

Health Pulse

magazine



Special Report:
Health Community of West
Africa Association Trains
Over 100 Natural Health
Professionals in AI-Enhanced
Traditional Chinese Medicine
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Mental Health:
How Bruxism Reveals the
Silent Stress Epidemic in
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HCOWAA: Advancing Healthcare Standards in West Africa

The Health Community of West Africa Association (HCOWAA), based in Ghana, is a non-governmental organization dedicated to advancing healthcare across West Africa. Addressing the uneven distribution of medical resources, HCOWAA advocates for regional cooperation through a Health Alliance that unites healthcare stakeholders to create a cohesive health community.

With a mission to improve health outcomes in West Africa, HCOWAA facilitates collaboration, innovation, and research among professionals, leveraging collective resources to enhance healthcare services, policies, and access. HCOWAA envisions a resilient West African healthcare system where institutions and professionals lead groundbreaking research, foster innovation, and influence policies that elevate regional healthcare.

Through initiatives like establishing a regional healthcare database, launching research projects, and hosting policy roundtables, HCOWAA builds strong networks to drive healthcare advancements. Advocacy efforts focus on equitable access, supporting vulnerable populations, and addressing healthcare disparities. The organization's objectives include fostering research and innovation, supporting health policy reforms, and integrating medical equipment manufacturers with healthcare facilities.

HCOWAA also facilitates training programs, academic exchanges, and research grants, ensuring members are equipped with knowledge and skills to address regional health challenges effectively. Networking events like the HCOWAA Medical and Health Industry Investment Summit & Expo connect professionals, offering a platform for partnership and knowledge sharing.

HCOWAA's commitment extends to partnerships with international health organizations and academic institutions, which amplify its impact by introducing global best practices and strengthening West African healthcare infrastructure. Collaborative efforts with international partners promote training, research, and infrastructure upgrades for health facilities, pharmaceutical establishments, and clinics.

In addition, HCOWAA's magazine partnerships, including an MoU with Health Pulse Magazine, provide platforms to publish relevant content, share insights, and enhance visibility for ongoing initiatives. Through these combined efforts, HCOWAA aims to foster a collaborative healthcare environment that not only addresses urgent health challenges but also builds a sustainable, inclusive healthcare future for West Africa.

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Prioritizing Oral Health: Africa's Call to Action

Oral health has long been overlooked in Africa, yet it affects nearly 42% of the region's population, imposing a significant burden on individuals, families, and health systems. African ministers of health took a decisive step to change this narrative, adopting a regional oral health framework at the Seventy-fifth session of the World Health Organization (WHO) Regional Committee for Africa in Lusaka, Zambia.

The framework sets ambitious but achievable goals: by 2028, at least 50% of each country's population should have access to essential oral health services, major oral diseases should be reduced by 10%, and 60% of countries should have national oral

health policies backed by dedicated budgets and personnel. Importantly, countries affected by noma, a devastating oral disease, are urged to integrate its management into national health strategies.

Dr Mohamed Yakub Janabi, WHO Regional Director for Africa, rightly emphasized that oral diseases have been "largely neglected" and that robust, sustained, and coordinated efforts are essential. The framework underscores oral health as a critical component of universal health coverage, advocating for stronger leadership, financing, workforce development, and integration into essential health services.

Early examples of progress are encouraging. Mauritius abolished taxes on toothpaste to improve access to fluoride products, while over 14,000 health workers across Africa have undertaken WHO training to detect and manage oral diseases at the community level. Senegal, a leading advocate against noma, has committed to a multisectoral approach to protect its population. Fourteen countries are pursuing WHO recognition of noma as a neglected tropical disease, reflecting growing regional commitment.

Yet, challenges remain daunting. Investment in oral health is strikingly low—over 70% of African countries spend less than US\$1 per capita, far below

the global average of US\$50. Preventive care is limited, national fluoride guidelines are scarce, and the oral health workforce is critically understaffed.

The adoption of this framework signals a turning point. Success will require political will, strategic financing, skilled personnel, and strong partnerships. If implemented effectively, it promises not only to reduce the prevalence of oral diseases but also to improve overall health, wellbeing, and equity across Africa. The time to act is now—because oral health is not a luxury; it is a cornerstone of healthy communities.

The Tooth

By Priscilla Akorfa Fomevor

A tooth is not a mere tool or a decorative chip of bone. It is, in fact, a living organ, a self-contained world of tissue and sensation built for endurance and function. To understand dental health is to first understand this small, mighty fortress within us.

Each tooth is a layered architecture of purpose. Its outer shield, the enamel, is the hardest substance the human body produces a translucent armor against a world of pressure, acid, and temperature. Yet for all its strength, it cannot regenerate. Beneath it lies the dentin, a sensitive, bony layer threaded with microscopic passages that lead inward. At the heart of it all rests the pulp, the soft, living core where nerves and blood vessels gather the tooth's silent messenger and lifeline. This entire structure is anchored firmly into the jaw by a cushion of ligaments and a layer of cementum, connecting it not as an isolated object, but as part of an integrated oral system.

This living stone faces constant, quiet threats. A film of bacteria—plaque—clings daily to its surfaces, feeding on sugars and releasing acids that slowly

dissolve the mineral strength of the enamel. Without defense, this leads to decay, a breach in the fortress wall. Similarly, inflammation along the gumline can undermine the very foundation that holds the tooth in place. These processes are often silent, progressing without pain until significant damage is done.

Caring for such a structure, then, becomes an act of both reverence and vigilance. It begins with the simple, steadfast rituals of brushing with fluoride toothpaste, which helps rebuild weakened enamel, and flossing, which cleans the hidden spaces a brush cannot honor. What we eat and drink matters, too—every choice between sugar and nourishment, between constant sipping and mindful meals, shapes the environment these teeth endure. Yet our own care, however diligent, is only part of the story. Regular visits to a dentist provide a professional eye and a skilled hand able to remove hardened deposits, spot the earliest signs of trouble, and help fortify what we maintain at home.





Health Community of West Africa Association Trains Over 100 Natural Health Professionals in AI-Enhanced Traditional Chinese Medicine

The Health Community of West Africa Association, in collaboration with the 14th Batch China Medical Team, and the West African Traditional Medicine Cooperation and Exchange Centre (WATMCEC), have jointly hosted an impactful training session for the association of Natural Health Professionals Federation of Ghana (NAHPFEG), on Thursday, February 19, 2026.

The event, held at Wisconsin University International College, focused on the practical application of Traditional Chinese Medicine (TCM), specifically Red Cupping Massage Therapy, within the context of modern technological advancements.

Themed “The Use Of Artificial Intelligence In The Modern Search For Excellence In Traditional Herbal Medicine And Alternative Healthcare,” the session drew health professionals eager to explore how time-honored healing practices can be enhanced by contemporary science and integrated into West African healthcare systems.

The training was rooted in a core philosophy shared by the organizing bodies: that the future of healthcare lies

in collaboration, not exclusion. Reverend Charles, delivering the welcome address, set the tone by emphasizing the training’s goal to “broaden the knowledge and assist in strengthening healthcare in the system,” urging participants to engage deeply with the material.

This sentiment was powerfully echoed by Prince Opoku Dogbey, Vice President of HCOWA. In his opening speech, he highlighted the natural synergy between African and Chinese medical traditions.

“Here in Africa, we are not strangers to traditional medicine, our indigenous healing systems have long emphasised holistic care—treating the body, the mind, and the environment together. What HCOWA advocates for is structured integration: combining the strengths of indigenous African medicine with scientifically validated traditional systems like TCM, within regulated, ethical, and clinical frameworks.” Prince Opoku Dogbey stated



Traditional Chinese Medicine, one of the world's oldest continuous medical systems, is increasingly recognized globally for its non-invasive, low-risk therapies. Among these, Red Cupping Therapy—a technique involving suction on the skin to promote blood flow and relieve pain—took center stage.

