

Ray of hope with once-weekly treatment of diabetes

PROF EMERITUS HAJERA MAHTAB

Approximately 8.4 million Bangladeshi and an estimated 425 million adults worldwide have diabetes. Type 2 diabetes (T2D) is the most common around the world and also in Bangladesh, accounting for an estimated 90-95% of T2D cases in Bangladesh alone.

Diabetes mellitus is a chronic disease which further leads to life threatening diabetes related complications, e.g. cardiovascular disease, chronic kidney disease, blindness, amputation etc. Estimation reveals, about 50% of patients in Bangladesh are still undiagnosed and about 50% of patients are dying due to diabetes related complications.

Despite the availability of ample diabetes care facilities, Bangladeshi patients have poor blood glucose control. A sedentary lifestyle, poor medication adherence, fear of daily injectable medicines are the key barriers to optimal blood glucose control.

Currently, patients are being treated with oral anti-diabetic drugs and injectables (insulins and Glucagon-like peptide-1 receptor agonist or GLP1-RA). Though oral medicines have very good compliance, there are few clinical concerns like pancreas β -cell failure, hypoglycaemia, weight gain etc., but insulin remains the gold standard for blood glucose control.

Despite proven advantages of insulin for diabetes management, patients are reluctant to use this because of daily



injection phobia, hypoglycaemia, weight gain etc. Whereas GLP1-RA, which is available in injectable devices has proven benefits in blood glucose control, cardiovascular and renal complications reduction and the least chance of hypoglycaemia. Because of injectable delivery systems, patient's adherence is also not good with such medication.

In the last two decades, scientists are working more closely to minimise all these challenges. And they are successful to some extent. Besides daily injectable and oral medication, once weekly GLP1-RA (dulaglutide) medications are now available and being used to control blood glucose. Even in Bangladesh now patients

have easy accessibility to this once weekly medication.

Patients can use this medication once a week, which can minimise the blood glucose by releasing the body's own insulin, reduction of co-morbidities (heart attack, stroke etc.) and deaths due to diabetes related complications. Study also confirms that dulaglutide can restore β -cell function, which helps further to produce the body's own insulin.

Once weekly dulaglutide has proven its cardiovascular benefits ensuring both primary and secondary cardiovascular risk reductions. Several possibilities account benefits of dulaglutide on cardiovascular outcomes. These include the reduction

of low density lipoproteins (LDL) cholesterol, blood pressure, weight and glycaemic control.

Evidence also suggests, once weekly dulaglutide independently improves blood vessel function, attenuates progression of atherosclerosis, thus dulaglutide has a direct effect on neuroprotection and it can reduce the risk of stroke significantly.

Furthermore, most importantly dulaglutide's injectable device has been developed keeping patients in mind, thus simple injection delivery system introduced to improve patient adherence with medications. The dulaglutide device has a hidden needle, which will relieve patients from needle phobia. Additional key benefits of once weekly dulaglutide is weight reduction. Usually, diabetes patients' Body Mass Index (BMI) remains high and dulaglutide can reduce that.

As diabetes patients are suffering from poor control, they need to adhere to their medications which can ensure their healthy wellbeing. Once weekly medication could be the ultimate solution for uncontrolled diabetes patients.

Once weekly dulaglutide can control blood glucose, reduce comorbidities and ensure weight reduction. Most importantly, such once weekly medicines can improve patient's adherence to treatment, which ensures a sustainable positive effect on diabetes management.

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Rx UPDATE



NIH updates COVID-19 treatment guidelines

The National Institutes of Health (NIH), USA has updated its guidelines on treating COVID-19. Here is a look at what is new:

- Treatment recommendations are outlined according to the severity of the disease. For example, for COVID-19 patients who are not hospitalised or who are hospitalised but not on supplemental oxygen, no particular antiviral or immunomodulatory treatment is recommended, and the panel recommends against using dexamethasone. For hospitalised patients on oxygen (but without needing a high-flow device or mechanical ventilation), remdesivir alone or with dexamethasone is advised.

- Increasing evidence points to persistent symptoms after COVID-19 recovery — including headache, vision and hearing changes, loss of taste or smell, memory loss, and cognitive impairment for up to 3 months — but effective management strategies have not been identified. This may occur even in patients with mild COVID-19.

- Sections have been added on managing COVID-19 in HIV-infected patients, as well as on sedation management and post-intensive care syndrome in ICU patients.

See the full guidelines here: <https://files.covid19treatmentguidelines.nih.gov/guidelines/covid19treatmentguidelines.pdf>

HEALTH bulletin



Narcolepsy drugs tied to increased risk for birth defects

Use of the stimulants modafinil and armodafinil during pregnancy is associated with increased risk for major congenital malformations in offspring, according to findings in the Journal of the American Medical Association (JAMA) Internal Medicine.

