



پری وینشن فرسٹ نیوزلیٹر کی جانب سے قارئین کو

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عید مبارک



PCDA Pakistan collaborates #HERCircle Event in Faisalabad:

Empowering Women's Health on International Women's Day 2026

Report: **Dr. Ahmad Shahzad**

Head of the Central Region of PCDA Pakistan

PCDA Pakistan's Central Region, led by the most dynamic "Star of PCDA", Dr. Ahmad Shahzad was one of the leading collaborator alongwith Lyalpur Diabetes Foundation (LDF), Pakistan Society of Internal Medicine (PSIM), Pak-Korea Nutrition Center (PKNC) and Faisalabad Medical University (FMU) played host to a pivotal event on Sunday, March 8th, 2026, at Serena Hotel in Faisalabad dedicated to advancing women's health: #HERCircle: Elevating Women's Health, Together.



The exclusive gathering for invited healthcare professionals (HCPs) commemorated International Women's Day with a focus on comprehensive discussions around

female well-being. It was a wonderful and inspiring gathering where with the esteemed Female HCPs of the city and 103 distinguished Healthcare Professionals

from multiple specialties participated. The event created a valuable platform to discuss important aspects of Diabetes and Obesity management.

The event, themed "GIVE TO GAIN," featured a distinguished panel of experts who shed light on various critical aspects of women's health. The agenda, running from 4:00 PM to 6:00 PM, included a series of insightful presentations and a closing Iftar.

Highlights from the day's discussions included:

Obesity Uncovered: Balancing the Scale with Nutrition:** Prof. Dr. Hooria Aamir delivered a key address on understanding obesity and the crucial role of nutrition in managing it effectively.

Weight & Women's Health:

A Hormonal and Clinical Perspective:** Dr. Samina Haq provided valuable insights into the intricate relationship between weight, hormonal balance, and overall women's health from a clinical standpoint.

Debunking Myths vs. Realities about Semaglutide: Dr. Ahmed Shahzad tackled common misconceptions surrounding Semaglutide, clarifying its role and efficacy in modern treatment paradigms.

Weight Management Approach: Semaglutide - The GLP-1 Pioneer Still Leading the Way: Prof. Dr. Aamir Shaukat elaborated on Semaglutide's continued leadership in weight management as a GLP-1 pioneer, highlighting its significant impact.





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The event concluded with an Iftar, fostering networking and further discussion among the attending healthcare professionals. The organizers emphasized their commitment to advancing healthcare solutions and knowledge through such dedicated platforms. The initiative underscores the



ongoing efforts to empower healthcare providers with the latest research and approaches to better serve women's health needs across the nation.

The session highlighted strong clinical evidence and also marked a clear scientific difference between the original brand and copycat molecules.

The interactive discussion helped clarify many clinical concepts, and HCPs left the event with enhanced understanding and confidence in evidence-based obesity and diabetes management.

Head of the Central Region of PCDA Pakistan, Dr. Ahmad Shahzad expressed his feeling of thankfulness and gratitude to all the respected doctors who spared their valuable time and contributed to making this event a great success.

PCDA Highlights Renal Health on World Kidney Day 2026: Dr. Muhammed Saleem Emphasizes Diabetes Complication Prevention

On the recent observance of World Kidney Day 2026, the Primary Care Diabetes Association (PCDA) Pakistan, proudly amplified a critical message through an insightful media interview with Dr. Muhammed Saleem, Head of the AJK/GB Region of PCDA Pakistan. Dr. Saleem took the opportunity to shed light on a pressing health concern: the prevention of renal complications of diabetes in individuals living with the condition.



Lifestyle Modifications: reducing salt intake, managing blood pressure/diabetes, and avoiding excessive painkiller use. 1 in every 10 people worldwide suffers from chronic kidney disease (CKD) Yet, kidneys are seldom discussed, and only a few have chronic kidney disease awareness. On World Kidney Day 2026, let's explore the kidneys more, and also what we can do to keep our kidneys happy, healthy, and wise to function till the end. Read this article till the end, it is important to be aware.

Awareness and Education: The Head of AJK/GB Region for PCDA stressed the need for widespread public awareness campaigns and patient education programs to empower individuals with diabetes to take an active role in their kidney health.

Dr. Saleem's interview serves as a timely reminder from the PCDA that while diabetes poses significant challenges, understanding and preventing its renal complications is an achievable goal through collective effort, informed choices, and consistent medical care. His insights reinforce PCDA's commitment to improving the lives of people with diabetes across Pakistan.

World Kidney Day 2026 is observed on March 12, 2026, in Pakistan and globally, focusing on the theme "Kidney Health for All – Caring for People, Protecting the Planet". It highlights the link between kidney health, environmental impact, and the need for early detection of chronic kidney disease (CKD). The campaign emphasizes preventing kidney disease through healthy habits: drinking enough water,

World Kidney Day is an internationally observed day to spread much-needed awareness about our major body organ—the kidneys. World Kidney Day is celebrated on the third Thursday of the month of March every year. This year, World Kidney Day 2026 comes up with a theme of Kidney Health for All – Caring for People, Protecting the Planet.

This year, the theme runs a whole year of activities to spread awareness about the link between environmental factors and kidney health. With some natural, genetic, and health reasons, unhealthy environmental factors like air pollution, heat, and dehydration increase the risk of kidney diseases. On the other hand, some kidney treatments also impact the environment. Therefore, environmental sustainability is also important.

In his impactful interview, Dr. Saleem underscored the alarming rise of diabetes-related kidney disease and stressed the proactive measures necessary to safeguard kidney health. He highlighted that diabetes is a leading cause of chronic kidney disease (CKD) worldwide, and with diligent management, many of its severe kidney-related consequences can be avoided or significantly delayed.

Key takeaways from Dr. Saleem's address included:

Early Detection is Crucial: He emphasized the im-

portance of regular screening for kidney damage in all people with diabetes, including routine urine tests for albumin and blood tests for kidney function. Early detection allows for timely interventions that can slow disease progression.

Optimal Diabetes Management: Dr. Saleem reiterated that maintaining strict control over blood sugar levels (HbA1c), blood pressure, and cholesterol is fundamental. These are the cornerstones of preventing microvascular complications, including those affecting the kidneys.

Taking care of diabetes
diligently is important for
safeguarding



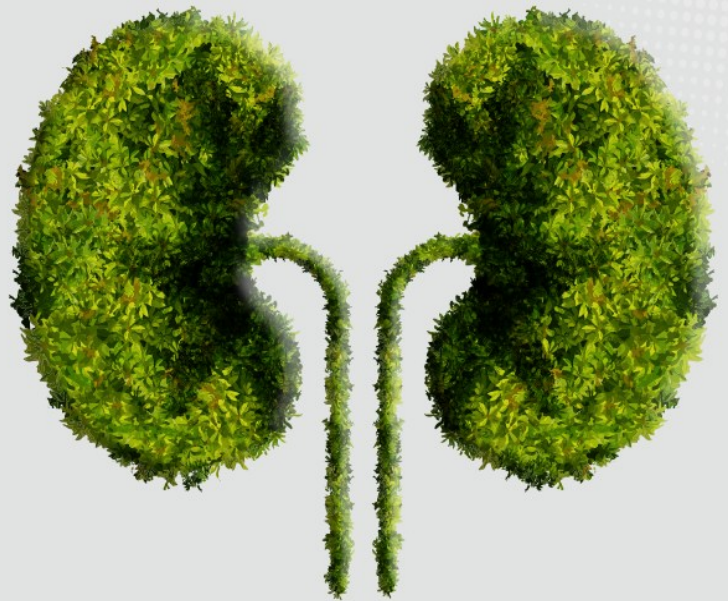
kidneys

and all other vital organs!



PCDA Pakistan

Committed for quality Care
of diabetics at
Primary Level



Across the globe, every 1 out of 10 people is affected by CKD. This situation is also not negligible in Pakistan, where more than 17 million people were affected by chronic kidney disease in 2021. Moreover, according to the doctors, around 21 per cent of the adults were affected by chronic kidney disease in 2025 in Pakistan.

Moreover, the treatments of chronic kidney disease range from medication to dialysis and kidney transplantation. Which, of course, calls in your resources and body strength.

CKD, is a major global health challenge

Before we discuss the symptoms of this health condition, it is important to get through the multifaceted functions of this amazing body organ. Kidneys play a vital role in

body cleaning. It filters out 50 gallons of fluid every day.

Moreover, it works to maintain the balance of body fluids, regulates blood pressure, and supports overall body health. It also produces hormones for red blood cells. However, if due to any risk factor, the kidneys lose their function, the person develops CKD.

Chronic Kidney Disease is a long-term (over the period of 3 months), progressive loss

of kidney function. This health condition also leads to other health problems over the period of time. Heart disease and stroke are some of them. Usually, this disease is silent and develops slowly. It has a total of five stages in the treatment process.

Early prevention is the best possible cure for chronic

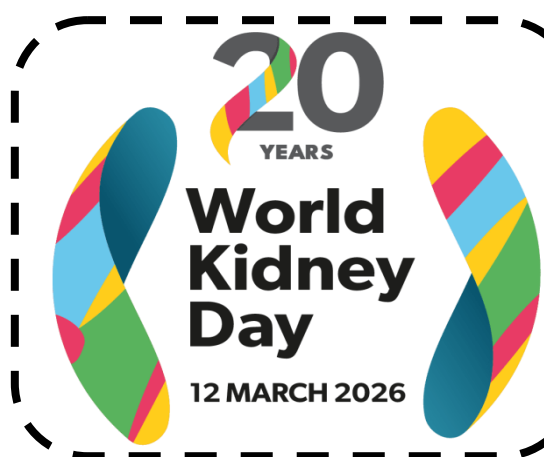
kidney disease. For this early prevention, awareness is the only tool. In the following, we will be dis-

risk of kidney failure and dialysis.

Diabetes and high blood pressure are the primary risk factors for chronic kidney disease. Therefore, systematic screening is encouraged if these chronic health conditions run in your family, either on the maternal or paternal sides.

Furthermore, if you are poor at emotional regulation and management, you are at risk of developing hypertension, diabetes, or even kidney conditions. Therefore, try to consult a professional if you struggle with depression, anxiety, and chronic low mood.

Moreover, Sodium puts pressure on blood vessels, and the kidneys have to try harder to wash out the body's wastes. Hence, if your salt intake is more than 1tsp per day, you are at risk.



cussing the risk factors to get yourself into regular monitoring to ensure early detection and prevention of the

Pakistan faces a significant diabetes epidemic. In 2021, approximately 33 million people were diagnosed with diabetes, a sharp increase from 5.2 million in 2000. By 2024, this number rose to 34.5 million, with projections indicating it could reach 70.2 million by 2050. Pakistan has the highest prevalence of diabetes (among adults aged 20-79) and the fourth-highest num-

ber of adults with diabetes in the world .

Nearly 40% of people with diabetes will eventually develop kidney disease. Uncontrolled diabetes and high blood pressure are identified as primary drivers of this surge in kidney patients.

Dr. Muhammad Wasif Baig, a consultant nephrologist in Faisalabad, highlighted that due to soaring numbers of

kidney patients, dialysis centers are increasingly unable to secure treatment slots. Shaukat Khanum Memorial Cancer Hospital and Research Centre emphasized that early detection is crucial for protecting kidneys. A study aimed at determining the prevalence of diabetic nephropathy among type 2 diabetes patients at a tertiary care hospital in Lahore found that 88% of participants had albuminuria (an early sign of

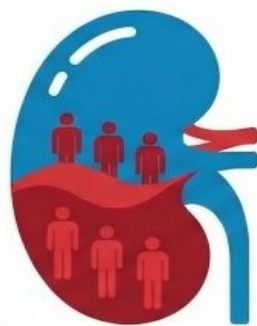
kidney damage) and 93% had elevated serum creatinine. SIUT PAKISTAN reported 22,000 new end-stage renal disease cases annually and that only 2.75% of patients have access to kidney transplants. These findings highlight that diabetic kidney disease is a major health crisis in Pakistan, closely linked to the escalating prevalence of diabetes and systemic healthcare challenges.

The Rising Tide: Chronic Kidney Disease in Pakistan



1 in 10 People Affected Globally

CKD maintains a consistent and significant presence across the global population.



17 Million+ Affected in Pakistan

As of 2021, over 17 million individuals in Pakistan were living with CKD.

21% Adult Prevalence by 2025



Doctors estimate nearly a quarter of Pakistan's adult population will be affected by 2025.

8 Golden Rules for Lasting Kidney Health

Daily Lifestyle Habits

- Be active, stay fit & Eat a healthy diet**
Maintain physical activity and proper nutrition as the foundation of kidney health.
- Keep appropriate fluid intake**
Ensure you are drinking enough water to help kidneys clear sodium and toxins.

- Don't smoke**
Smoking can lead to reduced blood flow to the kidneys and increase risk.

- Check your blood sugar & blood pressure**
Keep both levels in check as they are leading causes of kidney damage.

- Get tested & keep your emotions in check**
Seek testing for health conditions and manage stress for holistic wellbeing.

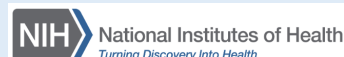
Medical Monitoring & Management

- Limit the use of inflammatory drugs**
Reduce reliance on over-the-counter anti-inflammatories that may harm the kidneys.

Bacteria play key role in kidney stones

Report: Dr. Shahid Akhter

Courtesy of



Nearly 1 in 10 people will experience a kidney stone sometime in their life. Kidney stones can be very painful when they exit the body in urine. Sometimes they require surgery to remove.

Kidney stones are made of minerals found in urine. Stones composed of the mineral struvite often contain bacteria. These bacteria are thought to contribute to stone formation. However, struvite stones make up less than 10% of all kidney stones. Most stones are made primarily of calcium and were long thought not to contain bacteria.

