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Criminality, poor prenatal care linked

Birh injuries 'very strong' forecasters of adult males' violent behaviour, study says

Cox News Service

LOS ANGELES – An exhaustive new study of more than 4,000 white males – tracked from the womb to adulthood – strongly links criminal behaviour with poor prenatal care and says evidence is "compelling" that the United States could slash violent crime by offering more medical attention to pregnant women.

Thanks to Denmark's comprehensive system of keeping track of its citizens, Adrian Raine of the University of Southern California and other researchers were able to study the medical records of 4,269 males from birth through the age of 18 for clues to violent behaviour.

To their surprise, researchers found a direct correlation between those youths who suffered common birth complications and a proclivity toward violent crime later in life, the scientists said in a report released yesterday at the American Psychological Association's annual convention.

Birth complications associated with violence included breech deliveries, babies born with umbilical cords wrapped around their necks and even those injured during birth, Dr. Raine said.

Injuries were recorded at the time of birth by an obstetrician and a midwife, although there was no obvious brain damage in any case, Dr. Raine said. Such birth complications can cause minor damage to prefrontal regions of the brain – areas researchers believe control impulsive behaviour.

Dr. Raine's analysis said brain injury alone didn't seem to be a major factor in predicting violent crime. But he said injury was a "very strong forecaster" when combined with environmental factors such as "maternal rejection" and child abuse.

"Only 4.4 per cent of the total sample [studied] had both of the risk factors ..... but they accounted for 18 per cent of all the violent crimes committed by the entire sample of 4,269," Dr. Raine said.

The study suggested better prenatal care could reduce violent crime rates by 18 per cent.

Other studies have suggested violence is linked to a brain chemical called serotonin, but no tie has been established between the chemical and life experiences. The federal government is spending millions of dollars annually on this research, because some scientists believe a proclivity toward violence is linked to heredity.

The article EM9411 reprinted above is used in Chapter 11 of the STAT 231 Course Materials.

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