

DECISION-MAKING SWAYED BY WORDS USED

Does the way in which information is framed shape people's perceptions and behaviour? Are we getting the same information when it is framed positively or negatively? A Canadian research team recently decided to test whether the framing effect would alter a pregnant woman's decision to use allergy-related drugs during her pregnancy.

The team recruited women callers from the Motherisk Program, a counseling service based in Toronto. Motherisk provides evidence-based information about the risks associated with drug, chemical, radiation and infectious exposures during pregnancy.

Callers were randomly assigned to one of two groups. In one group, women were told that by taking an allergy-related drug there was a 1% to 3% chance that a baby would be born with a major birth defect (negative framing). In the second group, women were told that there was a 97% to 99%

chance of having a healthy baby (positive framing). Both groups were told that the allergy-related drug did not significantly increase the risk of birth defects in the baby.

When contacted a few days later, women who had received the positively framed information perceived the drug as less risky and were more likely to say they would take it than were women who had been given the negatively framed information. The researchers point out that these results concur with the findings of previous studies on information framing.

"Framing is a very important issue, and here you have an important finding because it appears that negative and positive framing may have a significant impact on the decisions people make" says Robin Walker, Professor of Pediatrics at the University of Ottawa and Chief of Neonatology at the Children's Hospital of Eastern Ontario.

The study was well constructed,



according to Walker. "It's an elegant piece of work. Their methodology was carefully done. They have two well-matched groups and they came up with a significant result." However, John LeBlanc, Assistant Professor of Pediatrics, Psychiatry, Community Health and Epidemiology at Dalhousie University, points out that the groups were not representative of the general population. "Mothers who call Motherisk are already concerned. It would be interesting to try this same approach with women at doctors' offices or even women who don't get

prenatal care."

Both Walker and LeBlanc agreed that the study's conclusions constitute a significant contribution to study in this field. However, Walker stressed that more research is needed. "We need to look more carefully at how we present information and the impact of that presentation. This is a very broad issue and there is a need for more inquiry."

Ref.: J. D. Jasper, R. Goel, A. Einarson, M. Gallo and G. Koren. "Effects of Framing on Teratogenic Risk Perception in Pregnant Women." *The Lancet*. Vol. 358. October 2001. 🦋

PROBLEM PREGNANCIES AND INADEQUATE PARENTING

The links between low socio-economic background, inadequate parenting and criminal behaviour are now widely accepted and well-established in research.

However, links between problems with pregnancy, delivery and adult criminality have not been as easy to establish as, to date, findings have been contradictory. Now a team of Canadian and Swedish researchers has examined the role played by obstetric complications in the development of criminal and violent behaviour.

The researchers studied 15,117 individuals born in Stockholm, Sweden and monitored them until age 30. Information on obstetric complications (which included problems during pregnancy, labour-delivery and the neonatal period), criminal acts, the socioeconomic status of their

families and inadequate parenting was obtained from medical, health, social work and police records.

Obstetrical complications alone were not associated with adult criminality. However, obstetrical complications combined with inadequate parenting did slightly increase the risk of criminal offences among both men and women, and it more than doubled the risk of committing violent offences (i.e., crimes involving threatened or perpetrated physical violence such as rape, assault or robbery) among men.

A combination of obstetrical complications and inadequate parenting affected only a small portion of the study subjects (3.1 % of the men and 4.0% of the women). Inadequate parenting was experienced by 19.1% of the men and 18.1% of women and,

as is frequently the case, was associated with an increased risk of offending.

For Darren Lezubski, Managing Director of the Centre of Excellence for Child and Youth-Centered Prairie Communities in Winnipeg, the study "improves the methodology compared to previous studies. The researchers controlled for possible confounding factors, such as mental retardation and major psychiatric disorders known to increase the likelihood of offending." The authors of the study also analyzed the data by gender, "something that is too often neglected in this kind of research, despite recognized differences in the prevalence of criminal behaviour by gender."

Since the study suggests that obstetrical complications may influence the development of criminal

and violent behaviour, we can wonder "what services can be offered to pregnant women to reduce the incidence of complications at birth?" adds Lezubski. Additionally, it would be interesting to broaden the scope of environmental variables in order to better understand their role in developmental pathways that lead to criminality. Lezubski suggests "that future longitudinal studies should follow through by investigating with more scrutiny possible effects of environmental factors such as peer group pressure and the influence of the neighborhood on the likelihood of becoming a violent offender".

Ref.: S. Hodgins, L. Kratzer, and T. F. McNeil. "Obstetric Complications, Parenting and Risk of Criminal Behavior." *Archives of General Psychiatry*. Vol. 58. August 2001. 🦋