      a. Positive memories tend to be associated with kindness and respect.
      b. Negative memories tend to be associated with feelings of powerlessness and disrespect.

II. Signs of Labor

A. **POSSIBLE SIGNS** *(Women may or may not experience any of these signs. They may indicate that the woman's body is preparing for labor, but they may indicate other things – such as fatigue or illness.)*
   1. Restless back pain
   2. Cramps
   3. Loose bowel movements or diarrhea
   4. Nesting urge

For the average woman pregnancy typically lasts 38-41 weeks

B. **PRELABOR SIGNS** *(Women may or may not experience any of these signs. These signs do indicate the woman's body is preparing for labor, but actual labor may still be days or weeks away.)*
   1. Non-progressing contractions
   2. Bloody show

3. Leaking of amniotic fluid

C. **POSITIVE SIGNS** *(Baby is on the way!)*
   1. Progressing contractions *(Contractions are longer, stronger, more frequent.)*
   2. Cervix dilated more than 4 centimeters
   3. Gush of amniotic fluid

III. Hormones that influence labor and their effects

A. OXYTOCIN

1. "Love hormone" – "calm and connection"
   a. Causes rhythmic uterine contractions, the urge to push, "fetal ejection reflex', letdown of breast milk
   b. Calming and analgesic effects on mothers and babies; feelings of well-being and love; the opposite of catecholamine's
   c. Reduces stress, increases sociability, primes reward centers (in both mother and infant) imprinting pleasure with infant contact promoting bonding
2. Synthetic oxytocin (Pitocin or Syntocin) –
   a. Risk of uterine hyperstimulation
   b. Stronger contractions with increased pain without central oxytocin analgesia
   c. Increased desensitization of oxytocin receptors
   d. Increased possibility of disruption of newborn breastfeeding behavior

Oxytocin	Pitocin (Syntocin)
Released from the posterior pituitary into the brain and then into the bloodstream	Released into the bloodstream only
Pulsatile release during labor	Continuous infusion through IV
Brain-based calming, stress-reducing and analgesic effects	Minimal calming effects because significant amounts do not cross the blood-brain barrier
Neuromodulator that regulates hormonal feedback systems	Continuous infusion not sensitive to hormonal feedback
	Increased risk of postpartum depression or anxiety

B. BETA ENDORPHINS

1. These morphine-like hormones increase with pain, exertion, stress and fear and tend to counteract associated unpleasant feelings.
2. They have analgesic and stress reduction effects. They contribute to the "high" some women feel after birth.
3. Release of beta-endorphins during breastfeeding may contribute to the bonding process.

C. CATECHOLAMINE'S – stress hormones (adrenalin or epinephrine, noradrenalin or norepinephrine, cortisol, and others)

1. Trigger **'fight-or-flight'** response; may cause first stage labor contractions to slow or stop; fetal heart rate may slow; woman becomes tense and fearful

2. In second stage a surge of catecholamine's help mobilize the strength, effort and alertness need to push out the baby.
3. Skin-to-skin contact immediately after birth may facilitate the reduction in catecholamines, allowing oxytocin and beta-endorphins to promote bonding.

Because oxytocin and catecholamines usually antagonize each other, keeping mom relaxed is important. High levels of catecholamines in early labor may slow contractions.

D. PROLACTIN

1. "Nesting hormone" – due to this hormone mothers often do things to prepare for baby's arrival such as cleaning, preparing meals, making baby clothes, etc
2. Prepares breasts for breastfeeding during pregnancy and after birth
3. Promotes synthesis of human milk
4. Has mood-elevating and calming effects on mother.

IV. Overview of physiologic labor and birth

A. Positive purposes of labor

1. Labor announces the imminent arrival of the baby.
2. Labor signals the woman to go to a safe place.
3. Labor calls those who care for the woman to gather close and care for her.
4. Labor prepares the baby for birth and life outside of the womb.

B. Cardinal movements of labor

1. **Engagement** – when the biparietal diameter (widest part) of the fetal head passes the pelvic inlet.
2. **Flexion** – the fetal chin flexes toward the chest.
3. **Internal rotation** – the pelvic inlet is widest in the transverse diameter (from mother's left to right). The pelvic outlet is widest in the anteroposterior diameter (from mother's front to back. The head of the fetus must rotate to pass through these diameters.
4. **Extension** – As the fetal head passes under the lower border of the symphysis pubis, the baby extends his head and neck. First the occiput appears, then the face, then the chin.
5. **Restitution** – the baby's head returns to the position in which it entered the pelvic inlet.
6. **External rotation** – the baby rotates further as the shoulders follow movements similar to the head. First the anterior shoulder is birthed and then the posterior shoulder.
7. **Expulsion** – after the birth of the head and shoulders, the rest of the baby completely emerges from the mother.

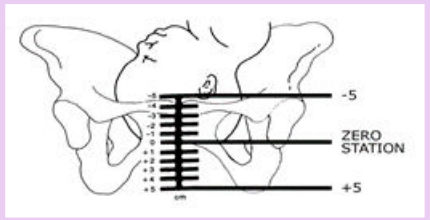
The cardinal movements of labor are the typical sequence of positions assumed by the fetus as it navigates its way through the pelvis of the mother during labor and birth.

C. Assessment of labor progress

1. <u>Cervical change</u>
   a. Cervical ripening (softening of the cervix)
   b. Position of the cervix (cervix moves from posterior to anterior)
   c. Dilation of the cervix (opening of the cervix)

d. Effacement of the cervix (thinning of the cervix)

2. Station – the relationship of the presenting part of the fetus to the mother's pelvis. The fetus is said to be at zero (0) station if the presenting part is at the imaginary line drawn between the ischial spines of the mothers pelvis. The head of the fetus is said to be *engaged* when it is at 0 station.



3. Quality of contractions (frequency, duration, intensity)
   a. *Frequency* of contractions is measured from the beginning of one contraction until the beginning of the next contraction. (How often do contractions occur?)
   b. The *duration* of a contraction is measured from the beginning to the end of the uterine muscle contraction. (How long do contractions last?)
   c. *Intensity* of contractions can be estimated by manual palpation or tocodynamometry (usually done in conjunction with electronic fetal monitoring). (How strong do contractions feel?)
   d. Quality of contractions can be influenced by:
      i. The condition of the mother – her level of fatigue and hydration
      ii. The condition of the baby – the flexion and rotation of the baby's head as well as the station (descent of the baby into the pelvis and through the birth canal)
      iii. Emotional factors that influence labor

Just as support can enhance labor progress, negative emotional factors can inhibit it.

Birth is as much an emotional process as it is a physical one.

a) Support – both physical and emotional – influences the mother's emotions. The presence of a supportive partner, family member, or friend is very helpful. The healthcare providers' attitude can make a significant difference in how a laboring person thinks about and manages her labor and birth experience. Doulas have been shown to be the most effective physical and emotional support during labor.
b) Emotional history of being mothered – A person's experience with their own mother can have a positive or negative affect on their perception of labor and birth.
c) Issues of past abuse – the effects of early abuse are likely to resurge during pregnancy and are marked in out of control feelings from the physical and emotional changes
d) A person's general acceptance of the birth process will influence how labor progresses.

V. Four stages of labor

A. Introduction

1. We divide labor into stages and phases because that makes it easier to describe and understand, but not all women follow this textbook pattern. Physical progress, as well as the emotional adjustment during labor, is unique to each woman. While this outline gives an accurate description of an average labor, there are always exceptions. Some women will struggle during early labor. Another woman's labor may stall during transition. As childbirth educators, we need to understand what an average labor is like, but we also need to remember that each labor is as unique as the woman experiencing it… and that requires flexibility on our part.
2. "6 is the new 4." In ACOG's 2014 Consensus Statement "Safe Prevention of Primary Cesarean" they recommended a new definition of active labor. Until this Statement active labor was defined as occurring between 3 or 4 centimeters of cervical dilation until 8 centimeters (when transition begins). Using data from the Consortium on Safe Labor, it was determined that the maximal rate of increase in cervical dilation (active labor) did not occur until 6 centimeters. This is the newest evidence-based recommendation. The older model is presented here because it is still commonly used as a description of the stages of labor.
3. Take note of the emotional responses listed for each phase and stage of labor. As a woman's focus turns more inward and the intensity of her response to contractions increases, she moves toward active labor. Most often her announcement that she "can't do this anymore" is a good indication that she has entered transition.

B. **Prelabor**- Contractions may be mild or intense, frequent or infrequent, but they are not *progressing*, meaning that they are becoming longer, stronger, and closer together. This can be tiring and discouraging for the mother and her partner. (See Section II.B – Prelabor)

C. **First stage of labor** (also known as the Dilation Stage)

In the first stage of labor – the dilation stage there are 3 phases:

Latent
Active
Transition

1. Dilation Stage Overview
   a. Cervix dilates up to 10 cm
   b. Cervix effaces (thins out) 100%
      i. For first time mothers (primiparas) the cervix usually effaces before it begins to dilate significantly
      ii. Contractions increase in duration, frequency, and intensity
      iii. Typically lasts 2-24 hours
         a) For primiparas (first time mothers) the average is 12.5 hours
         b) For women who have given birth before (multiparas) the average is about 6 hours.
2. Latent phase

a. The period characterized by persistent contractions that do not effect great change. These contractions are uncomfortable, but rarely painful.
    i. Contractions may begin by feeling like cramps either in the lower back or abdomen, but in true labor will increase in intensity.
    ii. Early in labor contractions may last only 30-40 seconds and occur every 20-30 minutes, but in true labor they will increase in duration and frequency.
b. Duration is between two-thirds and three-fourths of the dilation stage – the longest part of labor
c. It is often suggested that parents stay at home during this phase.
d. Emotional response – A pregnant person may experience excitement, anxiety, and relief during this phase of labor.

Early labor is a time to relax. Many providers ask the family to contact them or come to the birth facility following the **5-1-1** rule:

Contractions **5** minutes apart
Contractions lasting **1** minute
This pattern of contractions continues for **1** hour.

3. Active phase
    a. Cervical dilation progresses. The older standard says that this is from 4-7 cm. Newer guidelines state that active phase is from 6-8 cm.
    b. Contractions occur every 3-5 minutes, lasting 1 minute or more
    c. Duration
        i. For primiparas the active phase lasts an average of 3-7 hours
        ii. For multiparas it lasts from 20 minutes to 3 hours.
    d. This is usually the stage when the caregiver is called and, if not staying home for the birth, the woman moves to the birth center or hospital.
    e. Emotional response
        i. There is an emotional shift for the mother. She is no longer easily distracted but focuses on her contractions.
        ii. She may feel tired and discouraged.
        iii. She may become talkative.
        iv. She may feel a bit panicky as the reality of labor sets in.
4. Transition
    a. Cervical dilation progresses from 8 cm to 10 cm (or complete)
    b. Contractions may be 90 seconds long and occur every 2-3 minutes
    c. Duration is usually less than an hour (between 5-20 contractions)
    d. Emotional response
        i. The mother may feel tired and irritable
        ii. She may doubt her ability to cope

iii. She may experience nausea, vomiting, chills, hot flashes, or trembling due to increased levels of adrenaline. Some moms also begin to cry.

D. **Second stage of labor** (also known as the Birthing Stage)

1. Birthing Stage Overview
    a. Begins when the cervix is fully dilated and ends with the birth of the baby
    b. Typical duration is 15 minutes to three hours or more
        i. Primiparas average is 1 ½ to 2 hours
        ii. Multiparas' second stage is usually shorter than for her first birth
    c. Three key concepts
        i. Don't rush.
        ii. Push when you have the urge.
        iii. Use different positions.
2. Latent phase (laboring down – mother does not begin pushing until she feels the urge)
    a. There is sometimes a lull in contractions after full dilation is reached.
    b. Duration of 10 to 20 minutes
    c. Emotional response
        i. Mother gets a rest and renewed energy.
        ii. She looks forward to the baby's birth.
3. Active phase (Descent)
    a. The mother experiences an involuntary urge to push (Ferguson's reflex).
    b. Baby descends into the birth canal and (most often) rotates to an occiput anterior position.
    c. Various philosophies and methods of pushing
        i. Spontaneous bearing down – the mother feels the urge to push and pushes in the manner she desires as she follows her own body signals; more oxygen is available for baby. This is more physiologically healthy than prolonged pushing.
        ii. Delayed pushing – refraining from pushing until the baby is crowning. This may mean that this stage of labor is a little longer, but research shows that this conserves the mother's energy and improves chances of a spontaneous vaginal birth.
        iii. Directed pushing – if the mother neither feels contractions nor the urge to push (as may occur with epidural anesthesia), her caregivers may tell her when, how long, and how hard to push.
        iv. Prolonged pushing – the mother is told to hold her breath and push hard for 10 seconds. The process is repeated 3-4 times per contraction. Breath-holding may decrease the amount of oxygen available for the baby.
    d. Emotional response

i. The mother often feels powerful and encouraged as she pushes with the contractions.
ii. She may fear the physical act of pushing the baby out.
iii. If the baby's descent is rapid, she may be afraid and a bit disoriented because of how quickly the baby is born.
iv. If the baby's descent is slow, she may become fatigued and discouraged.

4. Crowning and Birth
   a. This phase begins when the baby's head no longer retreats from the vaginal opening and ends when the baby is completely born.
   b. The perineum stretches as it needs to. The mother may experience a burning or stinging sensation as the tissues stretch.
   c. This phase only lasts a few contractions. If an episiotomy is necessary, this is typically when it is done. (See ICEA Position Paper – Episiotomy)
   d. Emotional response
      i. The mother may be happy that the birth process is almost over and anxious to see her baby.
      ii. She may hesitate or be afraid due to the painful stretching of perineal tissue.

E. **Third Stage (also known as the Placental Stage)**
   1. This stage begins after the birth of the baby and ends with the birth of the placenta.
      a. There is usually a brief lull in contractions.
      b. When contractions resume, they seem less intense.
      c. Caregiver may direct the mother to give a few small pushes.
   2. Delayed cord clamping – waiting until blood is no longer pulsing before clamping and cutting the umbilical cord. Typically lasts 10-30 minutes (See ICEA Position Paper – Delayed Cord Clamping). This allows the infant to receive increased blood volume.
   3. Emotional response –
      a. The mother may be so involved with the baby that she barely notices the birth of the placenta.
      b. She may be preoccupied with encouraging the baby to suckle.
      c. She may be so tired that she is unable to pay much attention to the baby at first.

F. **Fourth Stage (also known as Family Integration)**
   1. This stage overlaps with the Placental Stage, beginning with the birth of the baby and ending when mother and baby are skin-to-skin and in the process of initiating breastfeeding.
   2. Benefits of skin-to-skin contact
      a. Stabilizes newborn heart rate and temperature
      b. Early initiation and increased duration of breastfeeding

Normal newborn care can be done while the baby remains skin-to-skin with the mother.

c. Less neonatal crying
d. Increased maternal attachment behaviors.

3. Care of the mother
    a. Examination of vagina and perineum and any necessary repairs
    b. Massage of the uterus to encourage involution
        i. Discharge of lochia begins
        ii. After pains can be distressing
    c. Vital signs (heart rate, respirations, blood pressure, temperature) are taken.
    d. Food and drink are offered to the mother.
4. Care of the baby
    a. Apgar scoring is done at 1 and 5 minutes after birth. The Apgar score is a rapid assessment of the baby's transition to life outside the womb. A score of 0-3 indicates severe distress; 4-6 is a sign of moderate difficulty; 7-10 indicates that the newborn is making a healthy transition.

