

# Thyroid health and pregnancy

DR SHAHJADA SELIM

Thyroid health during pregnancy is very important for both the mother and the unborn child. During pregnancy the mother's thyroid hormone crosses the placenta and is needed for the growth of the fetus. When the mother's thyroid produces either too little or too much of thyroid hormone, serious side effects can occur. So, it is extremely important that during pregnancy the mother's thyroid is working normally.

Pregnancy can be viewed as a *thyroid stress test*. During pregnancy, the thyroid gland must make 50% more thyroid hormone. To do this, the mother also needs to increase her intake of iodine which is needed by the thyroid gland to make thyroid hormone by 50%. It is recommended that all pregnant and breastfeeding women take a daily prenatal vitamin that contains 150 mcg of iodine.

**Hypothyroidism**  
Having too little thyroid hormone is called hypothyroidism. There are 2 types of hypothyroidism: minimal to mild, which is called subclinical hypothyroidism, and severe, which is called overt hypothyroidism. Both subclinical and overt hypothyroidism can lead to a miscarriage, preterm delivery and decreased IQ in the unborn child.



Women with hypothyroidism and on thyroid hormone replacement usually need to increase their dose during pregnancy.

This is not surprising as their thyroid gland is unable to produce the extra thyroid hormone required during pregnancy. Before getting pregnant, women on thyroid replacement drug should have their hormone levels checked so their dose can be changed if needed.

In addition to women known to be hypothyroid prior to pregnancy, another 2.5% of all pregnant women are hypothyroid. Most of these women have subclinical hypothyroidism and do not have any symptoms. These women are unable to produce the extra hormone needed during pregnancy because their thyroid

has already been partially damaged — usually by the body's immune system attacking the thyroid gland.

Treatment is recommended in women with subclinical hypothyroidism those who have thyroid antibodies. Screening should be done in all women in the following high-risk group for thyroid disease:

- Women with infertility
- Women over 30 years of age
- Women with type 1 diabetes
- Women with a history of miscarriage or pre-term delivery
- Women with family history of thyroid disease, symptoms of thyroid disease or with a large thyroid known as a goitre etc.

**Hyperthyroidism**  
Having excessive amount of thyroid hormone is called

hyperthyroidism. It can also be divided into overt and subclinical hyperthyroidism. It is much less common than hypothyroidism and less than 1% of all pregnant women have it.

Overt hyperthyroidism causes miscarriage, gestational hypertension, eclampsia and preterm delivery. Subclinical hyperthyroidism does not cause any bad outcomes for the mother or unborn child.

The most common cause of hyperthyroidism during pregnancy is Graves' disease, which is also an autoimmune disease. Graves' disease is caused by an antibody in the blood that makes the thyroid gland release too much thyroid hormone. Women with Graves' disease should see their doctor before getting preg-

nant to ensure that they are on the appropriate dose of anti-thyroid drugs.

**Postpartum thyroiditis**  
Postpartum thyroiditis is a thyroid disease in the postpartum period in women who typically do not have a history of having a thyroid disorder. 8% of all women may develop postpartum thyroiditis. Women with postpartum thyroiditis may be diagnosed any time during the first year following childbirth. If the diagnosis is made in the early stages of the condition, an overactive state is more likely. During later stages of the condition, the thyroid runs out of thyroid hormone and becomes an underactive thyroid. Most women will recover fully and have normal thyroid function at the end of the first year after childbirth.

Thyroid health during pregnancy is important for the mother and developing baby. All pregnant women should take prenatal vitamins with iodine.

Women with pre-existing thyroid disease need special monitoring and treatment during pregnancy. Because both hypothyroidism and hyperthyroidism cause serious side effects, first trimester screening of women at high risk for thyroid disease is recommended.

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## MCH HANDBOOK

### Empowerment of women and their family in rural community

PROF SHAFI BHUIYAN

The incidence of maternal and child death is highest in 75 countries in south East Asia and Africa. The most critical contributing factor is the awareness levels of women, families and communities about the potential negative consequences associated with delayed seeking of maternal and child health care (MCH). The two-way communication tool, the MCH Handbook, is recommended to enhance MCH knowledge, practice and continuum of care.

The MCH Handbook is a health promotion tool that equips mothers and families with record-keeping guides and accessible information. A multi-country study showed that the introduction of the MCH Handbook was an effective tool for accelerating mother's and family's awareness and utilisation of community clinics. MCH Handbooks are distributed at no cost, and mothers are encouraged to keep this booklet for reference at home and at each clinic visit.

An estimated 63% of pregnant women do not receive any antenatal, postnatal or delivery services from medical facilities. Various studies have shown that handbooks assist, encourage and empower pregnant mothers to seek needed care and to inform them as to when, where and how to obtain that care. By providing health promotion information from pregnancy until the child is 6 years old, handbooks also help ensure continuity of care.

