RSSDI

Indian Diabetes

EDUCATOR JOURNAL

Theme of the Month

Doctors Day Special Edition on Holistic Diabetes Care

To keep Members Diabetes Care team abreast about
DSME /DSMS - (Diabetes Self management Education / Support) Concepts

2015 2016 2017 2018 2019 2020 2021 2022

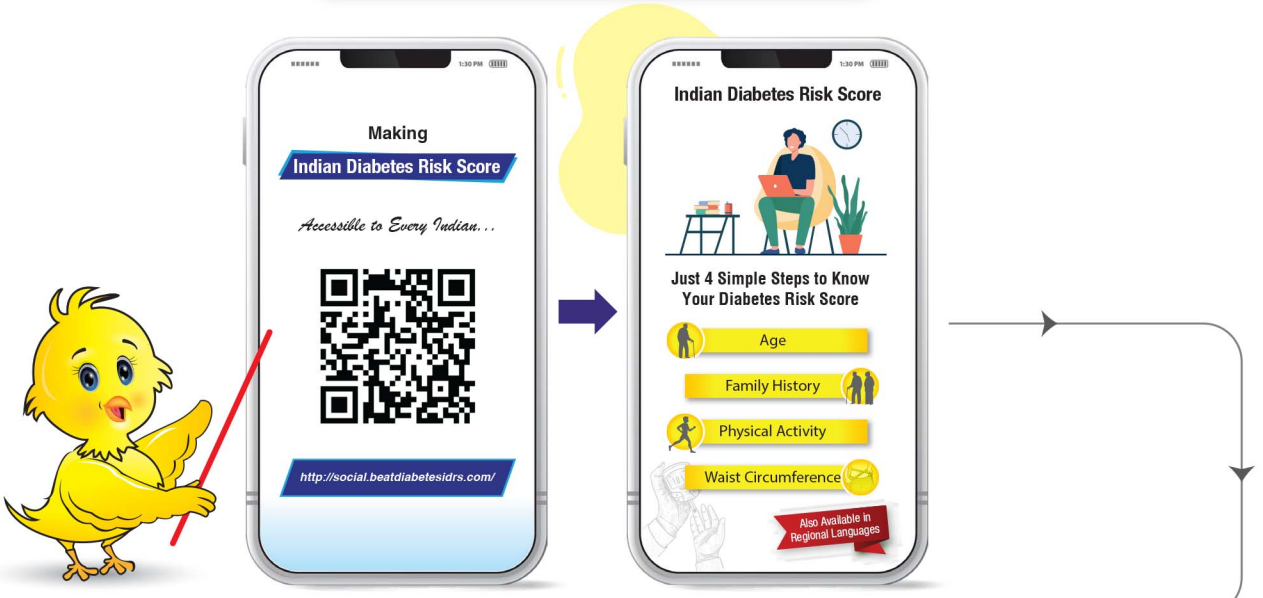
Longest Running Monthly Journal

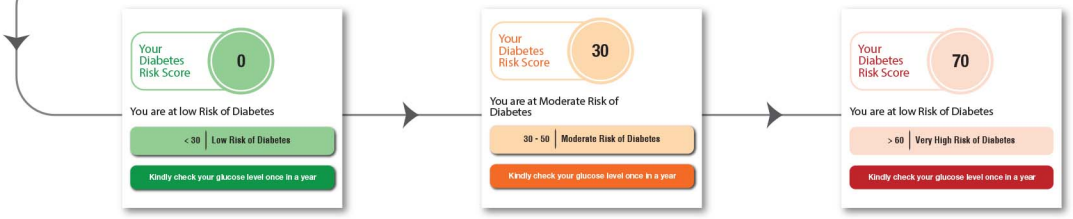
In collaboration with USV

Beat Diabetes Win Life

For screening people with High & Moderate Risk of Diabetes

Indian Diabetes Risk Score





Share this simple test with your family & Friends

Users can share it with their family & friends

Video on Suggestive Lifestyle interventions to minimise risks - for each category

12 Languages

An awareness initiative by USV

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1 st time in India
To keep the members of diabetes care team abreast with DSME and DSMS concepts

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*DSME: Diabetes Self-Management Education, DSMS: Diabetes Self-Management Support

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RSSDI Indian Diabetes EDUCATOR JOURNAL

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FOREWORD

Research Society for the Study of Diabetes in India (RSSDI) founded by Prof MMS Ahuja in the year 1972 is the biggest scientific association of healthcare professionals involved in promoting diabetes education and research in India. RSSDI is happy to collaborate with USV to support their endeavour to make India the 'Diabetes care capital of the world'. Through this collaboration, RSSDI would like to strengthen the cadre of diabetes educators by empowering them with recent updates in diabetes management helping bridge the gap between the physician and the patient. Today, the rule of 50% is prevailing in terms of awareness, detection, treatment and control in T2DM.Our aspiration is to achieve 90-90-90-90 i.e.90% of people with diabetes should be made aware, 90% should be detected, 90% of those detected should be treated, and 90% of those treated should reach their goals.

Indian Diabetes Educator Journal (IDEJ) is the first of its kind in India, and the longest running monthly diabetes educator journal since April 2015 & continues its endeavour to spread awareness, knowledge and enable healthcare teams to manage individuals with diabetes and empower them for self-care. RSSDI IDEJ will continue to keep the members of diabetes care team abreast with concepts of Diabetes Self-Management Education/Support (DSME/S) with a reach of 44000 doctors and diabetes educators digitally.

1st July is celebrated as 'National Doctor's Day' in India. It is a proven fact that multi-professional approaches improve quality of care in people with diabetes. This issue of IDEJ is dedicated to all doctors and allied health care professionals who give their blood and sweat to support individuals with diabetes in managing their blood glucose levels with empathy and are always fighting all barriers of care to help people with diabetes adopt behaviours that facilitate change and lead to overall wellbeing.

We sincerely thank our contributors for making this issue delightful reading for our readers. We dedicate this journal to all the healthcare professionals who are working relentlessly towards making "India–The Diabetes Care Capital of the World."

Sincere Regards,

Dr. Sanjay Agarwal
RSSDI Secretary

*DSME: Diabetes Self-Management Education, DSMS: Diabetes Self-Management Support

Expert Contributors
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Article: Evolution of Medicine in India

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Article: The Impact of Dr. Google on Doctor-Patient Relationship

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Article: Implementation of EMR in Healthcare Industry

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Article: Defensive Medicine – A Bane to Healthcare

Late Dr. Vijay S. Ajgaonkar

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Article: Type 1 Diabetes – Then and Now

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Article: 360 Approach - Holistic Diabetes Care

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Diabetes has become a major health care problem in India with an estimated 74 million adults living with diabetes.

All ancient civilizations created their own medicinal systems, but the ancient Indian system of medicine is thought to be the most systematic and holistic, both in terms of principles and curative procedures.

But the world is changing more rapidly since the industrial revolution. This holds true for medical systems as well, as any other sector of society.

Ancient India

Vedic Period

The four Vedas are the primary sources of Aryan culture and medicinal knowledge (Rig, Sama, Yajusa, and Atharva Veda). The hymns and prayers in the Atharva Veda show people how to protect themselves from various diseases and natural disasters. As evidenced by Yajur Veda, individuals in the Vedic period were really concerned about the physical and mental aspects of health.