An NIH-funded research team, led by Drs. Kymora Scotland and Gerard Wong of UCLA, has found evidence challenging long-held belief about calcium-based kidney stones. The results were published on January 26, 2026, in *PNAS*.

Using high-powered microscopes, the researchers found bacteria on the surface and inside both struvite- and calcium-based kidney stones that were removed from patients during surgery. This removal was done in a sterile way to confirm that any bacteria seen were not accidentally transferred from the skin. The stones removed included calcium-based stones in which traditional clinical testing didn't detect bacteria.

The bacteria were organized to biofilms, communities of

microbes that stick both to each other and to the surface. The cells in a biofilm are typically embedded in various materials produced by the cells, including DNA (called extracellular DNA, or eDNA). But fragments of a calcium-based mineral that formed outside of a living organism did not have bacteria on or inside them. This indicated that the bacteria were associated specifically with kidney stones and not other calcium-based stones.

Staining the kidney stones with chemicals that bind to biofilm-related molecules revealed the presence of these molecules on both the surfaces and the insides of struvite and calcium-based stones. The biofilm-like structures seen in the microscope images were particularly rich in DNA and



a biofilm component called mannose. Again, the team found that mineral fragments from a non-living source did not have either of these molecules on or inside them.

The researchers also examined kidney stones that were removed from patients who had not tested positive for a urinary tract infection. They did this to prove that the bacteria did not come from a previous infection. Nearly half these stones were still found to harbor bacteria, including many calcium-based stones.

The results suggest that bacterial biofilms are a key component of kidney stones. The researchers propose that the eDNA and other molecules released in slow-

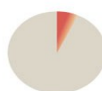
growing biofilms may provide sites where mineral fragments from a non-living source can clump to form kidney stones. Learning more about the link between bacteria and kidney stones could lead to new treatments that prevent or eliminate the m.

“This breakthrough challenges the long-held assumption that these stones develop solely through chemical and physical processes. Instead, it shows that bacteria can reside inside stones and may actively contribute to their formation,” Scotland says. “By uncovering this novel mechanism, the study opens the door to new therapeutic strategies that target the microbial environment of kidney stones.”



Struvite (Infection) Stones

Many of these patients have urinary tract infections, and a urease-producing bacteria causes the stones to form. Since UTIs are more common in females, it is more common to see this stone in females.



5-7%
of all kidney stones

Antimicrobial Stewardship in Diabetes: Optimizing Antibiotic Use in Primary Care



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Promoting responsible antibiotic use to improve infection management and limit antimicrobial resistance in patients with diabetes.

Abstract

Patients with diabetes are at increased risk of infections due to immune dysfunction, vascular complications, and metabolic abnormalities associated with chronic hyperglycemia. Consequently, antibiotics are frequently prescribed in primary care settings, sometimes without clear clinical indications. Inappropriate or prolonged antibiotic use contributes to antimicrobial resistance, adverse drug reactions, and increased healthcare costs. Integrating antimicrobial stewardship principles into routine diabetes care can help primary care physicians optimize antibiotic prescribing while improving patient outcomes.

Clinical Scenario

A 58-year-old man with long-standing diabetes attends a primary care clinic for routine follow-up. A urine test performed during evaluation shows bacteriuria, although he reports no urinary symptoms such as dysuria, frequency, or fever. Concerned about infection, he asks whether antibiotics are required. Should treatment be started, or would antimicrobial stewardship principles support avoiding unnecessary therapy? This scenario reflects a common dilemma in primary care

when laboratory results suggest infection but clinical symptoms are absent.

Introduction

Patients with diabetes frequently present with infections in primary care practice. Chronic hyperglycemia impairs immune responses and neutrophil function while compromising microvascular circulation, increasing vulnerability to bacterial and fungal infections³

Urinary tract infections, skin and soft-tissue infections, and diabetic foot in-

fections are among the most common infections encountered in patients with diabetes in primary care.

Consequently, patients with diabetes frequently receive antibiotics in outpatient settings. Studies suggest that approximately 30% of outpatient antibiotic prescriptions may be unnecessary⁵



highlighting the importance of antimicrobial stewardship in primary care. While antimicrobial therapy is essential when infection is present, inappropriate prescribing contributes to antimicrobial resistance and avoidable adverse effects.

Antimicrobial stewardship promotes appropriate antibiotic use through correct drug selection, dosing, and duration of therapy.

Because most antibiotics are prescribed in outpatient settings, primary care physicians play a critical role in antimicrobial stewardship and in limiting the emergence of antimicrobial resistance²

Why Antimicrobial Stewardship Matters in Diabetes Care

Research suggests that a substantial proportion of outpatient antibiotic prescriptions may be unnecessary or inappropriate⁵

In patients with diabetes, repeated healthcare encounters and prior antibiotic exposure increase the likelihood of infections caused by resistant organisms.

Practical Antimicrobial Stewardship Strategies in Primary Care

Accurate clinical diagnosis is fundamental to responsible antibiotic prescribing. Antibiotics should be prescribed only when there is clear clinical evidence of bacterial infection rather than colonization or noninfectious conditions²

Whenever feasible, microbiological testing should guide antibiotic therapy. Obtaining cultures before initiating an-

tibiotics helps identify the causative organism and allows targeted treatment.

When antibiotics are indicated, narrow-spectrum agents should be preferred whenever clinically appropriate⁴

Increasing evidence supports shorter treatment courses for many infections, which can reduce adverse drug effects and antimicrobial resistance⁶

Asymptomatic bacteriuria should not be treated with antibiotics in patients with diabetes except during pregnancy or prior to invasive urologic procedures⁷

Practice Tip Box – Antibiotic Stewardship Tips for Primary Care:

Prescribe antibiotics only when there is clear clinical evidence of bacterial infection rather than colonization or noninfectious conditions

Do not treat asymptomatic bacteriuria in patients with diabetes

Obtain appropriate cultures before initiating antibiotics whenever feasible

Prefer narrow-spectrum antibiotics whenever clinically appropriate

Use the shortest effective duration of therapy

Prevention: Reducing the Need for Antibiotics

→ Preventing infections can reduce the need for antibiotics in patients with diabetes.

→ Optimal glycemic control improves immune function and lowers infection risk³

→ Influenza and pneumococcal vaccines are recommended for adults with diabetes²

→ Education on hygiene practices, skin care, and early recognition of infection symptoms can also help prevent complications.

Conclusion

Antimicrobial stewardship should be considered an integral component of diabetes care in primary care settings. Through careful clinical assessment, appropriate antibiotic selection, and guideline-based treatment duration, clinicians can minimize unnecessary antibiotic exposure while maintaining effective infection management. Preventive strategies such as glycemic control, vaccination, and patient education further reduce infection risk. Responsible antibiotic use in primary care helps preserve the effectiveness of existing antimicrobial therapies for future patients.

Key Practice Points

→ Patients with diabetes are more susceptible to infections and frequently receive antibiotics in primary care settings.

→ Antibiotics should only be prescribed when there is clear clinical evidence of bacterial infection.

→ Asymptomatic bacteriuria in patients with diabetes generally should not be treated with antibiotics.

→ Narrow-spectrum antibiotics and shorter treatment durations help reduce antimicrobial resistance.

→ Preventive strategies such as glycemic control, vaccination, and patient education can reduce infection risk and antibiotic use.

References

1. World Health Organization. *Global action plan on antimicrobial resistance*. Geneva: WHO; 2015.
2. Centers for Disease Control and Prevention. *Core elements of outpatient antibiotic stewardship*. Atlanta (GA): CDC; 2023.
3. Casqueiro J, Casqueiro J, Alves C. *Infections in patients with diabetes mellitus*. *Indian J Endocrinol Metab*. 2012;16(Suppl 1):S27-36.
4. Barlam TF, Cosgrove SE, Abbo LM, et al. *Implementing an antibiotic stewardship program*. *Clin Infect Dis*. 2016;62:e51-77.
5. Llor C, Bjerrum L. *Antimicrobial resistance associated with antibiotic overuse*. *Ther Adv Drug Saf*. 2014;5:229-241.
6. Spellberg B, Rice LB. *Duration of antibiotic therapy: shorter is better*. *Ann Intern Med*. 2019;171:210-211.
7. Nicolle LE, Gupta K, Bradley SF, et al. *Clinical practice guideline for asymptomatic bacteriuria*. *Clin Infect Dis*. 2019;68:e83-e110.

Challenges Associated with controlling Infections in patients with diabetes

A review by: Dr. Shahid Akhter

Infections in patients with diabetes are often grouped into common infections that occur more frequently or severely, and rare "signal" infections seen almost exclusively in this population.

A. Skin and Soft Tissue Infections (SSTIs)

of complications like bacteremia (bloodstream infection).

2. Asymptomatic Bacteriuria: Bacteria in the urine without symptoms is much more common, especially in diabetic women.

3. Emphysematous Pyelonephritis: A rare, life-threatening necrotizing kidney infection that produces gas in the renal tissue.

C. Respiratory Infections

1. Pneumonia: Patients are at higher risk for community-acquired pneumonia, often caused by *Streptococcus pneumoniae* or *Klebsiella pneumoniae*.

2. Tuberculosis (TB):

Diabetes is a significant risk factor for the reactivation of latent TB.

3. Influenza: Diabetic patients are significantly more likely to be hospitalized or suffer complications during flu outbreaks.

D. Ear, Nose, and Throat (ENT) Infections

1. Malignant (Necrotizing) Otitis Externa: An aggressive outer ear infection that can spread to the skull base; it is found almost exclusively in elderly diabetic patients.

2. Rhinocerebral Mucormycosis: A rare, often fatal fungal infection of the nose, sinuses, and brain, typically occurring during diabetic ketoacidosis (DKA).

E. Other Site-Specific Infections

1. Osteomyelitis:

Bone infection that frequently occurs as a result of a deep, chronic foot ulcer.

2. Emphysematous Cholecystitis:

A severe, gas-forming infection of the gallbladder wall, seen more frequently in males with diabetes.

3. Fungal Infections:

Increased susceptibility to

superficial fungal issues like oral or vaginal thrush (candidiasis) and nail infections (onychomycosis).

The Challenges

Controlling infections in patients with diabetes mellitus is challenging because the disease acts as both a facilitator of infection and an inhibitor of the immune system. Uncontrolled hyperglycemia creates an environment that favors pathogens, while vascular damage and neurological impairment impair the body's natural defense mechanisms.

Key challenges associated with controlling infections in diabetes include:

1. Immune System Dysfunction

Impaired White Blood Cell Function: Hyperglycemia impairs neutrophils—the primary white blood cells that fight infection—reducing their ability to migrate (chemotaxis), engulf (phagocytosis), and kill bacteria.

B. Genitourinary Infections

1. Urinary Tract Infections (UTIs): These are more prevalent and carry a higher risk

Reduced Inflammatory Response: Monocytes and macrophages in diabetic patients often secrete fewer inflammatory cytokines (such as IL-1, IL-6) in response to infection, paradoxically leading to a weaker, delayed immune response.

Glycated Immunoglobulins: High HbA1c levels can cause glycation of antibodies, which may reduce their effectiveness in neutralizing

2. Pathophysiological Complications

Peripheral Vascular Disease (Angiopathy): Poor circulation prevents immune cells and antibiotics from reaching the site of infection effectively, especially in the feet.

Diabetic Neuropathy: Sensory loss prevents patients from feeling minor

injuries (e.g., foot injuries), leading to delayed treatment and progression to severe, deep-tissue infections.

Autonomic Neuropathy: This can lead to a "neurogenic bladder," increasing the risk of urinary tract infections due to urine retention.

Drug-Drug Interactions: Treatment for diabetes (e.g., certain oral antidiabetic agents) can interact with antibiotics or anti-tuberculosis drugs, complicating management.

Higher Resistance Rates: Diabetic patients often have higher rates of infections with antibiotic-resistant organisms, such as MRSA

3. Therapeutic and Treatment Difficulties

Head and neck

- Malignant otitis externa*
- Rhinocerebral mucormycosis*
- Periodontitis

Skin, nail, mucous membrane

- Fungal nail and skin infections
- Varicella zoster/shingles
- Oral and oesophageal candidiasis

Abdominal and liver

- Empysematous cholecystitis*
- Biliary tree infection
- Peritonitis

Perioperative

- Wound infection
- Vascular graft infection

Skin, soft tissue

- Cellulitis
- Necrotising fasciitis
- *Staphylococcus aureus* infection and colonisation

Systemic

- Sepsis
- Bacteraemia

Respiratory

- Community acquired pneumonia, especially
 - influenza
 - *Streptococcus pneumoniae*
- Tuberculosis
- Melioidosis

Genitourinary

- Asymptomatic bacteriuria
- Urinary tract infection
- Pyelonephritis
- Perinephric abscess
- Fungal (*Candida* spp.) cystitis*
- Empysematous cystitis and pyelonephritis*
- Candidiasis/thrush
- Fournier's gangrene*

Diabetic foot infection*

- Osteomyelitis

* Pathognomonic for diabetes/rarely encountered in patients without diabetes.

Figure 1. Infections that are more common in people with diabetes, or that have increased risk of hospitalisation or poorer outcomes.

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(methicillin-resistant *S. aureus*) or carbapenem-resistant *A. baumannii*, due to frequent hospitalizations and prior antibiotic use.

3. Therapeutic and Treatment Difficulties

Reduced Antibiotic Penetration: Due to vascular insufficiency, achieving a high enough concentration of antibiotics at the infection site is difficult, particularly in chronic infections like osteomyelitis.

4. Metabolic Complications

Infection-induced Glycemic Instability: Active infections typically increase blood sugar levels, which in turn fuels the growth of microorganisms, creating a vicious cycle.

Diabetic Ketoacidosis (DKA): Infection can trigger severe metabolic emergencies like DKA or Hyperosmolar Hyperglycemic State (HHS).