Dr. Linduan Hao, Executive Chairman of WATMCEC, framed the therapy as an ideal candidate for integration into West African clinical practice. "Red cupping therapy is practical, cost-effective, and adaptable, for doctors, it represents an additional therapeutic option that can be integrated into daily practice—whether for pain relief, rehabilitation support, or adjunctive care—without replacing conventional medical treatment." Dr. Hao explained.

The session moved from theory to practice with a live demonstration by Dr. Hao. A volunteer from the audience, Mr. Bediako Mensah who works at the University received the Red Cupping treatment, focused on the back. The immediate feedback was positive and telling. Mr. Bediako shared a spontaneous testimony, stating, "This morning I was feeling some back pains; however, after the massage, I feel a bit relieved and I wish it could have lasted longer."

The hands-on training continued as Ennison Isaac Neph, a member of NAHPFEG, volunteered to be the subject for the next demonstration, allowing the Ghanaian health professionals to observe the technique up close as part of their practical learning.

The interactive nature of the event fostered a rich learning environment. The training concluded with a dynamic question-and-answer session, where participants sought clarity on the treatment's applications and mechanisms. This was followed by an opportunity for networking and even inquiries about purchasing Red Cupping sets, indicating a strong interest in adopting the practice.

Crucially, the session underscored the importance of patient safety. In a key piece of clinical advice, Dr. Hao cautioned the trainees, stating, "If you are using the Red Cupping on a patient and he expresses excruciating pain, kindly put a hold on the treatment."

The collaboration marks a promising step toward a more diverse and robust healthcare landscape in West Africa. By blending the holistic principles of both African and Chinese traditions with the analytical power of modern tools like AI, initiatives like this training are paving the way for a future where patients have access to a wider, more effective, and culturally resonant range of therapeutic options.



The Vital Role of Estrogen in Oral Health.

By Priscilla Akorfa Fomevor



For generations, a woman's health journey has been closely charted through the lens of hormonal change. Yet, one critical aspect often remains in the shadows: the profound and direct impact of these fluctuations on oral health. While hot flashes and mood changes are widely discussed, the silent erosion of jawbone density or the sudden, unexplained burn on the tongue are whispers of a deeper systemic shift. The link is both direct and undeniable: estrogen is not just a reproductive hormone; it is a guardian of bone and oral tissue, and its decline fundamentally reshapes the landscape of a woman's mouth.

Estrogen plays a vital, understated role in maintaining the density and strength of the jawbone—the very foundation that anchors our teeth. As estrogen levels naturally wane during perimenopause and menopause, this foundation can begin to weaken. The result is a heightened risk for osteoporosis, a condition that does not selectively affect only the hips or spine. The jawbone is equally vulnerable. As it loses density and volume, its ability to support teeth diminishes. This can lead to increased tooth mobility, a higher risk of tooth loss, and significant challenges for restorative procedures like dental implants, which require sturdy bone for success. The health of the mouth, therefore, becomes a poignant reflection of skeletal health.

Beyond the bone, declining estrogen can manifest in more subtle, yet deeply distressing, sensory conditions. Burning Mouth Syndrome (BMS) is a complex disorder characterized by a persistent scalding sensation on the tongue, lips, or palate, often without any visible clinical signs. While its causes are multifaceted, the hormonal transition of menopause is a recognized key trigger. This condition is more than physical discomfort; it is a daily trial that can alter taste, dampen the joy of eating, and contribute to significant anxiety and social withdrawal. It stands as a stark example of how hormonal imbalance can directly dysregulate the nervous system within the oral cavity.

Women are encouraged to frame their oral health as an inseparable component of their overall well-being, especially during hormonal transitions. Mentioning life stage and any new oral symptoms to both a dentist and a physician creates a collaborative safety net. Nutrition rich in calcium and vitamin D, alongside weight-bearing exercise, supports both skeletal and jawbone integrity. For conditions like Burning Mouth Syndrome, a multidisciplinary approach—encompassing dental care, medical evaluation, and sometimes specialized pain management—is often the key to relief.



3.7 Billion People Suffer from Preventable Diseases

A staggering global health crisis is hiding in plain sight. According to the latest World Health Organization (WHO) data, oral diseases affect nearly 3.7 billion people worldwide making untreated tooth decay the most common health condition on the planet. Yet, these diseases are almost entirely preventable.

The burden falls hardest on the world's most vulnerable. Untreated dental caries (tooth decay) in permanent teeth tops the Global Burden of Disease list, causing pain, infection, and lost productivity across all ages. Severe gum disease affects over one billion people, while complete tooth loss impacts nearly 7% of adults globally, soaring to 23% in those over 60. Oral cancers, ranked the 13th most common cancer, claim nearly 190,000 lives annually.

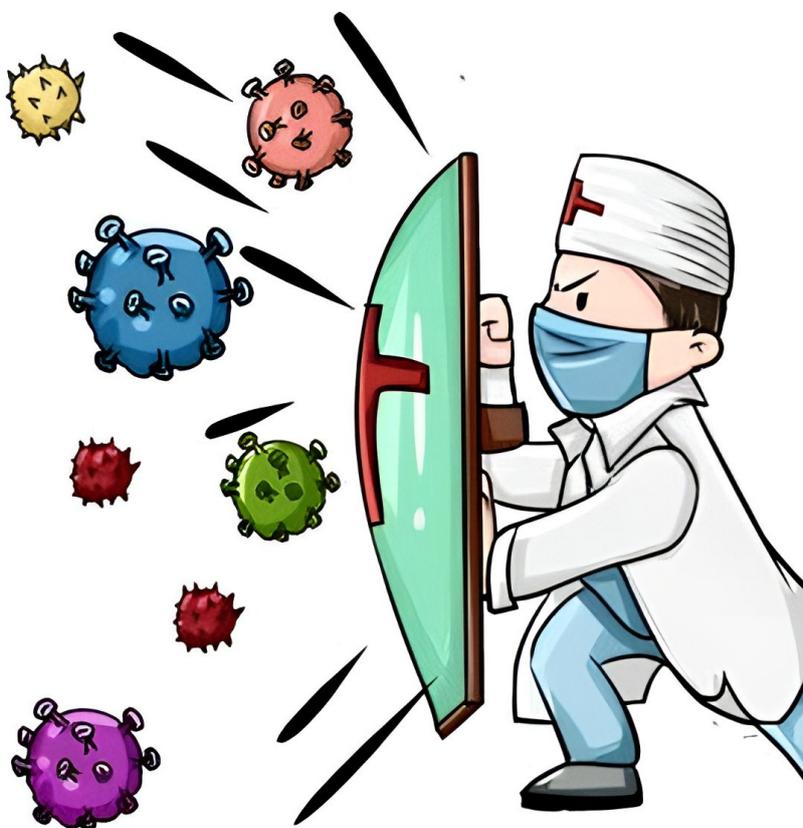
"Most oral health conditions are largely preventable and can be treated in their early stages," WHO emphasizes. The key drivers are common, modifiable risk factors shared with other noncommunicable diseases: high sugar consumption, tobacco use, alcohol, and poor hygiene. Yet access to care remains a profound global inequity. Prevention and treatment are expensive and rarely covered by national universal health coverage (UHC) plans. In low- and middle-income countries, services are severely lacking. Out-of-pocket costs for dental care frequently push families into financial hardship.

Children are not spared. Noma, a gangrenous disease mostly affecting malnourished children aged 2–6 in sub-Saharan Africa, is fatal in 90% of cases without early treatment. Orofacial clefts affect 1 in 1000–1500 births, with high neonatal mortality in low-income settings.

The path forward, however, is clear. "A well-balanced diet low in free sugars, stopping tobacco use, reducing alcohol, and twice-daily tooth brushing with fluoride toothpaste" are proven, simple measures. Adequate fluoride exposure is essential.

