

Pregnancy and Substance Addiction

Substance addictions are a growing problem in western society. A third of addicted women are of childbearing age. Major consequences can occur from drug use during pregnancy that affect the new born baby, the fetus, and the pregnancy itself. In this population, addictions to a single substance are rare. Not only illegal but also legal substances such as nicotine and alcohol can have serious consequences if they are consumed during pregnancy.

Addicted women who find themselves pregnant should seek a program that offers interdisciplinary, complete, and structured services as soon as possible. Such a program called "Pregnancy and Substance Addiction," exists at the University Clinic for Psychiatry in Vienna. Substance dependent women are treated by a team comprised of medical doctors, social workers, psychologists, nursing staff and pharmacists during the pregnancy and long after the birth. The University Clinics for Gynaecology and Paediatrics work closely with the program as well. The goal is stabilization of relapses, psychological disturbances, and the social situation of the mothers-to-be. The high frequency of comorbid psychiatric and somatic conditions and chaotic lifestyle can make the treatment of these women more difficult.

It is common that these women turn to treatment later in their pregnancy, often as a result of fear of the authorities (Youth Welfare Office). In Austria, it is not necessary to inform the Youth Welfare Office if children are born to women who are maintained on opioids. Custody of the baby can be maintained through close meshed support. This of course assumes that the new born is not under any danger. The well being of the child is the highest priority.

Consequences of the Consumption of Legal Substances during the Pregnancy:

Nicotine

Consequences of nicotine abuse during pregnancy can include miscarriages, low birth weight, fetal withdrawal syndrome, and sudden infant death syndrome (SIDS). Decreasing or stopping smoking during pregnancy has been shown to have many advantages for the baby. It is, however, very difficult for many women to end their dependence on cigarettes. Women tend to use smoking as a way to control their weight. Cognitive group psychotherapy is a good treatment option for nicotine dependence.

Alcohol

Alcohol abuse during pregnancy can lead to the occurrence of Fetal Alcohol Syndrome through its teratogenic actions. These children are born smaller and with smaller head circumferences than those of mothers who are not alcohol dependent. Deformities of the face are also common. The further development of the child can include growth disturbances and conspicuous behaviour. The main goal of treatment programs is to reach alcohol dependent women who are pregnant. A moralizing component is often present, even in hospital staff, which makes the treatment of these women more difficult.

Consequences of the Consumption of Illegal Substances during the Pregnancy:

Cocaine

Cocaine is an alkaloid that can pass through the placenta, into the fetal circulation. This leads to fetal plasma concentrations that are four times higher than those of the woman

herself. Cocaine abuse during pregnancy can lead to withdrawal syndrome in the new born which includes symptoms such as lethargy, increased hunger and an increased need for sleep. The treatment of choice for cocaine dependence is cognitive behavioural therapy. It is also important to examine the possibility of other psychiatric disorders such as depression.

Amphetamines

Women turn to amphetamines most often to help with weight loss. The consumption of these psycho stimulants causes blood vessels to constrict which can lead to fetal hypoxia. New born babies of mothers who abused amphetamines during the pregnancy are comparatively smaller and weigh less than those born to mothers who did not. The treatment of choice for amphetamine addiction is cognitive behavioural therapy. The existence of depression should also be examined and treated if it is diagnosed.

Benzodiazepines

Since benzodiazepines are so often and freely prescribed by some physicians, their use during pregnancy often occurs. Substance abusers often misuse this substance class as well. Intensive consumption during pregnancy results in a long withdrawal period for the new born. The use of benzodiazepines during the first trimester may also lead to deformities.

Opioids

The standard therapy for opioid addicted women during pregnancy is maintenance treatment. The goal of abstinence wished for by many pregnant women, is usually not feasible. Stabilization and the prevention of relapses during the pregnancy are the treatment priority. Doses reduction can be implemented once stabilization is reached, but not after the 32 week of pregnancy when withdrawal can cause premature birth. The physiological changes that take place during pregnancy include enzyme induction which can make it necessary for the substitution dose to be increased or for doses to be taken twice a day.

Methadone is the therapy option with which there is the most medical experience world wide. There have been several newer studies with Buprenorphine which show that it may lead to less occurrence of neonatal abstinence syndrome (NAS).

The Finnegan Score is used to qualify the intensity of the new born baby's withdrawal symptoms, including irritability, vomiting, and diarrhea. When a baby receives more than 11 points from the Finnegan Score, a medication therapy is started. The standard treatment for neonatal abstinence syndrome is morphine drops.