	0	**1**	**2**
Heart rate	Absent	<100 beats per minute	>100 beats per minute
Respiratory effort	Absent	Slow – irregular	Good crying
Muscle tone	Flaccid	Some flexion	Active motion
Reflex irritability	None	Grimace	Vigorous cry
Color	Pale blue	Acrocyanosis	Completely pink

    b. Possible suctioning of baby's nose and mouth
    c. Eye prophylaxis - Eye drops or ointment containing an antibiotic medication may be placed in a newborn's eyes after birth to protect the baby from the possibility of an unknown gonorrhea infection in the mother's body.
    d. Vitamin K - Vitamin K is an essential component of blood clotting produced by intestinal bacteria. Newborn babies normally have low levels of this vitamin until about one week after birth when the bacterial levels in the intestines reach adequate levels for vitamin K production.
    e. Blood sample - Babies born in the United States have a small amount of blood taken from their heels within the first 48 hours after they are born. That sample is then used to screen for a panel of inheritable disorders and congenital defects, including sickle cell anemia, cystic fibrosis, and many others.
5. Emotional response
    a. Initiation of family bonding
    b. Mother may be joyful, exhausted, or anxious about feeding the baby, relieved that labor is over or all of the above.

c. This is often a very emotional time for the father/partner as well. He may feel joy, relief, exhaustion, and/or anxious about assuming his role.

VI. Common Labor Interventions and Complications

A. **INTRODUCTION** – Birth is most often a healthy process, however medical intervention is occasionally necessary. The use of interventions varies greatly around the world and even within the same region or nation. ICEA adheres to a philosophy of family-centered maternity care and to the right of women to make informed decisions. Our task as childbirth educators is to give people the information they need to make the decisions that are right for them. Please consider the international standards of the International Childbirth Initiative (ICI) in Part 1 as well as the Lancet article listed under "Resources" in this Part.

ICEA encourages evidence-based practice (See Part 6 for a definition of EBP). In order for childbirth educators to offer accurate information to those they teach it is necessary to remain informed of the latest research. For this reason 24 hours of continuing education is required every three years for recertification.

B. BEFORE BIRTH

1. Techniques to help with a malpositioned fetus
    a. Maternal positioning (as advised on Spinning Babies) may optimize the baby's position resulting in greater comfort in pregnancy and ease during birth.
    b. External cephalic version (ECV) is a procedure used to turn a fetus from a breech position (the feet or buttocks are the presenting part) or side-lying (transverse) position into a head-down (vertex) position before labor begins.
    c. Webster technique - is a specific sacral chiropractic adjustment that helps facilitate the mother's pelvic alignment and nerve system function. This adjustment balances pelvic muscles and ligaments, reduces torsion to the uterus. This may offer a greater potential for optimal fetal positioning.

C. **FIRST STAGE** (Dilation Stage)

1. Blood pressure monitoring is done periodically throughout labor but may be required more often for those with hypertension or for those receiving certain types of medication
2. Withholding food and some fluids from a woman in labor is a practice used to help avoid aspiration in case there is a need for an emergency cesarean. With the increased use of epidural anesthesia this potential complication is exceedingly rare. Denying food and fluids to a laboring woman can result in fatigue that stresses not only the woman, but the baby as well.
3. Fetal monitoring

a. Electronic fetal monitoring (EFM) (also known as cardiotocography – CTG) is occasionally necessary, but continuous EFM has never been shown to improve outcomes.
    i. Performed externally usually with a Doppler device strapped to the mother's abdomen; used in conjunction with another device that tracks uterine contractions
    ii. Internal monitoring requires access to the baby's scalp to attach an electrode to monitor heart rate. This means that the amniotic sac must be broken if it has not already occurred. An internal uterine pressure catheter measures uterine contractions
b. Intermittent auscultation can be performed with a Doppler device, fetoscope, or pinard.

4. Induction of labor is the term for using pharmacologic, mechanical, or non-medical means to stimulate uterine contractions of labor before labor has started on its own.
    a. Common reasons for induction include: pregnancy longer than 41-42 weeks, placental abruption, premature rupture of membranes, maternal health problems and intrauterine growth retardation (IUGR – baby is not growing as expected)
    b. Elective induction is an induction of labor when there is no medical indication.
    c. The **Bishop Score** is a method to evaluate the body's readiness for labor. The dilation and effacement of the cervix are assessed as well as the consistency and position of the cervix. The location of the baby's head relative to the mother's pelvis (station) is also factored in. A Bishop's score of 8 or more means that conditions are favorable for a successful induction.

	0	1	2	3
Dilation	0	1-2 cm	3-4 cm	5 cm or more
Effacement	0 – 30%	30 – 50%	50 – 70%	70% of more
Consistency	Firm	Medium	Soft	
Station	-3	-2	-1 – 0	+1 or lower
Position	Posterior	Mid	anterior	

    d. Pharmacologic methods of induction
        i. Pitocin (Syntocin) usually administered intravenously
        ii. Prostaglandins (such as Cytotec or Cervidil) applied to the cervix
    e. Mechanical methods of induction

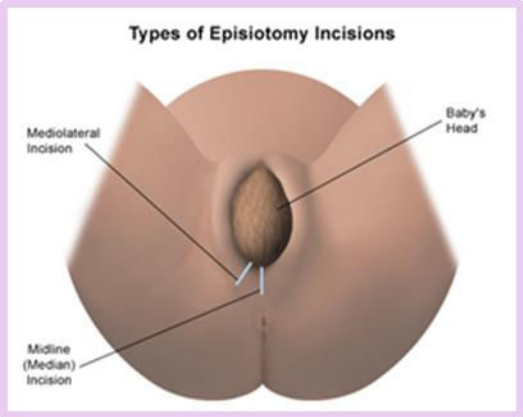
i. Sweeping the membranes. A healthcare provider uses a finger to separate the amniotic sac from the wall of the uterus.
ii. A balloon catheter may be inserted into the cervix.

f. Non-medical induction
i. Nipple stimulation
ii. Herbal remedies
iii. Acupuncture / Acupressure

5. Augmentation of labor is the term used for stimulating uterine contractions after labor has begun on its own. The most common methods of augmentation are:
a. Pitocin (Syntocin) usually administered intravenously
b. Artificial Rupture of Membranes (AROM) – breaking the amniotic sac so that the water (liquour) is released.
c. Non-medical methods of encouraging labor progress include walking, position changes, emptying the bladder, and hydrotherapy as well as those listed above under induction.

D. **SECOND STAGE** (Birthing Stage)

1. Valsalva maneuver requires the woman to hold her breath while pushing in the second stage. This is not an optimal pushing technique. Please see the previous section (V.D.3.c – Four Stages of Labor, Second stage, active phase) for optional techniques.
2. Precipitous birth is defined as a birth that occurs within three hours of the beginning of labor.
3. Meconium is the infant's first bowel movement. If the baby is stressed during labor meconium may be released into the amniotic fluid. Most infants have no problems when this occurs. Those infants who aspirate meconium stained fluid may develop breathing problems and require suctioning of the airway.
4. Breech birth describes a baby born with the presenting part other than the head. This occurs in 3% - 4% of all births, but is more common when the baby is preterm. External cephalic version is recommended when possible. (See Before Birth section above.)
a. Frank breech – buttocks first, hips flexed, knees extended
b. Complete breech – buttocks first, hips and knees both flexed
c. Footling breech – one or both feet presenting before the buttocks
5. Prolapsed cord occurs when the umbilical cord drops (prolapses) through the open cervix and vagina before the baby. The cord can then become trapped against the baby's body during delivery limiting blood flow. This most often occurs with premature births. An emergency cesarean is required.
6. Episiotomy is an incision in the perineum to enlarge the opening for birth.
7. Operative vaginal delivery often occurs during a prolonged second stage of labor. Two methods are used:



   a. Forceps are curved blades used to grasp the baby's head and assist it through the birth canal.
   b. Vacuum assisted birth requires the attachment of a vacuum cup to the baby's head to assist it through the birth canal.

8. Cesarean birth is birth of a baby through an incision in the abdominal wall and uterine muscle. The World Health Organization states that an optimal rate of cesarean birth is 10%-15%. The rate of cesarean birth varies greatly around the world. Some of this is due to cultural factors, not medical necessity. The wide variation indicates that many times the practice of cesarean birth is not evidence-based.
   a. The most common medical reasons for cesarean are arrest of labor, non-reassuring fetal heart tones, and malpresentation. These account for almost three-fourths of the cesarean births in the US.
   b. Strategies to reduce the number of cesarean births include:
      i. Continuous labor support. Although support of any kind during labor is helpful, the continuous support by a birth doula is the most effective.
      ii. Allowing more time for a woman to labor. Adopting the new guidelines for active labor (beginning at 6 cm) gives labor more time to progress.
      iii. Use non-surgical methods of dealing with non-reassuring fetal heart tones such as maternal repositioning and fetal scalp stimulation.
      iv. Using ultrasound in the third trimester to estimate fetal size is often inaccurate. Babies who measure large in this trimester using this method do not necessitate a cesarean.
      v. Twins – when the first twin presents head first – may be safely delivered vaginally.
      vi. Around the world cesarean rates are lower with midwifery-led care.
   c. Risks associated with cesarean birth include:
      i. Short term – infection, blood loss, blood clots
      ii. Long term – placenta accreta, hemorrhage, and hysterectomy
9. Vaginal birth after cesarean (VBAC) is most often the healthiest, safest choice for mothers and their infants. Please see the *VBAC Education Project* (listed under Learning Resources) for more information.
   a. Women who desire a VBAC should be informed of the statistics:
      i. Success rate over 70%
      ii. Rate of uterine dehiscence (rupture) is approximately 0.7%

b. VBAC is not recommended for women who:
    i. Have had previous uterine dehiscence
    ii. Have abnormal uterine scarring (due to previous surgery)
c. Repeated cesarean birth increases the risk of placenta accrete and placenta previa in future pregnancies.

Risks and Benefits of VBAC versus Elective Repeat Cesarean	
Planned VBAC	**Elective Repeat Cesarean**
72-75% success rate	Able to plan known birth date
Approximately 0.5% risk of uterine dehiscence	No risk of dehiscence during birth
	Longer recovery
Increases chance of future vaginal birth	Future births likely to require cesarean
Risk of anal sphincter injury	
Risk of maternal death 4 / 100,000	Risk of maternal death 13 / 100,000
Risk of transient respiratory problem 2-3%	Risk of transient respiratory problem 4-5%

E. **THIRD STAGE** (Placental Stage)
1. Perineal lacerations are common during birth. Perineal massage and warm compresses can minimize the risk of severe lacerations. The woman's position during birth can also effect the degree of tearing. Episiotomy increases the risk of severe laceration.
2. Postpartum hemorrhage is the primary cause of one quarter of the maternal deaths around the world. It is defined as blood loss of 500 mg or more in the postpartum period. Uterine atony is the most common cause of postpartum hemorrhage. Atony means that the uterine muscle has lost its tone; it is no longer contracting and firm.
3. Retained placenta occurs when the placenta has not been completely delivered within 30 minutes after birth. A retained placenta can cause or contribute to postpartum hemorrhage.

F. COMPLICATIONS WITH THE BABY

1. Prematurity is defined as birth between 20 and 37 weeks gestation. (Prior to 20 weeks gestation a fetus is not considered viable. Birth of a baby before this time is considered a miscarriage or may be referred to as a spontaneous abortion.) Prematurity is one of the leading causes of infant death worldwide.

Categories of Prematurity

Extremely preterm – 20-27 weeks
Very preterm – 28-32 weeks
Moderate to late preterm – 32-37 weeks

    a. Risk factors for prematurity include multiple pregnancies, infections, and chronic health conditions such as diabetes and high blood pressure although often no direct cause is found.

b. Most premature babies could be saved by providing adequate antenatal and postnatal care, steroid injections, kangaroo mother care, and antibiotics to treat newborn infections (when necessary).

2. Low birth weight (less than 2500 grams or 5.5 pounds) affects as many as 20 million infants around the world every year. There are a variety of causes. Consequences of low birth weight may be short or long term.
3. Birth defects may or may not be expected. Some are genetic anomalies; others can be caused by substance abuse or maternal disease. Childbirth educators cannot prepare parents for every possibility, but it is helpful to have a list of resources for parents. Some of these may be community resources. Some may be national or international organizations.
4. Stillbirth is the death of a baby at 20 weeks gestation or later. It can occur during the process of labor and birth. Stillbirth carries a great stigma in some cultures. The causes of stillbirth vary. Many, if not most, stillbirths are preventable.

A childbirth educator cannot prepare parents for every possible outcome, but we can give them some general guidance for dealing with unexpected outcomes. These two questions will alleviate some uncertainty in times of crisis:

If mother and child must be separated, who will stay with each one?
In case of emergency, who will you call for help?

VII. Dealing with loss and grief

A. Grief is a process. Although there are stages of grief that everyone experiences, not all will experience them in the same order or to the same degree.

Shock	•Initial paralysis at hearing the bad news
Denial	•Trying to avoid the inevitable
Anger	•Frustrated outpouring of bottled-up emotion
Bargaining	•Seeking in vain for a way out
Depression	•Final realization of the inevitable
Testing	•Seeking realistic solutions
Acceptance	•Finally finding the way forward

B. Bereavement situations can come in several different forms
   1. Bereavement of a baby that hasn't passed away yet but will.
   2. Active bereavement: when a family's baby dies and they are now coming home without their baby

3. Past bereavement: when a family has had a previous loss and is pregnant again.

C. When interacting with grieving parents childbirth educators can:

1. Meet the family where they are at in the grief process
2. Never assume that you know how they are feeling or what they are thinking
3. Listen more, talk less
4. Agree with whatever they are feeling. Each person's feelings are unique and should be respected
5. Remember to use the baby's name. Do not refer to the baby as "the fetus." Keep things personal because this is their baby.
6. Have a list of resources available for grieving parents.

PART 4 COMFORT MEASURES

BIG IDEAS

1. Education about the birth process can be an effective tool in reducing fear of childbirth.
2. Pain is part of childbearing for most women, but suffering can be alleviated.
3. Non-pharmacologic comfort and pain relief measures during labor are safe first options. Movement, massage, changing positions, and breathing patterns are all life skills that can reduce fear, tension, and pain during labor and birth.

OBJECTIVES:

At the completion of Part 4 the learner will:

1. Describe the normal pain of birth using the acronym P.A.I.N.
2. Outline the fear-tension-pain cycle.
3. List sources of fear and pain during labor.
4. Describe the difference between pain and suffering as it relates to labor.
5. Distinguish between the Gate Control Theory of pain and the Neuromatrix Pain Theory.
6. List the three R's of labor as defined by Penny Simkin.
7. List factors that promote oxytocin release during labor.
8. Describe the various comfort measures listed and their appropriate use.
9. List the benefits of movement and varied positions during labor.
10. Compare and contrast three support people for labor and birth.
11. Compare and contrast pharmacologic forms of pain relief.