In response, WHO Member States adopted a landmark resolution in 2021, shifting focus from curative care to prevention integrated within primary health systems. The Bangkok Declaration "No Health Without Oral Health" now calls for elevating oral diseases as a global priority and embedding them into UHC and NCD agendas. The message is unequivocal: oral health can no longer be ignored.

Source :WHO



Cybersecurity and Healthcare

Healthcare today depends heavily on technology. Hospitals and clinics use electronic medical records instead of paper files. Doctors and nurses rely on computer systems to view test results, prescribe medication, and monitor patients. Many people also use mobile health apps to book appointments, receive reminders, or track their health. While these digital tools make healthcare faster and more efficient, they also create new risks. This is why cybersecurity is so important in modern healthcare. Cybersecurity simply means protecting computers, digital systems, and health information from unauthorized access or misuse. In healthcare, this includes protecting patient records, hospital systems, medical devices, and health apps. A helpful way to think about it is to compare cybersecurity to locks on hospital doors. Just as physical security keeps unwanted people out of wards and offices, cybersecurity keeps digital intruders out of sensitive systems and information.

One of the main reasons cybersecurity matters is to protect

patient privacy. Medical records contain very personal details such as medical history, test results, addresses, and sometimes financial information. If this information is hacked or leaked, it can cause serious harm.

For example, stolen health records can be used for identity theft or fraud. In some cases, private medical information may be shared publicly without a patient's consent, causing emotional distress and loss of dignity. Strong cybersecurity helps ensure that patients feel safe sharing their information and confident that it will remain private.

Cybersecurity is also essential for keeping hospitals and clinics operating smoothly. Healthcare systems rely on computers for scheduling appointments, running laboratory tests, managing medications, and supporting emergency care. A cyberattack can disrupt these systems and bring services to a halt.

Donald Yaw Gaviston

Occupational Therapist, University of Ghana Medical Center





There have been real situations where hospitals were forced to cancel surgeries or delay care because their systems were attacked. Doctors could not access patient records, test results were unavailable, and treatment decisions were delayed. In healthcare, such disruptions can put lives at risk. Good cybersecurity helps prevent these dangerous interruptions.

Trust is at the heart of healthcare. Patients trust healthcare providers with their most personal information. If hospitals fail to protect that information, trust can quickly be lost. Patients may become reluctant to seek care, share important details, or use digital health services. By taking cybersecurity seriously, healthcare organizations show their commitment to patient safety and professionalism.

Simple Actions Make a Big Difference

Cybersecurity is not only about advanced technology. Simple

actions can greatly improve safety. Using strong passwords, updating systems regularly, and training staff to recognize suspicious emails can prevent many cyber incidents. For example, a staff member clicking a fake email link can unknowingly allow hackers into a hospital system. Proper training helps reduce these risks.

Cybersecurity affects everyone—patients, healthcare workers, and health systems. When digital systems are secure, patients receive safer care, staff can work confidently, and services run without disruption. As healthcare becomes more digital, strong cybersecurity will remain essential. By protecting health information and systems, cybersecurity helps create safer, more reliable healthcare for all.

Burkina Faso Launches National Mobile Effort to Eliminate Cervical Cancer

Burkina Faso is charting a new course in public health by directly delivering free cervical cancer screening to the heart of its communities, from remote villages to bustling local markets. This nationwide effort is overcoming deep-seated barriers of cost and distance that have long left women unprotected against one of the country's deadliest cancers.

Previously, fewer than eight percent of women had access to screening, with rural women facing journeys of dozens or even hundreds of kilometers to reach a health center. The government's bold response has been to declare screening and treatment free and to deploy mobile clinics that travel directly to where women live and work.

Dr Nayi Zongo, who leads the National Cancer Control Programme, emphasizes the shift in approach: "We moved the service to the community so women can safeguard their health without abandoning their fields, their markets, or their families."

The initiative's strength lies in its integration of multiple strategies: eliminating medical fees, deploying mobile health units, and launching widespread public campaigns through media and local partnerships. The World Health Organization has provided essential technical support, helping to train health workers and guide national policy.

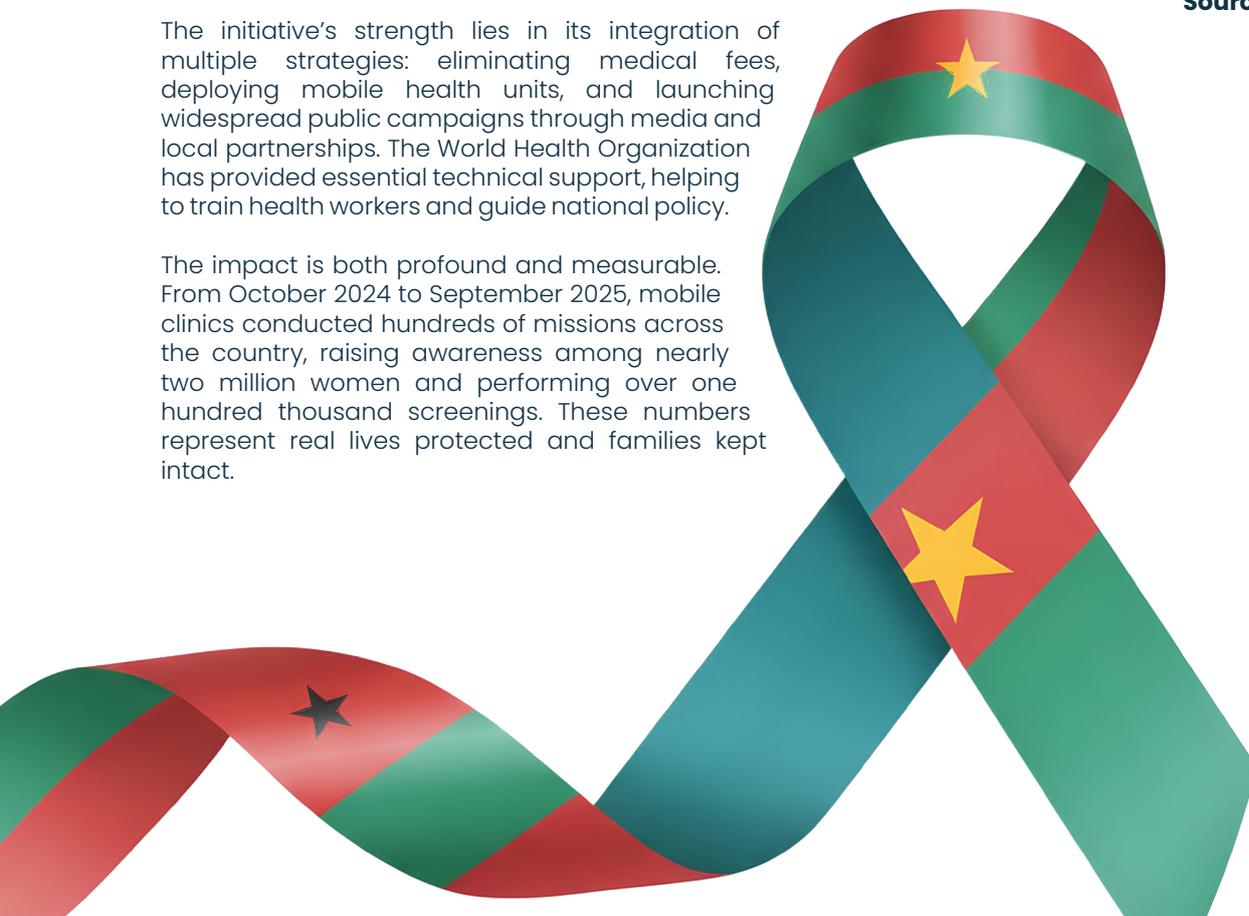
The impact is both profound and measurable. From October 2024 to September 2025, mobile clinics conducted hundreds of missions across the country, raising awareness among nearly two million women and performing over one hundred thousand screenings. These numbers represent real lives protected and families kept intact.