Hypoglycemia Risk: Aggressive treatment to lower blood glucose, particularly in the ICU setting, can lead to severe hypoglycemia, which increases mortality.

5. Specific High-Risk Infections

Diabetics are prone to, or exclusively suffer from, certain severe infections that are difficult to manage:

Diabetic Foot Infections (DFIs): Polymicrobial in nature, these often lead to limb amputation.

Rhinocerebral Mucormycosis: A rare, rapidly progressive, and often fatal fungal infection of the sinuses and brain that occurs almost exclusively in diabetics with DKA.

Malignant External Otitis: A severe, necrotizing infection of the ear canal caused by *Pseudomonas aeruginosa*.

Emphysematous Cholecystitis/Pyelonephritis: Infections causing gas formation in the gall bladder or kidneys.

6. Behavioral and Social Factors

Delayed Seeking of Care: Patients may not recognize early signs of infection, or may attribute symptoms to their diabetes, leading to delayed medical attention.]

Poor Compliance: Adherence to long courses of antibiotic therapy can be poor, leading to recurrence of infections.

Conclusion: *Effective management requires immediate and intensive control of blood glucose and targeted antibiotic therapy, alongside surgical intervention (debridement) when necessary.*

Antimicrobial resistance contributes to 200,000 annual deaths in Pakistan-WHO and the NIH call for action



Antimicrobial-resistant infections cause each year over 200,000 directly attributable and associated deaths in Pakistan. The crisis has been accelerated by the overuse and misuse of antibiotics in human health, agriculture, and veterinary practices. Without urgent measures, antimicrobial resistance could cause 63000 directly attributable deaths and 262000 associated deaths in Pakistan by 2050. Globally, antimicrobial resistance could lead to 10 million deaths annually.

Combating antimicrobial resistance requires a comprehensive One Health approach that addresses the interconnectedness of human, animal and environmental health. Factors driving resistance in Pakistan include irrational prescribing practices, over-the-counter sales of antibiotics, poor infection prevention and control practices, and the misuse of antimicrobials in agriculture and livestock,

The objective: to combat the global threat of antimicrobial-resistant infections,

which cause each year over 200,000 directly attributable and associated deaths in Pakistan. The crisis has been accelerated by the overuse and misuse of antibiotics in human health, agriculture, and veterinary practices.

Current Resistance Landscape is due to:

High-Risk Pathogens: Significant resistance is seen in *E. coli*, *Salmonella* (XDR typhoid), *Staphylococcus aureus* (MRSA), and *Acinetobacter* species.

Drug Failures: Resistance to first-line antibiotics (ampicillin, cotrimoxazole) and "last-resort" drugs like **colistin** and **carbapenems** is rising.

XDR Typhoid: Pakistan reported the first cases of extensively drug-resistant (XDR) typhoid in 2016, which is resistant to most standard treatments.

Vulnerable Populations: Children under five are the most affected, with over **73,000 AMR-associated deaths** in 2021 alone

Beyond the Burden: New Strategies for Diabetic Foot Ulcer Care in 2026

The Multidisciplinary Approach to Diabetic Foot Ulcers



By: Dr. Shakeel Ahmed

Diabetic foot disease 'is among the most serious complications of diabetes mellitus. It is a source of major suffering and financial costs for the patient, and also places a considerable burden on the patient's family, healthcare professionals and society in general.' Diabetic Foot Ulcer is among the one of serious and life threatening complication of Diabetes. Over all prevalence of 15-25% people with diabetes are at increased risk of developing diabetic foot ulcer.

Diabetic foot ulcer (DFU) management in 2026 focuses on a multidisciplinary, patient-centered approach to prevent amputations, emphasizing prompt infection control, vascular assessment, and optimal off-loading (e.g., total contact casting). Key practices include regular sharp debridement, maintaining a moist wound environment, and personalized patient education.

Diabetic foot disease isn't just a complication; it's a serious and costly burden for patients, their families, healthcare providers, and society. Diabetic foot ulcers (DFUs) are a life-threatening consequence, affecting 15-25% of people with diabetes.

2026's Cutting-Edge Approach to Diabetic Foot Ulcers

Managing DFUs in 2026 means a multidisciplinary, patient-centered approach focused on preventing amputations. This involves:

Swift Action: Promptly controlling infections, assessing vascular health, and ensuring optimal off-loading (like total contact casting).

Wound Care Essentials: Regular sharp debridement to remove dead tissue, maintaining a moist wound environment, and tailoring pa-

tient education.

Key 2026 Management Guidelines:

Assessment & Diagnosis: Immediately check for peripheral artery disease (PAD) and infection, as these significantly increase mortality risk. Thorough assessment is crucial!

Wound Care & Dressings:

Debridement: Continuous removal of necrotic tissue and callus is often necessary to promote healing.

Dressings: Use moisture-retentive dressings, such as hydrogels for low-exudate wounds and alginates for high-exudate wounds. Be mindful of specific dressings like Eusol for sloughy wounds, but never use it on clean tissue due to its hypertonic nature. Povidone-iodine (Pyodine) is commonly used and effective for in-

fectured wounds due to its affordability and excellent results.

Adjunctive Therapies: Consider advanced options like negative pressure wound therapy, hyperbaric oxygen for ischemic ulcers, or placental membrane allografts for non-healing cases.

Infection Management: Start empirical antibiotics for infections. For deep, extensive, or limb-threatening infections, prioritize rapid, broad-spectrum treatment.

Prevention & Education: Implement robust patient education, self-screening protocols, and regular foot check-ups to prevent recurrence.

Key Changes & Focus Areas (2026):

Person-Centered Care: A strong emphasis on personalized education and actively

involving patients in managing their own health.

Evidence-Based Interventions: Current guidelines advise against using topical phenytoin for healing due to low-certainty evidence.

Risk Categorization:

Screening frequency now varies based on risk, from every 1-3 months for high-risk patients to annually for very low-risk individuals.

Urgent Multidisciplinary Team (MDT) Approach:

Infection management for DFUs requires immediate input from vascular surgery, infectious disease specialists, and podiatry to prevent severe limb complications. This involves immediate wound cleansing, sharp debridement, offloading pressure, and targeted antibiotic therapy, with surgical consultation for severe or deep infections.

Core Management Principles

Assessment: Evaluate infection severity (mild, moderate, or severe) and check for PAD.

IDSA – IWGDF Classification:

Infection severity	Likely pathogen	Antibiotic	Dose
Mild	S. Aureus (MARA) Streptococcus MRSA	Cephalexin Doxycycline Trimethoprim/ Sulfamethoxazole Clindamycin	500mg PO, QID 100 mg BD 1-2 DS tab BD 450mg TDS
Moderate(may be treated oral as above or parenteral)	S. Arius (MSSA), Streptococcus, MRSA	Ceftriaxone Ampicilin-sulbacam Add vancomycin	1gm iv daily 3gm iv QID 15-20mg/kg BD
Severe (parenteral)	MRSA Pseudomonas	Add vancomycin Piperacillin –tazobactam	15-20mg/kg BD 4.5 gm iv TDS
Severe	Mixed Flora (MRSA, and Entrobacteriaceae , Pseudomonas, anaerobes)	Vancomycin Piperacillin –tazobactam Or Impanel	15-20 mg BD 4.5 gm iv TDS 500 mg QID

- 1. Uninfected:** Wound <2cm around ulcer, limited without pus or inflammation. to skin or superficial tissue;
- 2. Mild:** >2 signs of inflammation (pus, redness, pain, tenderness, warmth, induration); cellulitis/erythema
- 3. Moderate:** Systemically well and metabolically stable, but with >1 of the following: cellulitis >2cm; lym-



PCDA.PK is running a Diabetic foot care center where we make and provide off load at very low cost

phangitis; spread beneath moval of all callus, necrotic, fascia; deep tissue abscess; and devitalized tissue.

gangrene; muscle, tendon, joint, or bone involvement.

4. Severe: Systemic toxicity or metabolic instability (e.g., fever, chills, tachycardia, hypotension, confusion, vomiting, leukocytosis, acidosis, hyperglycemia, or azotemia).

Debridement:

Crucial for reducing bioburden, this involves sharp re-

Offloading: Reduce pressure on the ulcer using specialized footwear, casts, or crutches to facilitate healing.

.For this we made a hole moore then wound size fill it with foam and apply lether on it.

Wound Care: Cleanse with soap and water; avoid soaking the foot.



For this we made a hole more than wound size fill it with foam and apply leather on it



A Severe Grade-4 Foot Ulcer



The Ulcer completely healed in 4 weeks

Antibiotic Guidelines

Mild Infection:

1–2 weeks of oral antibiotics targeting Staphylococcus aureus and Streptococci.

Moderate/Severe Infection:

Parenteral (IV) broad-spectrum antibiotics, targeting gram-positive, gram-negative, and anaerobic bacteria. Switch to oral based on cultures after 48 hours if possible.

Sever (Grade 4 foot ulcer) Duration:

1–2 weeks for soft tissue infections; 6+ weeks for osteomyelitis (bone infection).

When to Seek Immediate Care but most of the time Antibiotic therapy is prolong among the diabetic foot ulcers patients.

Urgent, possibly surgical, evaluation is required if there are signs of deep infection, such as:

Foul smell, pus, or rapid worsening.

Systemic symptoms (fever, chills, high white blood cell count).

Severe ischemia (poor blood flow).

Long-Term Strategy

Optimize blood glucose control, manage comorbidities (e.g., hypertension, smoking), and maintain strict of-loading.

In the management of diabetic foot ulcer if a patient came to you with blister never be remove the skin of it only make an incision on the gravity side clean it with pyodin solution the remaining blister skin will protect the ulcer if you removed it will necrosed. The ulcer completely healed in 4 week. The diabetic foot ulcer should be managed by trained Diabetologist



Updates on GLP1 Drugs

Dr. Riasat Ali Khan's Selection

1

GLP-1 Drugs Linked to Cut in Asthma Flares for Overweight Adults

Courtesy of **Allergic Living**

GLP-1 drugs may reduce asthma flares in overweight and obese adults without diabetes, a new study finds.

Researchers analyzed three years of electronic health record and claims data from adults with asthma who were overweight or obese but did not have diabetes. Asthma flares in patients taking a GLP-1 medication were compared with those in similar patients who did not receive the drugs.

Across all weight categories examined – overweight, obese and morbidly obese – GLP-1 therapy was associated with a 12 to 15 percent reduction in asthma exacerbations. The reductions translated to about one fewer flare for every seven or eight patients over the three-year period, says Dr. Ruchi Patel, the study's first author.

“GLP-1 receptor agonists may be associated with fewer asthma exacerbations in non-diabetic patients, pointing to a promising new direction” in asthma treatment, says Patel, a Rutgers University internal medicine resident. The research was presented at the 2026 American Academy of Allergy, Asthma & Immunology Annual Meeting in Philadelphia.

GLP-1s as an Asthma Tool

The global study included 710 overweight patients with a body mass index (BMI 25 to 29), 1,515 obese patients (BMI 30 to 39), and 1,249 morbidly obese patients (BMI 40 and higher). Patient data came from the TriNetX healthcare database.

Health records showed patients were prescribed various types of GLP-1s, includ-

ing semaglutide, tirzepatide and li-

raglutide.

The study found overweight patients had 14.6 percent fewer asthma exacerbations. Those with obesity had a 12.2 percent fewer flares, and those in the morbidly obese weight category had a 13.3 percent reduced risk of exacerbations.

The effect was modest compared with biologic therapies such as dupilumab or omalizumab. Those medications can reduce exacerbations by half or more, says Dr. Edward Schulman. He's the study's senior author and director of the Allergy, Asthma and Airway Research Center at Drexel University College



of Medicine.

However, obesity-related asthma is often harder to control and responds less well to standard inhaled therapies. “It is associated with worse control, an increase in exacerbations, and worse outcomes,” Schulman says.

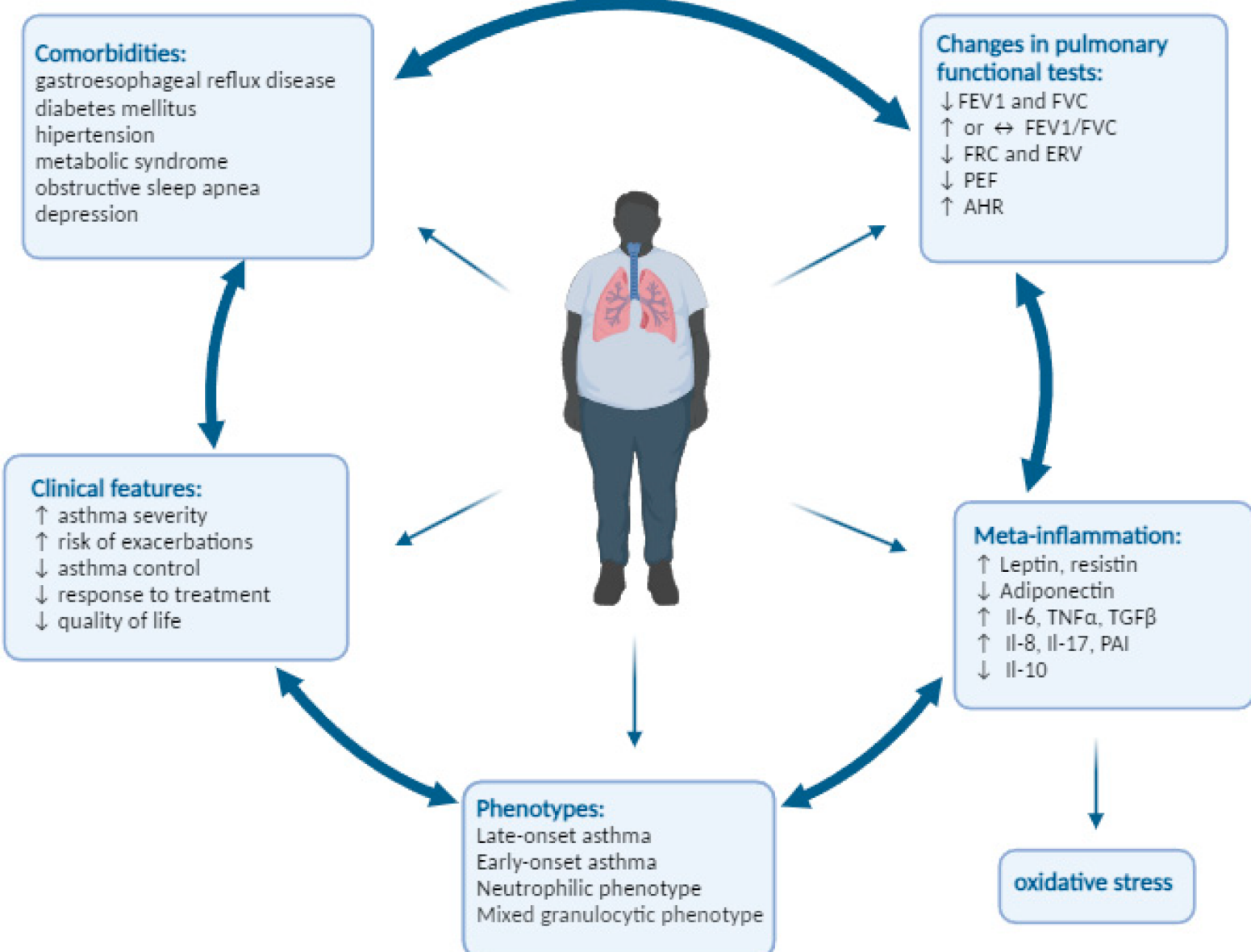
GLP-1 medications could potentially be used alongside biologics or other asthma medications to help these patients, he says. “This work is exciting and represents, to our knowledge, the largest study of non-diabetic, obese asthmatics treated with GLP-1 agonists,” Schulman says. “Our data strongly suggest GLP-1 agents represent a new armament to reduce

asthma exacerbations.”