LEARNING RESOURCES

- Pain versus Suffering video - https://www.youtube.com/watch?v=rlj9ehB-hLc
- Interventions for fear of childbirth – https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013321/epdf/full
- Comfort Measures - http://www.nationalpartnership.org/our-work/resources/health-care/maternity/comfort-in-labor-simkin.pdf
- Simkin's Three R's - https://www.youtube.com/watch?v=Mo4VmgpHmxs
- ICEA Handout "Relaxation Basics" – https://icea.org//wp-content/uploads/2016/01/Relaxation_The_Golden_Boat.pdf
- Water birth – https://waterbirth.org/
- Accupressure – https://www.medicalnewstoday.com/articles/323402.php
- ICEA Policy Statement: "The Use of Essential Oils for Pregnancy, Birth, and Breastfeeding" – https://icea.org//wp-content/uploads/2016/01/ICEA_policy_statement_Use_Essential_Oils_Pregnancy.pdf
- Continuous support during labor – https://www.cochrane.org/CD003766/PREG_continuous-support-women-during-childbirth
- Anesthesia – https://www.labourpains.com/home

CONTENTS

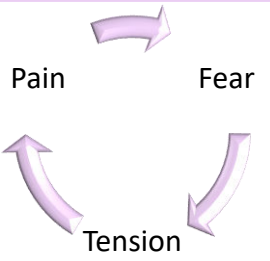
OUTLINE

P – Purposeful
A – Anticipated
I – Intermittent
N – Normal

I. Pain and Suffering

A. Pain in labor is different than pain due to injury. The pain of labor is pain with a purpose. The pain most women experience is a demonstration of the strength of her body. Because it is anticipated, it is something that she can prepare for. It is not a constant pain, but intermittent. And it is a normal part of labor – not a sign that something is wrong (as with an injury), but a sign that her body is working hard to bring a baby into this world.

B. Dr. Grantly Dick-Read (a British obstetrician of the middle 20th century) described the fear-tension-pain cycle. When a person experiences fear they tend to become tense. The more tension they feel the more intense the pain becomes… increasing their fear. As childbirth educators we can help alleviate some of that fear by providing information and skills that help people deal with the discomfort and pain of labor.



C. Sources of pain during labor
   1. Physical sources:
      a. Reduced oxygen supply to uterine muscle
      b. Stretching of cervix during dilation
      c. Pressure of baby on nerves of cervix and vagina
      d. Tension and stretching of ligaments of uterus
      e. Pressure of baby on urethra, bladder, and rectum
      f. Stretching of pelvic floor muscles and vaginal tissues at birth
   2. Emotional / mental sources:
      a. Fear, anxiety, loneliness

Physical sources of pain can be affected by:
- Intensity, duration, and frequency of contractions
- Degree and speed of cervical dilation
- Size and position of baby
- Fullness of bladder
- Mother's parity
- Mother's level of fatigue
- Mother's level of hydration and nourishment

   b. Feeling watched and/or judged
   c. Ignorance or misinformation about labor and birth
   d. Previous abuse and/or difficult or traumatic birth experience
   e. Unsupportive staff, family, or visitors
   f. Feeling powerless to make decisions
   g. Feeling that decisions are disrespected
3. Iatrogenic sources:
   a. Insertion of IV
   b. Physical exams
   c. Restriction of movement
   d. Restriction of fluids and nourishment

Considerations to help minimize unnecessary pain:

- What is necessary?
- What is evidence based?
- What does mom (and family) understand?
- Has mom participated in making decisions about her care?

D. Pain versus suffering
   1. Pain is an unpleasant physical sensation that one wishes to avoid or relieve.
   2. Suffering is a distressing psychological state that includes feelings of helplessness, fear, panic, loss of control, or aloneness.
   3. Most women fear suffering more than pain.
   4. Ways of dealing with pain vary from one culture to another.
   5. Some women worry about they will not be able to deal with the pain of labor in a culturally acceptable way.

E. Fear of labor (tocophobia) can vary from mild anxiety to stifling fear. It may include fear of the unknown, fear of pain, fear for the health of mother or baby, or fear of perineal trauma among other factors.
   1. Causes of this fear also vary:
      a. Fear may be transmitted from one generation to another by repeated storytelling of one or more person's difficult or traumatic experience.
      b. Previous personal traumatic experiences may also contribute to this fear. This is especially true for those who have experienced intimate partner violence, sexual abuse, or rape.
   2. Women who experience this fear are more likely to have a cesarean birth (either by choice or emergency) and prolonged labor.
   3. Because the source of fear and degree vary from person to person the way fear is managed will also vary. Strategies that are known to help many women include:
      a. Childbirth education – knowing what to expect alleviates some fear of the unknown; practicing coping strategies not only helps with pain perception, but also gives the laboring person something to do that may distract her from her fear.

b. Mind-body interventions such as visualization, meditation, mindfulness, and prayer have also proven to be helpful.
c. Various types of counseling may be helpful including but not limited to cognitive-behavioral therapy and group psycho-education by midwives.

F. Pain Theories

1. **Gate Control Theory** – This theory states that only a certain number of nerve impulses or sensations can travel along each pathway to the brain. By substituting sensations other than pain (such as massage or music) the brain's ability to sense pain is inhibited. It is as though there is a "gate" on the neural pathway that only allows a certain number of message through. If other sensations block that gate, the perception of pain is diminished.

Women who are more anxious about pain report more painful labors.

2. **Neuromatrix Pain Theory** – This theory states that the perception of pain is a complex function of the entire nervous system (the neuromatrix) that includes many subjective factors. It explains why affection (such as holding hands or a hug) or distraction (such as viewing a beautiful scene or a conversation with a friend) lessens the perception of pain.

II. Non-pharmacologic Comfort Measures

A. **The Three R's** – Relaxation, Rhythm, Ritual. There is not one right way to cope with labor. The three R's are basic principles that are found in most comfort measures. Each laboring woman should explore her options and use the methods that are effective for her.

1. Relaxation is the release of tension – both physical and emotional. Several of the comfort techniques listed below aid in relaxation. Relaxation promotes labor progress is several ways.
   a. Relaxation conserves energy. When unnecessary tension is released (in neck, shoulders, arms, etc.) more energy is available for the rhythmically contracting uterus.
   b. Relaxation promotes the release of oxytocin. (See Part 3 – III.A for more information on oxytocin.) During stress catecholamines are released and these hormones most often inhibit oxytocin production, thus slowing labor down. By alleviating stress catecholamine production is limited and oxytocin is more freely released. This promotes uterine contractions.

Promotes Oxytocin Release	Inhibits Oxytocin Release
Feeling secure	Feeling frightened
Privacy	Feeling watched
Dim lighting	Bright lights
People you know	Strangers
Comforting touch	Questions / Thinking
Comfortable environment	Uncomfortable environment

2. Rhythm – This may take many forms: swaying, breathing, rocking, tapping, stroking. Rhythm, including low pitched vocalization, may help a woman cope with contractions.
3. Ritual is a repetition of meaningful activity during contractions.
    a. Some rituals may be planned and learned in advance such as breathing techniques or visualization.
    b. Some rituals may be spontaneous. The woman may discover a ritual during labor that helps her cope. It is important for those helping her to adapt to her ritual and not try to change it.

B. **Creating a comfortable environment** can help a person relax. Lighting, room temperature, and music can contribute to a soothing environment. Choosing to wear comfortable clothing can be helpful. A person in labor will also want room to move and perhaps some amenities that will facilitate movement such as a birth ball. All people in the birth room should be ones that the laboring person is comfortable with.

C. **Positioning and movement** go hand-in-hand during labor. The baby's descent through the pelvis and birth canal will be aided by mother's position changes and movement.
1. Upright positions such as standing, walking, squatting, and sitting allow gravity to assist in moving the baby down.
2. Hands and knees positioning can alleviate back pain if the baby is in a posterior position (that is, if the back of baby's head is resting on mom's sacrum).
3. Side-lying can be beneficial if the laboring person is tired. Use of pillows or a peanut ball between her knees will help keep the pelvis open.
4. Lunges cause the pelvic opening to have an asymmetrical shape. It may also help gently stretch mother's muscles and ligaments providing some comfort.
5. Movement is part of many of the positions listed above. Walking causes subtle changes in the shape of the pelvis. Squatting helps the pelvic bones open up creating more room for the baby to move down. Sitting on a birth ball lends itself to an easy swaying motion. All of this movement increases comfort for the mother even as it encourages baby's movement through the pelvis.

D. **Breathing techniques** can vary greatly. There is not only one right way to breathe during labor. Effective breathing methods will enhance relaxation, reduce pain by supplying oxygen to the body, and provide a focus that helps keep the laboring person calm. Two basic breathing methods are:
1. Slow breathing. The mother focuses her attention as the contraction begins. She breathes in a deep breath, releasing it as she releases tension (in her shoulders, face, hands, etc.). This exhalation may sound like moaning. She continues this slow, deep breathing throughout the contraction, taking 5-12 breaths per minute. Once the contraction is completed she rests or resumes her normal activities.
2. Light breathing. When the contraction begins the mother takes in a short, silent breath and quickly releases it. The exhalation will be audible. There should be a short pause before taking the next breath. This technique results in 20-60 breaths per minute. Someone should monitor the mother's breathing to ensure that she does not

hyperventilate. If she begins to feel light-headed, she may slow down the breaths or pause a bit longer between breaths.

E. **Relaxation methods** can be quite diverse. What is relaxing for one person may not be relaxing for someone else. The methods listed here are a few from the ICEA handout "Relaxation Basics."

1. Relaxing breath – You may want to use a slow, deep breath as a signal to relax. Take in a comfortable breath. Then, let it out while relaxing your whole body. Taken at the beginning of a contraction, this slow breath may help you relax into the contraction rather than against it. At the end of a contraction, repeating this breath signals that you can rest until the next contraction begins. You can take a relaxing breath any time you feel your body getting tense.
2. Progressive relaxation – Select a muscle group (for example, arms) and tighten, then relax. Continue this with face, arms, abdomen, legs and feet. After you can tell whether or not muscles are relaxed, try to relax your muscles without first tensing. Start again with your head/face, and focus on the small groups of muscles. Release these muscles with each exhaling breath. Move down your body until you are completely relaxed.
3. Imagery – Imagine a comfortable, relaxed time like lying on the warm sand of a beach or floating in the water. Enjoy the feelings that come from remembering how your body felt. Use your own favorite place, and try adding smells (aromatherapy) or sounds (from your playlists) to enhance this experience. There are also smartphone apps to help with guided imagery.
4. Mindfulness – Because relaxation is more than released muscle tension, you can also get relaxed by focusing on your inner state. This is often called *mindfulness*. When you calm your mind, your muscles also relax. You can use any method of mindfulness that works for you.
5. Music can help create a soothing environment that helps a laboring person to relax. It can be used to set a rhythm for the woman to follow. (Music may also be used to help invigorate the atmosphere when the woman is fatigued. This isn't relaxation, but something to keep in mind for long labors.)

F. **Hydrotherapy** can take many forms. Standing in the shower and lying in a bathtub are both forms of hydrotherapy. Water can temporarily reduce awareness of pain as well as provide warmth and buoyancy. A variety of positions can be tried in a birth pool.

G. **Heat and cold** are used in different ways during labor (and possibly afterward).

1. Heat – a warm cloth or hot water bottle can help relax tense muscles.
2. Cold – An ice pack can be more effective at blocking pain pathways. Not only can the cold create a numbing sensation, but cold sensations actually "take up more space" on neural pathways making it more difficult for pain sensations to travel to the brain. (See the Gate Control Theory above.)

H. **Massage and touch** can take many different forms. What is effective will vary from one person to another. Massage and touch may be helpful in and of themselves, but they can also be a distraction. The distraction may or may not be welcome. It is the laboring woman who ultimately decides what is effective for her.

1. Effleurage is a light, stroking movement – firm enough to not tickle, but not strong enough to knead the muscles. It is effective as a soothing rhythm correlated with the woman's breathing during a contraction, moving outward from the center of the body – for example, starting at the shoulders and stroking outward toward the hands. It may also be done on the back from the shoulders downward reminding the woman that the baby is moving down.
2. Counterpressure is especially helpful as the baby moves further down in the pelvis. As the baby passes by the sacrum exerting pressure to push it outward, pushing against the sacrum with the flat of the hands or closed fists eases some of the discomfort the laboring woman experiences as her body adjusts to the baby's movements.
3. Acupressure (or shiatsu) is a technique that uses pressure on specific points to alleviate pain. It is recommended that these points not be stimulated until the woman is ready to have the baby because they can stimulate labor to begin.

I. **Transcutaneous Electrical Nerve Stimulation (TENS)** uses electrical impulses to minimize pain sensations. Four small pads with electrodes are adhered to the mother's lower back (in approximately the same area as the injections for the sterile water block below). She controls the switch which causes a mild electric current. She will feel a tingling vibration that diminishes her awareness of pain.

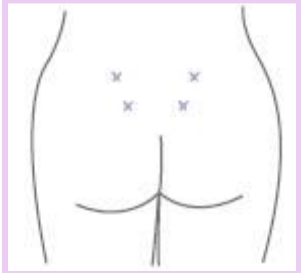
J. **Aromatherapy** can create a soothing environment that helps with relaxation. The laboring person should choose the scent(s) that appeal to her. ICEA recommends that only trained aromatherapists use essential oils since there are potential side effects if they are used incorrectly.

K. **Labor Support People**
   1. Family and friends may be very caring, but unfamiliar with the process of birth. While their emotional support is invaluable, their lack of knowledge and experience may be a hindrance to the effectiveness of their support.
   2. Nurses may have other duties that prevent them from providing continuous support.
   3. The most effective labor support is provided by doulas. Doulas are knowledgeable about the birth process and are solely focused on the well-being of the pregnant person (although they may also offer support to family and friends in the room).

III. Non-pharmacologic comfort measures that require training

A. **Sterile Water Block** is an injection of a small amount of sterile water just below the skin in the lower back. The initial injection feels like a bee sting, but that feeling passes quickly. The laboring person then feels relief from back labor. This procedure is done by medical professionals.

B. **Acupuncture** has many uses during pregnancy and birth. One of those is pain relief. Acupuncture must be done by a trained acupuncturist.



Injection sites for sterile water block

IV. Pharmacologic pain relief

A. Weighing risks and benefits of pharmacologic pain relief
   1. It may not eliminate all pain.
   2. Medication may affect labor progress.
   3. Medications affect the baby. The effect depends upon the drug, the amount received, timing of the dose, and other factors. Baby's liver and kidneys are immature so effects of the drugs may last longer for baby than for mom.
   4. Some medication may require some precautions such as:
      a. Restriction to bed
      b. Restriction of food and fluids
      c. Administration of IV fluids
      d. Monitoring of blood pressure and other vital signs
      e. Continuous monitoring of contractions and fetal heart rate

B. Route of administration of medication
   1. Oral medication – a pill or liquid that you swallow. (PO – by mouth)
   2. Inhalation – a gas you breathe in
   3. Intramuscular – a shot into the muscle (IM)
   4. Intravenous – injected into a vein; sometimes via catheter (IV)
   5. Neuraxial – injected into the space around the spinal cord (epidurals, spinals)

C. Area of effect
   1. Systemic – medications given by mouth, inhalation, or intravenously will affect the entire body.
      a. May take the edge off of the pain of a contraction, but do not always eliminate pain
      b. Results of these medications differ among women:
         i. Some people appreciate the perception of an increased break between contractions and feel that this helps them cope more effectively with labor.
         ii. Some people doze between contractions and feel as though the contractions surprise them when they wake up, leaving them with a feeling of loss of control.
   2. Regional – affects a large area of the body (epidurals, spinals – see below)
   3. Local – affects a specific, small area of the body; for example, a perineal block is an injection into the perineum sometimes used when an episiotomy or repair is needed.