The MCH Handbook applies a two-way communication model for promoting awareness of MCH services, while exiting tools in Bangladesh are largely one-way (such as treatment cards, EPI cards, antenatal cards etc). There is no evidence to suggest that these cards are effective or being properly used by mothers. A pilot study conducted in Bangladesh revealed that the MCH Handbook is a good starting point and an effective community-based tool for promoting maternal, neonatal and child health. The MCH Handbook will help reduce delays in decision-making at the family level, as well as delays in arranging quality services at the facility level.

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## HEALTH bulletin

# Clean water, rigorous hygiene key to coping with anti-microbial resistance

A new report warning that superbugs will kill someone every three seconds by 2050 has highlighted the important role that clean water, good sanitation and rigorous hygiene must play in healthcare around the world, WaterAid said at Women Deliver Conference.

STAR HEALTH REPORT

The Review on Antimicrobial Resistance has warned that more than one million people have died since mid-2014 of such infections, and that up to 10 million people may die every year from resistant infections by 2050.

The problem has been exacerbated by widespread use of antibiotics, particularly in places where hospital patients frequently contract infections spread by poor sanitation and hygiene practices and are given antibiotics in prevention.

Some 38% of healthcare facilities in low- and middle-income countries, and 42% in Sub-Saharan Africa, do not have access to water, making good hygiene almost impossible.

WaterAid America Director of Policy and Advocacy Lisa Schechtman said, "This frightening scenario of a world where we could be thrown back into the Victorian era of death from simple infection



highlights the incredible importance of having clean water, good sanitation and rigorous hygiene practices in health centres around the world. Preventing infection is the best way of saving lives. And the best way to prevent infection is to ensure that healthcare centres have continuous access to clean water, to good functioning sanitation including toilets that are not backed up spreading disease, and to ensure medical personnel, from clinic directors to cleaners, have both the knowledge and ability to practice proper handwashing with soap and cleaning techniques."

High rates of infection and sepsis are deadly to new mothers and newborns. One in five newborn deaths is from infection or sepsis, which can often be prevented with good hygiene and clean water.

The 2015 World Health Organisation landscape survey of healthcare facilities in low- and middle-income countries also found that 35% don't have handwashing facilities and 19% don't have any functioning toilets. Many facilities with some access to water also face disruptions in supply and issues of quality.

A WHO-Unicef Global Action Plan aims to address this situation; however it will need to be made a political priority by national governments and donors to achieve access to water, sanitation and good hygiene in all healthcare facilities.

WaterAid's four-year campaign Healthy Start is designed to highlight the critical importance of these basic services for maternal, newborn and child health.



## WHO rejects call for Olympics to be moved due to Zika

The World Health Organization (WHO) recently rejected a call for the Rio Olympic Games to be moved or postponed due to the threat posed by large outbreak of Zika virus in Brazil, reports Reuters.

Responding to a call from more than 100 leading scientists, who said it would be unethical for the Games to go ahead as scheduled, the United Nations health agency said having the Games in Rio as planned would "not significantly alter" the spread of Zika, which is linked to serious birth defects.

"Based on the current assessment of Zika virus circulating in almost 60 countries globally and 39 in the Americas, there is no public health justification for postponing or cancelling the Games," the WHO said in a statement.

Zika infection in pregnant women has been shown to be a cause of the birth defect microcephaly and other serious brain abnormalities in babies.

The connection between Zika and microcephaly first came to light last fall in Brazil, which has confirmed more than 1,400 cases of microcephaly.

## Health Event



50 years celebration of GME Group was held yesterday at the Hotel Pan Pacific Sonargaon Hotel in Dhaka. In the grand event, latest invention and most modern technology were displayed to share the significant and remarkable advancement in health care sector to make the sector modernised in Bangladesh. GME group is the biggest imaging equipment and consumable importer in Bangladesh and is one stop service provider. The honorable Minister, Ministry of Health and Family Welfare of People's Republic of Bangladesh Mr. Mohammed Nasim MP was present in the meeting as the Chief Guest.

/StarHealthBD



## Peptic Ulcer Disease

### Symptoms

- Burning pain in the middle or upper stomach between meals or at night
  - Bloating
  - Heartburn
  - Nausea or vomiting
- In severe cases,
- Dark or black stool (due to bleeding)
  - Vomiting blood (that can look like "coffee-grounds")
  - Weight loss
  - Severe pain in the mid to upper abdomen

### Prevention

- Don't smoke.
- Avoid alcohol.
- Don't overuse aspirin and/or NSAIDs.
- If you have symptoms of an ulcer, contact your doctor.