GLP-1 Effects on Airways

GLP-1s were first approved to improve blood sugar control and regulate appetite and in people with Type 2 diabetes. They're now widely used for weight loss. Short for glucagon-like peptide-1 receptor agonists, GLP-1s mimic the natural GLP-1 hormone to slow gastric emptying and increase feelings of satiety.

GLP-1 receptors are also present in airway smooth muscle and lung tissue, meaning the hormone may have direct effects on the cells there.



Research suggests GLP-1 activity may reduce pro-inflammatory signaling and airway inflammation. Schulman says that could lower the airway hyperresponsiveness and bronchoconstriction that's seen with asthma.

Prior research has shown that GLP-1s can reduce asthma flares in people with obesity and Type 2 diabetes.

It is not yet clear whether the association between GLP-1 therapy and the lowered risk of asthma flares is due to weight loss, a reduction in inflammation, or both. The researchers did not have data on how much weight participants lost or whether they moved between BMI categories.

Benefit Beyond Weight Loss?

However, because the reduction in exacerbations was similar across weight groups, researchers believe the effect on asthma flares isn't explained by weight loss alone.

"The benefit we saw in our study was consistent across the BMI categories, which to me is very suggestive that there is a weight independent, direct anti-inflammatory effect that is at play," Patel says.

Morbidly obese individuals are expected to lose more weight on a GLP-1 than someone who is in the overweight category. But researchers didn't see a "linear" relationship between

asthma flare reductions and the starting weight.

Obesity-related asthma is considered a distinct subtype of asthma. Excess fat tissue can contribute to inflammation throughout the body and metabolic dysfunction that can affect the cells of the airways. Fat around the chest and abdomen can also restrict lung expansion and make it more difficult to breathe.

Obesity is an important risk factor for asthma and for asthma morbidity, both in children and adults. While there are many common pathophysiological and clinical commonalities, certain characteristics differ between both age groups. This is a

reflection of an obese asthma syndrome that is complex and multifactorial. Potential underlying mechanisms include a shared genetic component, dietary and nutritional factors, alterations in the gut microbiome, systemic inflammation, metabolic abnormalities, and changes in lung anatomy and function.

There is growing evidence that weight loss interventions also help improve asthma outcomes. Future studies should characterize obesity beyond BMI, considering other anthropometric indices and biomarkers, much like asthma is not phenotyped merely by the presence or absence of wheezing.

GLP-1s may increase risk of osteoporosis and gout, new research finds

Courtesy:  NBC NEWS

A large analysis suggests the popular weight loss drugs may carry an increased risk to bone health. GLP-1 drugs — including [Ozempic](#) and [Wegovy](#) — may be tied to a slightly higher risk of osteoporosis and gout, according to research presented Monday at the American Academy of Orthopaedic Surgeons' annual meeting.

Osteoporosis is a disease that weakens the bones and makes them likelier to break or fracture, often from minor falls. It's a common concern for many older adults and for people who lose a significant

amount of weight over a short period of time. Gout, meanwhile, is a painful form of arthritis that can occur when the body has too much uric acid, which can come from a diet high in red meat and alcohol — as well as rapid weight loss.

as Ozempic and Wegovy, and liraglutide, sold as Victoza and Saxenda. About 4% of GLP-1 users developed osteoporosis, compared with a little over 3% of nonusers — an in-

creased risk of about 30%. A related condition, osteomalacia, which involves the softening of the bones, was rare but also occurred about twice as often among people on GLP-1s.

Rates of gout were also slightly higher — 7.4% for GLP-1 users versus 6.6% for nonusers — an increased risk about 12%.

“It’s not huge,” Horneff said. “But within that data that was put in there, you even saw nearly a doubling of the risk of having some sort of bone mineral density issue at five years.”

“Weight loss does cause bone loss,” Dr. Clifford Rosen, a professor of medicine at Tufts University who has been studying the potential impact of GLP-1s on

bone health. He wasn’t involved with the new research.

“The question we’ve been studying is whether this is a normal compensation of the skeleton, it’s just reshaping itself, or whether this is truly a risk for losing bone that’s more rapid than what would be expected,” Rosen said.

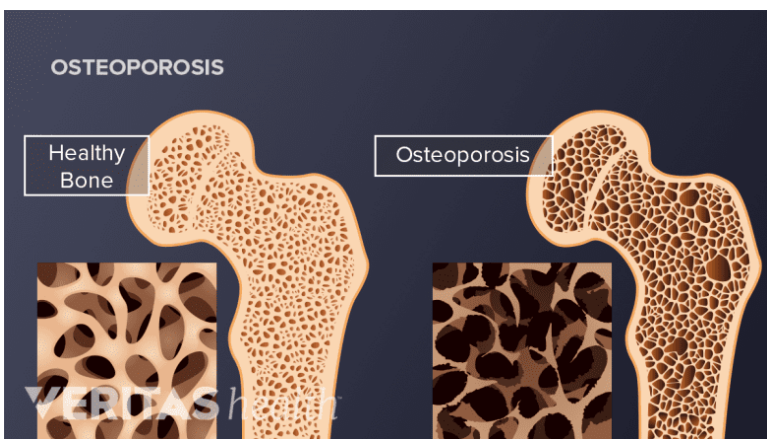
Because the new research was observational, it can’t prove the medications caused either condition. Horneff said the team didn’t know about patients’ diet or exercise habits, or whether they were taking vitamin D supplements or other nutrients important for bone health. But the results echo other research, including a study published in February in the *Journal of Clinical Endocrinology & Metabolism* that linked GLP-1 drugs to a higher risk of osteoporosis-related fractures in older

adults with Type 2 diabetes.

The Food and Drug Administration notes in its label for semaglutide that it might increase the risk of bone fractures in older adults and women, Rosen said.

According to a new study presented at the American Academy of Orthopaedic Surgeons' annual meeting, GLP-1 drugs were associated with an increased risk of osteoporosis and gout — findings that further add to the long list of side effects associated with the drugs.

According to data from KFF, around one in five U.S. adults have used GLP-1 drugs, with rates expected to grow over time, especially as costs decrease. Aside from weight loss and diabetes, research suggests that GLP-1s could have positive impacts on heart health, kidney disease, fertility, arthritis, and

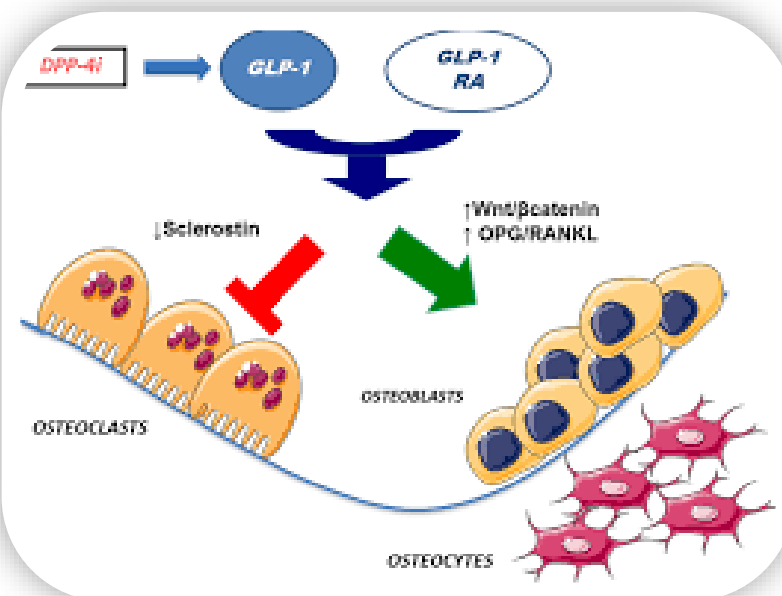


amount of weight over a short period of time. Gout, meanwhile, is a painful form of arthritis that can occur when the body has too much uric acid, which can come from a diet high in red meat and alcohol — as well as rapid weight loss.

In the new study, which has not yet been published in a peer-reviewed journal, researchers analyzed five years of medical records from more than 146,000 adults with a diagnosis of both obesity and Type 2 diabetes.

The study compared patients taking GLP-1 drugs to patients not taking them.

The records didn’t include detailed information about which GLP-1 drug each patient was taking, though medications documented included semaglutide, sold



However, the medications also have significant side effects, including unintended muscle mass loss, nutritional deficiencies, a potential for increased risk of miscarriage or birth defects, and severe mental health issues like depression and sui-

146,000 patients who were obese and had type 2 diabetes and compared those who were taking GLP-1 medications to those who weren't. Overall, researchers found that roughly 4% of patients taking GLP-1s developed osteoporosis compared to a

ents, such as vitamin D and calcium, due to their appetites being suppressed. Rapid weight loss on GLP-1s could also change the way the body builds and breaks down bones.

How to stay healthy while on GLP-1s

year and getting labs drawn to check your vitamin and mineral levels, not just your weight," she said.

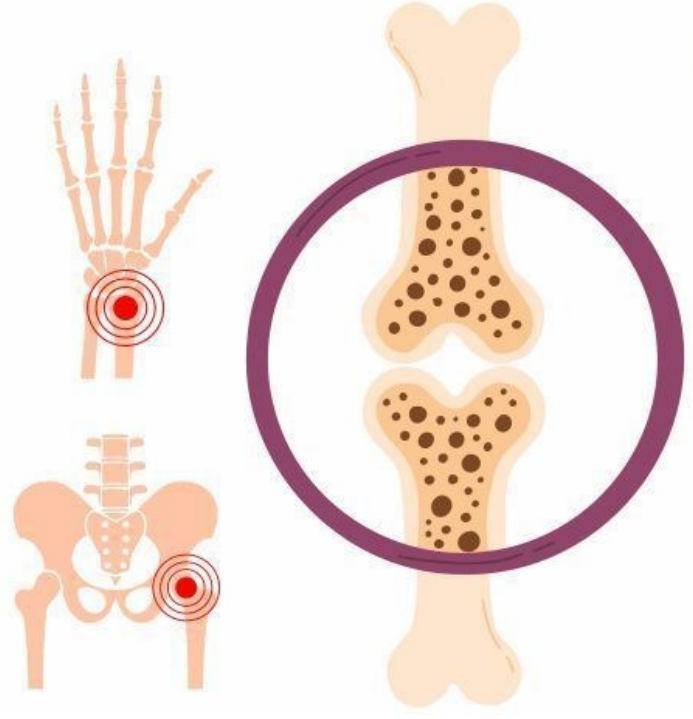
Some other ways people can stay healthy and protect their bones while on GLP-1s include:

Exercising regularly-

Osteoporosis

Osteoporosis is a chronic bone disease that causes bones to weaken and become brittle, increasing the risk of fractures. It occurs when bone mass and mineral density decrease, leading to structural deterioration. The condition is often called a "silent disease" because it progresses without symptoms until a fracture occurs.

Causes, Symptoms, Diagnosis, and Treatment



cidal thoughts. Some of the more severe side effects of GLP-1s are gastroparesis or stomach paralysis, intestinal blockage, inflammation of the pancreas, and gallbladder damage.

In a new study, which has not yet been peer reviewed, researchers found that GLP-1 medications may also increase the risk of osteoporosis and gout. Osteoporosis is a disease that causes the loss of bone mineral density and bone mass, which makes people more vulnerable to fractures. Gout is a type of inflammatory arthritis that is caused by a buildup of uric acid, which can occur with rapid weight loss.

For the study, researchers analyzed five years of medical records from over

little over 3% of those not taking GLP-1s. This represented a 30% increased risk of osteoporosis among patients taking GLP-1s. Patients taking GLP-1s also developed osteomalacia — a related condition where bones soften — twice as often as those not on the medications.

GLP-1 users also had slightly higher rates of gout compared to non-users (7.4% versus 6.6%, respectively). The increased risk of gout among patients taking GLP-1s was 12%.