D. Regional anesthesia – epidural and spinals (intrathecal)
   1. Regional – usually from the sternum to the feet
   2. <u>Most effective option for medicated pain relief</u>
   3. Combination of anesthetic and analgesic medication
   4. Lower dose of medication is necessary
   5. Typically fewer side effects
   6. Possible side effects:
      a. Decreased blood pressure

b. Itching
c. Nausea
d. Longer labor
e. Fever

Epidurals and spinals may increase other interventions such as:

- IV fluids
- Bladder catheter
- Continuous EFM
- Blood pressure monitoring
- Confinement to bed
- Restriction of food and fluids

E. General anesthesia is most often used in an emergency when the mother must be anesthetized immediately. Unconsciousness and total muscle inactivity results from the administration of either inhalation or intravenous anesthetic agents.

PART 5: POSTPARTUM AND NEWBORN CARE

BIG IDEAS

1. Birth initiates the fourth stage of labor with transitions for the newborn as well as the entire family.
2. Human milk is the best nourishment for optimal newborn health and development.
3. Perinatal mood and anxiety disorders (PMAD) occur during pregnancy and the first year after a woman gives birth and are recognizable and treatable.

OBJECTIVES:

At the completion of Part 5 the learner will:

1. State the purpose of the Baby Friendly Hospital Initiative.
2. List at least four benefits of skin-to-skin contact immediately after birth.
3. List at least two benefits of breastfeeding for both mother and infant.
4. Outline basic information about breastfeeding.
5. Define the six states of the newborn.
6. Describe common variations of newborn appearance.
7. List newborn warning signs that would prompt contacting a care provider.
8. List maternal warning signs that would prompt contacting a care provider.
9. Summarize physical and emotional maternal postpartum changes.
10. Identify transitions that the new family will experience after birth.
11. Describe postpartum mood and anxiety disorders (PMAD) as they occur during pregnancy and the first year after a woman gives birth.

LEARNING RESOURCES

- Baby Friendly Hospital Initiative
  - WHO – https://apps.who.int/iris/bitstream/handle/10665/272943/9789241513807-eng.pdf?ua=1
  - USA – https://www.babyfriendlyusa.org/about/
- Outcomes of Breastfeeding vs. Formula Feeding – https://www.evergreenperinataleducation.com/upload/OutcomesofBreastfeeding_Nov2013.pdf
- ICEA Position Papers
  - Infant Feeding – https://icea.org/wp-content/uploads/2015/12/Infant-Feeding-PP-rev-2017-B.pdf
  - Skin-to-skin Contact – https://icea.org/wp-content/uploads/2019/11/ICEA-Position-Paper-Skin-to-Skin-Contact-PP.pdf
  - Safe Infant Sleep – https://icea.org//wp-content/uploads/2015/12/Safe-Infant-Sleep-PP-2017.pdf
  - Perinatal Mood and Anxiety Disorders – https://icea.org/wp-content/uploads/2015/12/Perinatal-Mood-Anxiety-Disorders-PP-2017.pdf
  - Delayed Bathing – https://icea.org/wp-content/uploads/2018/02/ICEA-Position-Paper-Delayed-Bathing.pdf
- Nine Instinctive Stages – The Magical Hour – http://www.magicalhour.org/aboutus.html
- Laid-back breastfeeding – https://lllusa.org/lie-back-and-relax-a-look-at-laid-back-breastfeeding/

- WHO Code of Marketing of Breast-milk Substitutes – https://www.unicef.org/nutrition/index_24805.html
- States of the Term Newborn – https://www.centreforperinatalpsychology.com.au/states-of-alertness/
- AAP breastfeeding recommendations – https://pediatrics.aappublications.org/content/pediatrics/129/3/e827.full.pdf
- WHO breastfeeding recommendations – https://www.who.int/nutrition/topics/exclusive_breastfeeding/en/
- Back to sleep / Tummy to play – https://www.healthychildren.org/English/ages-stages/baby/sleep/Pages/Back-to-Sleep-Tummy-to-Play.aspx
- Edinburgh Postnatal Depression Scale (EPDS) – https://psychology-tools.com/test/epds
- Postpartum Support International – https://www.postpartum.net/
- Prevention and Treatment of Traumatic Childbirth (PATTCh) – http://pattch.org/

CONTENTS

OUTLINE

I. The Baby-Friendly Hospital Initiative (BFHI)

A. Promoting the ideal

1. The type of care offered in the postpartum period is as unique as each facility and healthcare provider. Providers tend to practice in the manner in which they were trained – and this practice is reflected in the policies and procedures where they work. You will be able to best help women and their families if you are familiar with common practices in your area.
2. In addition, information is presented here that reflects the latest evidence-based practice. The Baby-Friendly Hospital Initiative (BFHI) is a global initiative endorsed by the World Health Organization and UNICEF to encourage facilities to better support breastfeeding. It is estimated that there are more than 20,000 facilities around the world that have earned Baby-Friendly status.

3. Only 2.9% of United States births occurred in Baby-Friendly designated facilities in 2007. That number has steadily increased so that as of 2018 25% of births occur in Baby-Friendly designated facilities. ICEA supports BFHI but recognizes that not many facilities currently practice the Ten Steps.

B. **BABY-FRIENDLY HOSPITAL INITIATIVE (BFHI)**
   1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
   2. Train all health care staff in skills necessary to implement this policy.
   3. Inform all pregnant women about the benefits and management of breastfeeding.
   4. Help mothers initiate breastfeeding within one hour of birth.
   5. Show mothers how to breastfeed and how to maintain lactation, even if they are separated from their infants.
   6. Give newborn infants no food or drink other than breastmilk, unless *medically* indicated.
   7. Practice **"**rooming in**"** – allow mothers and infants to remain together 24 hours a day.
   8. Encourage breastfeeding on demand.
   9. Give no pacifiers or artificial nipples to breastfeeding infants.
   10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or birth center.

C. Breastfeeding Recommendations
   1. The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of life. After that other complimentary foods are introduced, but AAP recommends continued breastfeeding for one year or as long as mutually desired by mother and infant.
   2. The World Health Organization also recommends exclusive breastfeeding for the first six months. Other foods may be gradually introduced after that time. Breastfeeding is recommended for two years of age or beyond.

D. Benefits of breastfeeding (This is not an exhaustive list. There are many more benefits than can be listed here.)
   1. For the infant
      a. Fewer, less severe infections
      b. Less diarrhea
      c. Lower risk of Sudden Infant Death Syndrome (SIDS)
      d. Fewer allergies
      e. Less cardiovascular disease as an adult
   2. For the mother
      a. Lower rates of reproductive cancers (ovarian, uterine, endometrial, etc).
      b. Better cardiovascular health
      c. Increased bone density

II. Family Integration – the 4th stage of labor

The strongest predictor of successful breastfeeding is feeding within the first hour after birth.

A. Skin-to-skin contact
   1. Regulates newborn
      a. Respiration
      b. Temperature
      c. Heart rate
      d. Glucose levels
   2. Initiates a more peaceful transition to life outside the womb
   3. Causes the release of oxytocin which promotes bonding
   4. Baby on mom's abdomen helps uterine involution
   5. Healthy infants should remain in direct skin-to-skin contact with their mother's immediately after birth.
   6. Initiation of breastfeeding within the first hour after birth is the most predictive factor for breastfeeding success. Breastfeeding can be started at any point in time, but it may take more effort and support.

B. Baby's nine instinctive stages. In the first hour after birth mother and infant should remain skin-to-skin, but covered so that they remain warm. In this safe and comfortable environment, the infant will go through nine distinct stages.
   1. The birth cry is a distinctive cry immediately after birth as the baby's lungs expand.
   2. In this relaxation stage the newborn's mouth does not move and the hands are relaxed.
   3. The baby begins to move head and shoulders about three minutes after birth. He may open his eyes or move his mouth.
   4. The infant makes increased mouthing and sucking movements. The rooting reflex becomes more obvious.
   5. The baby may rest after periods of activity.
   6. The baby attempts to move toward the breast with crawling movements about 35 minutes after birth.
   7. This is the familiarization stage. The infant licks the mother's nipple and massages her breast.
   8. Suckling begins as the newborn self-attaches. In a non-medicated labor this usually occurs about one hour after birth. If the mother has had medication during labor it may take more time as baby remains skin-to-skin.
   9. Sleep is the final stage, usually occurring 1 ½ to 2 hours after birth.

C. Laid-back breastfeeding

1. The reclining position during breastfeeding allows the mother to take advantage of instinctual infant movements that help the baby to latch effectively.
2. Lying back also frees up the mother's hands so that she can stroke her baby encouraging even more instinctual behaviors that support breastfeeding.
3. This position is relaxing for mother and baby reducing issues of fatigue and poor latch. Promoting instinctual behaviors (as opposed to a more managed, formal approach) supports a bonding relationship between parent and child.

Illustration courtesy LLLI

III. Early Postpartum (the first 2-3 days)

A. **Breastfeeding** (For a more thorough understanding of how to help new mothers with breastfeeding consider ICEA's Early Lactation Care Workshop – https://icea.org/certification/upcoming-workshops/early-lactation-care-workshop/

1. For the first 3-4 day breasts secrete **colostrum**. This thick, yellowish fluid is ideal for the newborn. It helps flush meconium (baby's first bowel movements) from the baby's system. It also colonizes the newborn's digestive tract with healthy bacteria. Its yellowish color is due in part to the antibodies that help boost the baby's immune system. The mother's breasts usually do not feel any different (there is no feeling of fullness) in the first few days because the volume of colostrum is small.
2. Gradually more mature milk is produced. Usually around day 3 mother's breasts will feel fuller. This milk is thin and bluish-white in color. The frequency and duration of feedings help determine when the mature milk "comes in." The more often and the longer the baby is at the breast the sooner the mature milk will be produced.
3. When mother has uninterrupted time with her infant she is better able to learn baby's feeding cues. Baby is more contented when skin-to-skin with the mother.

Breast size does not affect the amount of milk produced. Larger breasts simply have more fatty tissue.

4. The amount of milk that a mother produces is directly related to how often she feeds the baby. The more often baby is at the breast the more milk the mother will make.
5. Please note: ICEA supports the WHO Code of Marketing of Breast-milk Substitutes. The code stipulates that there should be absolutely no promotion of breastmilk substitutes, bottles, and teats to the general public; that neither health facilities nor health professionals should have a role in promoting breastmilk substitutes; and that free samples should not be provided to pregnant women, new mothers or families.

B. Mother's postpartum recovery

1. Uterus

a. Uterine contractions continue after the baby is born. To make sure the contractions are adequate to minimize blood flow the nurse or midwife will massage the uterus. Breastfeeding also stimulates the uterus to contract.
b. **Lochia** is the bloody discharge from the uterus after birth. For the first few days it is bright red like a heavy menstrual flow. As the blood ages it darkens, and the flow lightens. After ten days or so the discharge becomes a tan color as it mixes with mucus. If at any time the bright red blood flow returns recommend that the woman see a healthcare provider. Sexual intercourse is discouraged until after the discharge of lochia is finished.

Warning Signs for the Postpartum Mother

Signs of Infection
- Fever
- Warm, red, tender area on leg or breast
- Foul smell or pus from perineum or cesarean incision

Unusual bleeding
- Blood clot larger than a lemon
- Soaking a pad in an hour
- Return of bright red blood after color has darkened or disappeared

Sudden pain
- Headache
- Abdominal or perineal tenderness

Appearance of rash or hives
Feeling extremely anxious, panicky, or depressed
Being frightened for your safety

2. Perineal care
   a. Often after birth the perineum is sore and/or swollen. Ice can help ease this discomfort.
   b. It is important to keep the perineum clean so that any wounds from tearing or episiotomy can heal.
   c. Some people experience discomfort when urinating or having a bowel movement. Taking in plenty of fluids and fiber can help keep stools soft. Walking and other gentle exercise can help reduce constipation.
3. Hormonal changes
   a. As pregnancy progresses progesterone levels increase reaching their highest levels just before the child is born. Within 24 hours after birth progesterone levels drop to almost nothing. This is an enormous hormonal shift in a very short period of time and it often affects a mother's mood.
   b. In breastfeeding mothers, production of oxytocin and prolactin will increase.

C. An infant's first few days (See also Part 3 – V.F.4)
1. Skin-to-skin contact with a parent eases baby's transition into this world.

2. A newborn's first few bowel movements are black, tarry meconium. As the mother's milk comes in this changes from black to brown to yellow.
3. Newborn appearance
    a. The newborn's head may appear cone-shaped due to time in the birth canal. This will resolve within a few days after birth.
    b. Vernix caseosa (or simply **vernix**) is a creamy, white substance that protects the infant's skin. Delaying baby's first bath takes advantage of the antimicrobial and antioxidant properties of vernix. (See ICEA position paper for more information.)
    c. **Lanugo** is fine body hair on baby's back, shoulders, forehead, and ears. This usually disappears within a few weeks after birth.
    d. **Mongolian spots** are black and blue areas that resemble bruises that usually occur on the back and buttocks (although they are occasionally found elsewhere). These are most often seen on babies of Native American, Asian, African, or southern European descent.
    e. **Milia** are tiny white spots on baby's cheeks and across the nose. They will disappear on their own and require no treatment.
    f. Pregnancy hormones may cause baby's breasts and genitals to swell. This is temporary and will resolve in the first week or so after birth.
4. The family will receive instruction on how to care for the umbilical cord.
5. In the US if the family chooses to circumcise the male infant, this is usually done before the family leaves the hospital.

D. Going home
1. Unless this is a home birth, a new family goes home within 24 – 48 hours following an uncomplicated birth. Especially for those with a first baby, this is a time of great adjustment. The family should have the necessary contact information (midwife, physician, lactation consultant, etc.) for any questions they may have.
2. For those who had difficulty (a hemorrhage, a cesarean, problems with the infant, etc.) this time will be more difficult.

IV. Postpartum transitions

A lactating woman should consume 330-500 extra calories per day.

A. Mother's adaptations
1. Physical adaptations
    a. Breast development continues for the breastfeeding mother for 2-3 weeks postpartum. For this reason, the use of artificial nipples during this time is discouraged.
    b. By six weeks postpartum the milk supply for breastfeeding mothers should be well-established and meeting baby's needs.
    c. If a woman chooses not to breastfeed her menstrual cycle can return at any time.

d. By six weeks postpartum the uterus has returned to its pre-pregnant size.

2. Emotional adaptations. Postpartum emotions can be affected by several factors.
   a. The hormonal changes listed above are significant and can have a strong influence on mother's emotions.
   b. Newborns do not sleep for very long at one time. Both parents can be affected by fatigue.
   c. The amount of support and encouragement that a new mother receives influences how well she transitions into motherhood.
   d. Relationships may change. How extended family reacts to the baby has a great impact on the family. Relationships with friends may undergo a transition.
   e. Nutrition can impact mood. Encourage the new family to eat foods that promote good physical and emotional health.

