

# Uniquely human 'pain of altruism' recruits help in childbirth

April 17 2015, by H. Roger Segelken

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Among all the costs of childbirth – routine obstetric care and complications, midwife fees and gratuities, hospital bills longer than the baby itself – pregnant women can expect another "cost," not covered by insurance or experienced by other animal species: high-decibel labor pain and a lengthy recovery, which Cornell psychologist Barbara L. Finlay calls the "pain of altruism."

Human mothers' experience of pain and the expression of distress occur today because human ancestors who cried for help "survived in greater numbers than the thick-skinned or stoic," hypothesize Finlay and her co-author, the University of Toronto's Supriya Syal, in a Trends in Cognitive Sciences essay.

"One feature of [human evolution](#) and cultural evolution is that we're one of the few species where adults can seek help from those around them when hurt – and have a good chance of getting useful help," said Finlay, the College of Arts and Sciences' William R. Kenan Jr. Professor of Psychology.

Labor is more painful to human mothers, Finlay hypothesizes, because expressions of pain are especially effective in recruiting help: "Over the course of evolutionary time, events and circumstances that would not be perceived as painful in nonhuman animals have come to be perceived as pain in humans – because we can seek help."

And sometimes help really is needed, Finlay says, noting: "Delivering the

baby damages tissue; it is potentially mortal to mother and the baby; it is a genuinely dangerous event.

"However, stretching your cervix is not. But cervical dilation predicts the eventual appearance of the infant and that dangerous event – birth. So here we have an evolutionarily tailor-made system to get a human mother to seek help. This 'pain of altruism' is nearly culturally universal in humans – and absent in our close primate relatives around the time of birth – because it improves survival."

Furthermore, only human mothers take so long to recover from childbirth – continuing to express pain, soliciting help for many days, experiencing postpartum malaise, and taking plenty of time to resume regular activities.

Writing a longer essay (set for publication in the trade journal *New Scientist*), the mother of two (delivered by Caesarian section) explains what prompted this hypothesis some 20 years ago. Finlay was researching the evolution of vision in New World owl monkeys at Brazil's Centro Nacional do Primatas. Close by her workstation was the C-section recovery room for monkeys whose near-term embryos had been experimentally removed – except that the monkeys seemed to need very little recovery time.

In hours, the monkeys were sitting up, climbing around, interacting with each other and eating with their customary gusto, Finlay recalls:

"Whereas, my own postoperative progress on these same abilities was better measured in days or weeks. I began to think that some of the causes of the sensation of [pain](#) in humans might be fundamentally different than in other animals."

Sociality and cooperation, Finlay and her co-author posit in the Trends essay, "are benefits to human cultures but may carry unexpected costs."

Try telling that to the health insurance help line.

**More information:** "The pain of altruism," *Trends in Cognitive Sciences*, Volume 18, Issue 12, December 2014, Pages 615-617, ISSN 1364-6613, [dx.doi.org/10.1016/j.tics.2014.08.002](https://doi.org/10.1016/j.tics.2014.08.002)

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