Currently, it's not clear how or why GLP-1s drugs affect people's bone health, but one potential theory is that some patients on GLP-1s may not be getting enough key nutri-

According to Christopher McGowan, a gastroenterologist who runs a weight-loss clinic in North Carolina, the research reaffirms the need for careful guidance on protein intake, exercise, and bone health for patients taking GLP-1s to ensure they're still getting proper nutrition while on the medications.

"The takeaway isn't fear," McGowan said. "It's refinement."

Separately, Ilana Muhlstein, a registered dietitian nutritionist based in Los Angeles, recommends patients regularly meet with their doctors to check their progress and assess their health. "If you're on these medications, you should be seeing your doctor at least once a

ly: Weight-bearing exercises like walking, yoga, and lifting weights are great for your bone health.

Eating healthy foods: It's important to get enough calcium, magnesium, vitamin D, protein, and other nutrients. You can also talk to your healthcare provider about supplements if you think you're not getting enough of a certain nutrient.

Consulting with a healthcare provider as needed: If you're worried about how GLP-1s will impact your bone density or other parts of your health, you can talk to your healthcare provider about potential screenings or what you can do to reduce your risk of certain conditions.

3

Can OTC Remedies Help With GLP-1 Adherence?

Courtesy **Medscape**

Nausea. Constipation. Diarrhea. Heartburn.

These are the annoying side effects that GLP-1 users complain about most often — and sometimes prompt them to discontinue the medications.

Recently, makers of over-the-counter (OTC) products have taken notice and launched campaigns aimed squarely at GLP-1 users aggravated by the drugs' gastrointestinal (GI) side effects.

“On a GLP-1? Discover products to power your progress,” reads a page on Amazon devoted to products by Haleon. It features a suite of the company's long-standing products— Gas-X, Tums, and Benefiber — and its recently launched Centrum Nutrient Replenish, a vitamin and mineral blend marketed specifically to GLP-1 users as a way to fill in the “nutrient shortfalls” that can happen with eating less.

The marketing campaign, launched in 2025, isn't only about side-effect relief, according to Haleon spokesperson Jennifer Nadelson.

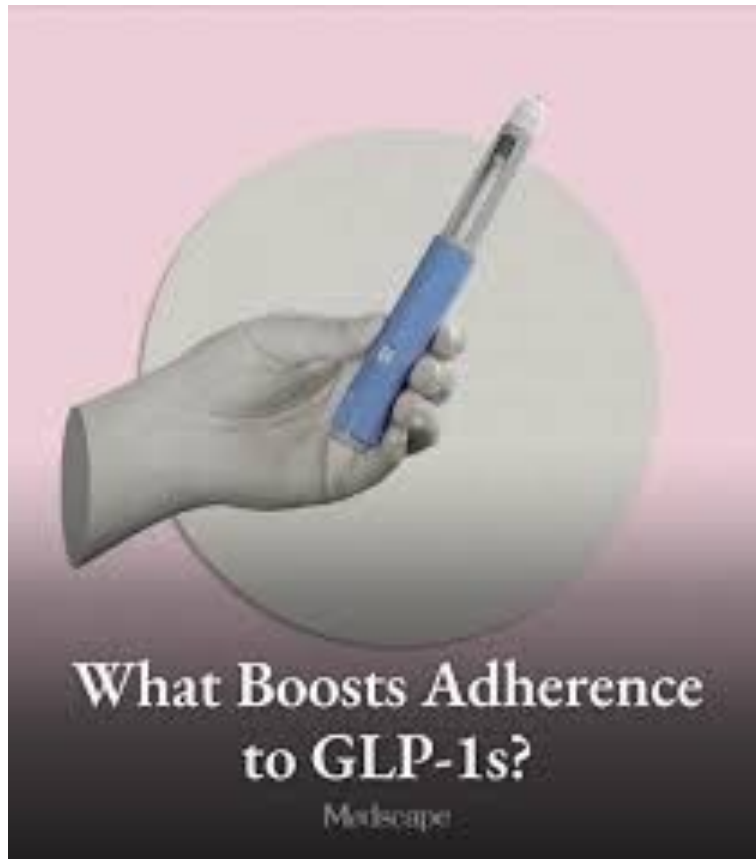
“The increased conversation around GLP-1 medications highlight

“The increased conversation around GLP-1 medications highlighted a broader, unmet need: Many people using GLP-1s are thinking more intentionally about nutrition, digestive health, and how to manage side effects as their eating patterns change,” she said.

Haleon isn't the only company zeroing in on this patient population. The brands Vitafusion and Bariatric Fusion also have created vitamin and mineral blends marketed specifically to people taking GLP-1s.

So, are these new (or repurposed) OTC products the answer?

Gastroenterologists told Medscape Medical News that they don't rule out the products but usually



don't turn to them first due to what they say is a lack of strong evidence for their effectiveness, specifically for the side effects reported with GLP-1 use.

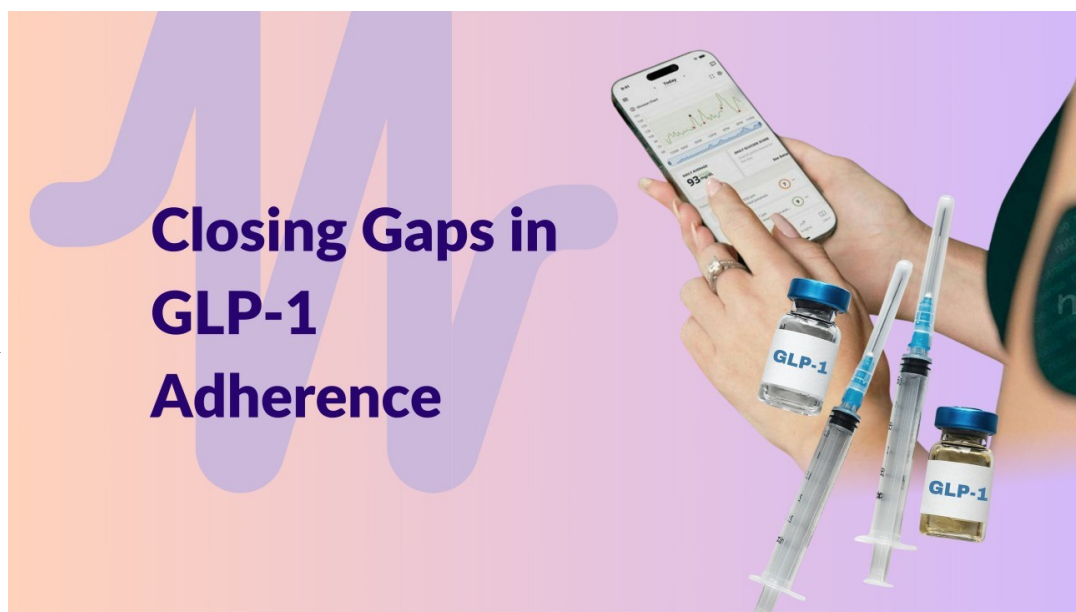
Side Effects: The Problem Is Real Taking GLP-1s does raise the risk for several GI side effects.

A

GERD (7.5%), esophagitis (2.6%), and gastroparesis (0.53%) than their counterparts not taking a GLP-1.

In a 2025 study tracking more than 125,000 people with overweight or obesity initiating GLP-1 therapy, moderate or severe side effects were associated with significantly higher risk for discontinuing the medications in patients with and those without type 2 diabetes.

8“Many times, the patient has to stop the medication in order for the symptoms to be resolved,” said Prateek Sharma, MD, professor of medicine at the University of Kansas School of Medicine and a physician at the University of Kansas Health System in Kansas City. Some patients have severe nausea three or four times a day, Sharma, an author on the 2024 study, told Medscape Medical News.



Closing Gaps in GLP-1 Adherence

In a 2025 joint advisory idea how much fiber they eat on nutritional priorities to support GLP-1 therapy for obesity, the Obesity Medicine Association and other organizations noted that side effects, especially GI, are a challenge and that nutritional and medical management of GI side effects in GLP-1 users is critical.

Start With the Basics

Clinicians may be able to address GI side effects without turning to prescription medication or OTC products by evaluating the patient's diet first and making adjustments. For example, Michael Camilleri, MD, DSc, professor of medicine, pharmacology and physiology at the Mayo Clinic, Rochester, Minnesota, said that when a GLP-1 user reports constipation, he usually starts by asking about the amount of fiber in their diet.

The newest Dietary Guidelines for Americans recommend prioritizing "fiber-rich whole

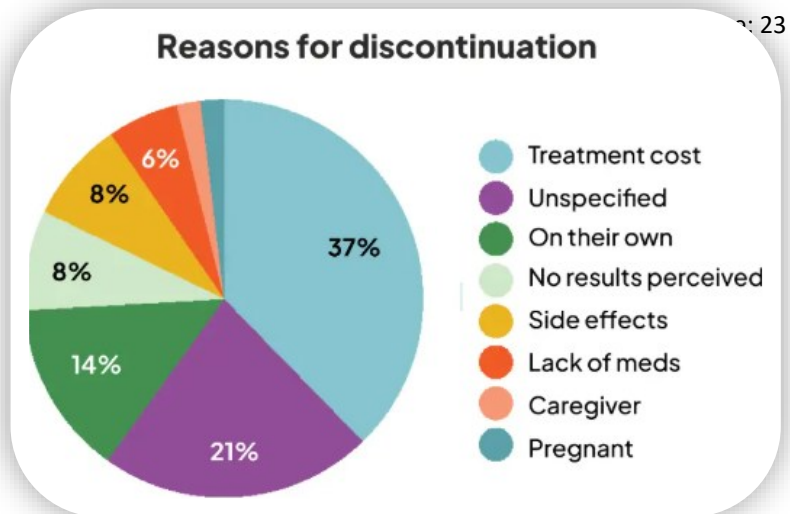
in a day, Camilleri said, so some education might be needed. For example, a cup of oatmeal has 4 grams, and a cup of boiled black beans has 15.

In Camilleri's experience, up to 40% of patients using a GLP-1 experience nausea, "but it's transient in most people."

A 16-week study he co-authored that found that increasing the dose slower than usual recommendations worked well in those who reported nausea. "They were able to continue their medications," Camilleri said.

Sharma also takes a basics-first approach. He asks patients with constipation, for instance, if they are drinking enough water and eating enough vegetables. Some may need additional protein in their diet to counter loss of muscle mass, he said.

The Role of OTC Products — and the Caveats



would try to prescribe a medication that deals with nausea and vomiting," Sharma said.

Some of the supplements targeted at GLP-1 users "are being promoted without much evidence to back them up," he added. Use of supplements has not been studied specifically for symptoms associated with GLP-1 use, Sharma said.

For guidance, gastroenterologists can turn to the joint advisory on nutritional priorities and recent research identifying which nutrient GLP-1 users are likely to be lacking

For instance, under the joint advisory, daily magnesium supplementation, titrated to keep bowel movements regular, can help. Magnesium citrate can normalize bowel movements. Fiber supplements and polyethylene glycol 3350 are also suggested, as well as stool softeners. In a 2025 review, researchers found justification for several dietary supplements in GLP-1 users, including multivitamins, protein to meet the goal of 1.2-2 g/kg/d, whey protein to preserve lean body mass, and fiber for regularity.

In another review, vitamin D, iron, and B vitamins were found to be the most common nutrients GLP-1 users lack.

The Need for Patient Education

When a patient asks about supplements for GLP-1 side effects, Sharma said he tries

to educate patients about their regulatory status and encourages his colleagues to do the same. Under the Dietary Supplement Health and Education Act, the FDA doesn't have the authority to approve dietary supplements for safety and effectiveness or to approve their labeling before they hit the market.

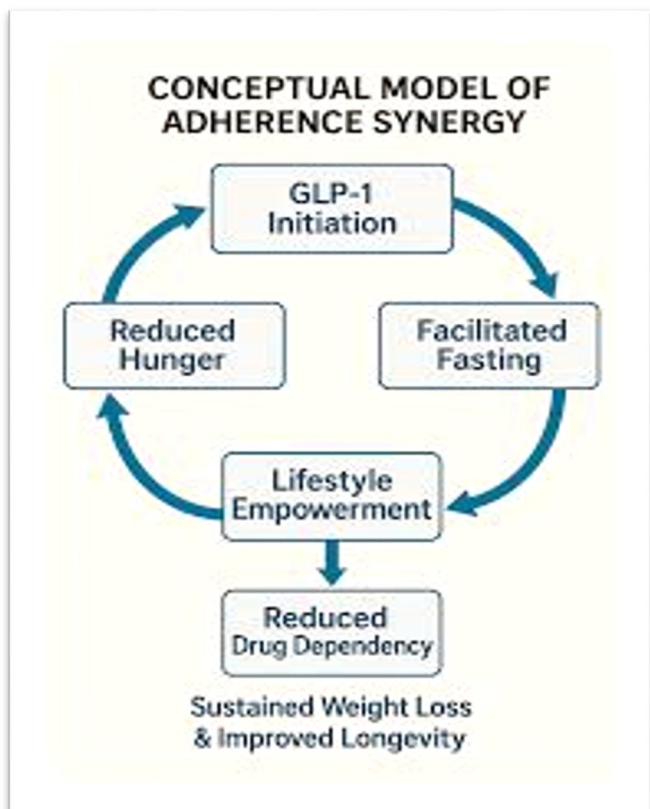
Sharma also encourages colleagues to educate themselves about OTC products targeted toward GLP-1 users and the way they're marketed.

"All physicians who are seeing patients on GLP-1s should be aware of the different types of supplements and should not be recommending them carte blanche for all patients," he said.

Sharma recommended a case-by-case assessment. With every patient, he reviews the list of prescription medications and asks about all OTC products taken.

Would Sharma ever recommend a supplement to treat a GLP-1 associated symptom, given the lack of specific research in GLP-1 users? He said he would, in some cases.