SNOWBALL
Helpful suggestions for a healthy postpartum

Sleep
Nutrition
Omega 3s
Walk
Baby breaks
Adult time
Liquids
Laughter

B. Infant growth and development
   1. Growth spurts occur around three weeks, six weeks and three months of age. It is common at these times for new mothers to feel as though they don't have enough milk because baby always wants to feed. Knowing that this is a growth spurt and understanding that frequent nursing will increase her milk supply will help alleviate the mother's anxiety.
   2. Infant states of consciousness – Infants relate to their caregivers in predictable patterns depending upon their state of consciousness.
      a. Deep sleep is a time when baby is almost motionless. Baby's only respond to the most intense stimuli when in this state. Attempting to feed a baby in this state will be frustrating because the baby's response will be minimal.
      b. Light sleep is also known as REM (Rapid Eye Movement) sleep. The baby will exhibit light movements during this time. Light sleep is associated with processing information and learning. Most of baby's sleeping time is light sleep.
      c. Drowsiness is a state in which infants demonstrate variable levels of awareness and activity. If left alone they may go to sleep or if stimulated they may waken.
      d. Quiet alert is the time when babies are most aware of their environment. Babies explore the world around them with wide, bright eyes as they interact with their caregiver.
      e. Babies in the active alert state exhibit more physical activity, but their focus is a bit dulled.

f. Crying is a difficult state for the caregiver – and it is intended to be so. This is the baby's way of communicating a need.

Understanding a newborn's state of consciousness can help parents tune into their child and so ease their transition to parenthood.

C. Care of the newborn

1. Gently bathe the baby in comfortably warm water once or twice a week. Parents may give a sponge bath or a full bath according to their preference. Teach parents different methods of securely holding their infant in the water.
2. Generally, clothing the baby in one more layer of clothing than the adults have on is adequate warmth and protection.
3. In the US and Canada children are required to be restrained in a car seat when in a vehicle. Many car seats are used incorrectly. Encourage parents to have their car seat installation inspected.
4. Comfort measures for fussy babies include:
    a. Swaddling – wrapping the baby snuggly in a blanket.
    b. Movement – rocking or swaying with baby; putting baby in a swing.
    c. Soft noise / white noise – shushing in the baby's ear; turning on a fan
    d. Sucking – even if baby has fed until full sucking on a pacifier (dummy) or finger may be soothing
5. Placing babies on their back to sleep has significantly lowered the rate of Sudden Infant Death Syndrome (SIDS). When awake parents should be encouraged to give infants "tummy-time" – that is time to play while lying on their stomachs. This strengthens neck, back, and shoulders preparing the infant for sitting and crawling.
6. As baby grows sleep and wake cycles become longer. Periods of activity lengthen as do hours of sleep.

Warning Signs for the Infant

Physical symptoms
- Temperature (too hot or too cold)
- Yellow skin or eye color
- Breathing problems

Behavioral changes
- Listlessness
- Constant crying or fussiness

Feeding problems
- Fewer than 7-8 times in 24 hours (breastfed baby)
- Fewer diaper changes than expected

Problems with the umbilical cord

Problems with circumcision

D. Family adjustments

1. Adjustments to family life are easier when there is good social support from family, friends, and community. Good communication skills, adequate sleep, and a healthy lifestyle including nutrition and exercise will facilitate a healthy transition.

2. If this is not the first child in the family the sibling(s) may need an adjustment period. This will include learning about newborns and also accommodating the new demands on their parent(s).
3. In the US approximately 60% of new mothers return to work within three months after the baby is born. This can be a very difficult adjustment. A gradual transition to working full-time will help.
4. Family planning is a topic parents may want to discuss with their healthcare provider. Exclusive breastfeeding can reduce the chance of another pregnancy, but only for the first six months or so postpartum.

V. Perinatal Mood and Anxiety Disorders (PMAD)

A. Postpartum blues (This is not considered a disorder but is listed here so that it can be easily compared to PMAD.)
   1. Effect about 80% of American women
   2. Usually occurs 3-5 days after birth
   3. Lasts 1-2 weeks
   4. Characteristics –
      a. Mood swings
      b. Crying
      c. Anxiety
      d. Insomnia
      e. Irritability
      f. Loss of appetite
      g. Talking and emotional support help.

Although the information here pertains to the postpartum period, these disorders may occur at any time during pregnancy or up to one year after birth.

B. Postpartum depression and/or anxiety
   1. Effects 15-20% of new mothers
   2. May be mild or severe
   3. May continue from postpartum blues or develop any time in the first year
   4. Characteristics:
      a. Appetite changes
      b. Too much or too little sleep
      c. Feelings of loneliness, anxiety, irritation, and despair
      d. Role confusion
      e. Possible suicidal ideation
      f. Treatment is established by a wellness plan that may include in- or out-patient treatment, counseling, therapy and/or drugs

5. An effective tool for screening for postpartum depression is the Edinburgh Postnatal Depression Scale (EPDS). Diagnosing mental health problems is beyond the scope of childbirth educators, but this simple tool can help determine those who are likely to be depressed.

C. Postpartum obsessive-compulsive disorder
   1. Up to 9% of new mothers have OCD (many also have depression)
   2. Intrusive, repetitive, persistent thoughts
   3. Thoughts of hurting the baby
   4. Disgusted with herself for having those thoughts
   5. Counting, cleaning, or other repetitive behaviors

D. Panic Disorder
   1. Effects about 10% of new mothers
   2. Extreme anxiety
   3. Shortness of breath, chest pain, dizziness
   4. Often no identifiable trigger
   5. Excessive worry or fear

You are not alone.
You are not to blame.
With help, you will be well.

Postpartum Support International

E. Postpartum psychosis
   1. Affects 1-2 women per 1,000
   2. May appear at any time, but typically shortly after birth
   3. Previous mental illness is a risk factor
   4. Characteristics:
      a. May see or hear things that others don't
      b. May distrust those around them
      c. Confusion and/or memory loss
      d. Suicidal and/or homicidal ideation
      e. This condition is dangerous and requires immediate professional help.

F. Bipolar Disorder
   1. Characterized by rapid, severe mood swings from very high (mania) to very low (depression).
   2. Half of all women with bipolar disorder are diagnosed in the postpartum period
   3. If misdiagnosed as postpartum depression and treated with anti-depressants, an exaggerated manic phase may result.

G. Post-traumatic Stress Disorder (PTSD)
   1. PTSD can be experienced after a terrifying event or ordeal in which grave physical harm occurred, was threatened, or was perceived. If a woman experiences or perceives that she and/or her baby were in danger of injury or death to during childbirth, her birth is defined as traumatic – psychologically, physically, or both.
   2. Symptoms may include intrusive thoughts, extreme anxiety, hypervigilance, and acute distress in social environments.

3. In the US one in four women describe their birth as traumatic. Estimates of PTSD range from 5.6% - 9% of all births (between 224,000 and 360,000 women every year!).
4. Around the world rates of PTSD vary from 1.2% - 14%.
5. Observers of traumatic events can also be traumatized. Partners, midwives, physicians, nurses, doulas, or anyone else present at a traumatic birth can be affected.

Studies have demonstrated common themes in the experiences of PTSD due to childbirth as:

- Perceived lack of communication by medical staff
- Fear of unsafe care
- Lack of choice regarding routine medical procedures
- Lack of continuity of care providers
- Care being based solely on delivery outcome.

PART 6: TEACHING SKILLS

BIG IDEAS

1. Childbirth educators support clients in practicing informed decision-making skills and are familiar with the principles of evidence-based care.
2. The Cochrane Library and other reliable resources are readily available to the childbirth educator seeking evidence-based maternity care.
3. Developing childbirth classes using SMART objectives, engaging activities, and varied teaching strategies supports the understanding and retention of information.
4. Childbirth educators are aware of at-risk populations and adapt their teaching strategies to meet all learners' needs.
5. Evaluation is necessary to keep education relevant and effective.

OBJECTIVES:

At the conclusion of Part 6 the learner will:

1. Define evidence-based care.
2. Describe different types of research about maternity care.
3. Define informed decision-making.
4. Demonstrate informed decision-making using the acronym BRAIN.
5. Explain three theories of adult education.
6. Apply the ADULT acronym to curriculum development for adults.
7. List the three domains of learning.
8. Describe four types of adult learners.
9. List five steps of curriculum design.
10. Differentiate between a block curriculum and a spiral curriculum.
11. Use a mind-map to brainstorm ideas for a childbirth class.
12. Differentiate the learning styles of Generations X, Y, and Z.
13. Describe at least three groups of vulnerable populations and their particular needs.
14. Define the steps of writing a SMART objective.
15. List ways to establish rapport with class participants.
16. Describe at least five teaching methods for the childbirth class.
17. Evaluate visual tools, posters, and music for the childbirth class.
18. List at least three ways to improve recall.
19. Discuss benefits of creating a birth communication plan or a list of birth preferences.
20. Compare and contrast informal and formal types of class evaluation.

LEARNING RESOURCES

- Evidence-based practice definition – http://www.seminperinat.com/article/S0146-0005(97)80013-4/pdf
- ICEA Position Papers and Statements
  - Role and Scope of the Childbirth Educator – https://icea.org/wp-content/uploads/2015/12/Role-Scope-of-CBE-PP-2017.pdf
  - Curriculum Development – https://icea.org//wp-content/uploads/2016/01/Curriculum_Development_Content_CBE.pdf
  - Competencies and Certification of the Childbirth Educator – https://icea.org//wp-content/uploads/2016/01/PCBE_Prerequisities_Training_Cert_for_CBE.pdf
  - Practice Settings for the Childbirth Educator – https://icea.org//wp-content/uploads/2016/01/PCBE_Practice_Settings_for_CBE.pdf
  - Use of Essential Oils for Pregnancy, Birth and Breastfeeding – https://icea.org//wp-content/uploads/2016/01/ICEA_policy_statement_Use_Essential_Oils_Pregnancy.pdf
  - Equity and Diversity Statement – https://icea.org/about/equity-and-diversity/
- Respectful Maternity Care: The Universal Rights of Childbearing Women – https://www.who.int/woman_child_accountability/ierg/reports/2012_01S_Respectful_Maternity_Care_Charter_The_Universal_Rights_of_Childbearing_Women.pdf
- Infographic of different generations of learners – https://generationz.com.au/wp-content/uploads/2018/09/GenZGenAlpha.pdf
- Icebreakers – https://transitiontoparenthood.wordpress.com/for-educators-and-doulas/class-activities/icebreakers/
- Class games and activities – https://transitiontoparenthood.wordpress.com/for-educators-and-doulas/class-activities/
- Pain Medication Preference Scale – https://birthtools.org/birthtools/files/BirthToolFiles/FILENAME/000000000006/MOC-CnC-PainMgmtPreferenceScale-Simpkin.pdf

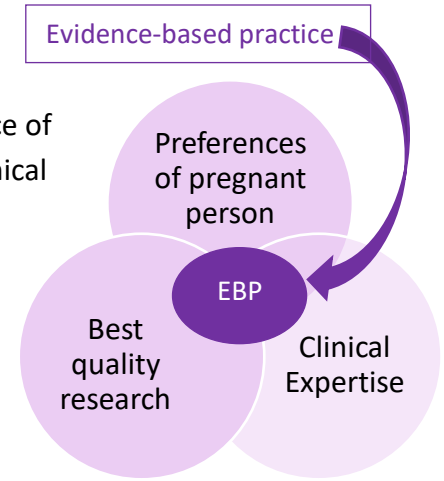
Contents

OUTLINE

I. Evidence-based practice

A. ICEA's philosophy is centered around the concept of a person's right to make their own decisions based on knowledge of alternatives. The fact is that most of the time there are alternatives – options that one person may prefer, and another may not. Several factors contribute to that preference: cultural factors, applicable research, expertise of the healthcare provider, and others. One of the benefits of quality childbirth education is learning about the options available and the research that supports them. ICEA requires Certified Childbirth Educators to continue their education and recertify every three years. In this way we encourage educators to stay current in their knowledge of evidence-based practice.

B. EVIDENCE-BASED PRACTICE is "the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research." David Sackett, MD



C. Practice can vary greatly from one provider to the next and from one facility to the other. Regional variances have been researched and documented.

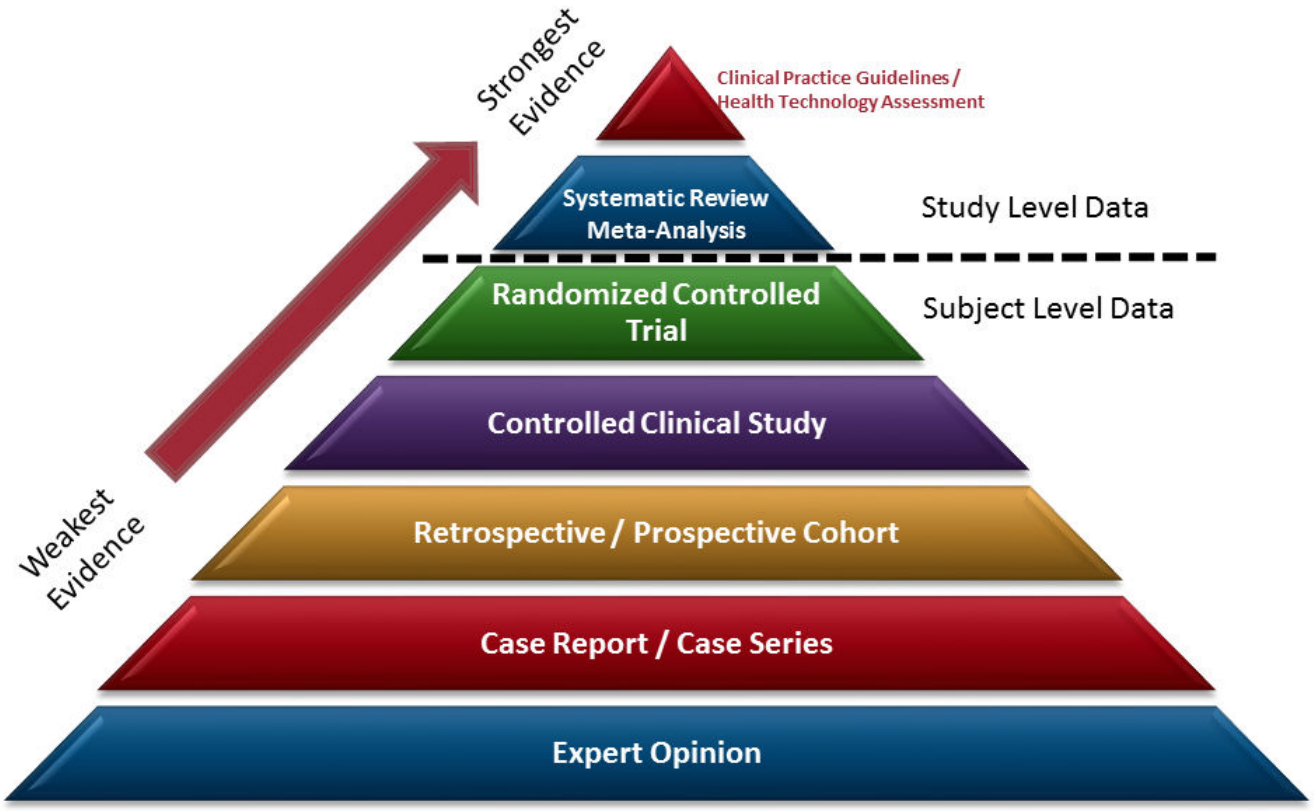
II. Evaluating Research

A. A childbirth educator provides quality information for her clients. In order to do that it is important to understand how to evaluate research. Some information to consider when evaluating research:

1. Two basic categories of studies:
    a. **Quantitative studies** look at numbers and statistics – a good thing when you are considering risks and benefits of a procedure. *Example: How many cesareans are performed each year?*
    b. **Qualitative studies** consider attitudes and feelings. *Example: How do women feel after they have had an emergency cesarean?*

Quantitative Research	Qualitative Research
Structured data	Unstructured data
Statistical analysis	Summary
Objective conclusions	Subjective conclusions
Surveys	Interviews
Experiments	Observations

2. Who sponsored the study? *Is it possible that there might be bias in the results of a study on infant feeding done by a formula manufacturer?*
3. 3. Have experts in the field reviewed this information? *Was the study published in a peer reviewed journal?*
4. How big was the group that was studied? *The study might be well done, but a study of 15 people will have less credibility than one that includes 1,500 people.*
5. What variables could influence the outcomes? *(Standards of practice, education levels, socioeconomic levels, access to healthcare, environmental issues, and more…)*



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B. Both quantitative and qualitative research are valuable. In the past emphasis has been placed on quantitative research. With the more recent emphasis on respectful maternity care the value of qualitative research has been recognized. Birth is more than a physical event that moves the baby from the inside to the outside. It is a life event that transforms peoples' lives. Qualitative research takes this into account. (See ICEA's philosophy statement.)
C. COCHRANE LIBRARY is an independent, non-profit organization that does systematic reviews including studies from all over the world. Their meta-analyses sort through dozens of studies that include thousands of subjects. (A meta-analysis sorts through all applicable

studies and combines statistics from those studies. Combining statistics from various groups minimizes the risk of bias and increases the numbers of those studied which makes for more accurate conclusions.)

