Physical abuse during pregnancy: a significant threat to maternal and child health

Harriet L. MacMillan, MD

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Drs. Muhajarine and D'Arcy are to be commended for reporting on physical abuse during pregnancy, an area of major importance to maternal and child health (page 1007).[1] Although over the past decade several studies from the US have examined the prevalence and determinants of physical violence against pregnant women,[2–7] few Canadian surveys have done so.[8]

Findings from the study by Muhajarine and D'Arcy, that 5.7% of the women interviewed reported physical abuse during pregnancy and 8.5% reported abuse within the year before the third-trimester interview, should alert health care professionals to the common occurrence of this problem.

These prevalence rates and the corresponding population estimates (4.5% and 6.2% after adjustment for disproportionate sampling) may well be underestimates of the extent of physical abuse during pregnancy. In a US study involving more than 1000 pregnant women, those who reported abuse were more likely than nonabused women to seek prenatal care late (during the third trimester).[2] Muhajarine and D'Arcy recruited women who were in their second trimester. Those who first sought prenatal care in the third trimester (and therefore were excluded from their study) may have had an even higher prevalence of abuse during pregnancy. Also, the authors' analysis was based only on responses from women who completed both interviews, at entry and late in the third trimester. Approximately 10% of the subjects did not undergo the second interview; the nonrespondents were more likely to be single, less educated and of aboriginal background than those who completed both interviews. Although the extent of physical abuse in this group of women is unknown, at least 2 of these correlates (single status and lower education level) have been associated with an increased risk of abuse during pregnancy.[8] If the prevalence of violence during pregnancy was greater in this group of nonrespondents, the overall rate of abuse among pregnant women would be even higher.

The women in Muhajarine and D'Arcy's study were among those receiving prenatal services through the Saskatoon District public health system. According to the authors, the women participating in these programs included about half of all pregnant women in the Saskatoon area. To assess the generalizability of their findings, it would have been useful to have information about the population size of Saskatoon and the sociodemographic characteristics of women residing in the region. A recent study of domestic violence among female patients at 3 family practice clinics in communities of varying sizes found that more women in rural settings than in larger communities reported having a violent partner currently.[9]

Muhajarine and D'Arcy identify several risk factors for physical abuse during pregnancy: aboriginal background, negative life events in the preceding year, perceived stress and a male partner with a drinking problem. However, the findings should be interpreted with caution for at least 2 of these factors; the 95% confidence intervals around the adjusted odds ratios for aboriginal background and male partner with a drinking problem were very wide, and the lower limit of the confidence interval was 1.0 or close to it.

The authors' results regarding social support underscore the message that this is a complex concept. Women who reported the availability of a wider network of friends appeared to have lower rates of physical abuse during pregnancy. However, those who indicated having had contact with a larger number of friends in the previous month reported higher rates of abuse. These contrasting findings suggest that it is not simply a matter of determining the presence or absence of social support but, rather, that the nature, quality and degree of support may be important factors as well.

Information about the prevalence and risk factors of physical abuse during pregnancy in a clinical sample of women is an important addition to the literature. What we need now, though, is a population-based longitudinal study that will examine not only these issues but also the outcomes for women and their children. In a commentary published in 1992, Newberger and colleagues emphasized that there has been little investigation of the risks to maternal and child health associated with physical and sexual abuse during pregnancy.[10] The results of a US survey published in 1994 indicated that abuse during pregnancy was associated with a range of maternal complications and low birth weight.[2] With the extensive focus across countries on low birth weight as an important health outcome, it is surprising how little effort has been invested recently in examining the possible link with abuse during pregnancy.

In an editorial published in 1993 Rae-Grant[11] asked the question What can we do about physical abuse in pregnancy? He outlined a management system to combat this

problem that included better education about services that protect abused women, the need for physicians to ask their patients about abuse, the provision of services for abusers and the need to find ways for the long-term prevention or reduction of the frequency of abuse in pregnancy. Newberger and colleagues[10] emphasized the need for housing advocacy, legal and medical referrals, court accompaniment and access to counselling support groups. They advocated for "networks of support in the community."

A crucial question that needs to be asked now is "What can we do to prevent physical abuse in pregnancy?" Without population-based studies and rigorous evaluation of interventions aimed at reducing the problem, this question will be difficult to answer. Clearly the study by Muhajarine and D'Arcy, as well as the earlier work of Stewart and colleagues,[8] indicates that the burden of suffering associated with this problem demands that we make this area a research priority in Canada. Determining the prevalence and risk factors of physical abuse in pregnancy at the national level, over the long-term, is an important element of developing preventive interventions. Without rigorous evaluation of prevention programs we will not know whether such programs are doing more good than harm. I hope that one day soon a commentary will be published that tells us "What we have learned about the prevention of physical abuse in pregnancy."

Dr. MacMillan is with the Departments of Psychiatry and Behavioural Neurosciences and of Pediatrics, Hamilton Health Sciences Corporation — Chedoke Campus, Hamilton, Ont. Dr. MacMillan's work is supported by a Faculty Scholar Award from the W.T. Grant Foundation (New York, NY).

Competing interests: None declared.

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Correspondence to: *Dr. Harriet L. MacMillan, Centre for Studies of Children at Risk, Hamilton Health Sciences Corporation — Chedoke Campus, Patterson Building, 1200 Main St. W, PO Box 2000, Stn. LCD 1, Hamilton ON L8N 3Z5; fax (905) 574-6665; macmilnh@fhs.csu.mcmaster.ca*

Can the health care system buy better antibiotic prescribing behaviour?

Mitchell A.H. Levine, MD; Ashish Pradhan, MB, MD

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Antibiotics costing more than $485 million are prescribed annually in Canada (source: IMS Health Canada database, 1997). Concerns have been raised that some of this amount represents an inefficient use of limited health care resources, through either the unnecessary use of antibiotics for viral infections or the excessive use of expensive broad-spectrum drugs. In addition to questions about cost, the immoderate use of antibiotics has also been associated with the development of antibiotic resistance in the community.

Excessive antibiotic use is likely multifactorial.[1] Physicians have a strong desire to treat all infections aggressively to avert therapeutic failure. Pressure from patients may also contribute to this problem, and physicians may fear that their patients will leave the practice to find more willing prescribers. A third issue is time: it takes less time to write a prescription than to explain to a patient why an antibiotic is unnecessary.

In this issue James Hutchinson and Robert Foley[2] identify an association between the rate of antibiotic prescription and the method of physician payment (fee-for-service or salary) (page 1013). In their study of Newfoundland GPs, they found that fee-for-service physicians gave antibiotic prescriptions to more patients than did salaried physi-