In 2014, Big Belli, a media and social networking brand, released a documentary called 40 Weeks online. The documentary, directed by Christopher Henze, follows multiple women during their pregnancies. The film predominantly features three women, though it includes the stories of many. Throughout the film, women detail their accounts of physical and emotional changes that occurred during their pregnancies. 40 Weeks provides viewers with information about different aspects of pregnancy including the importance of nutrition and hydration, knowledge about safe medications, and the possible complications that can affect a pregnant woman and her fetus.

The film is divided into three sections corresponding to the three defined trimesters of pregnancy. The first trimester is from week one to week twelve. The second trimester is from week thirteen to week twenty-seven. The third trimester spans from week twenty-eight to childbirth, which typically occurs around week forty. An infant delivered at forty weeks is considered full-term, while an infant delivered prior to thirty-seven weeks is considered premature.

Throughout those three sections, the film includes interviews with pregnant women. Although the film follows the stories of multiple women, it predominantly features the stories of three women: Emily, Victoria, and Liz. The opening of the documentary describes how doctors measure pregnancy, what physiological changes occur in the first trimester, and introduces the pregnant women featured in the film. The second section of the documentary discusses the second trimester. At the end of the documentary, the pregnant women experience the third trimester of pregnancy, prepare for the birthing process, and give birth to their infants.

The opening of 40 Weeks states that doctors measure pregnancy using the first day of the woman’s last menstrual cycle as the first day of her pregnancy. A woman’s menstrual cycle is the process of ovulation and menstruation that enables a woman’s body to get pregnant. The cycle repeats every month until an egg is fertilized by sperm and the woman becomes pregnant. Following the explanation of how doctors calculate pregnancy, the documentary discusses the first three weeks of pregnancy. Though the documentary does not discuss week one in detail, it does discuss the second week of pregnancy. During the second week of pregnancy, the woman’s body undergoes a process called ovulation, when the woman’s ovaries release eggs. The film explains that a male sperm usually fertilizes a woman’s egg during the third week of pregnancy.

The film then introduces several other pregnant women as they describe their experiences having an ultrasound in the first trimester of pregnancy. An ultrasound is an imaging technique that uses sound waves to produce images of a fetus. An image produced during an ultrasound is called a sonogram. One woman, Victoria, describes the experience of having an ultrasound during the first trimester. During Victoria’s ultrasound, physicians diagnosed her with a fibroid tumor, an abnormal noncancerous growth that can develop on or in a woman’s uterus. According to 40 Weeks, a fibroid tumor is common in pregnant women and the tumor had no effect on Victoria’s fetus.

The film then introduces a pregnant woman named Liz and her husband, Max. Liz and her husband describe how pregnancy seemed impossible due to their specific circumstances. The couple describes that Liz suffered from sarcoma, a form of cancer, and was treated with chemotherapy. Due to that chemotherapy, Liz began premature menopause, or the discontinuation of a woman’s monthly menstrual cycle. Physicians informed Liz that she may remain in menopause permanently, causing her to be infertile. According to Liz and Max, the couple still managed to conceive several months after Liz ended chemotherapy.

As the film continues discussing the first trimester, Tiffany Werbin-Silver, an obstetrician and gynecologist at Westchester Health Associates in Mount Kisco, New York, describes certain foods to avoid during pregnancy. In the film, Werbin-Silver states that pregnant women should avoid raw, undercooked, and unpasteurized foods. Pasteurization is a process that kills bacteria, so unpasteurized foods might contain bacteria that could harm the pregnant woman and her fetus. In addition to food guidelines, the film notes the importance of oral health care in pregnant women. According to Susan Peck, a nurse practitioner, up to fifty percent of women develop gingivitis, or gum inflammation, during pregnancy, caused by the hormonal changes that occur during pregnancy.

In addition, Peck describes safe medications that can be used during pregnancy. In the US, the Food and Drug Administration, or FDA, labels drugs with categories that indicate how safe they are to use during pregnancy. Those labeled category A are the safest drugs to take during pregnancy, while category B drugs are classified as having demonstrated no risks in
humans [16].

Continuing the discussion of the first trimester [8] of pregnancy [6], Peck explains the importance for pregnant women to stay hydrated and eat nutritious foods. By keeping hydrated during pregnancy [6], especially through the first trimester [8], women can help prevent fatigue associated with pregnancy [6]. In addition to remaining hydrated, Peck states that pregnant women should focus on eating nutritional carbohydrates, proteins, and fats in their meals. Peck recommends eating foods such as spinach, salmon, Greek yogurt, and eggs. Peck suggests that women avoid types of large fish [17] such as sharks, swordfish, and king mackerel, because they contain high amounts of mercury that can be harmful to the developing fetus [7]. According to Peck, prenatal vitamins are also important to fill nutritional gaps in the pregnant woman’s diet.