Awa, a mother of six from Ipendo, recalls her initial fear when hearing the town crier announce a screening visit. "I was afraid of what they might find," she shares. "But I thought of my children and went. When the result was clear, I felt a great relief. Now I tell every woman: this service is for us, and it can save your life."

Dr Seydou Coulibaly, the WHO Representative in Burkina Faso, highlights the broader significance of this success. "Burkina Faso demonstrates that with political will and tailored solutions, even the most stubborn health challenges can be addressed. This model of free, mobile care is a powerful inspiration for the entire region."

Beyond the medical statistics, this program carries a deeper message of dignity and social justice, affirming that every woman, no matter where she lives, has the right to health and a future.

Source: WHO





The Brushing Myth:

Why “Harder” Isn’t “Cleaner” For Your Teeth

Priscilla Akorfa Fomevor

We’ve all been there. Feeling like your teeth need a deep, rigorous scrub, you bear down on your toothbrush with extra force, convinced that more pressure equals a more thorough clean. It’s a logical assumption if a gentle wipe cleans a counter, surely a good scrub does better. But when it comes to your teeth, this common belief isn’t just wrong; it’s actively harmful.

The truth is, brushing harder does not mean cleaner teeth. In fact, brushing too hard is

a leading cause of enamel erosion and gum recession, two problems that are irreversible and can lead to serious dental issues.

To understand why, let’s look at what you’re actually cleaning. Your tooth enamel is the hardest substance in the human body, but it’s not invincible. It’s designed to withstand chewing forces, not the abrasive assault of stiff bristles driven by excessive pressure. Over time, aggressive scrubbing wears this protective layer down, much like sandpaper wears away wood.

Simultaneously, your gums are soft, delicate tissue. Scrubbing them harshly causes them to become inflamed, sore, and eventually to pull away or recede from the teeth. This recession exposes the sensitive tooth root (dentin), which is not protected by enamel and is far more susceptible to decay and extreme temperature sensitivity.

The result? You may be brushing away your teeth’s natural defenses and creating long-term vulnerabilities, all in the pursuit of short-term “clean.” Dental professionals recommend using a soft-bristled toothbrush, brushing gently at a 45-degree angle for 2 minutes twice a day, focusing on technique over force for effective cleaning

The pursuit of clean teeth should not come at the cost of your health. Abandon the “no pain, no gain” mentality at the bathroom sink. Clean teeth are achieved through gentle, meticulous care, not forceful scrubbing.

By switching to a soft-bristled brush and focusing on gentle, effective technique, you’re not taking the easy way out—you’re taking the smart way forward. You’re protecting your enamel, safeguarding your gums, and ensuring a healthy smile for years to come. Your future self will thank you for the lighter touch.



How Bruxism Reveals the Silent Stress Epidemic in the Minds of Men

By Priscilla Akorfa Fomevor

A silent epidemic is happening in the mouths of millions of men every night. It's not a disease of decay, but one of pressure—a physical manifestation of the mind's unspoken burdens. This epidemic is bruxism, the involuntary clenching and grinding of teeth, and it stands at the critical intersection of mental health and modern dentistry.

More than just a "dental issue," bruxism is increasingly understood as a biobehavioral condition—a tangible sign written in enamel and jaw muscle of our internal stress, anxiety, and psychological tension. For men, who are statistically less likely to report psychological distress and more likely to somaticize stress (express it through physical symptoms), the teeth often become the unwilling canvas.

The unconscious grinding and clenching of teeth for many, is the body's first and only confession of a mind under siege. In the quiet of sleep, when guards are down, stress takes physical form. What was felt emotionally by day is enacted physically by night, turning the jaw into a vise and teeth into tools of silent protest.

This condition lives in the shadowed space between dental care and mental well-being, a physical symptom with psychological roots. For men, who often navigate cultural expectations of stoicism, the mouth can become an unwilling vent for unspoken pressures. The tension they may not voice in words emerges instead as force in the jaw, a tangible translation of anxiety into action. The result is not merely soreness come morning, but a slow, steady erosion of the self—both structurally and emotionally.

Dentists now find themselves reading a different kind of chart. Beyond cavities and gum health, they are interpreting the language of wear. Flattened teeth, fractured edges, and overworked jaw muscles are more than clinical observations; they are silent testimonies to a patient's inner world. A routine check-up can unexpectedly become a moment of revelation, where the story of a person's stress is written plainly across the surface of their molars. The dentist's chair, then, transforms from a site of repair to a place of discovery—often the first stop on a path toward recognizing the profound link between mind and body.





Why Your Gum Health Might Be Causing Your Breakouts

By Priscilla Akorfa Fomevor

You've scrutinized your skincare routine, changed your pillowcases, and eliminated dairy from your diet. Yet, those persistent, inflamed breakouts around your jawline and mouth refuse to budge. If this sounds familiar, it might be time to look beyond your pores and consider a surprising culprit: your gums.

We often think of acne as a surface-level issue—clogged pores, excess oil, and dead skin cells. But emerging research highlights a deeper, more systemic trigger for inflammation. The health of your mouth and the bacteria living within it could be secretly wreaking havoc on your skin, leading to a specific type of acne that is stubborn and inflamed. At the center of this mouth-skin connection is a harmful bacterium with a long name: *Porphyromonas gingivalis*. This bacterium is a primary offender in periodontal disease, more commonly known as gum disease. It thrives in the pockets between your teeth and gums, causing infection, inflammation, and bleeding.

For years, the dangers of *P. gingivalis* were thought to be contained to the mouth. However, scientists now understand that this bacterium is a master of disruption that can affect the entire body. This is where your skin comes into the picture. Acne is, at its core, an inflammatory condition. The systemic

inflammation sparked by *P. gingivalis* can travel throughout the body, landing in the skin and exacerbating inflammatory responses.

For the pores around the jawline and mouth—areas already prone to congestion due to hormonal influences and daily touching—this added internal inflammation acts as a match to kerosene. It can turn a small clogged pore into a painful, red, cystic breakout that is difficult to treat with topical creams alone. If this pattern coincides with other symptoms like bleeding gums, bad breath, or gum sensitivity, the link between your oral health and your skin becomes even harder to ignore.

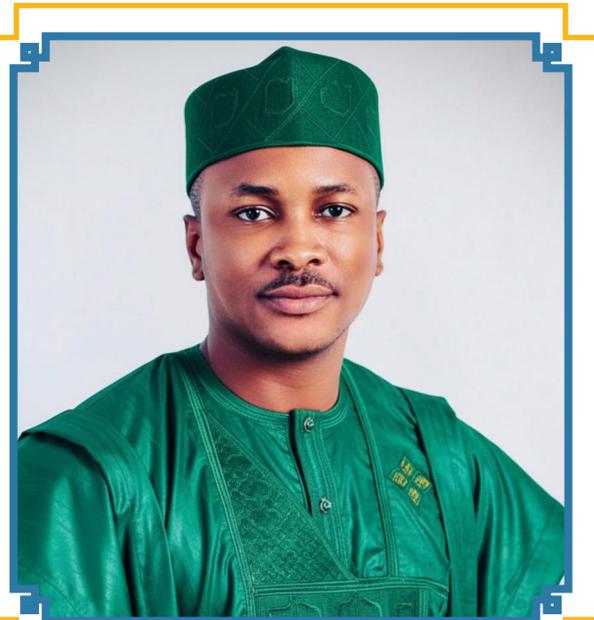
For anyone struggling with persistent lower-face acne, the solution may require a dual approach. On one hand, a consistent skincare routine with non-comedogenic products helps manage the surface. On the other hand, addressing the root cause involves a deep dive into oral hygiene. This means not just brushing twice a day, but also committing to daily flossing to remove the bacteria from between the teeth, using an antiseptic mouthwash, and—most importantly—seeing a dentist regularly to treat and manage gum disease before it can fuel systemic inflammation.



