

## **PRECONCEPTIONAL CARE**

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**“The writer is the author of the Book “Fetal Attraction” a book on everything Indian parents to-be need to know about pregnancy and child birth.”**

Most of the women who get pregnant see their gynecologists only after they have missed their periods. They take it for granted that they are healthy enough to carry on with a nine month journey safely – they also take for granted that they have no problem which could potentially harm the growing baby. As a matter of fact don't we plan, and don't we organize ourselves for any long trip we make? Then why this casual attitude towards such an important event in our lives, when the lives of both, the mother and the baby could be at stake?

Planning your pregnancy can help you make wise choices that will benefit both you and your baby. As soon as you decided to start a family, you should see your gynecologist who will help you determine what steps you may need, to become physically and medically ready for a pregnancy. Preconceptional care refers to the care prior to conception. This preventive care is one of the most cost effective and beneficial interventions, which can dramatically improve the chances of a successful pregnancy.

There are various factors which if addressed preconceptionally can result in a healthy successful pregnancy.

### **Age:**

Adolescent (in girls less than 19 years) pregnancies are more likely to result in low birth weight babies. On the other hand, older women are at greater risk for genetic abnormalities and miscarriages. Information about problems associated with age and necessary intervention along with management of any existing medical problems are among the mainstays of treatment of women advanced in age.

### **Medical history and medications:**

Women with certain medical conditions may benefit from advice before becoming pregnant. Drugs taken during pregnancy, especially during the first three months could harm the baby. Hence in conditions e.g. like epilepsy, the medications may possibly harm the pregnancy or the unborn child. Hence the neurologist needs to be consulted when you are planning a pregnancy so that he could prescribe the safest drugs possible during pregnancy.

Women with diabetes need to control their sugars very strictly because the chances of abnormal babies increases 8 times if the sugar is uncontrolled in the first trimester of pregnancy.

Medications being taken for skin conditions (e.g. retinoic acid) need to be stopped before planning a pregnancy since it can cause nervous system abnormalities in the baby.

### **Family history:**

It is important to know about any baby with a congenital abnormality or a mentally challenged child so that your gynecologist could carry out appropriate screening as soon as you get pregnant.

### **Reproductive history:**

Women with recurrent miscarriages, those with advanced age and those with abnormal pregnancies in the past can benefit by testing their embryos prior to the transfer to the uterus. For example, if the embryo has a genetic disease, it is not transferred to her womb, thus preventing the creation of an abnormal pregnancy. This can improve the chance for the birth of a child without the affected condition.

### **Weight:**

Women who are obese have a greater chance of problems during pregnancy. Obesity poses risks for the baby as well as the mother. They also are at increased risk for a condition called "macrosomia", in which a fetus grows too large causing complications during labor. A woman who is slightly underweight should gain a few pounds to prepare for her pregnancy.

### **Psychiatric Disease:**

Psychiatric disease warrants good quality pre-pregnancy care and counseling. The estimate is that there is a 10-15% risk of schizophrenia in offspring. Risks of instability and potential plans for withdrawing medication must be thoroughly discussed before planning a pregnancy.

**Diet:**

It is advisable to take folic acid tablets (vitamin) at least 3 months before you become pregnant even if you are healthy and have a good diet. This may reduce the risk of having a baby born with a spine problem such as spina bifida.

Things to avoid include too much of Vitamin A, undercooked meat which can cause Toxoplasmosis, ETC.

**Lifestyle:**

**Alcohol:** Heavy drinking can cause an increased risk of miscarriage and it may cause serious harm to the baby's growth and brain development.

**Smoking:** Stopping smoking is strongly recommended. Tobacco smoke can slow the baby's growth. The risks of having a miscarriage, premature birth or still birth are higher in women who smoke.

Caffeine in tea, coffee, cola etc should be cut down.

**Dental hygiene:**

There has recently been scientific evidence that gum disease increases the risk of preterm delivery. Therefore every woman should have dental care and treatment prior to pregnancy if possible.

**Drug abuse:**

Drug abuse can be hazardous to the baby. Women who consume heroin can be prescribed methadone to avoid symptoms of withdrawal in the baby.

**Vaccines:**

Infections can harm both the mother and the fetus. Some infections in pregnancy can cause birth defects or illnesses in the fetus. Vaccinations can prevent some of these infections. It is important to be vaccinated before becoming pregnant, because some vaccines are not safe to use during pregnancy.

All women considering pregnancy should get tested for immunity to Rubella (German measles) and if not immune, should be offered rubella vaccination. Rubella infection in pregnancy can lead to devastating effects on the developing fetus. Vaccination for women susceptible to chicken pox also can be offered so as to avoid maternal and fetal infections.

### **Infections:**

Sexually transmitted diseases come in all types and forms. These diseases not only affect the ability to conceive but can also infect and harm the baby e.g. HIV. AIDS in pregnant women bears special attention since treatment with antiretroviral (anti HIV) drugs has been shown to reduce the transmission of infection from mother to child. Screening for syphilis can also be done to avoid complications, both maternal and fetal. Gonorrhoea can lead to adverse pregnancy outcomes and infertility if not treated. Treatment of both partners prior to pregnancy is preferred as it prevents unnecessary exposure of fetus. The preconception period is optimal to provide immunization to women who have not received the hepatitis B vaccine especially if they are at risk of blood exposure or sexually transmitted disease.

### **Genetic screening:**

Women with family or partners' family having Hemophilia, sickle cell anemia, Thalassaemia, muscular dystrophy can be offered genetic screening to detect any of these hereditary disorders. If the pregnancy is found to be affected, then the patient is counseled for termination of pregnancy.

### **Conditions in which pregnancy is contraindicated:**

There are some medical conditions like some cardiac conditions (pulmonary hypertension), respiratory conditions (cystic fibrosis) kidney conditions (severe compromise of kidney function) wherein the woman should be deterred from getting pregnant since these conditions can threaten the mother's life.

### **Male Periconception care:**

There is expanding scientific evidence of an association between male associated health issues and pregnancy outcomes. A couple should attend the periconception visit together and

the woman's partner should be encouraged to be included in periconception counseling and care.

Paternal smoking as well as alcohol consumption have been associated with decreased fertility and increased frequency of malformations in the baby. It takes an average 10-11 weeks for sperm to be produced. So abstaining from alcohol and tobacco is advised three months prior to conception. Sperm production in the testes requires a temperature that is lower than the core body temperature. Men should refrain from staying too long in saunas or hot tubs and prevent overheating of testes (e.g. not wear too tight underwear) to maximize sperm production. Use of certain lubricants during sex can decrease fertility hence they should be avoided.

Pregnancy puts special demands on a woman's body. As a quality of any crop will depend upon the quality of seeds, the soil and the environment, a healthy baby can only result from the union of a healthy sperm and ova in the mother's healthy environment.

Always remember, a pregnancy should be "by choice and not by chance".

Becoming a parent is filled with many challenges, rewards and choices. Making healthy choices before you become pregnant is an important step to a healthy and happy pregnancy.