- **Ayurveda:** Medical observation and theorization in the Vedic period set the foundation for Ayurveda (the Science of Life), a more rational and methodical system of Indian medicine. The Ayurvedic practitioner was known as vaidya, which means "deep understanding". Ayurveda is the foundation of traditional medicine. It was further refined by Charaka, King Kanishka's court physician. Dhanvantari, the patron god of Indian medicine, pioneered various therapeutic techniques and passed them down to Sushruta, the renowned Vedic surgeon. Madhumeha, a condition in which a person passes honey-like (sweet) urine, is an unrelated and unusual disorder in Ayurveda and is currently known as diabetes mellitus. The famous Indian political scripture Arthasastra even mentions diabetogenic ways of killing foes. Charaka, Sushruta, and others took a scientific approach to diabetes and its treatment. They were able to identify the two types of diabetes type 1 and type 2. Even ancient seers believed that the causes of Madhumeha are excessive use of guru (heavy to digest), snigdha (unctuous), amla (sour) and lavana (salt) rasa, navinna (food prepared from newly harvested grains), new wine, Asya sukha (sedentary lifestyle), atinidra (excess sleep), avyayama (lack of exercise), achinta (lack of mental exercise), abstaining from samshodhana (purification) therapy.
- **Siddha:** Disease, according to the Siddha system, is a state in which the normal equilibrium of the five elements in humans is disturbed, resulting in various forms of suffering. In the Siddha medical system, diagnostic methods are based largely on the physician's clinical acumen following observation of the patient, pulse, diagnosis, and clinical history.

- **Yoga:** Yoga is both a science and art of living a good physical, mental, moral, and spiritual life. It is thought to have been created by Indian saints and sages some thousand years ago. Yoga is an art and science of living in harmony with the universe that has its roots in the Vedas.
- **Naturopathy:** The Vedas and other ancient literature contain multiple references to naturopathy, indicating that it was widely used in ancient India. Naturopathy believes that all diseases are caused by a buildup of unhealthy matter in the body and that removing it can cure or relieve them. It also claims that the human body has innate self-building and healing abilities.
- **Unani:** The body, according to the Unani system of medicine, is made up of four basic elements: earth, air, water, and fire, all of which have varied temperaments, such as cold, hot, wet, and dry. A new compound with a new temperament emerges from the combination and interaction of four ingredients, namely hot-wet, hot-dry, cold-wet, and cold-dry. Blood, phlegm, yellow bile, and black bile are the four humours that nourish the body's simple and compound organs. The Unani medical system emphasizes health promotion, disease prevention, and treatment.

The Buddhist Period

Lord Buddha was an outspoken supporter of medical science. Lord Buddha used to personally attend to the sick. Taking care of the sick was considered a noble cause. During his travels, Buddha established Buddhist Viharas (monasteries) in various locations to spread Buddhism, and all of the Viharas prioritised medical treatment and education.

Medieval Period

The invasion of foreigners in the 10th century AD brought with them their own physicians called Hakims.

Post-Buddha and Muslim Period

Starting in the 10th century, physicians trained in the Unani system in the Middle East began to make an impact. Emperor Akbar (1555–1605), during his reign, encouraged the establishment of many hospitals and the amalgamation of the Unani and Ayurvedic systems. The impact of Muslim dominance was very apparent before the Portuguese conquered Goa in 1510.

Christianity and Medical Care

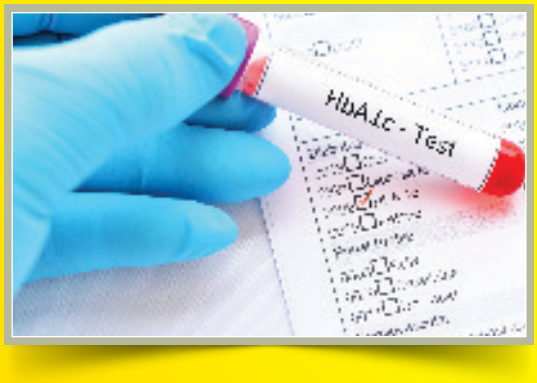
Hospitals were integrated into churches and monasteries. Medicine was considered a sacred practice, and all missionaries, including nuns and monks, were trained to care for the sick. Until the middle of the 19th century, hospitals were plagued by overcrowding and infection. Florence Nightingale revolutionized the running of hospitals and this was the beginning of the era of 'Better Patient Care'.

Modern Period of Medicine

With the entrance of European missionaries in the 16th century, the Allopathic system of medicine became popular. The Portuguese constructed the Royal Hospital in Goa between 1510 and 1515, and the Jesuits later introduced a basic general medical training programme at the hospital, which was later converted into a school of medicine and surgery in 1842. The first medical school was established in Calcutta, followed by Madras in 1846. Along with the expansion of British rule over the country, the local government encouraged the establishment of dispensaries at the sub-division and district levels. Slow growth persisted, and on the eve of independence, the country had 7400 hospitals and dispensaries with 1, 13,000 beds. The Government of India appointed the Health Survey and Development Committee in 1943, which was led by Sir Joseph Bhore and included nineteen other members. Earlier efforts by health administrations were focused on alleviating pain and rehabilitating the sick. The concept of prevention like sick-room segregation and infection control emerged later, partially as a result of observations that infections were frequently transmitted from one patient to those in close proximity. The importance of distinct organisms as the causative agents for individual diseases was brought to the forefront by the development of modern sciences such as bacteriology, parasitology, and pathology in the latter half of the last century. The significance of environmental hygiene was also recognized and more desirable outcomes were achieved by a concerted effort of prevention, treatment, and rehabilitation.

Post-Independence India

After more than 150 years of foreign dominance, India became an independent country in 1947. Following independence, India's government prioritized primary healthcare and medical education. India has made consistent efforts to improve the country's healthcare system. India has been independent for more than 70 years, and the healthcare system has advanced significantly. In both medicine and surgery, exponential advances have resulted in the emergence of super-speciality streams. Cardiology, endocrinology, gastroenterology, nephrology, neurology, oncology, haematology, rheumatology, and pulmonary medicine are among India's most popular super specialities.



Medicine has progressed since ancient times, from the Vaidya to the endocrinologist. Diabetes, also known as 'Madhumeha', was prevalent during the Vedic period and remains so now, with India on the verge of becoming the World's Diabetes Capital. But, in addition to being the world's diabetes capital, India is also on the path to becoming the world's 'Diabetes Care Capital', as there has been significant progress in the diagnosis, treatment, and technology in the management of diabetes. In ancient India, diabetes was diagnosed by ant attraction to the patient's urine, but now there are advanced blood tests like HbA1c (Glycated haemoglobin) which are used. Also, earlier diabetes was treated with crude or impure insulin from animal origin like bovine and porcine insulin, where as now human insulin (produced by recombinant DNA technology using either E. coli or yeast) and analogs are easily available and can be given via pens or insulin pumps. With evolving research and technology, doctors are continuing to upgrade their knowledge of the latest advancements in order to keep up with the opportunities for faster and more reliable treatments for better health outcomes.

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Frequently Asked Questions

1. I am a 42-year-old lady having diabetes for the last 10 years. I am overweight and my blood glucose levels are uncontrolled. Just three days back I found out that I am having issues with my kidney. As soon as I saw the bulge near my hips, I was afraid and tried to find out the cause to ease my restlessness. But when I searched for the symptoms online it showed me a shocking result. I think my kidney is palpable and I am having kidney failure. I need immediate help. Please tell me what I should do?

Ans: Diabetes can lead to kidney disease if the blood glucose is uncontrolled for a long period however there can be several reasons for the bulge you feel and searching for a critical diagnosis like this one, online is not the right thing to do. Sometimes what the search engine suggests might not be accurate and can cause more harm than good. If you are well aware of the condition, searching for medical information online can help you gain information from a trusted site. However, self-diagnosis through the use of search engines, on the other hand, can lead users to believe that a simple headache is a serious complex issue, increasing unnecessary nervousness and fear. In some cases, people tend to even self-medicate themselves which can turn fatal. There is a chance that the information you find online is incorrect or misleading. The issue is that Google's ranking factors frequently favour well-optimized articles over credible and reliable sources. Besides a diagnosis is made with the clinical assessment which can only be done by a qualified doctor who has spent years studying medicine and is equipped with the right information and experience to make the correct diagnosis and suggest further treatment. So, when you have doubts concerning your health it is best to talk to the doctor rather than searching for the symptoms online. Please visit your doctor and understand the cause of your symptoms and follow his/her advice regarding treatment.