The Growing Role of Artificial Intelligence in Cancer Care

Emmanuel Apetsi (AI/ML Engineer) Founder: Skylake.ai | Executive Director: OpenAI4Africa
Artificial intelligence is rapidly reshaping the way cancer is detected, diagnosed, and treated around the world. From reading scans to predicting how tumors may respond to specific therapies, AI-powered tools are opening new possibilities for more precise and personalized care. In this special feature, we speak with a medical expert to unpack how AI is being used in cancer treatment today, what it means for patients and health systems, and what the future could hold especially in low-resource settings.

1. In simple terms, how is artificial intelligence being used in cancer care today?



Emmanuel Apetsi

(AI/ML Engineer) Founder: Skylake.ai |
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In simple terms, it is used in cancer care as a second pair of eyes: reading scans and pathology faster, flagging subtle warning signs, and helping teams prioritize urgent patients. I always say, "Spend without measure on the mind and the body – for wisdom and health are the only treasures that make all others shine."

2. How does AI help doctors detect cancer earlier or more accurately?

AI improves early detection by catching faint patterns clinicians can miss under pressure. In Sweden's MASAI trial (2026), AI-supported mammography detected more cancers and reduced interval cancers by 12%. Earlier MASAI findings also showed 44% lower reading workload with similar false-positive rates.

3. Can AI influence treatment choices for individual patients, and how does that work?

Yes. It combines pathology, imaging, and labs to estimate which treatment is more likely to work for each patient. In a 2025 ASCO multinational study, AI support improved HER2 scoring accuracy from 66.7% to 88.5%, helping more patients be matched to targeted therapy.

4. Are there concerns about data privacy, bias, or over-reliance on technology when using AI in healthcare?

Yes, these risks are real. I frame it this way: "As AI advances, we must build guardrails or risk a future where our creations tip the balance toward danger." That means consent, strong security, bias audits, local validation, and clinician sign-off before final care decisions.

To simply put: “Disaster looms if AI advances faster than our ethical decisions.” We must ensure ethical guidelines are in the DNA of every healthcare AI solution we build.

5. How are AI systems trained to detect cancer or support treatment decisions?

They are trained on large, labeled cancer datasets, then tested on unseen cases across different hospitals and populations. Before deployment, teams benchmark safety and fairness. After deployment, performance is monitored continuously so models can be corrected when real-world data shifts.

6. What kinds of data such as scans, lab results, or patient records do these systems rely on?

They rely on multimodal data: mammograms, CT/MRI, digital pathology slides, blood and biomarker results, genomics, treatment history, and physician notes. The best systems combine these inputs so clinicians get a fuller and more personalized view of each case.

7. How do you make sure AI tools used in hospitals are accurate, safe, and reliable?

We use a three-layer safety model: rigorous pre-deployment validation, live monitoring with drift alerts, and human override at decision points. Governance follows FDA and IMDRF good machine learning practice and WHO ethics guidance, with documented testing for every model update. For AI engineers, human-in-the-loop is always our utmost priority in healthcare settings.

8. How accessible are AI-powered tools in low-resource settings, including parts of Africa?

Access is improving through cloud support, portable scanners, and triage tools that prioritize urgent cases. In low-resource settings, success depends on offline capability, stable power, local

training, and affordable deployment. The best solutions are adapted with local clinicians, not copied from high income systems.

The truth is access improves dramatically when systems can run locally. Kalon (kalonedge.com) is already building edge-ready solutions designed for on-device intelligence, offline readiness, and private data handling, so clinicians and health professionals can run decision support and diagnostic workflows without constant cloud dependency. I stand by this: “The future runs on edge intelligence, and there’s no turning back.”

9. What are the biggest myths people have about AI in medicine that you would like to correct?

The biggest myths are that AI replaces doctors, AI is always right, and one model works everywhere or that one tool fits every hospital. None are true. Safe and good use means local testing and human judgment. I put it simply: “Overachievers win by treating AI as a teammate, not a tool.”

10. What excites you most about the future of AI in the fight against cancer?

What excites me is tangible progress: stronger MASAI screening outcomes, AI-assisted HER2 gains in 2025, FDA-approved blood-based colorectal cancer screening, pathology foundation models like CHIEF and Virchow, and the first FDA-approved cell therapy for a solid tumor.

I also believe:

“The future of AI will not be defined by size, but by mastery memory, adaptability, orchestration, polish, and integration.”

Red Cup Massage :

New Secret to Smarter Healing Unlocked – TCM

By Marilyn Tiphaine Fifame

14th Batch China Medical Team has unveiled a new secret to faster and smarter healing with a training on Red Cupping Massage Therapy. This impactful session which was held for association of Natural Health Professionals Federation of Ghana (NAHPFEG) was part of training program on “The Use of Artificial Intelligence in the Modern Search for Excellence in Traditional Herbal Medicine and Alternative Health” at Wisconsin University International College.

Leading the training, Dr. Linduan Hao, Executive Chairman of the West African Traditional Cooperation and Exchange Centre and Acupuncturist of the 14th China Medical Team for Ghana explained that The RED CUP massage is a significant healing therapy used for individuals experiencing back pain, spinal discomfort, muscle

stiffness, poor blood circulation, post-stroke conditions, abdominal fat concerns, and general body fatigue. It is also highly recommended for postpartum women seeking abdominal toning and individuals looking to improve circulation and relieve chronic tension.

The RED CUP device is a modern Chinese therapeutic method, which combines advanced technology with targeted massage principles. It works by stimulating pressure points, enhancing blood circulation, relaxing muscles, and relieving deep-seated pain. Not only that, it is designed to improve oxygen flow in the body, reduce inflammation, and support overall wellness.

The training had a hands-on session practical demonstration of the RED CUP massage technique the after which some volunteers shared their personal experiences in an interview with the media team.

Mr. Bediaku Menah, a staff of Wisconsin University, expressed gratitude for being part of the session stating that he felt a noticeable relief from his back pain after the session. "The massage has brought comfort and relaxation to me and strongly recommend it to individuals suffering from spinal cord issues or occasional back pain".

Dr. Eddison, Head of Piesie Herbal Clinic located in Kasoa and Amasaman, described the experience as both exciting and impactful stating that the massage is helpful and effective. He is currently planning to acquire the RED CAP massage machine for use in treating stroke patients and individuals with abdominal weight concerns. He believes this innovation will strengthen Ghana's homeopathic and herbal medicine practice within the healthcare system. He confidently recommends the massage to every Ghanaian, highlighting its

ability to promote easy and healthy blood flow. Another volunteer, Anaaba, experienced the massage on her stomach and shared that she felt lighter afterward. She suggested that the therapy would greatly benefit women after childbirth, helping them regain shape and improve abdominal firmness.

The RED CUP massage represents a powerful blend of tradition and innovation. Its therapeutic benefits, combined with artificial intelligence integration in herbal medicine practice, signal a promising future for alternative healthcare in Ghana. The device is available for clinics, wellness centers, and practitioners interested in enhancing their services.

For more details or how to acquire the RED CAP massage device, to book a session or get trained please contact: 0596505979.

Together, we are advancing holistic healthcare with excellence and innovation, a blend of traditional and modern technology and artificial intelligence (AI).



The Hormonal Disadvantage:

Testosterone and Plaque Buildup.

By Priscilla Akorfa Fomevor

Men are not great at going to the dentist. This is hardly breaking news. But what many don't realise is that even the men who brush twice daily and swear by their electric toothbrushes are fighting biology itself. Testosterone, the very hormone that fuels male strength, libido, and drive, quietly sabotages oral health in ways most men never see coming.

It starts with plaque. Testosterone increases the proteins in saliva that oral bacteria feed on, creating a stickier, more hospitable environment for biofilm to form. The result is faster accumulation of plaque, which, if not meticulously removed, hardens into tartar and inflames the gums. This is why boys and girls have similar rates of gum disease until puberty, when male rates begin to climb sharply and never look back.