III. Informed Decision-Making

Respectful Maternity Care

Article II: Every woman has the right to information, informed consent and refusal, and respect for her choices and preferences, including companionship during maternity care.

A. Informed decision making includes the right of consent or refusal of care. Informed decision-making requires more than quickly skimming over a form and signing it. It requires education and thoughtful consideration – and all the more so since childbirth is often the first significant exposure people have to the healthcare system as adults. Informed decision-making requires that the woman know and understand. Quality childbirth education is an essential part of informed decision-making for childbearing women and their families.

B. BRAIN is an acronym that is a helpful decision-making tool for English speakers.

1. B – Benefits. What are the benefits of this procedure, medication, or course of treatment?
2. R – Risks. What are the risks of this procedure, medication, or course of treatment?
3. A – Alternatives. Are there alternatives to this procedure, medication, or course of treatment? (If so, the benefits and risks of those will also need to be considered.)
4. I – Intuition. A person's intuition will incorporate their personal belief system, cultural considerations, and possibly other personal preferences and opinions.
5. N – Next steps or Not now or No. Once a certain option is chosen consider the "next steps" are things most likely to follow. (For instance, if a woman chooses to have epidural anesthesia she will also have IV fluids and be restricted to bed.) "Not now" would refer to postponing a procedure. Refusing a procedure would require a "No."

B – Benefits

R – Risks

A – Alternatives

I – Instinct

N – Next steps

The two most important decisions that affect birth outcomes:
The place of birth
The caregiver

IV. Adult Learners

A. Foundational theories of adult education

1. **Andragogy** is based on the following assumptions about adult learners:
   a. Adults are self-directed learners (as opposed to children who are dependent on an instructor to teach them what they need to know).

   b. An adult draws on their life experience as they learn new things
   c. The developmental tasks of an adult influence their readiness to learn. (People in a childbirth class want to learn because they are expecting a baby.)
   d. Adults tend to be problem-centered learners. They see a need to know something and so they determine to learn it.
   e. An adult's desire to learn is driven internal motivation, not external.
   f. Adults need to understand the reason why they need to learn something.
2. **Self-directed learning** theory acknowledges that adults pursue learning in ways that are effective for them. Some may choose to take a class (online or in person). Others may find a mentor or read a book.
3. **Transformational learning** theory focuses on the transformation of thinking that takes place as an adult learns. Childbirth classes offer information on pregnancy and birth even as the subtle task of transitioning to being parents takes place. Parents do more than memorize new information in a childbirth class. They begin to assume the responsibilities of parents by making decisions that will affect their lives and the lives of their children.
4. Other learning theories emphasize the social aspect of learning.
   a. What is an adult expected to learn or to know in the context in which they live? (For example, is childbirth education an expectation in their culture or is this a new idea?)
   b. How do adults learn with the context in which they live? Is it enough to watch a video? Do they need to practice a hands-on skill? This may differ depending on the age of the learner and the culture in which they live.
   c. Holistic learning recognizes that learning is not simply an intellectual exercise, but incorporates social, emotional, and spiritual aspects of a person as well.

B. Application of adult learning theories – the ADULT acronym
1. A – Agenda. Adults come to class with an agenda. They may have specific things that they want to learn. Allow enough flexibility in your curriculum to answer their questions and address their specific needs.
2. D – Discussion. Adults come to class with life experience. Can you relate the concepts you teach to what they already know? Allow time to listen to their perspectives and concerns.
3. U – Understand my needs. Listen to the needs expressed by the adults in your class. How can you help them learn? How can you make them feel welcome and accepted?

A – Agenda
D – Discussion
U – Understand my needs
L – Learning preferences
T – Time is valued
S – Setting is comfortable

4. L – Learning preferences. Not all adults learn in the same way. Vary your teaching style so that all can be engaged in learning.
5. T – Time is valuable. Begin and end class on time. Do not waste time during class.
6. S – Setting. Is the setting of the classroom comfortable and welcoming?

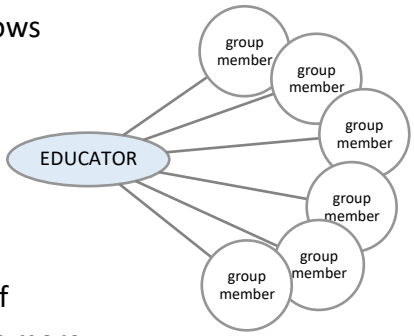
C. Domains of learning – Quality childbirth education addresses all three of these domains.
   1. **Cognitive.** This domain includes learning facts and information. (Example: learning about the stages of labor)
   2. **Affective.** The affective domain includes emotions and attitudes. (Example: learning information or techniques that help parents deal with fear of labor)
   3. **Psychomotor**. This domain uses physical, hand-on skills. (Example: learning breathing techniques that help calm people during labor.)

D. Types of learners. Three categories listed here, but all of us learn in all of these ways. However, most people have one dominant way in which they prefer to learn.
   1. **Visual** – These learners take in most information through visual means. They will enjoy videos, pictures, charts, and other tools that will help them see what the educator is saying.
   2. **Auditory** – These participants learn primarily through hearing. They will listen closely to what you say and appreciate discussions. Music will help them relax.
   3. **Kinesthetic** – These hands-on learners will better understand what they can touch or manipulate. Allowing them to hold the baby and the pelvis will help them better grasp the cardinal movements of labor.

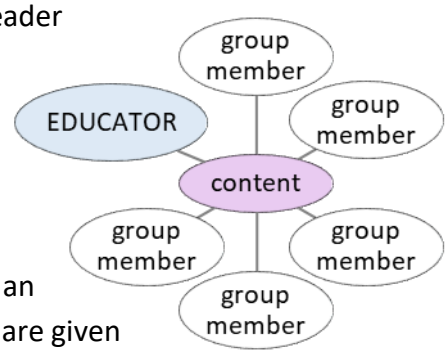
E. Adults have a variety of personalities and learning preferences. Those preferences can generally fit into these four categories:
   1. **Quiet, organized intellectuals**. These people enjoy a well-organized class. They will appreciate having written resources (either on paper or online). They may not participate in class discussion very much, but they will be thinking about what is said.
   2. **Relaxed, easy-going mediators**. They enjoy solving puzzles and working with others. They do not like conflict and would rather listen than discuss. They also will be thinking about what is said.
   3. **Fun-loving talkers**. They enjoy hands-on activities and games. They will gladly engage in class discussions, but may tune out long lectures.
   4. **Hard-working leaders**. They enjoy discussion and debate. They will ask questions. They want to understand so that they can better predict outcomes.

F. The type of group structure that you establish for your class will depend upon your own personality and teaching style, the class content, and the type of people that attend.

1. In a **leader-centered group** the information flows from the educator to the participants. The educator is the content expert and shares information. There is no emphasis on group discussion or dynamics. Little time is given for the group members to process the information that they are hearing. This type of group may be appropriate when the content is more technical or when time is very limited.



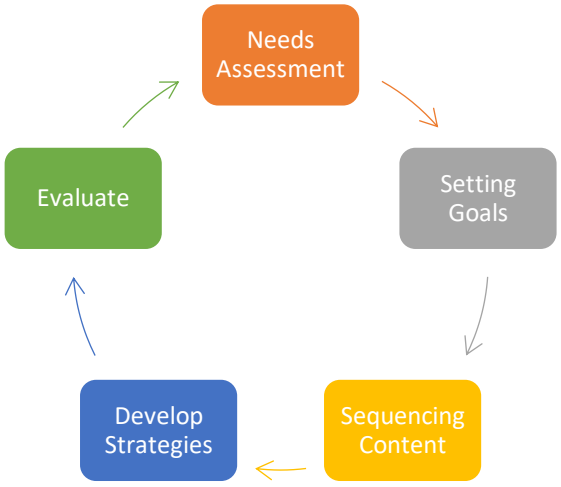
2. A **content-centered group** has a designated leader (the educator) who is the content expert. Group members are encouraged to interact with one another. An atmosphere of openness fosters discussion. This type of group is effective for most childbirth classes. Group participation and relationships grow in an atmosphere of camaraderie. Group members are given ample time to process information as the educator employs a variety of teaching strategies.



V. Curriculum Design

A. Steps to develop a curriculum

1. **Assess needs**. What do the people you teach need to know? This may depend on their age, culture, health history, or other factors. A group of teen mothers will need different information than a group who wants a refresher class.
2. **Set goals and objectives**. What will the class accomplish? Keep in mind the three domains of learning. Goals and objectives should include something from each domain. More about objectives below.
3. **Sequence content**. What is a logical progression of concepts? (You would not teach about pharmacologic forms of pain relief before you explained the stages of labor.)
4. **Develop teaching strategies**. What methods will you use to teach the content? Will you

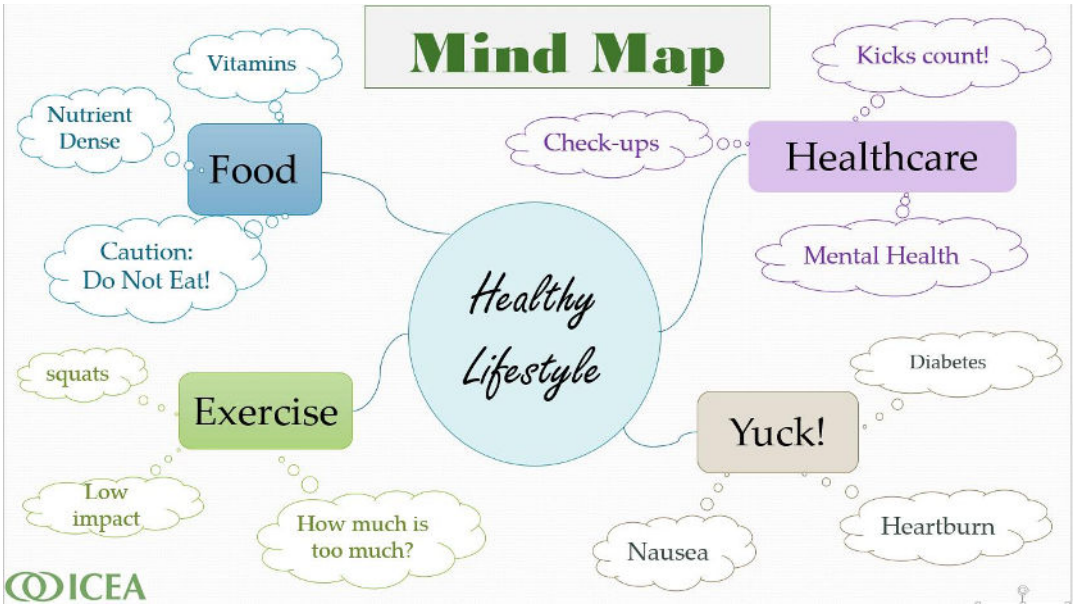


show a video? Offer time to learn a hands-on skill? Play a game?

5. **Evaluate**. How will you evaluate the effectiveness of what you teach? If you do not evaluate what you teach, you limit your own ability to learn and grow. Setting specific objectives and checking to see that you have met them helps you become a better educator. Once the evaluation is complete, appropriate modifications may be made to the curriculum.

B. Spiral or Block curriculum?
   1. A **block curriculum** may be best if you have a limited amount of time to teach. Teaching in a "block" format means that you teach all of one topic at one time. Teaching a class that is all about breastfeeding is using a block curriculum.
   2. A **spiral curriculum** gradually builds knowledge over a series of classes. For example, in an introductory class you may give a brief description of the stages of labor and practice a simple breathing exercise. The next time you meet you may go into more detail about labor and include comfort measures to deal with discomforts. In a later class you may teach about common complications of labor. Each class adds another layer of understanding as you spiral the information throughout the series of classes.

C. A **Mind Map** can be a helpful tool when you are thinking through the needs assessment. A mind map is "brainstorming on paper." Your ideas do not need to be organized at this stage. It is an opportunity to get all of your ideas written down where you can see them. The example below is for a class on healthy lifestyles. What would you add to this?



D. Part of the needs assessment will also be considering the ages of those being taught. Below are stereotypical descriptions, but please keep in mind that each person is an individual. These generational characteristics will be influenced by personal learning styles, culture, education, and a variety of other factors.

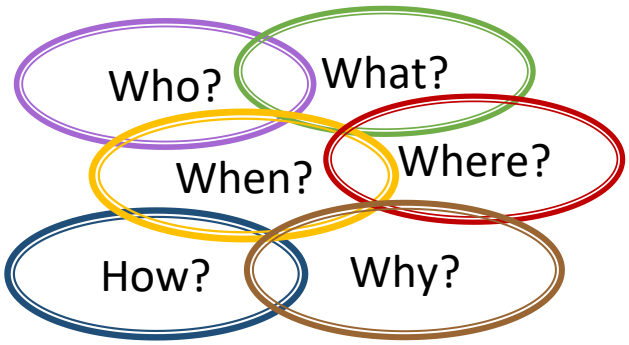
1. Generation X – born 1965-1979
    a. Appreciate participative learning
    b. Want to hear from those that have experience
    c. Enjoy learning tools geared specifically to their needs
2. Generation Y – born 1980-1994
    a. Appreciate interactive learning
    b. Want to hear from their peers
    c. Enjoy online resources
3. Generation Z – born 1995-2009
    a. Appreciate learning in a variety of ways
    b. Looking for information from peers and groups online
    c. Enjoy social media platforms for learning

E. Vulnerable populations. These are groups of people that have specific needs that may not be met in a traditional class. Creating classes geared toward these groups may make teaching more effective. ICEA believes that all people should be treated with dignity and respect. Please see the International Childbirth Initiative (ICI) in Part 1 as well as ICEA's Equity and Diversity Statement and Respectful Maternity Care: The Universal Rights of Childbearing Women under learning resources in this part.