2. I am a 35-year-old man having diabetes for 6 years. I am stuck in Dubai due to some official commitments. I am having a throat infection. I am only comfortable with my diabetologist in India. At her clinic, she is providing online appointments but I am not sure if online consultations would be helpful, as she won't check me personally and would give me less time. I am confused about whether I should take the appointment or not?

Ans: Yes, you should consider taking the online appointment. Telemedicine or online doctor consultation is a fairly new concept which picked up momentum during the pandemic. It is a great alternative if you are unable to visit the doctor in person at a clinic or hospital, just like in your case. Online consultations may not replace the traditional physical consultations but they do allow for a personal connection with your treating physician who is well aware of your medical history and current treatment regime. This means that in the online consultation, your doctor can at least advise you the change in treatment protocol or refer you to a specialist. You save on time before you can actually meet her and can prevent any complications. Even though your doctor might not be able to check you physically, she can still observe through video consultations. To get the best out of the consultation, it is a good practice to note down your symptoms and recent changes and communicate them to your doctor.

3. I am a 35-year-old man and I got diagnosed with diabetes recently. My father also has diabetes for the last 10 years but is managing on oral medications. When I visited the doctor for my treatment, I was shocked to note that he started me on a once-daily insulin injection. I have just been diagnosed and he is putting me on insulin while I have seen other people having diabetes for more than 5-6 years all on medications. I am disappointed with my doctor and losing trust in him. Should I change the doctor?

Ans: It is a myth that insulin should be initiated only when oral medications do not work. In fact, the early initiation of basal insulin has been shown to improve blood glucose control and provides long term protection to the organs. This is a treatment strategy supported by international guidelines. Early initiation of insulin helps to give the beta cells of the pancreas 'rest' and therefore preserves the β-cell mass. Timely insulin initiation helps prevent diabetes progression, reduces the risk of complications and has less serious adverse effects. Hence what your doctor has suggested is beneficial for your long-term health. Always trust your doctor and his/her experience. With newer research and advancements, the treatment protocols also get updated and you need to trust your doctor with these judgements for the best of your health.

4. I am having diabetes for 4 years and I planned to lose weight. My gym trainer provided me with a free diet plan along with an exercise package for weight loss. In the diet, he increased my protein intake by including 200 g of chicken, 6 whole eggs, a whey protein shake and reduced carbohydrate intake by just allowing one chapati in the meals a day. I feel very bloated and one day I started sweating profusely and when I checked my blood glucose level it was 62 mg/dL. Should I continue the diet and exercise plan?

Ans. A certified personal trainer is a fitness professional with education and/or experience in exercise science. They do not have expertise in nutrition. A dietitian on the other hand is qualified in accessing your nutritional health status and providing you with the right guidance when it comes to diet. Including a very high protein and low carbohydrate diet without making any adjustments in medications is not correct. Remember firstly that you need to take a customised meal plan from a qualified dietitian who after understanding your lifestyle and current dietary practices will plan the diet which will suit you. Also whenever you make any change in your diet or exercise pattern you must inform the treating doctor so that he/she can make the necessary changes in the medication dosage to avoid high or low glucose levels. You must surely continue with the healthy lifestyle, just keeping in mind taking professional help from the right specialist who has expertise in his/her field.

The Impact of Dr. Google on Doctor-Patient Relationship

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Over the past decade, the creation of a powerful instrument such as the 'Internet', as well as access to it, has progressed at a breakneck speed. In late 2017, the world's Internet users numbered 3.7 billion. This figure grew to 4.9 billion in 2021. The demands of society have evolved as new opportunities have developed.

The internet has gained significant importance as a global source of information, including medical/health information. Many patients and their relatives, particularly those in urban areas, have easy access to the internet and access it extensively to seek medical information. There are numerous health-related websites that are visited by millions of individuals every day. Researchers have observed that in the past few years, a new type of patient has emerged: the “E-patient”, who actively acquires information regarding health and diseases via “Googling”. People turn to 'Dr Google' to look for information about their symptoms and health conditions. This is both a boon and a bane as patients are well-versed, before a visit, which allows them to ask relevant and well-informed questions. However, not all the information available on the internet is authentic and can be misleading.

Impact of Dr Google on the Doctor-Patient Relationship

Over the last few decades, the interactions between patients and doctors have shifted. Consumer liberty in health care is on the rise. Education and communication between health care consumers and professionals is now a two-way exchange, as opposed to the previous one-way information transfer technique. The dynamics of the doctor-patient interaction are influenced by Dr Google. In several nations, the number of complaints against doctors is on the rise. Patients are influenced by the digital revolution where information on anything is available at the click of a button. So many times, reading this kind of easily available health information coupled with half knowledge on the patient’s side leads to mistrust, uncertainty, and discouragement from visiting a qualified physician. Even if they do visit a doctor, patients can flood a busy physician with irrelevant questions due to the mountain of information they have gathered beforehand from the internet. This strains the patient-doctor relationship leading to dissatisfaction at both ends. Blind faith in a doctor’s treatment is replaced by suspicion from too much-unfiltered information using search engines.

A few years back, the first medical contact was the family doctor, who is now being displaced by the internet. Before the internet, patients got medical advice from friends, neighbours, family, etc. which is exactly what Google is doing now but with a greater amount of information available. Many times, the information a patient seeks is not even relevant to their situation. The search shows up serious health conditions even for a basic symptom like fatigue which is absolutely irrelevant in the patients’ case but can lead to stress and anxiety. A number of studies state that doctors agreed that patients who conducted an internet search prior to their

visit require additional consultation time, and they recommend new investigations and seek the advice of a super-specialist. A suspicious patient uses the information received from the internet to test the clinician's knowledge. This has led to the practice of 'Defensive Medicine'. This means doctors may be recommending a diagnostic test or treatment that is not essentially the best option for the patient but mainly helps to protect the doctor against any allegations by the patient. Clinicians state they feel dominated by patients, which results in a strained doctor-patient relationship, which could further affect the overall health of a patient.

Patients should realize that 'googling' or consulting 'Dr Google' for health information has to be limited to a source of information only about the disease condition. It 'CANNOT' replace a qualified health professional who spends years in medical training to get qualified to practice medicine. Correct interpretation and diagnosis after proper physical examination can be done by doctors only. One has to trust the treating physician for all the medical decisions. It is the patients trust in the doctor that motivates him/her to do their best for the patient. A doctor-patient relationship is the basic element in the ethical principles of medicine and is built on trust, respect and good communication both ways.

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Did You Know?

There is a Condition Called White Coat Hypertension?

Most people are aware of hypertension, but very few are aware of White Coat Hypertension (WCH) which occurs due to a change in blood pressure levels due to the presence of a physician or another health professional and is characterized by an elevated clinic blood pressure with normal ambulatory or home blood pressure. When compared to patients with normal blood pressure, WCH has been demonstrated to raise the relative risk of sustained hypertension by nearly thrice. Also, WCH can impair cardiac function and raise the risk of carotid atherosclerosis when compared to normotensive (having normal blood pressure) patients. The European Society of Hypertension (ESH) has published treatment guidelines for WCH based on limited evidence. Due to their higher risk of developing sustained hypertension and target organ damage, individuals with WCH and no additional cardiovascular risk factors should be managed with lifestyle adjustments and regular monitoring.

