

Cervical cancer: Stop before it starts

DR ABU SIDDIQUI

Cervical cancer is the most common cancer in women of Bangladesh. In spite of claiming thousands of women's lives every year, it hardly receives due attention. The cancer that affects the cervix (lower part of the uterus) is highly preventable with regular screening and vaccine — both are available locally.

January is the cervical cancer awareness month. It is time to remind women to pay attention to their cervix by checking or screening for deadly cancer and its catastrophic consequences.

Almost all women are at risk of cervical cancer! It occurs most often in women over age 30. The Human Papillomavirus (HPV) is the main cause of cervical cancer. It passes from one person to another during sexual intercourse. At least half of sexually active women will have HPV at some points in their lives, but few women will ever get cervical cancer. In most cases, HPV will go away naturally; however, if it does not, there is a chance that — over time, it may cause cervical cancer.

In addition to HPV, other cofactors can increase the risk of cervical cancer



including having sex at an early age, multiple sex partners or partner who has multiple partners, smoking, repeated pregnancies, weak immune system, exposure to the hormonal drug Diethylstilbestrol, hormonal contraception for a longer period of time, Chlamydia infection, family history of cervical cancer, poor economic status etc.

Early on, cervical cancer may not manifest with signs and symptoms. However, the following symptoms may be

associated with cancer:

- Abnormal vaginal bleeding between periods or after intercourse
- Bleeding after menopause
- Continuous vaginal discharge, which may be pale, watery, pink, brown, bloody or foul-smelling
- Pelvic pain or pain during intercourse

Cervical cancer is diagnosed through a series of examinations. A simple procedure called VIA test (done free of cost at government hospitals) and Pap smear are

most commonly used techniques for screening cervical cancer. Recently, an HPV DNA test is widely used to determine the high-risk strains of HPV that will most likely lead to cervical cancer. The good news is if the cancer is diagnosed early, it is almost 100 percent curable.

Along with the screening, we have powerful preventive tool — HPV vaccine to prevent this cancer. Ideally, females should get the vaccine before they are sexually active, but it can be taken ever after starting sex, if the HPV DNA test is negative. The vaccine is given in three shots over six-months which helps the body to develop immunity against HPV. If you are eligible and can afford the vaccine, you should get vaccinated. Remember that you are never old to get shots.

In this month, along with the international community, Bangladesh can also commence special campaign to raise awareness on cervical cancer. This is a much needed campaign that can save thousands of lives every year who are unnecessarily dying from cervical cancer.

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GENE AND STEM CELL THERAPIES

New frontiers in ophthalmic medicine

DR HASAN MAHMUD REZA

Many diseases are incurable by means of contemporary medical treatment where regenerative medicine holds promise. Gene and stem cell therapy, part of regenerative medicine have showed their promise and are becoming upcoming useful treatment approaches for different types of eye diseases that are currently left untreated with available treatment options.

Gene therapy is a technique for correcting defective genes by replacing an abnormal or disease-causing gene with a normal one. And stem cells have the capacity to replicate, regenerate and become specialised cell types (such as skin, muscle, blood, brain and nerve cells) and ability to replace damaged cells.

At least 160 gene mutations or abnormality have been considered that may cause genetic diseases of the eye. Genetic manipulation or cell transplantation in eyes is more feasible and effective with fewer complications as compared to

other organs. A revolutionary gene therapy treatment for a type of inherited blindness called Leber's congenital amaurosis (LCA) was successfully started in 2007. Transplantation of cultured corneal stem cells has been shown to be a safe and effective method of reconstructing corneal surface and



restoring useful sight in patients with unilateral Limbal Stem Cell Deficiency (LSCD), which is a very painful blinding disease.

Gene therapy also aims to cure corneal abnormalities occur in diabetic patients called diabetic keratopathy, where cornea becomes prone to poor wound

healing and other disorders can cause pain and may lead to vision loss. Again, dry macular degeneration, one of the most common causes of vision loss in individuals over the age of 55, has showed success in treatment with human embryonic stem cells. The encouraging point is that clinicians and scientists have already developed new tools based on stem cell therapies to repair damaged ocular surface and retinal cells in various conditions like Stevens-Johnson syndrome, ocular cicatricial pemphigoid, chemical injury etc.

Many hospitals and clinics in India, Thailand, Malaysia and Singapore are now offering this treatment and more and more people seem to get the benefit. Similarly, our public and private sectors can think over making the new cell based treatment available locally.

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TECHNOLOGY TALKS

New app adds incentives to go to the gym

REUTERS, San Francisco

If a bulging waistline is not enough of a motivator to go to the gym, a new iPhone app adds a financial incentive to provide that extra nudge.

The app called GymPact charges users a fee for every gym commitment they skip. The fee can range from \$5 to \$50 dollars.

"We decided to motivate people by having money on the line, rather than giving them money, which is a very radical departure from other motivational apps and programmes," explained Yifan Zhang, GymPact's co-founder and CEO.

After providing a credit card, GymPact's users make a commitment for the number of times each week they will go to the gym, along with the financial penalty they will incur if they don't.

At the end of the week, the company charges users who did not meet their goals. The money collected is distributed to users who kept their commitments. People who committed to more days get a bigger portion of the pooled money.

The company is paying out anywhere between 50 cents \$1 for each workout and keeps about 30 percent of each payout.

To validate the time spent at the gym, users must check-in at a venue for 30 minutes for the workout to count.

"One of the key concepts is loss aversion. Say you take the same amount of money and you offer it as a reward, or use it as a penalty. People are much more motivated by a loss than by gain," she explained, adding that users make it to the gym 90 percent of the time.

LifeSize 220 demonstrates the benefits of remote communication in health

LifeSize, a division of Logitech and world leader in HD video collaboration, showed a demo of Room 220, the world's most powerful HD video communications system at The Daily Star Colloquium recently.

LifeSize's Room 220 focused on genuine human interaction by offering the most exceptional quality and user simplicity, making remote communications in healthcare far more superior, productive and true-to-life, notwithstanding its unique flexibility and cost efficient performance. Through Room 220, LifeSize redefines and delivers better care ensuring improved patient outcomes on an on-demand basis at any time, across any location, at a very minimal cost.

The product enables users to experience HD for under 1Mbps or take it to the top at 8Mbps, delivering the best performance at any bandwidth with Adaptive Motion Control for natural, uninterrupted communications. The advantages of LifeSize's relentless innovation for better and more affordable video collaboration through greater integration of medical equipment and content in sharing information visually will be extended to offer better health consultation for many people across the country.



Knowing for better living

In Bangladesh ...

Every year **57** thousand people die due to tobacco consumption !

Avoid tobacco consumption

Exercise regularly

Drink plenty of water

Keep away from stressful situations

Consult your Doctor



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