1. **Pregnant adolescents**. Their needs and learning styles will be unique not simply because of their generation, but because of their developmental stage in life – both physically and psychologically.
    a. Pregnant adolescents have specific nutritional needs.(See Part 2 – VII)
    b. They tend to be more self-centered learners. This does not mean they are selfish; rather that their world still remains centered on themselves. Example: They may appreciate that breastfeeding is healthier for the baby, but they will be more motivated to continue breastfeeding if they know it will also help them lose weight.
    c. Pregnant adolescents have a relatively small peer group. Expecting them to attend a class that consists of mostly older people may not be realistic.
    d. They may need additional help with the more practical aspects of parenting: time management, balancing a budget, finding community resources, etc. Creating a list of resources for them may be helpful.
2. **Parents of advanced age.** While the definition of "advanced age" may vary somewhat from one culture to another, there are some universal concerns. Women over 35 years of age are more likely to have a child with genetic anomalies (such as Downs Syndrome). They are more likely to use assisted reproductive technology (ART) which can increase risks with pregnancy and birth.

3. **Parents with developmental disabilities**. These parents may require one-on-one instruction. Education is best begun early in pregnancy. Much repetition and practice will help.
4. **Non-binary parents.** The educator should use inclusive language and terminology. Communicate before class with these parents to see what pronouns they prefer and how they would like to be addressed.
5. **Minority parents.** Sadly, in the US and in many parts of the world discrimination based on race, religion, and other factors is present even in healthcare settings. The concerns and questions of minority parents are often disregarded. An ICEA certified childbirth educator will make every effort to be sensitive to the concerns of minority parents and to meet their needs.
6. **Parents with a history of abuse.** These parents will appreciate advance notice of pictures or videos with explicit content. They may have specific fears that need to be dealt with privately.

F. In addition to the groups listed above, a possible result of the needs assessment may be the desire to create classes for specific groups such as a refresher class for experienced parents or a class for VBAC (vaginal birth after cesarean) mothers. ICEA certified childbirth educators may also be asked to teach a sibling class or a breastfeeding class. These may be taught using a block format (for a one-time class) or a spiral curriculum if a series of classes is required.



Answering these basic questions will help to focus class content and teaching strategies.

G. SMART objectives. Writing out SMART objectives may simply seem like an academic exercise, but taking the time to think through this process helps focus the educator's content, methods, and evaluation. Your objectives should be focused on what you want the participants to be able to do. This can be very helpful in ensuring that your curriculum is an effective teaching tool.

1. **S – Specific**. State specifically what you want to accomplish.
2. **M – Measurable**. Give definitive examples or measures of what you want to teach.
3. **A – Achievable**. Be realistic in the objective. Can the objective be accomplished in the time you have allotted? Can the objective be accomplished with the information and tools that you have?
4. **R – Relevant**. The objective should be related to the overall class content.
5. **T – Time element**. When will this objective be completed?

Inadequate Objective	SMART Objective
Learn relaxation techniques	At the end of this class the participant will be able to list at least three benefits of relaxation during labor. *(cognitive domain)*
	At the end of this class the participant will appreciate the benefits of relaxation during labor. *(affective domain)*
	At the end of this class the participant will be able to demonstrate the roving body check as a means of relaxation. *(psychomotor domain)*

At the end of this program the participant will write a complete SMART objective. ☺

VI. Teaching strategies, tools, and more!

A. **Preparation**. Create a checklist that can serve as a reminder for what is needed for each class.

1. The educator's philosophy will influence what and how they teach. Explore your personal views about labor, birth, and newborn care. Do you feel strongly about a topic, such as medication, no medication, circumcision, vaccines, or something else? None of us is completely free from bias, but as much as possible we must put our own preferences aside. On the rare occasions that an educator shares their personal opinion it should be plainly stated that it is an opinion. It is the educator's role to provide clear and accurate information.
2. Environment
    a. There should be plenty of comfortable seating. Every participant should be able to see the educator and any visuals used.
    b. Ensure adequate lighting and comfortable temperature.
    c. Will food be provided for participants? Serving snacks can entice people to attend as well as creating a more welcoming, informal atmosphere.
3. Equipment / Teaching tools
    a. If you are using audio/visual equipment, is it in working order? Do you know how to operate it? If there is a problem, do you know who to call?

Proper Preparation & Practice Prevent Poor Performance

b. Practice ahead of time so that you can confidently perform any demonstration. Make sure that you have enough equipment/tools for each participant.
c. Visual aids such as power points, videos, posters, or flip charts should be reviewed regularly to ensure that they are effective teaching tools. VACCINE is a good tool to use to evaluate visual aids. Are the aids:
    i. **V**isible – Can everyone see what you are doing or showing?
    ii. **A**ccurate – Are statistics and diagrams reliable?
    iii. **C**lear – Is it easy to read and understand?
    iv. **C**oncise – Too many details can become confusing. Keep it simple.
    v. **I**nteresting and informative – Use color to bring attention to important points or to differentiate one thing from another.
    vi. **N**eat – Keep visual aids neat.
    vii. **E**ffective – Images should be used for emphasis and to help participants retain information.

B. **Establishing rapport** between the educator and the class participants as well as between the group members themselves facilitates learning. The more comfortable people are with one another, the more open they are to new information.
1. Educator and class participants
    a. Professional appearance is important but may vary from one setting to another. Often in a hospital setting business casual attire is required for teaching classes. In a more informal setting that may not be necessary, but in every circumstance an educator should appear neat and professional.
    b. Introduce yourself as participants arrive. Welcome them to class. Offer snacks (if they are served). Encourage them to make themselves comfortable.
    c. Briefly let participants know what to expect. Will you be doing an activity? (See "Icebreakers" below.) Are they required to sign in or fill out a form? (A photo release form is necessary if pictures are taken during class.)
2. Icebreakers are activities or games that "break the ice" or help participants become acquainted and comfortable with one another. They provide a time of transition between the rest of the day and a childbirth class. Icebreakers are an informal, non-threatening way to encourage group participation. The more engaged people are in learning the more readily they learn. Only a few examples are listed here. Search the internet for more or make up your own!
    a. Alphabet game – Each person (or couple) is given a piece of paper on which they list the letters of the alphabet. Ask them to come up with a word that has to do with pregnancy, birth, or parenting that begins with each letter. When this is completed the educator then calls out a letter and participants

call out the words they chose. Some answers may lead to laughter and others to meaningful discussion.

b. Twenty answers – List random facts and characteristics on a sheet of paper. Give each class participant (or couple) a sheet and have them mingle to find people that match the statements. Example: born in December, moved in the last year, travelled in the last month, plays soccer, etc.

c. Review questions – For a later class list terms that have been covered in previous classes on one set of cards. On another set of cards write the definitions of those terms. Have the participants find their counterpart: if they have the definition, they need to find the person with the card that has the term written on it and vice versa.

C. **Teaching strategies.** Generally speaking teaching strategies should change every 20-30 minutes. Sitting for long periods of time may be uncomfortable for some pregnant people. Listening to a lecture for too long causes minds to wander. Long videos may contain too much information for people to process all at once. The list of teaching strategies here is not exhaustive. Not every strategy will be effective for every group. The strategies you use will depend on those you teach, your teaching style, the time allotted for class, and other factors.

1. Lecture is probably the most familiar teaching technique. The educator speaks, and the participants listen. More information can be dispensed quickly in this way, but because participants are not given opportunity to process what they hear, less information is actually retained.
2. Power point presentation (or something similar like *Prezi*) is a modified form of the lecture format. It gives the listener something to look at which helps them better understand the information they are hearing. Tips for a better presentation:
    a. Don't put too many words on the slide. If you read everything that is on the slide, people will become bored. They can read faster than you can speak.
    b. Use colorful images that illustrate your point. Let them see what you are saying. They will understand your point better and remember it longer.
    c. Use diagrams or charts that clarify your point. This can be an effective way to summarize material that you have already presented.
3. Role play can be used to help people integrate what they have already learned.
    a. For instance, after completing a discussion about informed decision-making two volunteers can act out a dialogue between healthcare provider and the pregnant person. The educator could create two or three scenarios for them to choose from (a compassionate provider who listens well, a nurse who objects to birth plans, etc). Using both positive and negative examples helps everyone in the group think through the steps of informed decision-making.

   b. Another use of role play would be to recreate an operating room or theatre during a cesarean birth. Each person in the group plays a part – surgeon, anesthesiologist, nurses, midwives, and any others. Discuss the role of each one. Ask the group to use their five senses: what do they see, smell, taste (maybe not much of this!), feel, or hear?

4. Brainstorming can be a helpful way to help students apply what they know. It also helps the educator assess what participants have learned.
   a. After learning about comfort measures the educator may ask the group what they would do for someone experiencing back labor. This could also provide an opportunity for them to demonstrate what they have learned. (More on that coming up!)
   b. When discussing the postpartum period ask what resources they think they would need. They may list healthcare provider, lactation consultant, family, friends, babysitter, or others. This can prompt a discussion about a postpartum plan.
5. Demonstration / return demonstration is especially appropriate when teaching comfort measures as well as relaxation and breathing techniques. It is not enough to simply explain these things. New parents will be much more confident if they have practiced them.
6. Grab bags provide a guided, but spontaneous, framework for discussion. Place objects in a bag that pertain to a specific topic. For example, things you would take to the hospital or things you would use during labor. As each person takes something out of the bag they can explain what it would be used for. The educator may have alternative uses to suggest.
7. Reflection activities may include writing or drawing. Participants may be asked to write down their fears pertaining to birth or asked to draw what a peaceful birth would feel like to them. The idea is not to critique their writing or drawing skills, but to help them state their feelings in order to process them in a healthy way.
8. Games keep learning fun. Matching card games may be used to match new words to definitions or to match interventions to scenarios when they are necessary. A game of dice can give them an idea of variations in the length of labor. (A roll of the dice for each stage of labor, pushing, etc.) As an alternative to the Grab Bag, use those same items for a scavenger hunt.
9. Storytelling engages listeners. Stories can illustrate a point and demonstrate how or why the knowledge was used. It is not wise for the educator to share personal stories unless they are disguised with a phrase such as “I knew someone who…”
10. Discussion in groups or between partners can lead to a better understanding of a topic. The Pain Medication Preference Scale (listed under Learning Resources) is an effective way to prompt discussion of preferences between partners.

D. **Teaching props** are the tools used to illustrate or demonstrate what is taught.
   1. Effective use of teaching props.
      a. When using any kind of visual aid make sure that everyone present can see. Encourage them to move around if necessary for them to have a good view.
      b. Allow time for participants to use the tools that you discuss.
      c. If you use a newborn doll treat it respectfully as though it were a real baby. Even when you are not directly teaching, you are indirectly demonstrating how to hold and care for a baby.
      d. To allow class participants to become familiar with props you may want to set up stations around the room that they can rotate through. For comfort measures you may want a station for each of the following: massage tools, rebozo, birth ball, and perhaps others. Make sure that there is adequate supervision for each station for those that have questions.
   2. Examples of teaching props and their use
      a. Probably the most beneficial teaching props for a childbirth educator are the model of a pelvis and a newborn doll. Use these to props to demonstrate how the baby moves through the pelvis. A pelvis with moveable joints can be used to demonstrate the advantages of different positions and how they aid the movement of the baby through the pelvis.

      b. Massage tools may be something as simple as a ball or wooden toy. Allow time for participants to practice with these and see what they prefer.

      c. Birth ball (or physical therapy ball) can be used in a variety of ways. Demonstrate different positions and let participants discover what works for them.
      d. Rebozo is a cover or shawl that can be used in a variety of ways: to support the pregnant belly, to provide stability on a birth ball, etc.

E. **Improving recall**. It is not enough to simply present information. An effective educator also wants to help learners remember what is taught.
   1. Using a spiral curriculum (See this outline part – V.B.2) provides repetition through a class series. Repetition helps learners integrate what they know so that they can apply it.
   2. Adults are more likely to retain information if you keep lectures under 20 minutes. Mix lecture with activities that give class participants an opportunity to use what they have learned.
   3. Use the Rule of 3. When information is presented in groups of three it makes it easier to remember – three comfort measures, three warning signs, etc.

4. Allow for student-directed learning. Encourage participants to ask questions – and answer them directly. Leave time at the end of class for questions and answers. If someone is curious enough to ask the question, they tend to listen and remember the answer.

F. **Teaching relaxation and breathing exercises** is a significant part of childbirth education. Relaxation and breathing can interrupt the fear-tension-pain cycle (see Part 4) and help most people better tolerate the process of labor. Tools that may enhance relaxation include visualization, movement, and music. Helpful hints for teaching:
   1. Make sure that you have practiced the technique yourself.
   2. Allow adequate time. Will you need mats for participants to lay on? Will you need to rearrange furniture to make room? What about putting things away when you are done? The amount of time allotted should include all of these things as well as the time for the exercise itself.
   3. Consider when you will do this. Expecting people to move from a busy work day directly into a relaxation exercise may not be realistic. If you offer this at the very end of the day to a group of tired people they may actually fall asleep. What works best may vary from one group to another.
   4. Allow people time to transition from relaxation to active participation again.

G. **Practicing a birth rehearsal** is an effective way to help participants apply what they have been taught. Begin with a basic exercise as described below. Make sure the class space feels safe and comfortable for class practice: close doors and window blinds, dim lights, minimize distractions. As the educator, move through the room during practice with quiet positive comments at their level. If you are able to repeat this exercise in more than one class, you may want to introduce issues such as back labor or slow progress.
   1. Begin with a few mild contractions lasting 30-45 seconds. Explain that these contractions are uncomfortable, but not painful. This gives participants a chance to talk about what they will do at home during early labor.
   2. Contractions become longer, stronger, and closer together. The mother does not want any talking during these contractions. Discuss when they should go to the birth facility or call the midwife (if they are staying at home). Practice a variety of comfort measures and positions. Discuss the importance of relaxing between contractions and frequent trips to the bathroom to empty the bladder.
   3. Move into transition. There is little break between contractions. Discuss what the partner do when the mother feels like she can't go on.
   4. Talk about effective positions for pushing.
   5. Baby is born. Discuss benefits of skin-to-skin contact and breastfeeding.

H. **Communication tools** for birth and postpartum.
   1. For birth

a. The purpose of communication tools is just that – to communicate. For this reason, many people are moving away from the phrase "birth plan" and using words like "birth preferences" or "birth vision." These terms may also help people more readily accept the unpredictability of birth.
b. A list of birth preferences helps in at least two ways:
    i. It encourages the pregnant person to consider and think through her options.
    ii. It facilitates communication between all members of the circle of care.
c. Encourage people to keep plans short. If it is too long, it is not always reasonable to expect providers to be able to keep it all in mind. Birth communication tools are most effective when they are read and acknowledged by the person's care providers. Occasionally, the back side of a two-sided document is totally overlooked. If the list of preferences is more than one page long, the pregnant person may need to reconsider her place of birth or provider. Ideally, her desires and the place and provider should be a good match.
d. Birth communication tools are not well-accepted everywhere. As a professional you may need to inform your client of situations/facilities in which a birth plan is not viewed in a positive light.