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Diabetes Facts and Figures

A study was conducted by Dixit JV et al. (2021) to understand the quality of diabetes care received by the people in India. Considering the increasing trend of diabetes in all regions of India and the inadequacy of qualified doctors, it is likely that care received by people having diabetes may vary in quality. Through this study it was observed that:

- 19.3% of the people having diabetes received care from doctors who were specialized in Diabetology/Endocrinology.
- 41.5% received diabetes care from an adequately qualified doctor (MD/DNB medicine).
- 30.7% received diabetes care from non-qualified doctors.
- 8.3% did not know the qualification of their treating doctor.

Resource:

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What's Trending? Implementation of EMR in Healthcare Industry

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For centuries, medical records have been kept on paper as it is one of the simplest methods to store the data with low implementation cost. However, it has a number of drawbacks, as it is a very fragile medium that necessitates a large amount of storage space, and only one person can access it at a time.

The most significant issue with paper records is the challenge to access them on time; as medical practitioners frequently require patient data immediately.

The advancement of technology has changed the way the entire healthcare industry functions. An electronic medical record (EMR) exists as an electronic version of the paper-based record. It is a computer-based system for storing, organizing, and retrieving information about patients, and holds tremendous expectations for improving the quality and safety of healthcare. An electronic medical record (EMR) can store a variety of data, including the patient's full name, complete address, date of birth, gender, person to contact in an emergency, insurance, medications, allergies, laboratory and test results; immunisation, medical-surgical, and hospitalization history; and documentation of the patient's progress assessment, vital signs, plan of care, education, and research that can be accessible from multiple locations within the hospital while maintaining patient privacy and confidentiality.

It is an important technological advancement that benefits the medical industry significantly. The development of electronic medical records can assist medical facilities to boost productivity and profits, improving the work processes, patient safety, and healthcare quality. Most countries are increasingly embracing electronic medical records (EMR). It has also resolved nearly 70% of prescription issues.

The key functions for safety, quality, and care efficiency that EMRs support are:

- Physicians have access to diagnoses, allergies, lab results, and prescription information.

- Providers in various care settings have access to current and previous test results.
- Providers and patients can communicate securely through the internet.
- Health records, disease management tools, and health information resources are all accessible to patients.
- Electronic data storage and reporting based on industry standards.
- Data analysis is possible with huge amount of patient data, to give better insight into treatment protocols and outcomes.

With the promising effects of EMR implementation in developing countries, more health care institutions are beginning to adopt the technology. However, the widespread application of EMR has revealed some issues of dispute in the EMR system.

The following are some of the most important barriers to adoption:

- High cost and low return on investment in case of small clinics.
- Training of staff for managing the EMR system.
- Failure to incorporate technology systems into clinical processes and workflow.
- Concerns about no updation in-spite of advancement in technology.
- Implementation and support resources are in short supply.
- Unavailability or inadequacy to address demands of rural or primary care centers.
- Concerns about technology's unforeseen negative implications.

The use of an EMR system has been proved to increase patient safety and eliminate the flaws of paper-based medical records. However, there are still a number of challenges surrounding EMR system implementation that need be properly examined in order to maximize the benefits of EMR.

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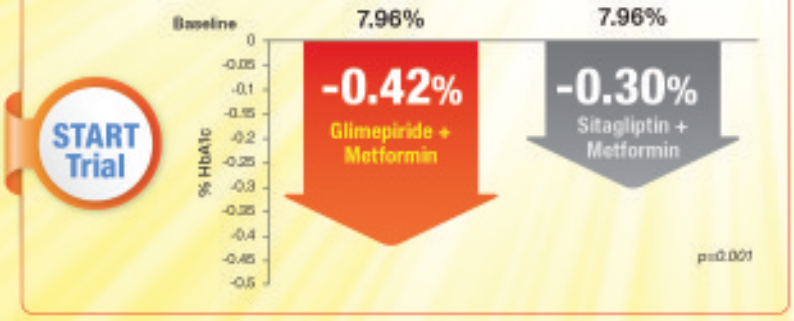

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1. Start trial- Gnanagiri TV et al., Indian J Endocrinol Metab. 2017 Sep-Oct; 21(5): 745–750.MLA. 2. Diabetes Obes Metab. 2017; 19:1189-1192. 3. Data on file.

Information
Metformin hydrochloride (as prolonged release) and glimepiride tablets
Glycomet-GP 0.5/Glycomet-GP 0.5 Forte/ Glycomet-GP 1/ Glycomet-GP 1 HS/ Glycomet-GP 2/ Glycomet-GP 2 HS/ Glycomet-GP 3/ Glycomet-GP 3 HS/ Glycomet-GP 4/ Glycomet-GP 4 HS/ Glycomet-GP 1 Forte/ Glycomet-GP 2 Forte/ Glycomet-GP 3 Forte/ Glycomet-GP 4 Forte.

Abridged Prescribing Information

Composition: • Glycomet GP 0.5 mg: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 0.5 mg. • Glycomet GP 0.5 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release forms) 1000 mg and glimepiride IP 0.5 mg. • Glycomet GP 1: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 1 mg. • Glycomet GP 1 HS: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 1 mg. • Glycomet GP 2: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 2 mg. • Glycomet GP 2 HS: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 2 mg. • Glycomet GP 3: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 3 mg. • Glycomet GP 3 HS: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 3 mg. • Glycomet GP 4: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 4 mg. • Glycomet GP 4 HS: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 4 mg. • Glycomet GP 1 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 1000 mg and glimepiride IP 1mg. • Glycomet GP 2 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release forms) 1000 mg and glimepiride IP 2mg. • Glycomet GP 3 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 1000 mg and glimepiride IP 3mg. • Glycomet GP 4 Forte: Each uncoated tablet contains: metformin hydrochloride IP (as prolonged release form) 1000 mg and glimepiride IP mg. **Indications:** Glycomet GP is indicated for the management of patients with type 2 diabetes mellitus (T2DM) when diet, exercise and single agent (metformin hydrochloride or glimepiride alone) do not result in adequate glycemic control. **Dosage and Administration:** Dosage of Glycomet GP should be individualized on the basis of effectiveness and tolerability while not exceeding the maximum recommended daily dose of glimepiride 8mg and metformin 2000 mg. Initial dose: 1 tablet of Glycomet GP should be administered once daily during breakfast or with the first main meal. Do not crush or chew the tablet. In several cases the tablet may remain intact during transit through the gastrointestinal (GI) tract and will be eliminated in feces as hydrated mass (ghost matrix). Patients should be advised that this is normal as all drug components have already been released during GI transit. **Contraindications:** In patients hypersensitive to glimepiride, other sulfonylureas, other sulfonamides, metformin or any of the excipients of Glycomet GP; pregnancy and lactation; diabetic ketoacidosis, diabetic pre-coma, in patients with eGFR<30 ml/min/ 1.73 m², acute conditions with the potential to alter renal function (dehydration, severe infection, shock, intravascular administration of iodinated contrast agents), acute or chronic disease which may cause tissue hypoxia (myocardial infarction, shock, cardiac/respiratory failure) hepatic insufficiency, acute alcohol intoxication, alcoholism. **Warnings:** Keep out of reach of children. Patient should be advised to report promptly exceptional stress situations (e.g. trauma, surgery, febrile infections). Blood glucose regulation may deteriorate and a temporary change to insulin may be necessary to maintain good metabolic control. In case of lactic acidosis, patient should be hospitalized immediately. **Precautions:** In the initial weeks of treatment, the risk of hypoglycemia may be increased and necessitates especially careful monitoring. Serum creatinine levels should be determined before initiating treatment and regularly thereafter: at least annually in patients with normal renal function. Intravascular contrast studies with iodinated materials can lead to acute alteration of renal function. In patients in whom such study is planned, Glycomet GP should be temporarily discontinued at the time of or prior to the procedure, and withheld for 48 hours subsequent to the procedure and reinstituted only after renal function has been re-evaluated and found to be normal. Use of Glycomet GP should be discontinued 48 hours before any surgical procedure. **Adverse reactions:** For glimepiride – hypoglycaemia; temporary visual impairment; GI symptoms like nausea, vomiting, abdominal pain, diarrhoea may occur; increased liver enzymes, cholestasis and jaundice may occur; allergic reactions may occur occasionally. For metformin – GI symptoms like nausea, vomiting, abdominal pain or discomfort may occur.

