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Mom's mood may affect developing fetus

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Courtesy of the Association for Psychological Science
and World Science staff

Depression in a pregnant woman can change how the baby develops after birth, new research suggests—but the effect is far from simple.

As a fetus grows, it's constantly getting chemical signals from its mother, noted the authors of the study, published in the journal *Psychological Science*.

In recent decades, scientists have found the environment in the womb is very important to a fetus. Smoking and drinking can be devastating. Other effects are subtler; people who were born during the Dutch famine of 1944, most of whom had starving mothers, were identified as likely to have health problems like obesity and diabetes later.

In the new study, University of California-Irvine scientists recruited pregnant women and checked them for depression before and after they gave birth. They also gave the babies tests after birth to see how well they were developing.

What made a difference to the babies was whether the environment was consistent before and after birth, the research found. The healthiest babies were those who either had mothers who were healthy both before and after birth, and those whose mothers were depressed before birth and stayed depressed afterward. What slowed the babies' development was changing conditions—a mother who went from depressed before birth to healthy after or healthy before birth to depressed after.

"We must admit, the strength of this finding surprised us," said Curt A. Sandman, one of the researchers. A cynical interpretation would be that if a mother is depressed before birth, you should leave her that way for the well-being of the infant, Sandman noted. But he argued that a "more reasonable approach" would be to treat women who have prenatal depression.

"We know how to deal with depression," he said, but the problem is that women are rarely screened for depression before birth.

In the long term, having a depressed mother could lead to neurological problems and psychiatric disorders, Sandman said. In another study, his team found that older children whose mothers were anxious during pregnancy have differences in certain brain structures. It will take studies lasting decades to figure out exactly what having a depressed mother means to a child's long-term health, he added.

"We believe that the human fetus is an active participant in its own development and is collecting information for life after birth," Sandman said. "It's preparing for life based on messages the mom is providing."