For instance, he might recommend a fiber supplement, such as Citrucel, for constipation from GLP-1 use, he said. Camilleri said that after evaluating a patient's diet, he may suggest fiber supplements or commonly available osmotic laxatives to relieve constipation.



grains" with a target of two to four servings a day. The previous guidelines recommended a goal of 22-34 g/d for adults, depending on age and sex.

Many Americans have no

When a patient complains of GLP-1 side effects, Sharma sometimes prescribes medications already known to address their problem.

"If someone is having nausea and vomiting from GLP-1, I

4

GLP-1 Drugs Tied to Unexpected Migraine Benefits

Courtesy **MEDPAGE**TODAY

Can the neurovascular effects of GLP-1s play a role in treating migraine?

Chronic migraine patients who used GLP-1 receptor agonists to treat conditions like obesity or diabetes had fewer emergency department (ED) visits than those on topiramate (Topamax), a real-world data analysis showed.

Compared with topiramate users, GLP-1 drug initiators were 10% less likely to visit the ED over the following year (RR 0.90, 95% CI 0.86-0.94), reported Hsiangkuo Yuan, MD, PhD, of Jefferson Headache Center at Thomas Jefferson University in Philadelphia, in an abstract released ahead of the American Academy of Neurology annual meeting.

Chronic migraineurs who started GLP-1 drugs also were 14% less likely to be hospitalized (RR 0.86, 95% CI 0.81-0.91), and were 13% less likely to have a nerve block (RR 0.87, 95% CI 0.78-0.97) or receive a triptan prescription (RR 0.87, 95% CI 0.84-0.91), compared with those who started taking topiramate.

The GLP-1 receptor agonist group was less likely to start tricyclic antidepressants (RR 0.65), valproate (RR 0.52), oral or nasal calcitonin gene-related peptide (CGRP) receptor antagonists (RR 0.77), CGRP monoclonal antibodies (RR 0.58), or serotonin-norepinephrine reuptake inhibitors (RR 0.80) than the topiramate group. There was no significant difference in beta-blocker initiation between



groups.

"This study suggests a possible signal that people with chronic migraine who start a GLP-1 receptor agonist may end up needing fewer acute-care visits and fewer additional triptans or preventive migraine medications over time compared with those starting topiramate, a commonly used migraine preventive," Yuan observed.

"Because this analysis cannot determine the cause of these differences, we don't know whether GLP-1 receptor agonists help migraine directly, whether any improvements relate to broader effects such as better metabolic health, weight loss, or reduced inflammation, or

whether the findings simply reflect the limitations of topiramate in real-world use," Yuan told MedPage Today.

"Still, seeing a pattern of lower overall healthcare use may give patients hope that these medications could offer benefits beyond metabolic effects and highlights the need for future prospective studies to determine whether GLP-1 receptor agonists truly help with migraine prevention," he added.

GLP-1 receptor agonists exert anti-inflammatory and neurovascular effects that may influence migraine pathophysiology, but no large-scale trials have assessed whether they prevent migraine. A prospective pilot

study in Italy last year reported that adjunctive use of the GLP-1 agent liraglutide (Saxenda) reduced mean monthly headache days in people with refractory high-frequency or chronic migraine and obesity from 19.8 to 10.7 days.

This benefit was independent of weight loss, noted researcher Roberto De Simone, MD, of the University of Naples Federico II in Italy. "This suggests that the mechanism of action is not solely linked to the well-known association between excess weight and migraine worsening, but may instead involve additional biological pathways," he told MedPage Today.

The GLP-1 receptor is expressed in the choroid plexus, and experimental studies have shown that its activation can reduce cerebrospinal fluid production more effectively than either acetazolamide or topiramate," De Simone continued. "In animal models of chronic migraine, GLP-1 receptor agonists have been reported to suppress CGRP expression and dampen central sensitization within the trigeminal nucleus caudalis," he pointed out.

pressure may represent a shared pathogenic step underlying both idiopathic intracranial hypertension and migraine," De Simone noted. "This could account for the remarkable overlap between the two disorders, not only in their clinical presentation but also in their major risk factors like female sex, obesity, and sleep disorders," plus their elevated circulating CGRP levels and their shared high prevalence of venous sinus stenosis, he added.

adults with chronic migraine who started using a GLP-1 agent -- liraglutide, semaglutide (Ozempic, Wegovy, Rybelsus), dulaglutide (Trulicity), exenatide (Byetta), lixisenatide (Adlyxin), or albiglutide (Tanzeum) -- within 12 months of diagnosis, and 10,997 who initiated topiramate. Chronic migraine was defined as headache on at least 15 days a month for 3 months or longer, with migraine symptoms on at least 8 of those days.

demographics, BMI, comorbidities, and prior preventive migraine drug use. The study population had an average age of 48 and 87.8% were women.

The findings suggest a potential role of GLP-1 drug in migraine management and warrant prospective evaluation, Yuan and co-authors said. While the groups were balanced at baseline, variables that may have changed over the year -- weight loss, migraine severity, medication use patterns, or lifestyle changes -- were not accounted for and may have influenced outcomes.

The pilot study data "support the hypothesis that altered regulation of intracranial

Yuan and colleagues used TriNetX data to evaluate information about 10,997

The GLP-1 receptor agonist and topiramate groups were propensity-score matched on

5 Gut Flora May Be Altered by Oral Semaglutide Additive

Courtesy [Medscape](#)

Salcaprozate sodium (SNAC), the absorption enhancer present in oral semaglutide, was associated with reduced abundance of certain fiber-fermenting gut bacteria, lower fecal butyrate levels, elevated circulating inflammatory markers, decreased levels of a brain-derived neurotrophic factor, and increased liver weight, according to a preclinical analysis.

Oral semaglutide is paired with SNAC to protect the drug in the stomach and enhance absorption. Rates of gastrointestinal side effects — the leading cause of discontinuation — are higher with oral vs injectable semaglutide.

Researchers conducted an in vivo study to evaluate the effects of chronic SNAC exposure on gut microbiota composition, function, and host metabolic outcomes.

brain-derived neurotrophic factor were quantified using enzyme-linked immunosorbent assay.

ceae (-62%; P = .0011) and Bacteroidaceae (-77%; P = .0027) – and a sevenfold increase in Desulfovibrionaceae (P = .039), taxa previously linked to inflammatory conditions.

trols, SNAC exposure was associated with a 70% increase in plasma TNF-alpha levels (P = .0009); in the SNAC plus semaglutide, IL-6 levels increased and brain-derived neurotrophic factor levels decreased.

Healthy male Sprague-Dawley rats were randomized to receive oral gavage of semaglutide alone, SNAC alone, semaglutide plus SNAC, or phosphate-buffered saline (control) daily for 21 days.

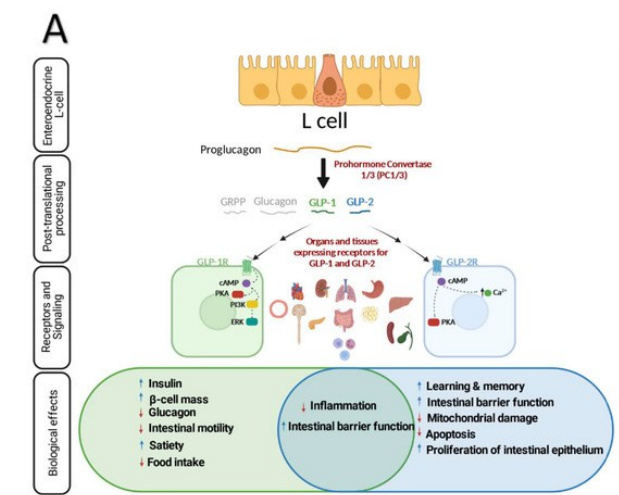
TAKEAWAY:

SNAC monotherapy vs control treatment was associated with significant reductions in key fiber-fermenting bacterial families — Muribaculaceae

After 21 days, fecal butyric acid concentrations were reduced by 77% with SNAC alone

Liver weight increased by 12.9% in the SNAC group compared with control group (P = .029).

Fecal microbiota composition was analyzed at baseline and day 21 using 16S ribosomal RNA gene sequencing; fecal short-chain fatty acids (acetic, propionic, and butyric) were measured using gas chromatography-mass spectrometry.



and by 75% with SNAC plus semaglutide (P = .010) and by 75% with SNAC plus semaglutide (P = .018), consistent with the loss of key butyrate-producing bacteria.

IN PRACTICE: "Given that oral [semaglutide] requires daily SNAC exposure over extended periods, these findings highlight the importance of evaluating microbiome and inflammatory marker changes in patient populations receiving oral GLP-1 receptor agonist therapy," the authors of the study wrote.

Compared with con-

6

GLP-1 Drugs May Raise Fragility Fracture Risk in Older Adults With T2DM

Courtesy [Medscape](#)

In older adults with type 2 diabetes (T2DM), the initiation of GLP-1 receptor agonists vs drugs such as DPP-4 and SGLT2 inhibitors was associated with an 11% increased risk for fragility fractures.



Previous studies on GLP-1 receptor agonists and bone fractures have reported conflicting results, with some suggesting neutral or protective effects and most including participants younger than 60 years.

Researchers conducted a retrospective cohort study using data from Israel, focusing on older adults with T2D and comparing GLP-1 receptor agonists with comparator drugs — DPP-4 and SGLT2 inhibitors.

A total of 46,177 participants

aged 65 years or older were included, of whom 11,257 initiated GLP-1 receptor agonists (most frequently semaglutide and dulaglutide), and 34,920 initiated one of the comparator drugs between January 2018 and October 2022.

The primary outcome was the occurrence of fragility fractures — comprising fractures of the hip, pelvis, vertebrae, forearm, humerus, or rib — defined by diagnostic codes. Patients were followed up for a median dura-

tion of 34.7 months.

Sociodemographic, anthropometric, and clinical data were collected from Clalit Health Services, and socioeconomic status was assessed. Propensity score weighting was used to balance baseline characteristics, and the analysis accounted for the competing risk for death.

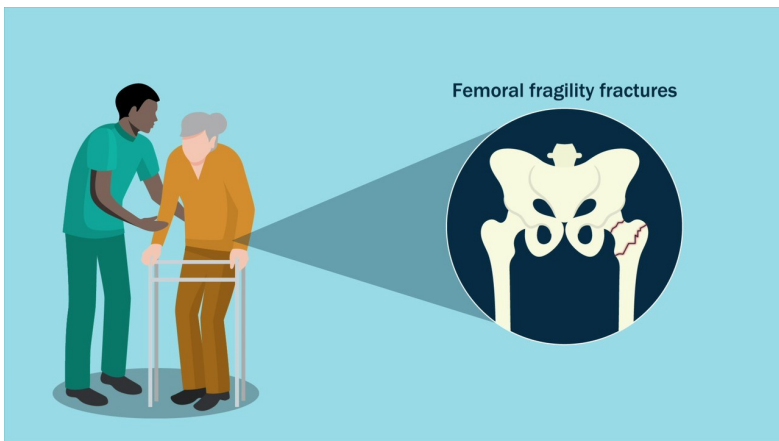
TAKEAWAY:

Overall, 4086 new incidenc-

es of fragility fractures was associated with an 11% increased risk for fragility fractures (hazard ratio [HR], 1.11; P = .02).

GLP-1 receptor agonists were linked to an increased risk for fractures compared with DPP-4 inhibitors (HR, 1.15; 95% CI, 1.04-1.27) but not compared with SGLT2 inhibitors.

The increased risk for fractures was significant among individuals aged 65-75 years



es of fragility fractures were recorded over 147,250 person-years, with femur fractures being the most common, accounting for 26.7%

(HR, 1.26; P < .001) but not among those aged 75 years or older.

IN PRACTICE:

of the “Given the elevated baseline fracture risk and expanding GLP-1 RA [receptor agonist] use in this age population, these findings may inform individualized clinical decision-making by helping clinicians weigh this modest first.

Initiation of skeletal risk alongside the cardiovascular and metabolic benefits of GLP-1 RAs in older adults with type 2 diabetes,” the authors of the study wrote.



7

Tirzepatide bests Cagri+Sema for weight loss among adults with obesity

Courtesy 

Adults receiving tirzepatide 15 mg lost 23.6% of their weight at 84 weeks vs. 20.2% for those receiving CagriSema.

CagriSema was well tolerated, with most gastrointestinal adverse events deemed mild or moderate.

Adults with obesity receiving tirzepatide 15 mg achieved greater weight loss than those receiving a fixed-dose combination of 23% with cagrilintide 2.4 mg and semaglutide 2.4 mg at 84 weeks, according to topline results from REDEFINE 4.

In a phase 3 head-to-head trial, researchers randomly assigned 809 adults with obesity and at least one weight-related comorbidity to receive either a once-weekly injectable fixed-dose combination of the amylin receptor cagrilintide 2.4 mg and the GLP-1 semaglutide 2.4 mg (CagriSema, Novo Nordisk) or the once-weekly injectable GIP/GLP-1 dual agonist tirzepatide 15 mg (Zepbound, Eli Lilly). The trial's primary endpoint was noninferiority of weight loss with CagriSema compared with tirzepatide at 84 weeks.