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Source: 1. JAPI 2020 68.51.-55 2. Data on File, 3. Cureus 2020; 12(9): e10.7759/cureus.1070 4. Diabetes Technology & Therapeutics 2019..2.79-84 5. Kalra, et al.: Sulfonylurea and combinations: International Task Force Indian J Endocr Metab 2018;22:132-57.

Priscribing information

Information: Metformin hydrochloride (as prolonged release) and glimepiride tablets. Glycomet-GP 0.5/Glycomet-GP 0.5 Forte/ Glycomet-GP 1/ Glycomet-GP 1/850/ Glycomet-GP 2/ Glycomet-GP 2/850/ Glycomet-GP 3/ Glycomet-GP 3/850/ Glycomet-GP 4/ Glycomet-GP 4/850/ Glycomet-GP 1 Forte/ Glycomet-GP 2 Forte/ Glycomet-GP 3 Forte/ Glycomet-GP 4 Forte.Abridged Prescribing Information **Composition:** Glycomet GP 0.5mg: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500mg and glimepiride IP 0.5mg.• Glycomet GP 0.5 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 0.5mg.• Glycomet GP 1: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 1 mg. • Glycomet GP 1/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 1 mg. • Glycomet GP 2: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 2 mg. • Glycomet GP 2/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 2 mg.• Glycomet GP 3: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 3 mg. • Glycomet GP 3/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 3 mg. • Glycomet GP 4: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 4 mg. • Glycomet GP 4/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 4 mg. • Glycomet GP 1 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 1mg. • Glycomet GP 2 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 2mg. • Glycomet GP 3 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 3mg. • Glycomet GP 4 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP mg. **Indications:** Glycomet GP is indicated for the management of patients with type 2 diabetes mellitus (T2DM) when diet, exercise and single agent (metformin hydrochloride or glimepiride alone) do not result in adequate glycemic control. **Dosage and Administration:** Dosage of Glycomet GP should be individualized on the basis of effectiveness and tolerability while not exceeding the maximum recommended daily dose of glimepiride 8mg and metformin 2000 mg. **Initial dose:** 1 tablet of Glycomet GP should be administered once daily during breakfast or with the first main meal. 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Defensive Medicine – A Bane to Healthcare

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Defensive medicine refers to the deliberate departure by doctors from standard protocol in view of safeguarding themselves against probable medical malpractice litigation. It involves encouraging non-essential investigations, referrals, performing unwarranted procedures, hospitalization, not admitting high-risk patients and not performing complex procedures. This is intended to protect themselves from legal liability under medical malpractice. The practice of defensive medicine is widespread at nearly all levels of the healthcare system globally.

The vicious cycle starts with doctors being involved in an unexpected adverse event, and/or patient-related harm; followed by getting charged by the patient or relatives; then the subsequent trauma related to the event leading to physical, cognitive, and behavioural consequences, including the practice of defensive medicine.

Violence against doctors is becoming very common and the prevalence in India seems to be increasing. Statistics show that over 75% of doctors across the country have faced at least some form of violence at some point of time in their life. Some of the doctors have been labelled as “killer doctors”, “murderers” etc. while they did their best to save the patient by working diligently for 24-36 hours at a stretch in stressful conditions with poor infrastructure. The past experiences of being prosecuted and penalized are associated with a more defensive behaviour on the part of physicians and surgeons.

Medicine cannot be black and white as protocols seem to indicate. Are people looking for doctors who strictly follow algorithms and guidelines? No, they should not. A doctor cannot transform patient care guidelines into a sequence of yes/no decisions without considering the complexity of medicine and the reasoning behind the clinical judgment. Guidelines are not a magic bullet for all healthcare conditions. A doctor considers the available evidence in the setting of a particular patient in a certain environment and interprets and utilizes it on the basis of clinical experience. Just like a recipe book does not warrant success in cooking, clinical guidelines cannot guarantee success in diagnosis/treatment. In truth, a standardized evidence-based practice, created on protocols and guidelines, is meant at improving population rather than individual health.

Hence the public needs to be educated that medicine is not a perfect science but rather an imperfect art, as it always has been. One cannot expect perfection and predictable results even in the most technologically advanced environment. Advent of Google and the availability of medical research articles on the Internet, has made the patient an avid consumer of medical data. Patients come to doctors with semi-literate opinions regarding diagnosis and treatment. The doctor has to act accordingly, bearing not only generosity in mind but also patient autonomy and the risk of suffering legal consequences. While taking the Hippocratic Oath, doctors vow to do everything in their power to help save a life. Yet, certain complications are difficult to avoid and they contribute majorly to medical malpractice suing.

Thus, continuous efforts should be made to educate the people about information sourced online being inappropriate if the clinical context is incorrrect. The media should realize the awfully damaging nature of reporting presumed medical errors and subjecting doctors or any healthcare worker to public trials through newspapers, television or websites before they are eventually judged in court. Executive Chairman of Fortis C-DOC Hospital for Diabetes and Allied Sciences, Dr Anoop Misra said “Doctors always try to save a patient based on knowledge, skill and experience. But sometimes they fail, often unexpectedly. Their hands should be strengthened not broken. Then only we can hope to have a crop of intelligent and efficient doctors for the next generation” in an article published in The Times of India. Finally, we urge patients, organizations, journalists, healthcare administrators, and policymakers, to cooperate and make healthcare systems better and safer for all.

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Type 1 Diabetes Then and Now

Late Dr. Vijay S. Ajgaonkar

Consultant Diabetologist, Founder of the Juvenile Diabetes Foundation, Maharashtra Chapter

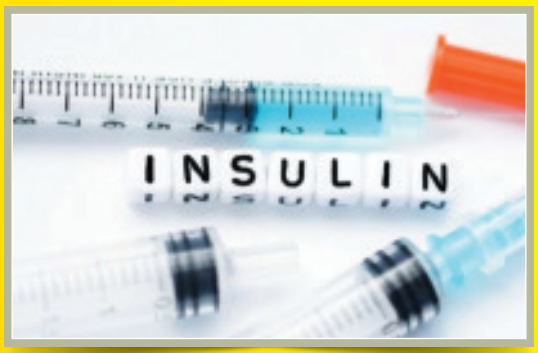
Having dealt with people with diabetes for more than five decades, I have had the privilege of observing many changes which occurred in the management of diabetes; but the changes that have occurred in the management of Type 1 diabetes are quite fascinating. What it was then and what it is now is worth studying.

In those days, the number of cases was very few, so there was total ignorance in the general public and even in the medical fraternity. Other than paediatricians, doctors from other specialities and family physicians hardly thought of childhood-onset diabetes.

That is why misdiagnosis was common in those days. A seven-year-old girl was taken to the operation table for exploratory laparotomy for suspected perforation of the appendix. Luckily when the anaesthetist noticed the child was already semiconscious and having acidotic breathing, he immediately took a second opinion of a paediatrician and the child was taken off the operation table and treated for diabetic acidosis. Some kids were wrongly diagnosed with encephalitis because of fever, unconsciousness and some with acute bronchitis because of fever and breathlessness.

Because of the rarity of such cases and ignorance on the part of the general public, the parents of such cases were keen on avoiding painful pricks and dietetic restrictions and preferred to try other types of treatments or went to the so-called holy people for easy solutions which unfortunately gave disastrous results.

This was the time we also realised that mere medical treatment is not adequate; we have to provide a support system by forming a cohesive team of diabetologists and paediatricians interested in endocrinology, a psychiatrist to deal with social stigma and the parents and kids. The task was not easy. Those were the days of impure animal insulins, glass syringes, and needles of 25/26 gauge, sterilising syringes and needles by boiling in water and monitoring by urine sugar estimated by Benedict's test.



