



## **HOT TOPIC: How to Counsel Overweight Women Seeking Emergency Contraception?**

**The copper IUD should be recommended as first-line emergency contraception (EC) therapy for overweight women. It is the most effective method of EC, and there is no evidence of impaired efficacy in overweight and obese women.<sup>1-8</sup>**

**Overweight women should be informed of preliminary data suggesting the possible risk of decreased efficacy of levonorgestrel EC.<sup>1-8</sup> For women who do not choose to use a copper IUD or who will be unable to access a physician for IUD insertion within 7 days of unprotected sex, levonorgestrel EC can be considered.**

### **Background**

In March 2014, Health Canada issued a warning that levonorgestrel (LNG) emergency contraception (EC) products (Plan B, Option 2, etc.) are less effective in women weighing 165 to 176 pounds (75-80 kg), and are not effective in women over 176 pounds (80 kg).<sup>8</sup> The exact mechanism for the possible reduced efficacy seen in overweight and obese women using LNG is not known.<sup>1</sup> Theories which are currently being investigated include a larger volume of distribution and increased binding of LBG to sex-hormone binding globulin and albumin.<sup>9</sup>

The Health Canada warning was based on the results of two clinical studies.<sup>10,11</sup> They concluded that compared to normal weight or underweight women taking LNG EC, obese women (BMI  $\geq 30$  kg/m<sup>2</sup>) were at four-fold higher risk of pregnancy and overweight women (BMI 25 to 29.9 kg/m<sup>2</sup>) were at two-fold higher risk of pregnancy. However, the included trials were not designed to assess the role of body mass index or weight in EC efficacy.<sup>6</sup> Weight and height were not measured at one of the two study sites; they were self-reported by study participants, which may have introduced error into the results. The numbers of women in the “overweight” and “obese” categories were small (and the number of pregnancies in the highest weight category was extremely small).<sup>7</sup>

The European Medicines Association has since performed a review of all the available evidence on the effectiveness of emergency contraceptives, and issued a press release in July 2014 stating “the data available are too limited and not robust enough to conclude with certainty

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that contraceptive effect is reduced with increased bodyweight. With side effects generally mild, the safety profile of emergency contraceptives is favourable and they can continue to be taken regardless of the woman's bodyweight."<sup>5</sup>

There has been no change in Health Canada's position on LNG emergency contraception.

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