Autism and schizophrenia share common origin

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Schizophrenia and autism probably share a common origin, hypothesises Dutch researcher Annemie Ploeger following an extensive literature study. The developmental psychologist demonstrated that both mental diseases have similar physical abnormalities which are formed during the first month of pregnancy.

Developmental psychologist Annemie Ploeger has investigated whether there is a connection between disorders in the first month of pregnancy and the development of schizophrenia and autism. Interestingly, many physical abnormalities of autistics are also prevalent in schizophrenics. For example, both autistics and schizophrenics sometimes have protruding ears and peculiar toes. There are also differences: a large head and intestinal problems, for example, are typical traits occurring in autistics. From this, Ploeger concluded that the two disorders share a common origin. The same error that occurs very early in pregnancy develops into autism in one individual and schizophrenia in another.

Ploeger's research reveals that in the period between 20 and 40 days after fertilisation, the embryo is highly susceptible to disruptions. In this period, early organogenesis, there is a lot of interaction between the different parts of the body. If something goes wrong with a given part of the body, it greatly influences the development of other parts of the body. As people with schizophrenia and autism frequently have physical abnormalities to body parts formed during early organogenesis, Ploeger concluded that the foundation for these psychiatric disorders is laid very early during pregnancy.

The existence of a relationship between unhealthy behaviour during pregnancy and the subsequent development of schizophrenia and autism in the child was already known. However, Ploeger's hypothesis that the early organogenesis stage is the most critical, is new. Ploeger bases her hypothesis on an extensive study of scientific literature in this area. She often had to make use of related studies; although a lot of research has been done into prenatal influences on the development of schizophrenia and autism, little is known about the influence that the period between 20 to 40 days after fertilisation has.

For example, she acquired information about autism from a study into softenon use. Softenon is a drug against morning sickness that was administered to women in the 1960s and 1970s. Later it was discovered that severely disabled children were born as a result of this medicine. Autistic children were born in four percent of pregnancies in which softenon was used, whereas normally this figure is 0.1 percent. Women could state exactly when they started to take softenon. The women who had taken softenon between the 20th and 24th day of the pregnancy had the greatest chance of giving birth to an autistic child.

Ploeger advises women to stop risky behaviour such as smoking, medicine use and stressful activities before they even become pregnant. If you only start to live healthily once you know that you are pregnant, the basis for a disrupted development of your child could already have been laid.

Source: Netherlands Organization for Scientific Research