## Commentaire

## Abuse during pregnancy: a quintessential threat to maternal and child health — so when do we start to act?

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buse to a pregnant woman is a quintessential threat to maternal and child health because it both directly (because of blunt trauma to the abdomen, for example) and indirectly affects the mortality and morbidity of both infant and mother, it interacts with many other health and economic risk factors, and it is a chronic and ongoing problem for both mother and infant (generally continuing before and after pregnancy). Abuse during pregnancy demands complex solutions, including a coordinated response from the criminal justice, social service and health care sectors. Intimate partner violence in general, and abuse during pregnancy specifically, should not be conceptualized as a disease or syndrome or disorder, nor should it be classified within one specific category of health problem, such as injury or reproductive, mental or physical health. Rather, abuse is a risk factor for all of these kinds of health problems. Women who are battered are not necessarily sick or ill as a result of being abused by a partner; in fact, they more often than not demonstrate amazing strength and ability to take care of themselves in spite of often untenable situations. However, it is clear that the abuse puts them at greatly increased risk for a multitude of physical and mental health problems.

Abuse happens all too often during pregnancy. The prevalence of physical abuse during pregnancy in Canada (5.5%-6.6% of all pregnancies)<sup>2,3</sup> is similar to that reported from other countries, including the United States,4 South Africa,5 Sweden,6 the United Kingdom7 and India.8 In addition to the threat to the health of the mother and fetus from trauma, 9-11 physical abuse before, during and after pregnancy is associated with reproductive health problems such as sexually transmitted diseases including HIV,12 urinary tract infections,13 substance abuse,14 depression and other mental health problems.<sup>15,16</sup> In addition, abuse during pregnancy is associated with higher rates of unintended and adolescent pregnancy<sup>17,18</sup> and elective pregnancy termination.19 An important reason for the particular risk for reproductive health problems, which has not always been measured separately from physical violence in prior research, is that about 40%–45% of physically abused women are also forced into having sex.20 In-depth interviews with women<sup>17,21</sup> suggest that abuse during pregnancy may be an important link between the well-established overlap of intimate partner violence and child abuse.22

Research in this area has also focused on intimate partner violence as a risk factor for low birth weight (LBW).<sup>23</sup>

The report in this issue (page 1567)<sup>24</sup> by Claire Murphy and colleagues moves our understanding of the relation between abuse during pregnancy and LBW substantially forward. Their meta-analysis of 8 published studies shows that abuse during pregnancy is indeed associated with LBW (odds ratio 1.4, 95% confidence interval 1.1–1.8), in spite of the mixed evidence when examining individual studies.

Having established the association between intimate partner violence and LBW, it is important to understand variations in different groups and potential causal pathways. Most of the studies included in the analysis by Murphy and colleagues involved women of lower social classes. The one research team that considered abuse during pregnancy and LBW in a sample of middle-class women separately found a significant relation between abuse and birth weight among middle-class, but not poor, women.<sup>25</sup> This may be because abuse is but one of a cluster of difficult life circumstances affecting birth weight that are associated with a life of poverty.<sup>15</sup> There is also a great deal yet to be explained about the risk factors for LBW related to interactions between ethnicity and intimate partner violence;<sup>26</sup> these risk factors need to be explored further in larger, ethnically diverse samples.

LBW may be the outcome of premature delivery caused by trauma in relatively rare situations or may occur in term infants as a result of more complex causal pathways. In a study of over 1000 women, it was found that both physical and nonphysical intimate partner violence were associated with LBW among women giving birth to term infants, but not for preterm infants.26 This association was confounded (or perhaps might more accurately be termed "mediated"<sup>27</sup>) by other abuse-related maternal health problems (notably, low weight gain and poor obstetric history). Low weight gain and smoking have also been found to be mediators of the abuse-LBW connection in other studies.<sup>28-30</sup> The more women are abused, the more likely they are to smoke or not gain weight, or both, during pregnancy, and these are risk factors for an LBW infant. Abusing partners may pressure their girlfriends not to gain weight as has been found among adolescent girls,<sup>31</sup> or the abuse may contribute to stress that has in turn been associated with smoking, low weight gain and consequent LBW.32,33 Therefore, I would urge Murphy and colleagues to repeat their meta-analysis when more studies have been published, and I would encourage investigators to continue to explore the relation between abuse and LBW; the story is far from being fully told.

These intertwined relationships are not only of interest to researchers but should be of intense interest to health care practitioners. If abuse contributes to conditions such as smoking and unhealthy nutrition during pregnancy, interventions aimed at these problems that do not address abuse will not succeed. In spite of support shown by professional associations for screening for abuse, 34,35 and repeated investigations that show that unless women are empathetically and routinely asked about abuse it is not identified, 36 health care providers fail to screen universally for domestic violence.<sup>37</sup> Validated, brief clinical screens have been widely and successfully used in prenatal care settings,<sup>38,39</sup> and chart prompts have been found to increase screening.<sup>40</sup> An important first step toward providing the full range of studies needed for evidence-based practice<sup>41</sup> would be to test further a promising brief brochure-based intervention that can be provided by a health care practitioner for abuse during pregnancy,42 which is available through the March of Dimes. 43 Thus, there is no good reason for the health care community to fail to address fully abuse during pregnancy.

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