By adulthood, the disparity is stark. Men are not only more prone to developing periodontal disease,

but they also tend to develop it earlier and more severely than women. And because gum disease is largely silent in its early stages, many men don't notice anything wrong until their gums bleed during flossing, their breath draws complaints, or a dentist delivers the unwelcome news that bone loss has already begun.

The consequences, however, are not confined to the mouth. Periodontal disease creates chronic inflammation that does not stay put. Bacteria from infected gums can enter the bloodstream and travel to other parts of the body.

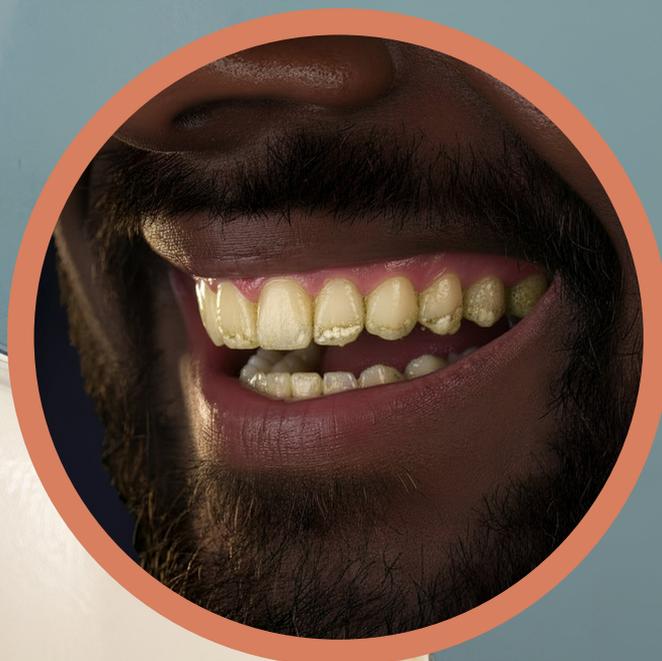
The links are now well established: men with advanced gum disease have higher rates of heart attack, stroke, and poorly controlled diabetes. There is also evidence tying periodontal inflammation to erectile dysfunction, as compromised blood vessels affect more than just the heart.

Yet dental care remains one of the lowest priorities in men's health. Surveys consistently show that men are less likely than women to schedule preventive checkups, more likely to cancel appointments, and far more likely to show up only when something hurts. By then, a simple course of treatment has often become a costly and lengthy ordeal.

Work and family responsibilities shoulder some of the blame, but so does a cultural reluctance

to acknowledge vulnerability. A toothache feels minor compared to chest pain or a suspicious mole. The mouth is treated as a separate mechanical system rather than an integral part of the body. This compartmentalisation is precisely what allows small problems to become major ones.

The good news is that the hormonal hand men have been dealt is not a life sentence. Plaque may form faster, but consistent disruption—brushing, flossing, and professional cleaning—keeps it in check. The fluoride in toothpaste remains effective regardless of testosterone levels. The same dietary choices that protect the heart, namely limiting sugar and avoiding tobacco, also protect the gums. |



Periodontal Disease

By Marilyn Tiphaine Fifame

When people think about dental health, cavities often come to mind first. However, another common and potentially more serious condition lurks quietly in the mouths of millions: periodontal disease, commonly known as gum disease. This chronic inflammatory condition affects the tissues surrounding and supporting the teeth, and if left untreated, it can lead to tooth loss and has been linked to other serious health problems throughout the body.

Periodontal disease begins as gingivitis, a mild form of gum disease characterized by red, swollen gums that may bleed easily during brushing. At this stage, the condition is still reversible with proper oral hygiene and professional cleaning. However, when plaque that sticky film of bacteria is allowed to accumulate and harden into tartar, the inflammation deepens. The gums begin to

pull away from the teeth, forming pockets that become infected. As the body's immune system fights the bacteria, toxins produced by the bacteria and the body's own enzymes break down the bone and connective tissue that hold teeth in place. This advanced stage is called periodontitis.

Many people with periodontal disease are unaware they have it because the symptoms can be subtle. Warning signs include persistent bad breath, red or swollen gums, tender or bleeding gums, painful chewing, loose or sensitive teeth, and receding gums that make teeth appear longer. If you notice any of these signs, it is essential to see a dentist promptly.

Research has established strong links between periodontal disease and other systemic health conditions. The inflammation and bacteria associated with gum disease may contribute to the development of heart disease, increase the difficulty of controlling blood sugar in diabetes, and has been associated with adverse pregnancy outcomes such as preterm birth and low birth weight. This connection underscores why oral health is inseparable from overall health.

The good news is that periodontal disease is largely preventable. Good oral hygiene practices brushing twice daily with fluoride toothpaste, flossing daily, and regular dental check-ups are the first line of defense. For those already affected, treatment ranges from non-surgical therapies like scaling and root planing (deep cleaning) to surgical interventions for more advanced cases.

Periodontal disease reminds us that a healthy mouth is truly the gateway to a healthy body. Paying attention to your gums today could protect your smile and your health for years to come.



Dental Check-Ups Now Recognized as a Critical Step for Heart Health Prevention

The Oral Health Foundation is spotlighting groundbreaking research that firmly establishes a direct and physiological link between the health of the mouth and the health of the heart, transforming daily brushing and flossing from a mere hygiene habit into a potential lifesaving practice.

The connection hinges on the silent threat of advanced gum disease, a chronic inflammatory condition affecting nearly half of all adults. Medical experts now confirm that the severe inflammation and harmful bacteria present in diseased gums do not remain confined to the mouth.



They can enter the bloodstream, traveling throughout the body and contributing to systemic inflammation—a major driver of cardiovascular disease. This process can accelerate the hardening of arteries and increase the risk of blood clots, directly elevating the likelihood of heart attacks and strokes.

The warning carries particular significance for the millions managing existing heart conditions, who may be at heightened risk from oral infections. Conversely, emerging studies suggest that effectively treating gum disease can lead to measurable improvements in markers of heart health

and blood vessel function. This revelation is set to reshape preventive health messaging. The Foundation emphasizes that protecting the heart now unequivocally includes a committed oral hygiene regimen: brushing thoroughly twice daily with fluoride toothpaste, cleaning meticulously between the teeth, and attending regular professional dental cleanings to disrupt the plaque and tartar that fuel gum disease.

“As we observe Heart Month, we want every individual to understand that the path to a stronger heart may very well start at the bathroom sink, your dentist is not just a caregiver for your smile but a key partner in your overall

cardiovascular defense team. This is a proactive, empowering message—by safeguarding your oral health, you are taking a direct and effective step to safeguard your heart.” stated a Chief Medical Advisor for the Foundation. The Foundation advises anyone with concerns about gum disease—often indicated by bleeding, swollen gums or persistent bad breath—to consult their dental professional promptly, framing such a visit as an integral component of comprehensive heart health management.

Source:
Oral Health Foundation



The “Smile Shield” Anti-Cavity Smoothie

This delicious, nutrient-packed smoothie is designed to strengthen teeth, fight cavity-causing bacteria, and promote healthy gums all while tasting like a treat!

Why It Works for Your Teeth:

- Calcium & Vitamin D: Builds and strengthens tooth enamel
- Probiotics: Helps crowd out harmful bacteria in the mouth
- Strawberries: Contain malic acid, a natural enamel whitener
- Vitamin C: Supports healthy gums and collagen production

Ingredients:

- 1 cup plain Greek yogurt (unsweetened) – high in calcium and probiotics
- ½ cup fresh or frozen strawberries – natural enamel whitener

- ½ cup chopped mango – rich in vitamin C for gum health
- 1 small carrot, peeled and chopped – source of vitamin A for gum tissue
- 1 tablespoon chia seeds – calcium and phosphorus for remineralization
- ½ cup milk (dairy or unsweetened almond milk) – extra calcium
- ½ teaspoon vanilla extract – for flavour
- 1 teaspoon xylitol or a few drops of stevia (optional) – sweetens without feeding bacteria
- Handful of ice cubes

Instructions:

1. Wash and prepare all fresh ingredients thoroughly.
2. Add all ingredients to a blender.
3. Blend on high until completely smooth (about 45–60 seconds).
4. Pour into a glass and enjoy immediately.



