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## LETTER TO THE EDITOR

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# A Personal Ethics Responsibility Example: The Relationship Between Child Development and Drugs Taken by Pregnant Mother

**Abstract:** Personal responsibility is an important ethical concept. The pregnant mother should regard this concept as of prime importance. The pregnant mother should take some precautions in order to protect her own health and that of her baby in order to provide for its normal development. In this communication, we address the general effects of medications or drugs ingested by a pregnant mother on the baby. Thus, we target refinement of the personal ethic responsibility of the mothers.

Key Words: Ethics responsibility, pregnant mother

# Bir Kişisel Etik Sorumluluk Örneği: Hamile Annenin Aldığı İlaçlar ve Çocuk Gelişimi Arasındaki İlişki

Özet: Kişisel sorumluluk önemli bir etik kavramdır. Bu durumda hamile anne birincil derecede önem arz etmektedir. Hamile anne kendisinin ve bebeğin sağlığının korumak, bebeğin normal gelişimini temin etmek için bazı şeylere dikkat etmelidir. Bu anlamda ilaçların hamile annenin bebeği üzerindeki genel etkilerine değineceğiz. Böylece annelerin kişisel etik sorumluluğunu vurgulamayı hedefliyoruz.

Anahtar Sözcükler: Etik sorumluluk, Hamile anne

#### To the Editor.

Medications or drugs taken by the mother during pregnancy pass to the baby (fetus) from a structure called the placenta. The placenta is located inside the uterus with the baby. Under normal conditions, the clear arterial blood of the mother carries the necessary substances for normal growth and development. These are carried to the placenta. In the placenta, the arterial blood flow of the mother empties into several holes, called sinuses. These placental sinuses contain finger-like structures called villus (villi is plural in Latin). These villi take the necessary substances carried by the arterial blood from the mother, which then enter the blood circulation of the baby by the veins termed umbilical veins.

Drugs taken by the mother during pregnancy can affect the baby in several ways. Some drugs are harmful directly to the developing baby and can cause the death of the child. The mother may have an abortion. Some drugs may affect specific parts of the body of the child. For example, the bones of the child may be affected and other organs may not. Bones may be very short, and because of this the ribs may be very small. When this occurs, the child can not breathe normally after birth due to inability of the lungs to expand. These breathing problems may cause death soon after birth. Sometimes severe heart, brain, lung, liver, and kidney diseases may occur. Heart abnormalities include occurrence of holes in the chambers of the heart, causing oxygenated blood to mix with venous blood. This condition affects every part of the body because the baby cannot get enough clear blood for the organs. Therefore, heart abnormalities are very important in that even normal organs at birth may later become diseased because of an abnormal heart. The face and the body of such children seem purple. Brain abnormalities are also very important. The brain is the main organ for mental development. Body movements such as walking, running, talking, and using the hands and other organs are all controlled by the brain. Sometimes very small changes in the brain may cause important mental and movement disorders. In some babies, the normal blood flow of the brain may be disturbed just before birth and can lead to very severe abnormalities. Some parts of the brain may be absent. There may be holes in the bones of the head. Brain tissue

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can go through these holes to the outside. In some instances, all the head bones are absent. These children may die before birth. After birth some of them show various findings, including slow mental and physical development of the child compared to normal children. Some of these children may never talk and may be unable to learn, while some may learn to speak a few words. Some can learn to do simple things. These children can not attend normal schools, and require special institutions. On the other hand, some of these children are mentally normal and may even be very intelligent, but they have movement disorders. The baby may be totally abnormal. Abnormalities may be so severe that the baby may die soon after birth. Some other drugs taken by the mother may be harmful to the placenta. When the placenta is affected it can not function properly. This is important because the placenta is the place where useful substances pass from the mother to the baby. Therefore, the baby can not develop normally with a diseased placenta

The degree of the drug's effect on the development of the child depends on the age of the baby and on the amount (dose) and type of the drug taken by the mother during pregnancy. In the early stages of the pregnancy, the baby may die, spontaneous abortion may occur, or a permanent abnormality in some organs of the child may develop.

Different kinds of drugs are known to cause abnormalities in the fetuses of pregnant women. One of these is the drug used for treatment of cancer. If a pregnant woman has cancer, this kind of drug can cause serious abnormalities in the child. These are very strong drugs. Therefore, they can stop normal development of almost every organ. The reason for this is these strong drugs kill not only the cancer cells but also the normal cells of the organs. Another group of drugs which can cause abnormalities in the child is the so-called cortisones. These consist of hormones used in many diseases such as allergy. If the mother uses these kinds of drugs, the child may gain excessive weight. These children are born with large faces and are very fat. They need these kinds of drugs after birth, because they are conditioned to them. If the doctor stops these drugs immediately, the child may die. Therefore, these drugs must be withdrawn slowly. Drugs used to prevent

epilepsy and some hormones used to prevent pregnancy are potentially dangerous for the developing child. These result in abnormal development of the brain and thereby of intelligence. Drugs used by the mother for diseases of the thyroid gland may cause severe thyroid damage in the developing child. Thyroid damage may result in mental and skeletal disorders. These children develop low intelligence levels, and their height is lower than in normal children. In addition to these, the drugs used by diabetic mothers can be very harmful to the child, and these children may be born with diabetes. Some sedative drugs may cause jaundice in the child. Sedative drugs may lead to breathing problems. Abnormal breathing prevents the body from taking enough oxygen, which may result in disorders in many organs, including the lungs, brain, heart, and kidneys. Aspirin, a well-known and widely used drug, can be very harmful to the child. If the mother uses excessive amounts of aspirin, the child may be born with jaundice. In this type of jaundice, the brain of the newborn baby may be damaged. Drugs that relieve pain other than aspirin can also be harmful to the baby, resulting in bleeding problems in the child. Bleeding in the brain may occur. Some drugs used for relieving stress can produce eye abnormalities, and the child may be totally blind. Other eye diseases such as cataracts can also occur. Antibiotics usually do not cause serious problems for the baby; however, they should not be used unless necessary. The pregnant mother and her doctor should try to avoid these drugs. Pregnant women should not be vaccinated because of risks of infecting the child. If a pregnant mother is vaccinated, especially with those vaccines against viruses, very serious infections can occur in the baby. These types of infections are called congenital infections. These children are born with large livers and spleens and jaundice. Their heads are also large because the infectious agent causes calcifications in the brain, and they block the free passage of water in the ventricles of the brain. When these ventricles are blocked, a condition called hydrocephalus occurs causing enlargement of the head and high pressure within the head. The brain can not develop normally under high pressure. Therefore, for these children, placement of a tube inside the

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head to remove the excessive water is necessary (1-4).

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