While boiling, the needles would hit the pan and would become blunt, causing pain while injecting insulin. Insulins available then were impure and of animal origin which caused local lipodystrophy, or allergic reactions. Longer-acting insulins had peaks causing more frequent hypos. Insulins available then had the strength of 40 units/mL. Diet advice was mostly negative and monotonous in nature with many restrictions. Because of fear of hypoglycemia, parents used to discourage physical activity. Admissions to school, securing jobs and getting married were common problems. Parents were overprotective as they were worried about hypo episodes. Even the family physicians would desist a nondiabetic person from getting married to a person with Type 1 diabetes.

With this picture, we doctors decided to tackle the problem by first arranging a get together of the kids and their parents by having a drawing competition. When 12 kids and their parents came, the feeling that only my child has this malady went out of the minds of parents and they gelled with each other. The feeling of isolation went away and acceptance became easier for all. This was followed by a monthly get together in which day to day care problems was discussed. Sometimes well-known personalities with chronic ailments would give an inspirational talk about how they handle their ailment.

Later in Christmas vacation, we were lucky enough to get a bungalow to hold a 4 days residential camp. There were 7 kids, 12 parents and 3 doctors. The camp not only included teaching sessions but also at the end of the camp, an assessment was done of how much the kids and parents have understood and practised. Kids were encouraged to take their own injections under the supervision of the doctors. Urine sugar estimation by Benedict solution was also demonstrated and the parents were also explained how to make minor adjustments to insulin doses. Kids were asked to observe the colour changes of the urine tests and note them with appropriate colours in a notebook. The camp was successful and changed the negative attitude to a positive one. We held a convocation ceremony and gave printed self-injector certificates to the kids, making them feel proud of their new status. On the last night, there was an entertainment programme performed by the kids showing their varied talents. In that, they performed a skit on hypoglycaemia.

As medical professionals, we also realised our local Indian circumstances and limitations in following western approaches, making us develop our own ways to tackle the challenges.

Then annual camps and monthly meetings became a regular feature. The number of kids with Type 1 diabetes started increasing more doctors joined the group and the need for a special clinic became evident. One of our colleagues offered his space to start initially a monthly clinic. Thereafter we got a bigger place from another NGO to conduct weekly clinics. Ultimately we could secure our own place. Over the years many developments took place in the field of diabetes management.

From the animal source, impure insulins to highly purified initially animal insulins and later to bioengineered human insulins and rapid & long-acting analogues was a giant step. Other significant steps like blood sugar monitoring at home, the use of disposable syringes instead of glass ones with fixed very thin needles; still later addition of pens and finally the pump has made insulin administration less painful but more complex.

There is a need to learn newer concepts like carbohydrate counting and glycaemic index from qualified dietitians. Meal planning has become liberal and less monotonous.

The addition of qualified dietitians, psychologists and diabetes educators to the healthcare team has been a leap in the progressive direction.

The holistic approach of our group started showing its impact. Kids started taking charge of their own diabetes management, became more self- reliant, parents were no more apprehensive and kids started growing in their careers in varied fields, getting married and having kids. They took part in varied activities like participating in hiking, running marathons, cycling from Kulu-Manali to Leh-Kargil and scaling the Himalayan peaks. This strengthened the belief that people with type 1 diabetes can lead normal lives if managed well.

Such has been the journey and advancement in science and research will ensure diabetes treatment spectrum will keep progressing with better approaches to care and patient outcomes.

360 Approach – Holistic Diabetes Care

Dr. Aditi Sood Kothari

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According to the International Diabetes Federation, globally 1 in 10 adults are living with diabetes. The numbers are predicted to go up to 643 million people having diabetes by 2030 and 783 million by 2045. These figures justify the demand for improved and increased diabetes care services. Diabetes (DM) is a complex condition which demands patients & caretakers to attend to multiple psychological, behavioural & environmental factors & their interactions. The first consultation with a newly diagnosed patient is described by health care professionals (HCPs) as being thorough which includes retrieving the patient's full medical history & detailed recordings of their diet & physical activities. When patients are seen by the same HCP, over a period of time the consistency & continuity of diabetes care is improved.

Managing DM most effectively can be done by expanding professional roles, team-based tactics & case management. The diabetes care team includes a Primary Care Provider(PCP) [This doctor or nurse practitioner or physician assistant offers routine medical care with physical exams, lab tests & prescriptions for medication]; an Endocrinologist/Diabetologist; Ophthalmologist; Podiatrist [also known as a foot doctor who is qualified to treat feet & lower leg problems]; Pharmacist; Dentist; Registered Nurse; Qualified Dietitian/Nutritionist; Certified Diabetes Educators (CDEs); Mental Health Professional; Fitness Professional. A general observation has been that before assigning partial responsibility for diabetes care to a team, the glucose control in patients has been varied, but managed with the help of a health care team gives better control and reduced HBA1c levels.

Diabetologist/Endocrinologist - Diabetes is an endocrine disorder and therefore falls under the care of an Endocrinologist or a doctor with a specialisation in diabetes care called as Diabetologist. They are the face of the multidisciplinary care team & provide leadership for versatile roles. They initiate clinical guidance in treating patients to decide the line of treatment, prescribe medications & refer to other specialists as per the patient's requirement. They direct the team to optimally make use of all the resources to provide the patient with an effective & competent support system for diabetes management & prevention of co-morbidities offering a cohesive approach. They also play an important role in the management of infections in people with diabetes. Their commitment is vital for a successful team to provide complete lifetime care resulting in patient satisfaction, improved quality of life & enhanced health outcomes with a lower cost burden on the patient as well as the society.

Certified Diabetes Educators (CDEs) are health care providers with wide training & skill, working with people having diabetes. They bridge the gap between the doctor and the patient. They help patients figure out how to manage diabetes in a way that fits with their routine, environment & family dynamics. They play a major role in imparting knowledge about primary prevention of diabetes, education & management for those newly diagnosed, prevention of secondary complications, & more complex management of diabetes. A CDE educates the patients on how to perform self-monitoring of blood glucose (SMBG), insulin injections demonstration, instruction on insulin storage and explains glycaemic targets [HbA1c- <7.0%, Pre-prandial - 80-130 mg/dL, Postprandial -

<180 mg/dL] & training of specific actions that should be taken based on readings (hypoglycaemia and hyperglycaemia management). The CDE motivates patients & their relatives to better adhere to the therapy & ensures regular follow-ups.

Qualified Dietitian is a critical member of the team who provides intensive nutrition education for the management of DM. In the paediatric population, a dietitian also assesses growth & development along with eating behaviours, food choices & meal patterns. The dietitian understands the diet and lifestyle of the individual and keeping in mind the medical history, plans a customised meal plan for the patient which is practical to follow and helps to achieve good glucose control. For people on insulin therapy or those having type 1 diabetes, patients may be entailed to dose insulin based on pre-meal blood glucose & carbohydrate content of their meals. This practice is known as carbohydrate counting & permits flexibility in meal patterns & portion sizes. Only a qualified dietitian can provide a detailed understanding of this concept and can empower the patients to make correct food choices in their routine life. The dietitian also evaluates goals & interventions routinely & revises the plan based on the patient's progress, assessment of nutritional status & weight. Dietitian provides counselling to patients & families on how dietary & lifestyle choices influence blood glucose control & help in the prevention of comorbidities. Studies suggest that the involvement of a qualified dietitian reduces long term complications of diabetes along with prevention [8% reduction or delay] of diabetes in adults with the implementation of lifestyle modification. The dietitian also plays an important role in imparting knowledge about practical skills like reading food labels and eating healthy when out.