2. For postpartum
    a. Preparation for the postpartum period is easy for new parents to overlook as they are planning for the birth itself. Thinking through options for the postpartum period can alleviate some of the stress of caring for a newborn.
    b. Questions for new parents to consider:
        i. Who will they call when they have questions about breastfeeding or infant development?
        ii. Who will they call when they need help? When educator's present this question it is a good opportunity to address issues of fatigue and postpartum mood disorders.
        iii. Who would they call in case of emergency? If there are other children in the home, who would they call to care for those children?
        iv. Who would they call for transportation needs?
    c. Encourage parents to keep this information where it is easily accessible – not only for themselves, but for anyone else who would be caring for the children.

I. **Evaluation** is necessary in order to improve the effectiveness of education. Evaluations communicate if the client's needs were met. The data collected can help determine areas of needed change. Evaluation takes place in many ways:

1. Informal evaluation has different forms. Results are usually not recorded but are used immediately to adjust the presentation to the participants' needs.
    a. An educator can observe the responses of class participants. Are they engaged? How often do they need clarification on something you have said?
    b. Note cards or sticky notes can be used for participants to write questions for the educator. This gives the educator a better understanding of the needs of the participants and their comprehension of what is being taught.
2. Formal evaluation provides information for improvement over time. Sometimes a formal evaluation is required by the facility that you teach for. It may also be a way for you to accumulate data over time so that you may continually improve your presentation.
    a. A form with standardized questions may be completed at the end of each class or at the end of a series of classes.
    b. Electronic forms of evaluation encourage group participation. Cumulative results from these types of surveys can help you fine tune a presentation to be even more effective.
        i. Poll Everywhere – https://www.polleverywhere.com/
        ii. Survey Monkey – https://www.surveymonkey.com

Part 7: BUSINESS

Please note: While some of the general business structure and advice given here may be universal, many of the practices and resources listed here pertain only to the United States. Governmental regulations, regional economics, and cultural practices will determine best business practice in your area.

BIG IDEAS

1. Formulating a business plan and addressing practical business matters will focus your energy and actions, pointing you in the direction of business success.
2. During the initial interview ask open-ended questions that will help you evaluate your clients' needs and determine if this relationship is a good fit.

OBJECTIVES

Upon completion of Part 7 you will be able to:

1. Evaluate the business environment in your area using a SWOT analysis.
2. Describe your personal and professional goals for your practice.
3. Define the meaning of mission, vision, and values in general and for your practice.
4. List at least four ways to market your business.
5. Compare and contrast stress and burnout.
6. Define and give examples of open-ended questions.
7. List at least three components of active listening.
8. List three types of social support that clients may or may not have.

LEARNING RESOURCES

- Small business association – https://www.sba.gov/
- Stress and burnout – http://www.helpguide.org/articles/stress/preventing-burnout.htm

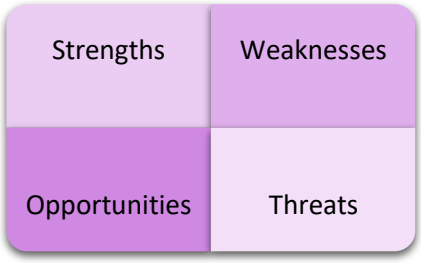
CONTENTS

OUTLINE

I. Taking Care of Business

A. **HONEST ASSESSMENT** –

1. Take a personal inventory. What are your strengths? Weaknesses?
2. Use a **SWOT** analysis to determine the best avenues for your business
   a. **S**trengths – What do you do well? What resources do you have?
   b. **W**eaknesses – Where do you need to improve? What resources do you lack?
   c. **O**pportunities – What are the needs in your area? How can you let people know about the services you offer?
   d. **T**hreats – Is there competition from others? What is the financial risk?



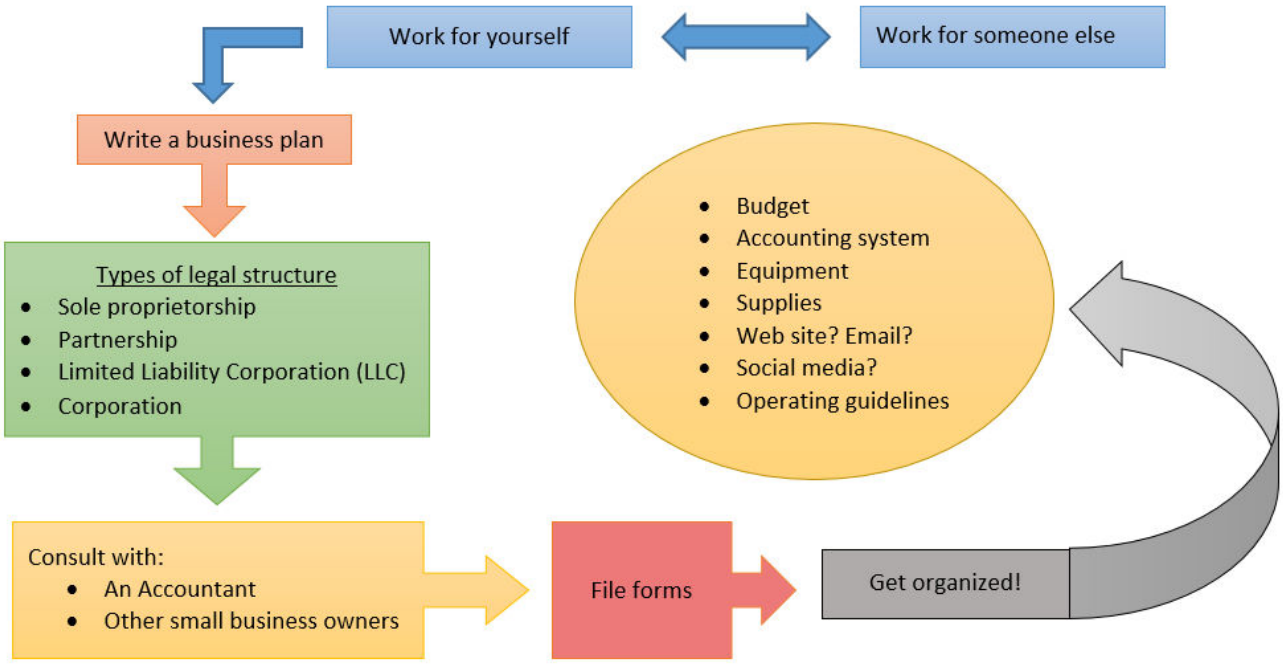
B. **GOALS** – How will you define your success? Consider your values, mission, and vision.

1. **Values** – What principles will guide your decision-making process? Clarify your values.
2. **Mission** – What is the purpose of the business? Define the steps necessary to accomplish your mission.
3. **Vision** – What do you want to be? Determine how you will define your success.

C. **SMALL BUSINESS FUNDAMENTALS**

1. Develop your business plan
   a. Who will you teach: define your target audience
   b. What will you teach: define your content/area of expertise
   c. When will you teach: define how many days, evenings, and weekends you will work
   d. Where will you teach: online-what platform will you use, in-person what locations are available.
   e. How will you teach: choose tools and resources to use
2. Determine the legal structure for your business
3. File the proper forms
4. Organize (budget, supplies, forms, etc.)
5. Create your professional image
6. Advertise
7. Evaluate – Use client evaluation data to drive improvement and change
8. Write a summary that briefly describes your business.
9. Determine the services you will offer.
   a. Establish an appropriate price structure for these services. Research fee structures of other birth professionals in your area.
   b. Will you offer pro bono services or services on a sliding scale?

i. Under what circumstances?
ii. How will you determine those circumstances?



D. **MARKETING**

1. Analyze the market
2. Consider the competition
3. Develop your tagline – a phrase that describes your business and that will help others remember your business
4. Network –
    a. Becoming acquainted with others (whether or not they work with expectant families) will make your business more visible
    b. Meet with local healthcare providers to acquaint them with your work
    c. See if you can collaborate with other organizations that provide services for new families
    d. Explore the possibility of working with other birth professionals.
    e. Offer to speak for other organizations or in schools
    f. Exhibit at health fairs and/or baby fairs
    g. Join online groups where expectant parents can be found
    h. Attend regional or national conferences. (ICEA conferences are a great place to meet people, learn about the latest evidence-based practice, and get new business ideas!)
5. Write a resume or curriculum vitae (CV)

6. Create a logo
7. Electronic media – Will you have a web site? A Facebook page? Twitter? Other social media?
8. Print media – Will you advertise in newspapers? Create brochures? Give out business cards?
9. Using social media to promote your business (See the ICEA Position Paper on Social Media referenced in Part 1)
    a. Do not share about clients or class photos without written permission (ICEA website has a form that certified professionals may download).
    b. Encourage clients to share out what they have learned during class.

E. **DEVELOP FORMS AND CONTRACTS**

1. Registration form
2. Contract for service
    a. What is included in your service?
    b. When are deposit and final payment due?
    c. What is your cancellation policy?
3. Log sheet to keep track of the hours worked and tasks accomplished in that time
4. Emergency contact sheet for your clients
5. Receipts (An online payment service such as PayPal or Square will send receipts to your clients once their invoice is paid.)
6. Evaluation forms (See Part 6 – VI.I to understand the importance of evaluation)
7. Helpful handouts. You may print these yourself to give to clients or send them electronically.
8. Business cards
9. Pamphlets or brochures

II. Self-care

A. SAFETY PRECAUTIONS

1. Universal Precautions (Red Cross Universal Precautions for Bloodborne Pathogens)
    a. It is not typical for childbirth educators to come into contact with bodily fluids. However, wear gloves any time this may happen.
    b. Disinfect your equipment (birth balls, massage tools, etc. before or after each class session.)
2. Situational awareness
    a. Park your car in a well-lit area as close to the class facility as possible.
    b. If you are going to/from a healthcare facility at night, do not hesitate to ask someone to accompany you to your car.
    c. Look around you. Don't hunt for your car keys as you walk to your car. Keep your head up and your eyes open.

B. **STRESS OR BURNOUT** – ICCE's work requires emotional as well as physical energy. It's a good idea to periodically assess your stress level. There may be times when it is appropriate to take a break from work. Birth work may be for just a season of your life – you give it all you have got for a few years. But it may be that being an ICCE is a life-calling for you. Consider yourself in a marathon and pace yourself. Take a break when you need one. Find a friend to talk to. You can better care for childbearing women when you also care for yourself. Use the following chart as a guide for self-assessment.

Stress vs. Burnout	
Stress	**Burnout**
Characterized by overengagement	Characterized by disengagement
Emotions are overreactive	Emotions are blunted
Produces urgency and hyperactivity	Produces helplessness and hopelessness
Loss of energy	Loss of motivation, ideals, and hope
Leads to anxiety disorders	Leads to detachment and depression
Primary damage is physical	Primary damage is emotional
May kill you prematurely	May make life seem not worth living

This table is reprinted here with permission from HelpGuide – http://www.helpguide.org/articles/stress/preventing-burnout.htm

C. **CHALLENGING CLASSES OR CLIENTS** –What is challenging for one instructor may or may not be for another.

1. It's important to find someone we can talk with. We all need a sounding board – someone who will listen without passing judgment, someone knowledgeable about teaching, someone who really cares for us. Perhaps your IAT would be willing to talk with you. ICEA also has a list of mentors.
2. The truth is – we are people. Sometimes we will make mistakes. The people we work with – midwives, nurses, physicians, aides – are not perfect either. We need to learn from our mistakes (and the mistakes of others) without beating ourselves up over it.

III. Client Interviews

A. **YOUR FIRST MEETING** (if you teach private practice clients) will probably be an informal, "getting-to-know-you" time. You will both be deciding if your personalities and expectations are a good fit for one another.

1. The interview form is an efficient way to obtain basic information, but when you speak with a client use open-ended questions to fill in the details.
2. Open-ended questions cannot be answered with "yes" or "no". Effective questions often begin with who, what, when, where, why, and how.

Open ended questions:
What do you think about…?
Tell me about…
How do you see…?
Help me understand…

B. **ACTIVE LISTENING**

1. Interviewing a client isn't just about collecting information, but also getting to know them as a person. Active listening lets the client know that you are interested not simply in what they are saying, but in who they are.
2. Active listening means focusing on what is said, not on the response you will be making. The following diagram shows different components of active listening.

C. **TOPICS FOR INTERVIEW**

1. Significant memories of birth experience
2. Previous pregnancy loss
3. Helpful comfort measures
4. Anything (procedures, medications, comfort measures) she would like to avoid this time
5. Does your client have any chronic medical conditions that may affect this pregnancy or birth (asthma, diabetes, hypertension, etc.)?

6. Are there any addictions that will affect this pregnancy/birth? (See Part 2 – VIII.C)
    a. Smoking is probably the most common addiction. It is one of the leading preventable causes of premature birth. Of course, it's best to quit, but as childbirth educators we need to applaud any reduction in smoking. Even if a woman finds it difficult to cut down, it is our job is to offer her emotional support and information – not judgment. Be honest with yourself – if it would be difficult for you to offer support to someone in this situation, respect her enough to decline the job.
    b. Marijuana has become legal in some places. Just as with alcohol and tobacco, because it is legal does not mean it is safe during pregnancy.
    c. Previous addictions can affect present pregnancies. For example, a woman who has overcome her addiction to prescription pain killers may have a strong aversion to any kind of medical pain relief in labor. This may require more intensive preparation (relaxation, breathing, visualization) for you and your client before labor begins.
7. Social health
    a. How supportive is the woman's spouse/partner? Will they come to class together?
    b. Are any other family members close by and supportive that should also come to class?
    c. Community support
        i. Is your client part of a supportive faith community?
        ii. Do they have friends nearby or are they new to the area?
        iii. Are the clients aware of community resources (WIC, breastfeeding support group, etc.)?
8. Cultural beliefs/customs - Does the client have particular beliefs or cultural practices about pregnancy or birth?

If a class member tells you about a history of abuse and states that she fear labor:

- Reinforce that she is not alone and that this is not her fault
- Provide evidence-based information regarding abuse and birth
- Explore the benefits of a doula because doulas can provide continuous physical and emotional support

For more information review Part 2 – VIII.B

D. **ASSESSING THE CLIENT RELATIONSHIP**

1. What does your client expect the relationship to look like? Can they call, email you with childbirth education questions? Can they drop into another class session if they cannot

attend their regularly scheduled class? How will you handle make-up content and classes?

2. How will the ICCE work with others (husband/partner, other family members, and friends)? Will you limit how many people can take the childbirth education class together?
3. Do you understand the cultural preferences of the client?
4. What kind of time commitment does the client expect? What kind of time are you willing to give?
    a. During pregnancy: Can they come early or stay late after class if they have questions or concerns?
    b. Postpartum: Will there be class reunion/support groups?

Congratulations!

You have now completed the ICCE Study Guide. As you prepare for your exam, please contact your trainer, mentor, or info@icea.org with any questions. Before you apply for the exam, please ensure that all of the requirements for this program have been completed. Requirements for completion are outlined in Part 1 or see https://icea.org/certification/childbirth-educator-certification/ for details.

Thank you for choosing ICEA. We wish you all the best!

ICEA
International Childbirth Education Association

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