Next, the film describes fetal genetic testing during the first trimester [8]. According to Jacques Moritz, director of gynecology at Mount Sinai Roosevelt, a hospital, in New York, New York, the genetic tests a woman and fetus [7] receive can depend on the woman’s age. As he describes during his interview in the film, a pregnant woman below the age of thirty-five is considered at low risk for complications, while a pregnant woman over the age of thirty-five is considered at high risk. Most women undergo a test called a nuchal translucency, or NT, which measures the skin at the back of the fetus’s neck. Cases of thickened skin can be associated with Down syndrome [18] and heart defects. Down syndrome [18] is the result of extra genetic material on the twenty-first chromosome that can cause intellectual and developmental disabilities. The first trimester [8] ends at twelve weeks, which the film notes before continuing on to the second trimester [8].

In the film, at week thirteen, physicians inform Liz that her cancer has returned and she will need to undergo surgery to remove a cancerous tumor from her back. Liz undergoes surgery and the documentary continues to follow her pregnancy [6]. As the film progresses, several of the pregnant women note they can feel their fetus [7] begin to move at week seventeen. Peck discusses the adaptability of women’s bodies during pregnancy [6] and states that while the fetus [7] is developing teeth and bones, the woman’s bones will receive less calcium.

Proceeding with the second trimester [8], the women presented in the film reach week twenty of pregnancy [6]. Several of the women presented in the documentary undergo an anatomy scan and an ultrasound [13] at twenty-seven weeks. During an anatomy scan, physicians check the fetus’s heart rate, position inside the womb [19], and amniotic fluid levels. Amniotic fluid is the fluid that protects and insulates a developing fetus [7] inside the woman’s womb [19]. During the ultrasound [13], physicians look at brain and heart function, the sex of the infant, and assess the fetus [7] for any birth defects [20].

As detailed in the film, pregnant women also undergo a glucose-tolerance test during the second trimester [8], typically between twenty-four and twenty-eight weeks of pregnancy [6]. A medical professional administers the test to determine whether the pregnant woman has developed gestational diabetes. Gestational diabetes, a common pregnancy [6]-related complication, is caused by hormonal changes during pregnancy [6] that affect how the human body uses insulin and sugar. Insulin is a protein hormone [21] created by the liver that regulates blood glucose levels throughout the body. Associated risks of gestational diabetes include excessive weight gain in the fetus [7] and increased risk of having to deliver via cesarean section. As part of the glucose-tolerance test, the pregnant woman is assigned to drink a liquid that contains fifty grams of glucose within five minutes. After the woman has consumed the solution, a blood sample is taken by a medical professional to test the blood sugar level, or the amount of glucose present in the blood. In addition to gestational diabetes, the film describes another common condition in pregnancy [6], pre-eclampsia, which is often diagnosed later in pregnancy [6]. Pre-eclampsia is the onset of high blood pressure during pregnancy [5], and that can cause seizures in pregnant women. The second trimester [8] ends at twenty-seven weeks.

Following the second trimester [8], the documentary proceeds to the third trimester [9] of pregnancy [6], week twenty-eight to childbirth. During the third trimester [8], the pregnant women in the film have baby showers and begin getting ready to give birth. Following the baby showers, several of the women begin to set up their nurseries. At week thirty-two, physicians inform Victoria that she is no longer able to deliver vaginally and will have to deliver her fetus [7] via caesarean section. The fibroid tumor that Victoria was diagnosed with at the beginning of the documentary is blocking her cervix [22], the ring of the tissue at the bottom of the womb [19] that widens to let the fetus [7] exit, and the fetus [7] will be unable to push through the large tumor.

As 40 Weeks concludes, physicians inform Liz in week thirty-three of pregnancy [6] that her cancer has returned. The physicians decide to induce Liz’s labor at thirty-five weeks so that she can receive chemotherapy to treat the cancer. Meanwhile, the other women featured in the documentary give birth between week thirty-four and week forty-one. After the women give birth, the film introduces each infant with a caption. The caption includes the infant’s name, weight, and date of delivery. The caption also states whether the infant was delivered vaginally or via cesarean section, and if a midwife or doula was present. Midwives and doulas are trained professionals that assist women during pregnancy [6] and childbirth. A doula may also provide support to the woman after the infant is born.
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