Mental Health Professional is another very important member of the care team. People with diabetes undergo many psychological issues and the diagnosis of diabetes can bring a flood of emotions [depression, anxiety, eating disorders, denial, anger, sadness & stress]. They should have access to psychological support to ease the distress & improve self-management. Managing diabetes includes the constant need of making decisions & actions which may often provide unexpected & unsatisfactory outcomes. It often leads to frustration, diabetes burnout [a state of physical or emotional exhaustion caused by the continuous distress of diabetes] & disengagement from diabetes care. Psychologists can help patients learn effective strategies for behaviour change and to manage stressful situations better. They help people to deal with emotional reactions [distrust, guilt, anxiety] & learn to accept their condition. They help in managing mental well-being which is as important as physical well-being.

Fitness Professional - A physical activity specialist that may be an exercise physiologist/personal trainer/physical therapist can help curate exercises that are safe for a diabetes patient ensuring to get the most out of an exercise regime. It is important to work with a fitness professional who understands diabetes & its treatment well. Exercise is an important factor of lifestyle therapy for the prevention & treatment of diabetes. Guidelines recommend activity of a minimum of 150 min per week using a combination of resistance & endurance training at moderate intensity. Proper assessment should be

done by the trainer before starting the regimen for the risk of hypo/hyperglycaemia, cardiac complications & foot assessment to prevent complications. The doctor and fitness professional should be in sync with each other to prevent any complications and maximise the benefit of exercise.

Other than these care team members, specialists like ophthalmologists, cardiologists, nephrologists and podiatrists may be referred to for prevention and management of diabetes-related complications. Nurses and pharmacists also play a vital role to close the loop of 360° diabetes care.

Diabetes management requires a multi-disciplinary approach to ensure every need of the patient is taken care of. With the help of different specialists, patients can enjoy a good quality of life by achieving their health targets.

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Diabetes Educator Tip of the Month

Contributed by
Prajakta Paradkar

PGD Sports Science, Fitness & Nutrition, CDE

Tips for Work Life Balance for Doctors

There has been a constant rise in the workload for the physicians and the pandemic has only worsened this scenario. The World Health Organization (WHO) recommends a doctor-patient ratio of 1:1000 but many times the doctors are managing many more. It is of utmost importance that they take care of themselves and are able to have a work-life balance to provide the best service to patients along with leading a healthy life themselves. Here are some tips to work efficiently:

- **Create a task list:** It has been observed that creating a list of all the tasks assigned for the day improves memory, increases productivity, and helps clarify goals.
- **Prioritize which tasks are the most critical and urgent:** Instead of procrastinating on important tasks, focus on completing them first. Cut tasks that do not require immediate attention and focus on urgent pending tasks.
- **Use handouts:** To avoid any confusion and improve communication, make use of handouts. This will reduce unnecessary phone calls and save time.
- **Make effective use of a scheduling system:** To boost productivity and efficiency, dedicate resources towards developing a good scheduling system, and ensure that the entire staff understands it.
- **Evaluate before adding new services or using new equipment:** Don't start a new service or buy major equipment without a cost-benefit analysis. These investments can produce poor results and can occasion disputes among the practice owners, so make sure to evaluate before you leap.
- **Dedicate some time to a favourite activity:** Spend time in recreational activities or get back to hobbies as it helps to improve physical well-being, emotional health, and cognitive functioning which can benefit future productivity.

- **Opt for a healthy snack and stay hydrated:** Keep nuts and fruits near your table to snack on during breaks. Include beverages like infused water or buttermilk throughout the day to stay hydrated. Set hourly reminders to accomplish water targets for the entire day.
- **Break the cycle of prolonged sitting:** Make sure you get up from the seat after every 1 or 2 consults and take a 2-3 min walk before you sit again. This will keep the metabolism ticking and will avoid the negative health effects of sitting for long.

Superfood: Foxtail Millet

Foxtail millet - *Setaria italica* also known as Italian millet, is the most commonly consumed millet in India. Some of the Indian names are kangni, tenai, kakun and navane.

It is grown as a rain fed crop in India, China and Bangladesh. Many Ayurvedic and Unani practitioners recommend foxtail millet products due to their medicinal and nutritional properties.

Nutritional Facts

- Gluten-free and easy to digest
- Germination of Foxtail millet enhances the presence of bioactive compounds
- Low Glycaemic index
- Helps in weight management

Health Benefits

Hypoglycaemic effect: Foxtail millet has a low Glycaemic Index (GI). Low GI foods are known to improve insulin sensitivity, increase satiety, and lower hunger pangs.

Presence of complex carbohydrates, resistant starch and high fibre content in foxtail millet helps regularise blood glucose levels.

Presence of β-glucan and water-soluble gum helps in glucose metabolism.

Anti-oxidant activity: Presence of natural anti-oxidants in millets leads to a reduced risk of chronic diseases. Foxtail millet shows the presence of anti-oxidants in the bran rich layer.

Cardioprotective effect: Intake of foxtail millets improves lipid profile and blood pressure. Due to the presence of high amounts of stearic and linoleic acids, foxtail millet improves lipid profile.

How to Consume?

Various recipes can be made from foxtail millet like pulao, upma, porridges etc. Flour can be made from germinated foxtail millets and can be added to composite flours.

Recommended Intake

The recommended intake is 50g per day to improve glycaemic control, especially postprandial glucose.

Resources:

1. Seema Sharma, Dharmesh C. Saxena & Charanjit Singh Riar . Antioxidant activity, total phenolics, flavonoids and antinutritional characteristics of germinated foxtail millet (Setaria italica), *Cogent Food & Agriculture.* 2015; 1:1, 1081728, DOI: 10.1080/23311932.2015.1081728
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3. Wahlang B, Joshi N, Ravindra U. Glycemic index lowering effect of different edible coatings in foxtail millet. *J Nutr Health Food Eng.* 2018;8(6):404-408. DOI: 10.15406/jnhfe.2018.08.00303
4. Ren X, Yin R, Hou D, *et al.* The Glucose-Lowering Effect of Foxtail Millet in Subjects with Impaired Glucose Tolerance: A Self-Controlled Clinical Trial. Nutrients. 2018;10(10):1509. Published 2018 Oct 15. doi:10.3390/nu10101509

Recipe: Foxtail Millet Pulao

Serves: 2

Ingredients	Amounts
Foxtail millet	½ cup
Cumin seeds	¼th tsp.
Green Chili	1 no.
Finely chopped onion	1 no.
Ginger	1 inch
Curry leaves	4 no.
Turmeric powder	¼ tsp.
Diced carrots	¼ cup
Boiled green peas	2 cups
Finely chopped coriander leaves	For garnishing
Salt	to taste
Oil	1 tsp.

1 cup: 250 ml; 1 tablespoon: 15ml; 1 teaspoon: 5ml

Method

1. In a large pan, heat oil and add cumin seeds. Once it splutters, add green chilli, onions, ginger and curry leaves.
2. Once the onion turns translucent, add turmeric powder, carrots, and peas. Mix well and cook for a minute.
3. Add foxtail millets and sauté them for a few seconds. Pour 4 cups of water, add salt and bring it to a boil. Simmer it for about 15 minutes or till water is absorbed and the foxtail is cooked.
4. Serve hot and garnish it with coriander leaves.

Dia-Games

Match the Following:

A	B
National Doctors Day (1st July)	Dr. Frederick Banting
India's first female doctor	Prof. M. Viswanathan
Doctor who discovered insulin	Birth & Death Anniversary of Dr. Bidhan Chandra Roy
First doctor to use insulin in India	Dr. Anandi Gopal Joshi
Father of Diabetology in India	Dr. J.P. Bose

Answers:

A	B
National Doctors Day (1st July)	Birth & Death Anniversary of Dr. Bidhan Chandra Roy
India's first female doctor	Anandi Gopal Joshi
Doctor who discovered insulin	Dr. Frederick Banting
First doctor to use insulin in India	Dr. J.P. Bose
Father of Diabetology in India	Prof. M. Viswanathan

Patient Speaks

I am Simi Bhatia, a 55-year-old woman having diabetes for the last 8 years. My blood glucose levels have been well maintained during this time with the advice and help from my doctor and diabetes educator as well as by following a healthy lifestyle.