Smile: It Makes a Difference!

By Marilyn Tiphaine Fifame

Establishing good oral health habits is one of the most important investments a family can make, not just for bright smiles, but for lifelong overall well-being. The mouth is often called a gateway to the body, and research increasingly shows that oral health is deeply connected to general health, from heart disease to diabetes management.

For families, this connection begins in infancy. Tooth decay is present in over 45% of children by age 19. Yet, this common childhood disease is almost entirely preventable with simple, consistent family routines.

Good oral hygiene should begin even before the first tooth appears. Parents can gently clean an infant's gums with a soft, clean cloth. Once teeth emerge, brushing twice daily with a tiny smear of fluoride toothpaste about the size of a grain of rice is recommended. As children grow, they should brush for two minutes, twice a day, with a pea-sized amount of fluoride toothpaste. Public health campaigns continue to emphasize the "Brush Twice Daily" habit to prevent infections and instill lifelong practices.

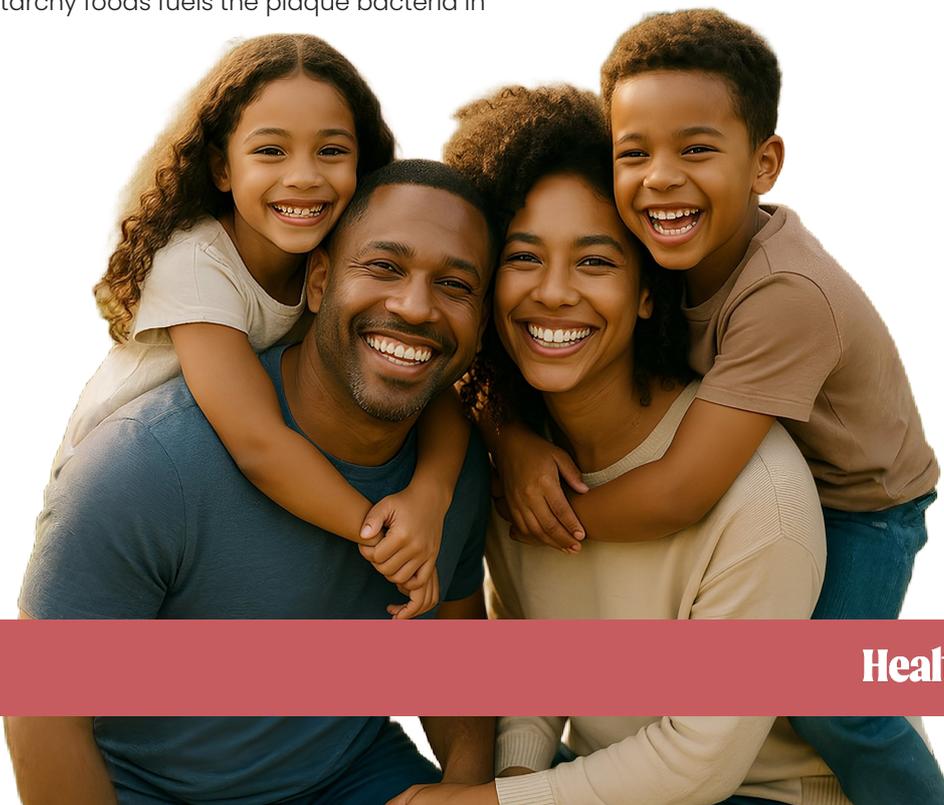
Parents play a crucial role as coaches and supervisors. Caregivers should assist with or monitor brushing until a child is around 10 years old to ensure it is done effectively. What families eat and drink directly impacts dental health. Frequent snacking on sugary or starchy foods fuels the plaque bacteria in

our mouths, leading to acid attacks that can last 20 minutes and erode enamel. It is not just what you eat, but how often. Sipping a sugary drink over an hour exposes teeth to acid much longer than drinking it quickly. Families should limit juice, offer water between meals, and choose nutritious snacks. Water, especially if fluoridated, is the best drink for teeth, helping to rinse away food particles and bacteria.

Regular dental check-ups are non-negotiable. Experts recommend a child's first dental visit by their first birthday. These early visits help children become comfortable with the dentist and allow for preventive care like fluoride varnish or dental sealants, which protect teeth from decay. Dental professionals are there to help, and families should not be afraid to visit the clinic.

Prioritizing family oral health is about more than avoiding cavities. Research links gum disease to heart disease, can complicate diabetes control, and is even associated with pregnancy complications. By teaching children to care for their teeth, families are fostering habits that protect their entire body for a lifetime. As the World Oral Health Day theme aptly puts it,

"A Happy Mouth is a Happy Body."





What Is Varicocele?

Varicocele is a common yet often overlooked condition that affects many men, particularly during their reproductive years. Despite its prevalence, it remains largely misunderstood and rarely discussed—until concerns about fertility arise. In this edition of Ask the Expert, Dr. Kwame Antwi, CEO of County Hospital, explains what varicocele is, how it can impact male fertility, and why greater awareness is essential for protecting men's reproductive health.



Dr. Kwame Antwi
CEO of County Hospital

Dr. Antwi explains that Varicocele is a swelling on top of the testis, caused by varicose vein or engorged vein. It occurs mostly on the left side because the left testicular vein drains into the left renal vein which offers some resistance to drainage causing stagnation and engorgement.

Men often wonder why a vein issue matters for their overall health or family planning. The answer lies in temperature regulation. Sperm production requires an environment slightly below normal body temperature to occur properly. When blood pools in the engorged veins, it generates excess heat. This additional warmth interferes with the delicate process of sperm formation, leaving the sperm unhealthy and less viable.

When examining a sperm analysis report, the damage typically appears in a specific area. Dr. Antwi notes that the sperm count is usually the part that suffers most significantly, though movement and shape can also be affected depending on the severity.

One of the challenges with varicocele is that it resembles other conditions affecting the scrotum. A man who notices swelling might be dealing with orchitis, torsion of the testis, or in rare cases, testicular cancer. This is why an ultrasound becomes so valuable. It provides a clear picture of what is happening internally, allowing doctors to rule out more serious conditions and confirm the presence of a varicocele before recommending any treatment.

For parents of teenage boys, Dr. Antwi advises a measured approach — it is generally better to wait and monitor the condition rather than rush into surgery. The body is still developing, and many cases stabilize without intervention.

When treatment becomes necessary, surgery remains the most effective solution. The procedure addresses the underlying vein issue and restores proper blood flow. Patients often worry about complications, but Dr. Antwi offers reassurance. The chance of recurrence is low when the operation is performed well, and fluid buildup is unlikely with proper surgical technique.

There is a common belief among patients that fixing a varicocele will boost energy levels, increase muscle mass, or enhance vitality. While it is true that varicocele can contribute to lower testosterone levels, Dr. Antwi cautions against expecting dramatic

changes after surgery. The link between varicocele repair and improved energy or muscle growth has not been firmly established, and patients should approach such claims with realistic expectations.

Not every varicocele requires intervention. If the condition is not causing pain and the man is not actively trying to conceive, Dr. Antwi suggests that leaving it alone is perfectly acceptable. Many men live with varicocele for years without it interfering with their daily lives.

The situation changes for couples pursuing fertility treatments. For those undergoing IVF, addressing a varicocele can offer a distinct advantage. Improving sperm quality through surgery increases the chances of successful fertilization, making the procedure a worthwhile consideration in these cases.