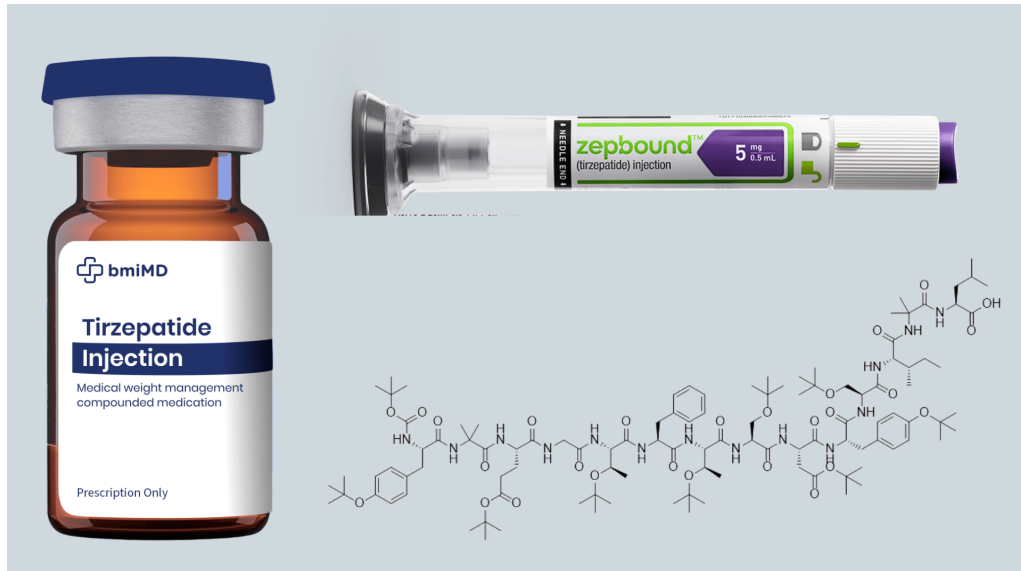
CagriSema did not achieve the trial's noninferiority endpoint in both the trial's efficacy and treatment-regimen estimand. Adults receiving tirzepatide lost 25.5% of

their body weight at 84 weeks vs. 20.2% with CagriSema, according to the efficacy estimand.

When the treatment-regimen was used, weight loss at 84 weeks was 23.6% with tirzepatide and 20.2% with CagriSema.

According to the press release, CagriSema was safe and well tolerated, with the most common adverse events being gastrointestinal in nature. Most gastrointestinal adverse events were mild or moderate in severity and decreased over time.

Martin Holst Lange, executive vice president, research and develop-



ment, and chief scientific officer for Novo Nordisk, said the company was pleased with the weight loss observed with CagriSema in REDEFINE 4.

“CagriSema has the potential to be the first GLP-1/amylin combination product to reach the market for people living with obesity, documenting that cagrilintide adds to the existing benefits of semaglutide and offers clinically meaningful additive weight loss effects superior to what has been observed with GLP-1 biology alone,” Lange said in a press release. “Based on the learnings from completed studies, we look forward to the REDEFINE 11 readout, and the initiation of the higher-dose CagriSema trial, which are both designed to assess the full weight-loss potential of CagriSema.”

According to the release, REDEFINE 11 is an 80-week phase 3 trial that includes an additional 80-week extension. The trial will compare once-weekly CagriSema 2.4 mg/2.4 mg with placebo among 600 adults with obesity, and topline results are expected in the first half of 2027. Novo Nordisk also said it will begin a phase 3 trial investigating higher-dose CagriSema with cagrilintide 2.4 mg and semaglutide 7.2 mg in the sec-

ond half of 2026.

Novo Nordisk has submitted a new drug application for CagriSema to treat overweight and obesity to the FDA based data from the REDEFINE 1 and REDEFINE 2 trials. As Healio previously reported from REDEFINE 1, adults with overweight or obesity and without diabetes receiving CagriSema lost 20.4% at 68 weeks according to the treatment policy estimand. In REDEFINE 2, adults with overweight or obesity and type 2 diabetes achieved a weight reduction of 13.7% and a 1.8 percentage point decline in HbA1c at 68 weeks according to the treatment-policy estimand. The changes in body weight and HbA1c in REDEFINE 1 and REDEFINE 2 were greater than what was observed in placebo.

The results from REDEFINE 4 follow previous data released by Novo Nordisk from REIMAGINE 4, another head-to-head trial comparing once-weekly CagriSema 2.4 mg/2.4 mg to once-weekly injectable semaglutide 2.4 mg (Wegovy, Novo Nordisk) for adults with obesity plus type 2 diabetes. As Healio previously reported, adults receiving CagriSema had greater decreases in both HbA1c and body weight at 68 weeks vs. those receiving semaglutide alone.





Orforglipron, A New Oral GLP-1 Beats Oral Semaglutide for A1c, Weight Loss

Courtesy

Medscape

Posted by: **Dr. Aqeel Rai**

Orforglipron, a novel oral nonpeptide GLP-1 receptor agonist (RA), led to a greater reduction in A1c and more significant weight loss compared to oral semaglutide in patients with type 2 diabetes (T2D) inadequately controlled by metformin, a phase 3 randomized controlled trial showed.

The primary objective of non-inferiority was met, and both orforglipron doses showed superiority to both semaglutide doses,” lead author Julio Rosenstock, MD, director, Dallas Diabetes Research Center at Medical City and clinical professor of medicine, University of Texas Southwestern Medical Center, Dallas, and colleagues reported in the study, which was published online in *The Lancet*.

“ACHIEVE-3 is the first study to directly compare the efficacy and safety of two oral GLP-1 receptor agonists in a randomized controlled trial,” they noted.

As previously reported by Medscape Medical News, a prior phase 3 study (ACHIEVE-1) of people with early T2D inadequately controlled with diet and exercise found that at 40 weeks, orforglipron monotherapy reduced A1c from baseline compared to placebo.

Oral Formulations

Most GLP-1 RAs are peptide-based, with a large molecular weight that necessitates administration via subcuta-

neous injection to allow absorption, avoid proteolytic degradation in the gastrointestinal tract, and minimize the effect of first-pass metabolism, the authors explained. However, some patients are reluctant to use injectable agents, which can “delay timely treatment initiation and intensification.”

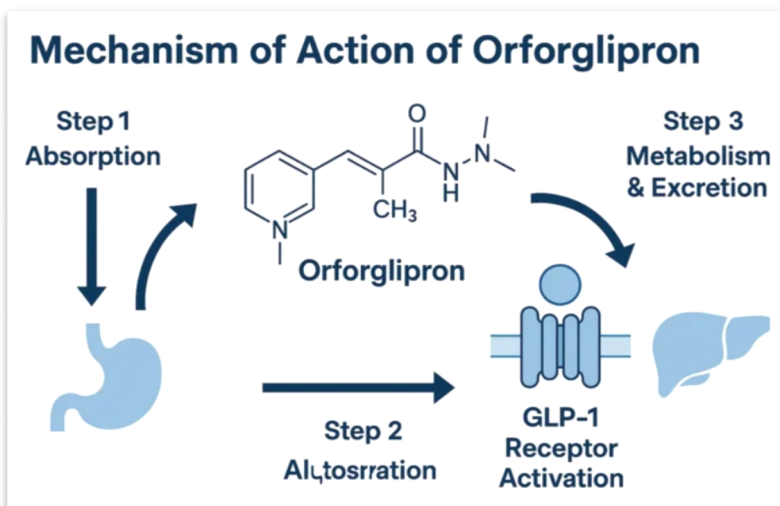
Oral semaglutide, a peptide-based GLP-1 RA and the only currently available oral formulation, is co-formulated with an absorption enhancer, leading to low bioavailability; it must be administered under fasting conditions to achieve therapeutic concentrations.

Orforglipron, on the other hand, is a nonpeptide (small molecule) partial GLP-1 RA with pharmacokinetic characteristics that allow for once-daily administration without dietary restrictions.

The current 52-week ACHIEVE-3 trial was a head-to-head comparison of the efficacy and safety of the two oral GLP-1 agents.

The researchers compared orforglipron to semaglutide in 1698 patients with T2D inadequately controlled by

metformin. The mean age of participants was 53.9 years, vs semaglutide 7 mg of -1.71% mean A1c was 8.3%, respectively. There was also a larger magnitude of change with orfor-



Participants were randomly assigned to receive orforglipron 12 mg or 36 mg (n = 424 and 423, respectively) or semaglutide 7 mg or 14 mg (n = 426 and 425, respectively). The primary objective was to assess the noninferiority of orforglipron by comparing the two higher-dose regimens to each other and the two lower-dose regimens to each other.

Participants were randomly assigned to receive orforglipron 12 mg or 36 mg (n = 424 and 423, respectively) or semaglutide 7 mg or 14 mg (n = 426 and 425, respectively). The primary objective was to assess the noninferiority of orforglipron by comparing the two higher-dose regimens to each other and the two lower-dose regimens to each other.

New Therapeutic Option?

The researchers found that both doses of orforglipron outperformed both doses of semaglutide, with mean A1c changes from baseline in orforglipron 12 mg vs

glipron 36 mg vs semaglutide 14 mg (-1.91% vs -1.47%, respectively). “GLP-1 medicines.”

Drucker, a professor in the Department of Medicine’s Division of Endocrinology, the Banting and Best Diabetes Centre-Novo Nordisk Chair in Incretin Biology, University of Toronto, said he looks forward to the “totality of phase 3 data from the ACHIEVE and ATTAIN programs studying orforglipron. Hopefully, this will become a new affordable and convenient option for people living with T2D and/or obesity.”

Estimated treatment differences were -0.48% (95% CI, -0.65 to -0.31) for the comparison of the two lower-dose regimens and -0.44% (95% CI, -0.62 to -0.26) for orforglipron for the two higher-dose regimens (P < .0001 for all).

Participants in both orforglipron groups showed sig-

1.3) for orforglipron 12 mg vs semaglutide 7 mg; -4.3% (-5.3 to -3.3) for orforglipron 36 mg vs semaglutide 7 mg; and -2.8% (-3.9 to -1.9) for orforglipron 36 mg vs semaglutide 14 mg (P < .0001 for all).

The most frequent adverse events were gastrointestinal, affecting 59% and 58% of participants receiving 12-mg and 36-mg orforglipron, respectively, vs

thors include the open-label design and the possibility that self-reported gastrointestinal adverse events represent a “potential source of bias.”

Nevertheless, they concluded, orforglipron represents a “potential new therapeutic option” for individuals with T2D considering initiation of GLP-1 RA therapy who might “prefer an alternative to the subcutaneous route of administration.”

Efficacy vs Tolerability

Commenting for Medscape Medical News, Michael

Nauck, MD, head of clinical research, Diabetes Division, Medical Department I, Josef-Hospital, Ruhr University Bochum, Germany, called the study “important” because it allows comparison of “competing GLP-1 RAs

designed for oral administration, with respect to efficacy and tolerability.”

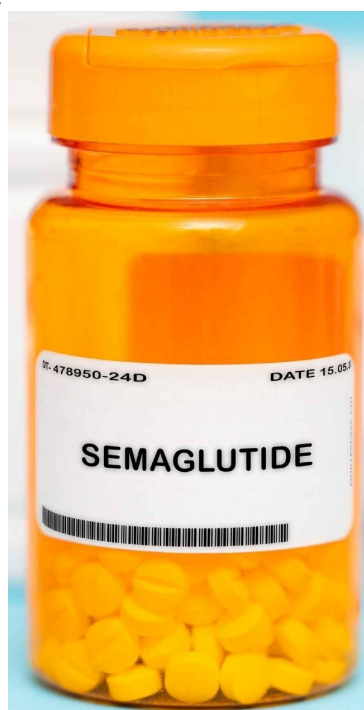
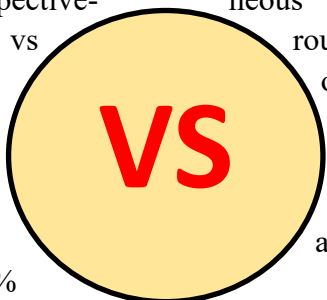
Nauck, coauthor of an accompanying editorial, believes the differences between orforglipron and semaglutide — that is, better efficacy but greater risk for gastrointestinal adverse events — “suggest differential use for those needing substantial improvements in glycemic control, vs giving priority to good tolerability.”

Also commenting for Medscape Medical News, Daniel Drucker, MD, senior investigator at the Lunenfeld Tanenbaum Research Institute, Mount Sinai Hospital, Toronto, Canada, said, “There’s growing interest in orforglipron, an investigational medicine for T2D and obesity, that may become the first small molecule approved in the class of GLP1s.

nificant weight reductions from baseline, beginning with week 4 and continuing to week 52. Orforglipron treatment was superior to semaglutide for weight loss, with estimated treatment differences of -2.3% (-3.2 to -

erate in severity,” but 9%-10% of participants in the orforglipron groups discontinued study treatment due to adverse events, compared to 4%-5% in the semaglutide groups.

Limitations noted by the au-

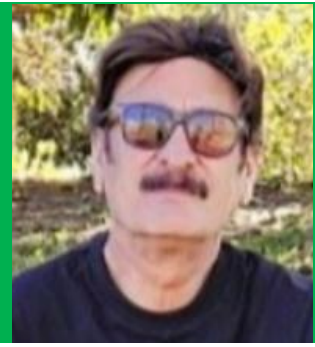


Wegovy Pill vs Orforglipron Pill: Which Is Better for Weight Loss?



Benefits of Ramadan Fasting in people with Diabetes

A brief review by: Dr. Nauman Rizwan



Ramadan fasting, when undertaken with careful medical supervision and management, can offer several potential benefits for individuals with diabetes, particularly those with type 2. These benefits include improved glycemic control, weight loss, and reduction in cardiovascular risk factors

Potential Benefits manage blood sugar levels.

Improved Glycemic Control:

Studies have shown that fasting during Ramadan can lead to a significant reduction in glycated hemoglobin (HbA1c) levels and fasting blood glucose (FBG) in people with type 2 diabetes. This is often attributed to reduced food intake during the day and improved insulin sensitivity.

Weight Loss and Body Composition:

Fasting can lead to a reduction in body weight and fat mass, a key factor in managing type 2 diabetes. This weight loss is primarily due to reduced overall calorie intake during the month, provided there is no overeating during the non-fasting periods.

