GUIDELINE FOR PROVIDING CARE TO WOMEN WITH A HIGH BODY MASS INDEX

This document is a guide for practising midwives who provide care to women with a Body Mass Index (BMI) of greater than or equal to 30.

Definition
Body Mass Index (BMI) is a measure of body weight in relation to height (weight in kilograms divided by height in meters²). Individuals with a BMI of ≥ 30 are classified as obese.

<table>
<thead>
<tr>
<th>Category</th>
<th>BMI Range</th>
<th>Lifetime risk of developing health problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal weight</td>
<td>18.5-24.9</td>
<td>Least</td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0 to 29.9</td>
<td>Increased</td>
</tr>
<tr>
<td>Obese Class I</td>
<td>30.0 to 34.9</td>
<td>High</td>
</tr>
<tr>
<td>Obese Class II</td>
<td>35.0 to 39.9</td>
<td>Very High</td>
</tr>
<tr>
<td>Obese Class III</td>
<td>&gt; 40</td>
<td>Extremely High</td>
</tr>
</tbody>
</table>

Special Considerations
“Obese women share the same hopes, dreams, and fears of all pregnant women. Additional concerns are raised due to their weight; however, abnormalcy of their pregnancy is not absolute. Midwives should not assume that complications will arise but instead utilize selective, increased surveillance and patient teaching regarding normal pregnancy, labor, and birth. They should also provide kind, integrative care to promote wellness and patient satisfaction.” (Caton 2000)

The topic of weight and obesity is a sensitive one. Many women with a high BMI have had previous negative experiences with the health care system. Therefore, while providing care to women with a high BMI it is important for midwives to be mindful of the fact that these women may experience emotional or psychological responses that may be related in part to previous experiences with the health care system.

Midwives should address these issues in terms of improving the client’s health and pregnancy. The approach must be timely, individualized, and non-judgmental, using impartial, open-ended questions. Weight and obesity can have a wide variety of meanings within different cultural and economic contexts.
Risks of Obesity in Pregnancy
Individuals with a BMI of ≥ 30 carry an increased risk of heart disease, type 2 diabetes, hypertensive disorders, respiratory problems and thromboembolism. In pregnancy, a pre-pregnancy BMI of ≥ 30 is also associated with an increased risk of developing complications/adverse outcomes in the prenatal, intrapartum and postpartum period, as well as complications for newborns.

Associated Risks

The BMI classification is an estimate of adiposity and may misclassify individuals with a lean or muscular build or those of certain ethnic groups. The distribution of body fat also impacts the degree of association with increased health risks, and this is not accounted for in BMI classification. Therefore not all women with a high BMI carry the same risk for developing complications.

<table>
<thead>
<tr>
<th>Prenatal period</th>
<th>Labour and birth</th>
<th>Postpartum</th>
<th>Newborn</th>
</tr>
</thead>
<tbody>
<tr>
<td>• gestational diabetes</td>
<td>• longer labour</td>
<td>• infection</td>
<td>• neural tube defects</td>
</tr>
<tr>
<td>• hypertensive disorders</td>
<td>• induction of labour</td>
<td>• reduced breastfeeding</td>
<td>• fetal macrosomia which is associated with</td>
</tr>
<tr>
<td>• varicose veins</td>
<td>• caesarean section</td>
<td></td>
<td>an increased risk of shoulder</td>
</tr>
<tr>
<td>• deep vein thrombosis</td>
<td>• anesthetic complications</td>
<td></td>
<td>dystocia, birth injury and</td>
</tr>
<tr>
<td>• preterm birth</td>
<td>• postpartum hemorrhage</td>
<td></td>
<td>perinatal death</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• stillbirth</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• anomalies may be missed on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ultrasound due to poor resolution</td>
</tr>
</tbody>
</table>
Recommendations

Prenatal care

1. Calculate BMI based on pre-pregnant weight and height. If this is unavailable then calculation should be based on the first available weight measurement.
2. Share and explore information regarding associated health risks, complications and adverse outcomes for both the woman and her fetus/newborn, in pregnancy, intrapartum and postpartum period.
3. Be aware of possible emotional and psychological response when discussing risks, complications and recommendations with a client and incorporate strategies for appropriate solutions.
4. For women with a BMI of greater than 35 review recommendations to take 5 mg of folic acid daily continuing 10 to 12 weeks post-conception. The standard dose (0.4 to 1.0 mg) is recommended for the remainder of the pregnancy.
5. Offer information regarding optimal nutrition and exercise.
6. Discuss appropriate gestational weight gain. Good outcomes are achieved within a range of weight gains, and additional factors may need to be considered for the individual woman. However current evidence suggests that appropriate gestational weight gain for BMI $\geq 30$ is 7 kg.
7. If client chooses not to measure or track weight gain, then document informed choice discussion re: risks and benefits of not tracking pregnancy weight gain.
8. Use appropriate sized cuff when monitoring blood pressure and document cuff size in the woman’s health record.
9. Discuss increased risk of gestational diabetes mellitus (GDM) and offer screening in each trimester.
10. Discuss risk of poor visualization on ultrasound and possible impact on care plan or place of birth.
11. Discuss risks and benefits of third trimester ultrasound for women in whom position or growth of the fetus is difficult to determine via abdominal palpation.
12. Discuss importance of fetal movement awareness.
13. Consult with physician for women with BMI $\geq 40$ as per CMM Standard for Discussion, Consultation and Transfer of Care.
14. Consider offering a prenatal consultation with an anaesthetist to discuss venous access, regional or general anaesthesia options in the case of pain management or caesarean section.
Intrapartum Care
1. Discuss possible need for internal fetal heart rate monitoring due to potential difficulty in auscultating fetal heart rate via external fetal monitoring.
2. Discuss means of dealing with shoulder dystocia to prevent birth injury.
3. Discuss possible need for ultrasound to confirm fetal position.
4. Discuss complications associated with induction of labour and caesarean section.
5. Consider establishing IV access in early labour.

Out-of-Hospital Birth Considerations
Discuss and document the following additional risks and considerations that may exist in an Out of Hospital (OOH) setting.
1. Risks associated with managing shoulder dystocia
2. Potential consequences of postpartum hemorrhage
3. Risks associated with management of a neonate with an undiagnosed congenital abnormality
4. The potential difficulty to physically move the mother if she is unconscious and/or in the event of an emergency.
5. EMS access to physical location of birth (i.e. consider stairs, small rooms, stretcher accessibility).
6. The potential need for transport in situations where fetal position is not palpable or inability to appropriately monitor fetal heart rate.

Postpartum Care and Follow-up
1. Provide appropriate breastfeeding support—prenatally and post-partum— to establish good positioning, latch and milk supply since obesity is associated with low breastfeeding initiation and continuation rates.
2. Discuss active management of third stage to prevent postpartum hemorrhage.
3. Discuss means of decreasing risk of wound infection (including perineal and caesarean).
4. Encourage early ambulation to reduce risk of thromboembolism.
5. Recommend appropriate diabetes-specific follow-up beyond 6 weeks post-partum for women with GDM.
6. Share recommendations for women with a BMI of greater than 35 to take 5 mg of folic acid daily three months prior to conceiving.
7. Provide information and resources for healthy nutrition and lifestyle support.
References


39. SOGC. (Feb 2010). SOGC Clinical Practice Guidelines. JOGC, No. 239.