Researchers studied nearly 150 women who used either drug in the 6 weeks before conception or during pregnancy. Among the live births, 13% had major congenital malformations, including congenital torticollis, hypospadias, and congenital heart defects. In contrast, the prevalence of major congenital malformations in the general population is roughly 3%.

All of the infants with congenital malformations had been exposed to modafinil or armodafinil during the first trimester.

The researchers note, "This potential risk is not likely due to the underlying condition of narcolepsy, because previous data suggest that narcolepsy does not increase the risk of abnormal pregnancy outcomes." Commentators advise, "These medications should be avoided or offered along with a reliable contraceptive to individuals who could become pregnant."

The prescribing information for both drugs notes the potential for foetal harm based on animal data.

World Occupational Therapy Day 2020: Reimagine doing

RABEYA FERDOUS

Each year, 27 October is celebrated nationally and internationally as the World Occupational Therapy Day. The theme of this year is, "Reimagine Doing".

In this critical time, the day is celebrated with the expertise of occupational therapy for reimagining participation in occupations that provide value and meaning to everyday life.

Occupational therapy is a health care profession whose concern is to promote health physically and mentally. Occupational therapy is the only profession that helps people across the lifespan to do the things they want and need to do through the therapeutic use of daily activities. Occupational therapy practitioners enable people of all ages to live life to its fullest by helping them promote health, and prevent or live better with injury, illness, or disability.

Occupational therapists work for making independence in Activities of Daily Living (ADLs) as much as possible. ADLs consist of three important things: self-care, productivity and leisure.

The occupational therapist provides four levels of intervention.

Adjunctive method: It is the initial stage of treatment which includes exercises, facilitation and inhibition techniques, positioning, transferring, sensory stimulation etc. In this stage occupational therapist assesses the patient's performance component.



Enabling activity: It is the stage where the occupational therapist practices the patient simulated activity for preparing to participate in their actual life. For example, practicing cylindrical grasp activities for the preparation of drinking water by using glass.

Purposeful activity: In this stage patients become more active than in the other stages. They can do their daily work like dressing, eating, writing, mobility etc.

Occupation based activity: It is the last stage where patients perform their self-care, leisure and productive work in their own environment.

Occupational therapy in Bangladesh After the liberation in 1971, occupational therapy became the most needed therapy for the injured freedom fighter. At that critical time, Professor R J Garst came to Bangladesh in 1972. He was an

American orthopaedic surgeon and a rehabilitation expert. In 1973, Professor Garst started the first occupational therapy school for occupational therapy at the Rehabilitation Institute and Hospital for the Disabled (RIHD). Currently, it is renamed as National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR).

Only three students completed their bachelor's degree in 1976. Unfortunately, the course was discontinued for a certain period. The course again started in 1993 at the Bangladesh Health Professions Institute (BHPI) which is the academic institute of the Centre for the Rehabilitation of the Paralysed (CRP).

In the beginning, the occupational therapy assistant course started at BHPI. Then the bachelor's degree course started in 1999 under the medicine faculty of the University of Dhaka. At present 294 therapists completed their bachelor's degree until 2019. Now they are working in different government hospitals, special needs schools, NGOs etc.

Occupational therapy is equally as important as physical therapy for people of all ages. It is an absolute essential to helping people regain their independence and ability to do what they love and enjoy in life.

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Bangladesh 5th National Youth Conference on Family Planning held at Dhaka

STAR HEALTH REPORT

SERAC Bangladesh organised a conference in Dhaka on family planning and sexual and reproductive health and rights (SRHR) during and beyond COVID-19 issues titled 'Bangladesh 5th National Youth Conference on Family Planning (BNYCFP2020)' in collaboration with Bangladesh Youth Health Action Network (BYHAN), United Nations Population Fund (UNFPA) Bangladesh, Right Here Right Now, Marie Stopes Bangladesh, Coalitions of Youth Organisations in Bangladesh (CYOB), Pathfinder International, Options Consultancy Limited, UK AID, Plan International, Population Services and Training Centre and Unite for Body Rights (UBR) Alliance, says a press release.

The theme of the conference was 'Connecting Youth Virtually and Globally' where more than 500 hundred youth participants and international speakers joined and interacted maintaining physical distancing in this hybrid conference.

The 2 days long conference focused on the meaningful participation of the youth showcasing programmes on family planning and well-being of young people including reproductive health care and family planning.

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Keep Calm and Check Your Blood Pressure

No medical checkup is complete without getting your blood pressure measured. Pressure that stays too high for too long can damage blood vessels and greatly increase your risk of a heart attack, a stroke or kidney damage. On the bright side, this simple test can give you the information you need to help prevent and control high blood pressure.

Why do I need to check my blood pressure?

If you have high blood pressure, you may need to check your pressure every day, not just every time you see your doctor. Daily at-home measurements can help you track the effectiveness of your treatments and because blood pressure can change from day to day (and even hour to hour), daily testing can give you a more accurate idea of your typical pressure.

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