Why Dental Care is Essential for Healthy Living

By Marilyn Tiphaine Fifame

When we think about health and wellness, we often focus on diet, exercise, and mental well-being. Yet one of the most critical components of overall wellness is frequently overlooked: oral health. The mouth is not an isolated part of the body; it is a gateway that reflects and influences your entire physical condition.

Scientific research has established strong connections between gum disease (periodontitis) and several serious health conditions. The inflammation caused by untreated gum disease does not stay confined to the mouth. It can enter the bloodstream and contribute to systemic inflammation throughout the body.

Studies show that individuals with periodontal disease have a higher risk of cardiovascular disease, including heart attacks and strokes. The bacteria from infected gums can travel to arteries and contribute to plaque buildup. For the millions living with diabetes, the relationship is bidirectional: diabetes increases susceptibility to infections, including gum disease, while severe periodontitis can make blood sugar harder to control.

Pregnant women also need to pay attention. Research suggests a link between advanced gum disease and premature births or low birth weight babies. This makes oral care an essential

component of prenatal wellness.

Emerging evidence even connects oral bacteria to respiratory infections, including pneumonia, particularly in older adults. There is also ongoing investigation into possible links between oral bacteria and Alzheimer's disease, as some studies have found these bacteria in the brains of patients with dementia.

The encouraging news is that maintaining good oral health is entirely within your control. Wellness-focused dental care involves simple daily habits: brushing twice daily with fluoride toothpaste, flossing to remove plaque between teeth, and limiting sugary foods and drinks that feed harmful bacteria.

Regular dental check-ups

are not just about detecting cavities. They are wellness appointments where professionals can spot early signs of problems before they affect your overall health. Conditions like oral cancer, nutritional deficiencies, and even immune disorders can first show signs in the mouth.

True wellness recognizes that the body functions as an integrated whole. Your mouth is not separate from your heart, your brain, or your immune system. By prioritizing dental care, you are not just protecting your smile; you are investing in your long-term health, reducing your risk of chronic disease, and supporting your body's ability to thrive at every stage of life.

Health Terms on Dental Care

Plaque

A sticky, colorless film of bacteria that constantly forms on teeth. If not removed by brushing and flossing, it produces acids that attack tooth enamel and can lead to cavities and gum disease.

Enamel

The hard, outer surface layer of the tooth. It is the hardest tissue in the human body and acts as a protective shield for the more sensitive inner layers against decay and damage.

Cavity (Tooth Decay)

Permanently damaged areas in the hard surface of teeth that develop into tiny openings or holes. Cavities are caused by a combination of factors, including bacteria in the mouth, frequent snacking, and poor oral hygiene.

Gingivitis

A mild and common form of gum disease that causes irritation, redness, and swelling (inflammation) of the gingiva, the part of the gum around

the base of teeth. It is usually caused by poor oral hygiene and is reversible with professional treatment and good home care.

Tartar (Calculus)

Hardened plaque that has been left on teeth and has calcified. Tartar forms above and below the gum line and can only be removed by a dental professional using special instruments.

Fluoride

A natural mineral that helps prevent cavities and can even reverse the earliest stages of tooth damage. It strengthens tooth enamel, making it more resistant to acid attacks from plaque bacteria and sugars.

Pulp

The living inner core of a tooth containing blood vessels, nerves, and connective tissue. It provides the tooth with nutrients and moisture. When pulp becomes infected or damaged (often due to deep decay), a root canal may be needed.

Periodontal Disease

A serious gum infection that damages the soft tissue and, without treatment, can destroy the bone that supports teeth. It is an advanced stage of gum disease that can lead to tooth loss.

Remission

A period during which signs and symptoms of cancer are reduced or no longer detectable after treatment.

Malocclusion

A clinical term for a “bad bite” or misalignment of teeth. This can include overbites, underbites, crossbites, or crowded teeth, which may affect chewing, speech, and appearance.

Sealant

A thin, protective coating (usually made of plastic resin) applied to the chewing surfaces of back teeth (molars). It acts as a barrier, protecting enamel from plaque and acids and helping to prevent cavities.

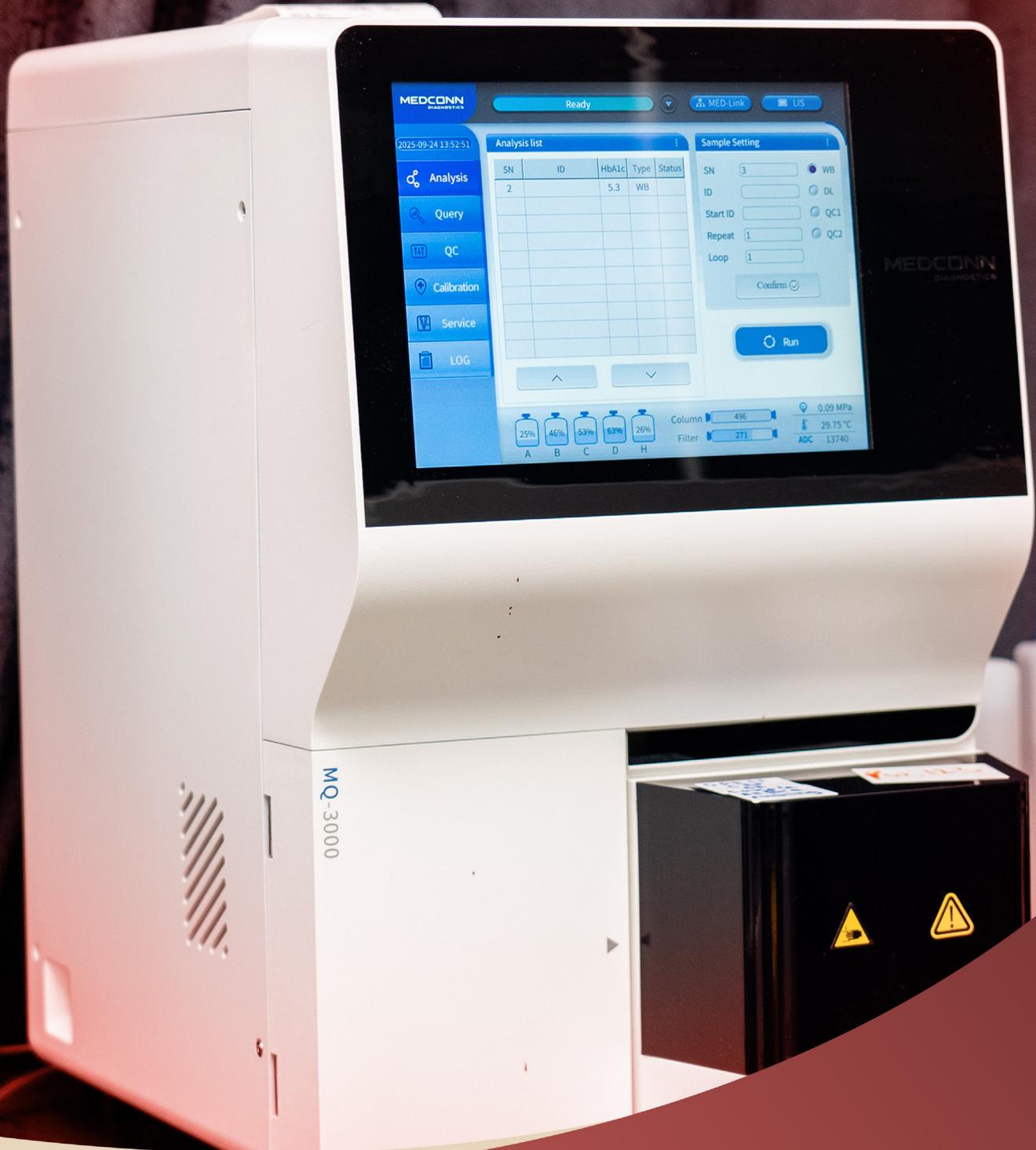
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