Enhanced Insulin Sensitivity:

The metabolic shift that occurs during fasting, where the body uses stored fat for energy after depleting glucose stores, can improve how the body's cells respond to insulin. This increase in insulin sensitivity helps better

Reduced Blood Pressure and Lipid Profile:

Fasting may contribute to a significant decrease in both systolic and diastolic blood pressure. Improvements in the lipid profile, such as a decrease in total cholesterol and LDL ("bad") cholesterol and an increase in HDL ("good") cholesterol, have also been observed.

Better Self-Management and Discipline:

The structured routine of Ramadan can provide an opportunity for individuals to develop better self-discipline and engagement in their diabetes management, which can lead to sustained healthy lifestyle choices after Ramadan.

Important Considerations

It is crucial for individuals with diabetes to understand that fasting carries potential risks, including hypoglycemia (low blood sugar), hyperglycemia (high blood sugar), dehydration, and diabetic ketoacidosis (DKA), especially for those with type 1 diabetes or poorly controlled

type 2 diabetes.

Therefore, anyone with diabetes who wishes to fast must:

1. Consult their healthcare provider before Ramadan to assess their individual risk and determine if fasting is safe for them.
2. Develop an individualized management plan with their doctor, which may include adjusting medication type, dosage, and timing.
3. Perform regular self-monitoring of blood glu-

cose throughout the day to detect dangerous fluctuations.

4. Follow specific dietary advice, focusing on complex carbohydrates and fiber during the pre-dawn meal (Suhoor) and avoiding excessive high-fat/high-sugar foods when breaking the fast (Iftar).

With proper medical advice and careful management, many people with type 2 diabetes can fast safely and benefit from the experience.



ایک یادگار دن:

پنجاب پولیس اور ڈاکٹر خالد حسین مزاری کے مابین

تاریخی معاہدہ طے پا گیا

رحیم یار خان (رپورٹ): یہ ہمارے لیے انتہائی فخر اور مسرت کا لمحہ ہے کہ رحیم یار خان کے معروف شوگر اسپیشلسٹ ڈاکٹر خالد حسین مزاری اور پنجاب پولیس کے درمیان ایک اہم معاہدہ کی یادداشت پر دستخط کیے گئے ہیں۔ اس تقریب میں ڈسٹرکٹ پولیس آفیسر رحیم یار خان، عرفان علی سمون اور ڈاکٹر خالد حسین مزاری نے باضابطہ طور پر دستاویزات کا تبادلہ کیا۔ یہ معاہدہ پرائمری کیئر ڈائی بیٹیس ایسوسی ایشن پاکستان کے تعاون اور پلیٹ فارم سے ممکن ہوا ہے، جو کہ ڈاکٹر خالد مزاری کی پیشہ ورانہ مہارت اور انسانی بہمدوری کا منہ بولتا ثبوت ہے۔

معاہدے کے اہم نکات:

اس معاہدے کے تحت پنجاب پولیس کے ملازمین اور ان کے

اہل خانہ کے لیے درج ذیل مراعات فراہم کی جائیں گی:

شہداء اور دورانِ سروس وفات پانے والے اہلکاروں کے

لواحقین: تمام اوپی ڈی خدمات بالکل مفت

حاضر سروس، ریٹائرڈ ملازمین اور ان کے اہل خانہ: تمام اوپی

ڈی خدمات پر 50% رعایت

ڈاکٹر خالد حسین مزاری کا وژن "بہترین اور سستا علاج سب

کے لیے" ہے۔ انہوں نے اپنی سماجی ذمہ داری کو نبھاتے

ہوئے پولیس کے جوانوں اور ان کے خاندانوں کی صحت کے لیے

اس عظیم مشن کا آغاز کیا ہے، جو کہ معاشرے کے محافظوں کے لیے

ایک بہترین تحفہ ہے۔ ہم ڈی پی او جناب عرفان علی سامو اور ڈاکٹر

خالد حسین مزاری کی اس کاوش کو خراج تحسین پیش کرتے ہیں، جس

سے نہ صرف پولیس فورس کا مورال بلند ہوگا بلکہ انہیں معیاری طبی

سہولیات تک آسان رسائی بھی حاصل ہوگی۔



Dr. Khalid Mazari Partners with Punjab Police to Provide Affordable Diabetes Care for police employees of Rahim Yar Khan

RAHIM YAR KHAN, PUNJAB, PAKISTAN – March 11, 2026 – A significant Memorandum of Understanding (MoU) was signed between Hamza Medicare, led by renowned Diabetologist & Hypertension Specialist Dr. Khalid Hussain Mazari, and the Punjab Police, Rahim Yar Khan, in collaboration with the Primary Care Diabetes Association Pakistan (PCDA). This partnership aims to provide essential and affordable treatment for diabetes and metabolic disorders to police personnel and their families in the district.



The MoU, which officially came into effect on March 1, 2026, reflects Dr. Khalid Hussain Mazari's commitment to fulfilling social and community responsibilities by ensuring access to quality healthcare at reduced costs.

Under the terms of the agreement:

→ Families of Shuhada (Martyrs) and In-Service Deceased Personnel will receive 100% free OPD (Out-

Patient Department) services.

→ Serving and Retired Police Employees and their families will benefit from a 50% discount on OPD services.

"Our agenda is to provide the best and most affordable treatment for diabetes and metabolic disorders for all," stated Dr. Khalid Hussain Mazari of Hamza Medicare. "This collaboration allows us

to extend crucial healthcare support to the dedicated members of the Police Department, District Rahim Yar Khan, and their families." Khalid H. Mazari and Mr. Irfan Ali Samo, PSP, District Police Officer, Rahim Yar Khan, and their families."

The initiative is expected to significantly ease the financial burden of managing chronic conditions like diabetes and hypertension for many police families, ensuring they receive timely and expert medical care. The MoU was signed by Dr. Riasat Ali Khan, the President of PCDA Pakistan, and the General Secretary, Dr. Shahid Akhter, have both shared their appreciation for Dr. Mazari's commendable efforts to support the ailing community through this vital partnership.



TO PREVENT OBESITY, COUNTRIES NEED TO...

RESTRICT THE MARKETING OF UNHEALTHY FOOD

TAX SUGARY DRINKS

PROVIDE ACCESS TO AFFORDABLE HEALTHY FOOD

MAKE SPACES FOR WALKING & CYCLING

TEACH CHILDREN HEALTHY HABITS

Posted By: **Dr. Nauman Rizwan**

Free is *Never Free*

How to Avoid Hidden Costs,
Make Smart Choices, and
Prioritize Value in Life



Dr. Pawan Kumar Sachdev

Dr. Pawan Kumar's 4th. Book released by Amazon

Report: Dr. Naresh Kumar

with over 35 years of continuous clinical experience. He has served 18 years as a Full-Time Family Physician and 17 years as a Full-Time Diabetologist, dedicating his career to comprehensive patient care, long-term disease management, and ethical medical leadership.

Throughout decades of practice, he has treated thousands

in health, time, relationships, and life decisions. Through practical wisdom and decades of observation, he encourages readers to embrace accountability, discipline, and ownership as foundations for lasting success.



As a Full-Time Family Physician for 18 years and a Full-Time Diabetologist for 17 years, I have had the privilege of caring for thousands of patients. I have seen recovery and relapse. Discipline and denial. Commitment and carelessness. And over time, I began to notice a consistent pattern that had nothing to do with prescriptions.

The pattern was simple.

When patients invested—emotionally, financially, and mentally—they followed treatment plans more seriously. They returned for follow-up. They respected lifestyle advice. They valued the process.

But during free medical camps and charitable services, while attendance was often high, follow-up rates were dramatically low. The word “free” attracted attention—

of patients across diverse backgrounds. Beyond clinical medicine, Dr. Sachdev has closely studied human behavior—particularly the connection between value, responsibility, and long-term success.

While serving in community outreach programs and free medical camps, he observed a striking pattern: although the word “free” attracted attention, sustained commitment and follow-up were often significantly lower. This recurring experience inspired a deeper reflection on the psychology of value—why people protect what they invest in, and neglect what costs them nothing.

Free Is Never Free is built upon these real-world insights. In this thought-provoking book, Dr. Sachdev challenges the illusion of “free” and uncovers the hidden costs we pay

Dr Pawan Kumar

Sachdev

Joint Secretary,

Primary Care Diabetes Association

(PCDA) Pakistan

Preface

For more than three decades in medical practice, I have witnessed something that textbooks do not teach.

Medicine teaches diagnosis. It teaches treatment protocols. It teaches evidence-based guidelines. But life teaches something deeper—the psychology of value.

but rarely long-term responsibility.

That observation troubled me.

Why does something offered at no cost often receive the least commitment? Why do we protect what we pay for, but neglect what is freely given? And is anything in life truly free?

Over time, I realized that “free” is rarely free. There is always a hidden cost—whether paid in discipline, time, responsibility, missed opportunity, or future consequences.

This book is not about money.

It is about mindset.

It is about how we value health, relationships, time, opportunities, and even advice. It is about understanding

that every decision carries a cost—seen or unseen. When we ignore that cost, we eventually pay a higher price.

Free Is Never Free was born from decades of observation, reflection, and experience—not only in clinics and hospitals, but in everyday human behavior. The lessons shared here extend beyond medicine. They apply to personal growth, leadership, education, business, and life itself.

If this book encourages even one reader to take greater ownership of their health, their choices, and their responsibilities, then its purpose is fulfilled.

Because lasting change begins the moment we understand one simple truth:

things we don't need, and give away our time, data, and energy all because something is labelled "free."

But nothing in life is truly free.

Every free choice carries a **hidden cost**—sometimes in money, sometimes in time, sometimes in peace of mind. We may not pay immediately, but the bill always arrives.

This book is not about rejecting free things.

It is about **understanding the real price behind them**.

You will learn:

- Why our brain is wired to fall for free offers
- How businesses profit from "free"
- How free services cost us data, attention, and freedom

This book explores:

- The psychology behind why humans are attracted to free
- How companies and platforms profit from "free" offers
- The hidden cost of free services in the digital age
- Opportunity cost in money, time, and personal growth
- How to avoid free traps and make smarter choices

Written in clear, relatable language with real-life ex-

Value creates commitment.

Commitment creates results.

Dr. Pawan Kumar Sachdev

Chapter 1

Introduction

The Hidden Cost Of Free

Everyone loves the word **free**.

Free offers catch our attention, influence our decisions, and often override logic. We stand in longer queues, buy

- Why free choices often become expensive mistakes
- How to make smarter decisions without regret

Free Is Never Free is a guide to seeing the world clearly so you can choose **value over illusion**.

Nothing is truly free—someone always pays.

In a world flooded with free apps, free trials, free advice, and free offers, we rarely stop to ask one simple question: *What is the real cost?*

In *Free Is Never Free*, the author reveals how the promise of "free" quietly influences our decisions, drains our time, compromises our data, and shapes our lives in ways we don't notice until it's too late.

amples, *Free Is Never Free* is a practical guide for anyone who wants to think better, decide wiser, and live more intentionally.

Because in the end, **the most expensive things in life often appear free**.

CHAPTER 2

Why We Fall for free

The attraction to free is not a character flaw.

It is **human nature**.

To continue reading this wonderful book, click the and purchase the book from AMAZON

<https://www.amazon.com/Free-Never-Pawan-Kumar-Sachdev-ebook/dp/B0GQCZ5QMS>



PCDA Mirpur Khas Chapter organizes Seminar on Safe Fasting for Diabetics

Reports: **Dr. Abdul Samad**
Head of South Region of PCDA Pakistan

Fasting during Ramadan is an important part of the Muslim faith for all healthy Muslims. However, fasting exemptions are made for those who are ill or have serious medical conditions, including diabetes. Safe fasting for diabetes during Ramadan requires medical clearance, typically 6–8 weeks before, to adjust medications (e.g., insulin or sulfonylureas) and manage risks. Focus on balancing blood sugar via nutrient-dense foods (complex carbs, protein) at Sahur, and breaking the fast (Iftar) with hydration and controlled portions to prevent hypo/hyperglycemia.

Dr. Abdul Samad highlighted the key points of safe fasting for diabetes during Ramadan, to a big gathering of Healthcare Professionals of Mirpur Khan and its suburbs. A lavish Iftar Dinner was served after the lecture.



PCDA Continues Ramadan Tradition with Crucial Session on Diabetic Foot Ulcer Prevention

Reports: Dr. Majid Khan
Social Secretary PCDA Pakistan

For many years, the Primary Care Diabetes Association Pakistan (PCDA) has upheld a significant tradition during the holy month of Ramadan: organizing insightful academic sessions during the pre-dawn hours of Sohor. This year, the PCDA proudly continued this vital practice, hosting a highly anticipated session focused on the critical topic of "Prevention and Management of Diabetic Foot Ulcers."



The event featured a compelling and scholarly presentation by the esteemed diabetologist and renowned Foot Care expert, Dr. Shakeel Ahmed. With his extensive knowledge and experience, Dr. Ahmed captivated the audience, providing invaluable insights into the latest evidence-based guidelines for both preventing the onset of diabetic foot ulcers and effectively managing them. He emphasized the importance of early detection, proper foot care practices, and advanced treatment modalities to significantly improve patient outcomes and quality of life.

Following Dr. Shakeel Ahmed's enlightening lecture, the session transitioned into a dynamic and exceptionally interactive discussion. Attendees, energized even in the early hours, actively engaged with Dr. Shakeel, posing thoughtful questions and sharing their own experiences, contributing to a truly "mind-blowing" exchange of knowledge and perspectives.

The successful session concluded with a heartfelt vote of thanks delivered by Dr. Riasat Ali Khan, President of the PCDA-Pakistan. Dr. Riasat expressed his profound gratitude to the learned speaker, Dr. Shakeel Ahmed, for his outstanding contribution. He also extended his sincere appreciation to all the enthusiastic participants who demonstrated their dedication to continuous learning by sparing their valuable time during the challenging, yet spiritually rewarding, hours of Sohor. The event underscored PCDA's unwavering commitment to advancing diabetic care and education within the com-





Prevention First Newsletter-Online

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