## Day care services in Quebec promote child development: results of a five-year study

**Montreal, November 5, 2007**. Since 1997, the Quebec government has subsidized an impressive day care network with the objectives of promoting the participation of parents in the workforce and supporting the development of children from underprivileged environments. While the great majority of Quebec's children attend day care, many parents fear that leaving children into day care can hinder their development, especially in their early years.

A study published today in the most prestigious international journal of psychiatry should reassure these parents. An international team of researchers, headed by Professor Sylvana Côté of the Université de Montréal, has concluded that children—even the very youngest—do not become more aggressive if they are placed in day care. On the contrary, this article, published in Archives of General Psychiatry, demonstrates that young children from underprivileged environments, in fact, have fewer problems with physical aggression if they are in day care.

Hitting, kicking, biting and other forms of physical aggression are central features of a severe conduct disorder, according to background information in the article. These behaviors may be associated with social, physical and mental health problems. "The origin of physical aggression problems can be traced back to early childhood, and studies have specifically shown that maternal characteristics, especially low levels of education, are among the best predictors of high physical aggression from early childhood to adolescence," the authors write.

Sylvana M. Côté, Ph.D. and colleagues studied 1,759 infants representative of all children born in Quebec in 1997 or 1998. Mothers were interviewed yearly from the time the children were age 5 months to 60 months, answering questions about family, parent and child characteristics and behaviors. This included details about nonmaternal care services, provided to care for a child, usually while the mother is working. These may have involved center-

based day care, family arrangements or other nonmaternal care provided regularly during preschool years. Physical aggression levels were evaluated at 17, 30, 42, 54, and 60 months.

Of the 1,691 children who were followed for the whole study, 111 (6.6 percent) received no nonmaternal care before preschool, 234 (13.8 percent) received some type of nonmaternal care beginning before age 9 months and 1,346 (79.6 percent) received nonmaternal care beginning at age 9 months or after. Children whose mothers did not have a high school diploma were less likely to receive day care. However, children who did receive nonmaternal care had lower levels of physical aggression, and the association was statistically significant among children who started day care before age 9 months.

Children of mothers who graduated from high school were at lower risk of developing physical aggression problems, and nonmaternal care had no additional effect on their behavior.

"In summary, we provide robust evidence that the provision of nonmaternal care services to children of mothers with low levels of education could substantially reduce their risk of chronic physical aggression, and that the protective impact is more important if children begin to receive these services before age 9 months," the authors conclude. "Because the children most likely to benefit from nonmaternal care services are those less likely to receive them, universal programs involving the provision of nonmaternal care should include special measures encouraging the use of nonmaternal care services among high-risk families."

On Thursday, November 8, at 9:30 a.m., at a conference to be held at Hôpital Sainte-Justine, Dr. Côté will present new findings that show the beneficial effects of day care on children's cognitive development. At the same event, Dr. Orla Doyle of University College Dublin will present the results of a British study that confirm those of Dr. Côté and her team.

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