Milestones

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**Milestones**

Pregnancy is a complicated procedure which lasts for a period of nine months during those nine months the mother carries the child inside her womb and many changes occur and also many milestones are achieved both by the mother and the child. All these milestones include the physical, emotional and psychological changes in the mother and the child. So it is important to keep a close eye at the behavior of the mother because if he mother is healthy than that means that the child will also be healthy. The changes that occur during pregnancy are body organs development and it is noteworthy here that once the fetus is developed and all the organs are formed when the child is considered as a complete human being. So all these milestones are important in the development of full and healthy human beings.

The transformation during pregnancy from a small fertilized egg to a fully formed baby is totally mind-blowing. The start of pregnancy is basically the first day of the female's last menstrual period. This cycle is also called menstrual age and it occurs two weeks ahead when the actual conception occurs. The baby inside the mother womb goes through various developmental stages which start as a fertilized egg. This egg further develops into a blastocyst, an embryo and then finally into a fetus. There are many milestones that the child will meet, which starts at the time of fertilization until the delivery of the child, these milestones include the heartbeat development during the first three months and also the development of head in the last three months (“Pregnancy After Transplantation: Milestones and Assessments of Risk - Armenti - 2011 - American Journal of Transplantation - Wiley Online Library,” n.d.).   
**Fertilization:**

It is a known fact that during every menstrual cycle one egg is released from one of the ovaries which happens about 14 days after the last cycle happened. Ovulation is a process which refers to the release of the eff which is then moved into a funnel-shaped end of one of the fallopian tubes. During ovulation, the fluid in the cervix becomes more fluid and also elastic which helps the sperm to enter the uterus rapidly. Once the sperm reaches the fallopian tube then fertilization takes place there the cell linings of the fallopian tube facilitates fertilization. The sperm then penetrates the egg as result fertilization takes place. hair like cilia push the zygote into the uterus, the zygote divides quite fast when it moves down the fallopian tube, in a total period of 3-5c days the zygote enters the uterus (Hatfield, n.d.). In the zygote, the cells become a hollow ball of cells which are called blastocyst. After 5-8 days of fertilization, the blastocyst sticks to the lining of the uterus, this process is called implantation and it will complete in 9-10 days.

**Embryonic Development:**

Next is the development of the embryo, this embryo develops inside the amniotic sac which is present under the lining of the uterus on one side. In this stage, most of the internal organs and also external body structures are formed. Most of the body parts and organs are formed 3 weeks after fertilization which equals to 5 weeks of pregnancy. At this point, the embryo gets elongate into a human shape. After a short period, the area that will late form the brain and spinal cord are developed. Heart and other blood vessels develop earlier around day 16. By day 20 the heart first time pumps fluid into the blood vessels and the first red blood cell formed and appears the next day. After 10 weeks of fertilization, all the body organs are formed. But the brain and spinal cord continue to develop throughout the pregnancy. At 8 weeks of pregnancy, the placenta and also fetus develops for about 6 weeks (“Stages of Development of the Fetus - Women’s Health Issues,” n.d.).

**Fetal Development:**

After 8 weeks of fertilization, the embryo is then considered as a fetus. At this point, the already formed structures grow and develop.

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| Milestones | |
| 12 weeks of Pregnancy | The fetus fills the uterus |
| 14 weeks | Sex of the child is identified |
| About 16-18 weeks | The mother will feel the movement of the fetus |
| About 24 weeks: | The fetus has chances of survival outside the uterus |

At this point, the lungs also grow until the time of the delivery. Throughout pregnancy, the brain cells accumulate new cells and even after the first year of birth. The placenta forms and also it extends the hairlike projection into the wall of the uterus. Through this placenta, the nutrients are exchanged between the fetus and the mother. By 18-20 weeks the placenta is fully formed but it continues to grow (Nierenberg, May 19, & ET, n.d.).

During each milestone, some key changes occur in the mother and the baby, during the first trimester of pregnancy the basic organs of the baby starts to develop. Around this time some females feel nausea, within the first two months the baby will develop from a ball of cells into an embryo which develops into a baby. During the first trimester, the uterus will grow in size and it will push on the bladder which causes frequent urination. The body also works overtime to make extra blood which leads towards lightheadedness. The muscles that are responsible to break down food become relaxed, hormonal changes also slow down during this process, food stays in the stomach for longer which creates heartburn. The skin also changes into rosy and shinny form which is caused by increased blood circulation. Early in pregnancy the breast size also changes because the hormones are getting prepared for breastfeeding. The changes in the child are also apparent from body parts development to increase in size are also evident (Geggel, August 12, & ET, n.d.).

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| **First trimester** | **Second trimester** | **Third trimers** |
| Week 5-6  Babby is the size of an ant. Hear begins to beat and facial expressions develop. Arms with fingers and legs are grown | Weeks 15-16  Baby can see light flattering outside the womb. To develop air sacs into lung the baby starts to breath amniotic fluid. | Over 6-2 weeks  The baby brain will develop billions of neuron. Skin will start filling out baby fats to prepare the baby for the outer world |
| Weeks 8-9  Baby can move limbs, has earlobes and also eyelids that are fused shut | Week 19-23  The mother will feel the baby kick and movement. | Week 28-34  The weight of the baby will be 3 pounds and measures up to 7 inches. Can distinguish between light and dark. |
| Weeks 10-11  The embryo becomes a fetus and has organs like liver, kidneys brain, etc. bones start to get hard and also genitalia develops externally | Weeks 24-27  Tate buds of the baby develop, the brain also grows quickly. The weight of the baby is just one pound also the baby start sucking the thumb. | Week 37-39  Baby is considered full-term. Lungs work and have a full head of hair |
|  |  | Week 40  Baby is ready for the outer world. average weight is 7 ½ and length is 20 inches. |

The process of pregnancy can be quite hard both for the child and the mother. Because there are many changes that occur during this journey. It is important to note that along with physical changes there are various emotional changes that happen inside the body and even after the childbirth it is possible that the mother will feel emotionally stressed because of the hormonal changes and imbalance inside the body so it is important to take care of both mother and child during each of these milestones.

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