However, when I was first diagnosed with diabetes I was very confused and scared. During routine blood tests, my blood glucose levels were in the high range and my HbA1c was over 7. I visited my doctor and he explained the condition and the changes I would need to make in my lifestyle and started me on medications. He explained that I needed to exercise and eat healthily and he asked me to follow the prescription for three months and then come back for a follow-up. Once back home I soon began getting a lot of advice from family and friends on how to manage my condition. I was told medications were not good and to avoid taking them and was given a range of home remedies to try which I was promised would give very good results. So then I started experimenting with everything from karela juice to overnight soaked chopped ladyfinger. I tried each of the suggestions and had mixed results.

After three months of various trials when I checked my HbA1c it had gone up to 9. That's when I went to a DE who patiently explained to me the importance of going to the doctor and taking medications as prescribed and that there was nothing wrong with the same. She also explained that trying certain home remedies was fine but only as adjuncts and they cannot replace medications. Also, the doctor needs to be aware of all the new diet and exercise regimes followed as the medication dosages would have to be adjusted accordingly. She asked me to go through my daily routine with her and following the same counselled me on my eating patterns. My DE gave me many useful tips which were practically possible and helped me in managing my diabetes better. I am very thankful to my doctor and my DE for guiding me. With their help, I have been successful in keeping my blood glucose in range and leading a healthy lifestyle.

NOTES

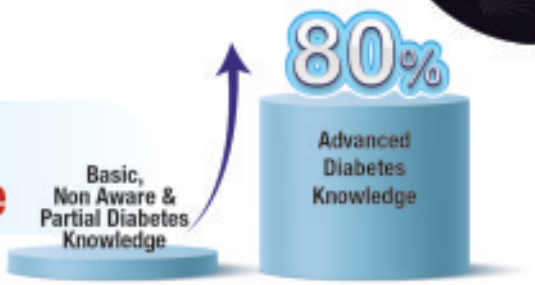
Beat Diabetes Win Life

Published in D-TechCon

D-TechCon World Congress OF DIABETES TECHNOLOGY

For all your new & existing people with diabetes

Diabetes Knowledge Improvement with this course



Diabetes Education Certificate Course In your name

Simple & easy steps for patients

- Scan QR
- Choose from 12 languages
- Access course (12 Modules)

12 Must to know topics

- Basics of Blood Sugar
- Understanding High Blood Sugar
- Blood sugar monitoring
- Know your Risk
- Heart & Kidney link
- Diabetes & footcare
- Diabetes & Eyes
- High Blood sugar & Immunity
- Medication adherence
- Self management of Blood sugar
- Safe feasting & fasting
- Healthy habits

Well informed adherent patients

- Patients to give tests to check their knowledge on each
- Reports are visible in dashboard
- Certificates and badges will be sent on your behalf

An awareness initiative by USV

Ref.: Dr rajeev chawla et al, World congress of diabetes technology 2022.

In T2DM Across Continum,

Start with

Glycomet®-GP 1/2

Metformin Hydrochloride 500 mg SR + Glimepiride 1/2 mg

Source: 1. JAPI 2020 68,51.-55 2. Data on File, 3. Cureus 2020; 12(9): e10.7759/cureus.1070 4. Diabetes Technology & Therapeutics 2019,.2,79-84 5. Kalra, et al.: Sulfonylurea and combinations: International Task Force Indian J Endocr Metab 2018;22:132-57.

Priscribing information

Information: Metformin hydrochloride (as prolonged release) and glimepiride tablets. Glycomet-GP 0.5/Glycomet-GP 0.5 Forte/ Glycomet-GP 1/ Glycomet-GP 1/850/ Glycomet-GP 2/ Glycomet-GP 2/850/ Glycomet-GP 3/ Glycomet-GP 3/850/ Glycomet-GP 4/ Glycomet-GP 4/850/ Glycomet-GP 1 Forte/ Glycomet-GP 2 Forte/ Glycomet-GP 3 Forte/ Glycomet-GP 4 Forte Abridged Prescribing Information **Composition:** Glycomet GP 0.5mg: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500mg and glimepiride IP 0.5mg.• Glycomet GP 0.5 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 0.5mg.• Glycomet GP 1: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 1 mg. • Glycomet GP 1/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 1 mg. • Glycomet GP 2: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 2 mg. • Glycomet GP 2/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 2 mg.• Glycomet GP 3: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 3 mg. • Glycomet GP 3/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 3 mg. • Glycomet GP 4: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 500 mg and glimepiride IP 4 mg. • Glycomet GP 4/850: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 850 mg and glimepiride IP 4 mg. • Glycomet GP 1 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 1mg. • Glycomet GP 2 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 2mg. • Glycomet GP 3 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP 3mg. • Glycomet GP 4 Forte: Each uncoated tablet contains metformin hydrochloride IP (as prolonged release form) 1000mg and glimepiride IP mg. **Indications:** Glycomet GP is indicated for the management of patients with type 2 diabetes mellitus (T2DM) when diet, exercise and single agent (metformin hydrochloride or glimepiride alone) do not result in adequate glycemic control. **Dosage and Administration:** Dosage of Glycomet GP should be individualized on the basis of effectiveness and tolerability while not exceeding the maximum recommended daily dose of glimepiride 8mg and metformin 2000 mg. **Initial dose:** 1 tablet of Glycomet GP should be administered once daily during breakfast or with the first main meal. Do not crush or chew the tablet. In several cases the tablet may remain intact during transit through the gastrointestinal (GI) tract and will be eliminated in feces as hydrated mass (ghost matrix). Patients should be advised that this is normal as all drug components have already been released during GI transit. **Contraindications:** In patients hypersensitive to glimepiride, other sulfonylureas, other sulfonamides, metformin or any of the excipients of Glycomet GP; pregnancy and lactation; diabetic ketoacidosis, diabetic pre-coma, in patients with eGFR<30 ml/min/ 1.73 m2, acute conditions with the potential to alter renal function (dehydration, severe infection, shock, intravascular administration of iodinated contrast agents), acute or chronic disease which may cause tissue hypoxia (myocardial infarction, shock, cardiac/respiratory failure) hepatic insufficiency, acute alcohol intoxication, alcoholism. **Warnings:** Keep out of reach of children. Patient should be advised to report promptly exceptional stress situations (e.g. trauma, surgery, febrile infections). Blood glucose regulation may deteriorate and a temporary change to insulin may be necessary to maintain good metabolic control. In case of lactic acidosis, patient should be hospitalized immediately. **Precautions:** In the initial weeks of treatment, the risk of hypoglycemia may be increased and necessitates especially careful monitoring. Serum creatinine levels should be determined before initiating treatment and regularly thereafter: at least annually in patients with normal renal function. Intravascular contrast studies with iodinated materials can lead to acute alteration of renal function. In patients in whom such study is planned, Glycomet GP should be temporarily discontinued at the time of or prior to the procedure, and withheld for 48 hours subsequent to the procedure and reinstituted only after renal function has been re-evaluated and found to be normal. Use of Glycomet GP should be discontinued 48 hours before any surgical procedure. **Adverse reactions:** For glimepiride - hypoglycaemia; temporary visual impairment; GI symptoms like nausea, vomiting, abdominal pain, diarrhoea may occur; increased liver enzymes, cholestasis and jaundice may occur; allergic reactions may occur occasionally. For metformin – GI symptoms like nausea, vomiting, abdominal pain or discomfort may occur.

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