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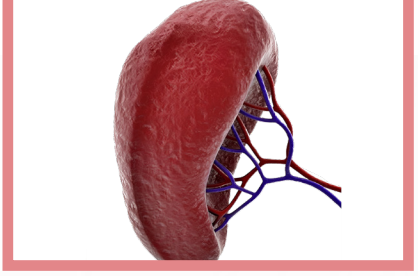

Contents

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. HCOWA 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, HCOWA builds strong networks to drwive 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.

HCOWA 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 HCOWA 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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Editorial

Malaria in Africa:

A Crisis We Can End But Haven't.

Across West Africa's evolving healthcare landscape, professional health associations play a critical yet often under-recognised role in strengthening systems, shaping policy, and improving population health outcomes.

This profile highlights the Ghana Public Health Association and its strategic partnership with the Health Community of West Africa Association (HCOWA)—a collaboration that is advancing knowledge exchange, professional development, and regional health initiatives. Together, they are fostering stronger public health systems, driving innovation, and contributing to more resilient and coordinated healthcare delivery across Ghana and the wider West African sub-region.

The Ghana Public Health Association (GPHA) is a professional body uniting practitioners across Ghana's public health space, dedicated to advancing prevention, health promotion, and evidence-based practice. Established in 1992, the Association was created to fill a critical gap in the healthcare system—the need for a strong, unified voice advocating for a whole-of-society approach to health that goes beyond clinical treatment to address policy, research, and community wellbeing.

With a vision of a healthy Ghanaian population for maximum productivity, GPHA works across sectors including medicine, epidemiology, nutrition, academia, research, and disease control. Its mission is anchored in improving health and wellbeing through high standards of professionalism, advocacy, and strategic partnerships. Through its growing membership base and multidisciplinary reach, the Association continues to influence both policy and practice, ensuring that public health remains central to national development priorities.

The Association's impact is reflected in its active role in shaping national policies and implementing programmes that strengthen health systems. GPHA has contributed to key policy frameworks such as food fiscal policies, food marketing regulations, and public procurement strategies, while also driving initiatives like antimicrobial stewardship programmes, leadership training for nurses, and maternal and child nutrition advocacy.

Beyond policy, it invests heavily in capacity building through scientific seminars, fellowships, and continuous professional development—ensuring that practitioners remain equipped to respond to emerging health challenges.

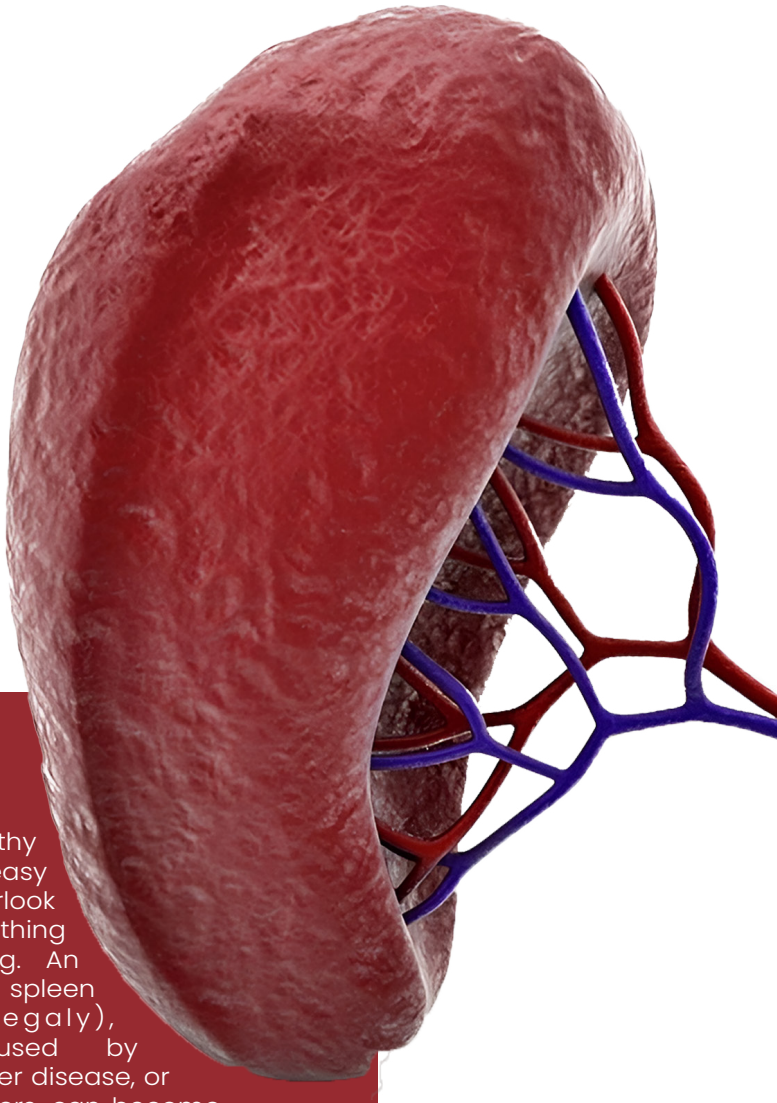
Central to GPHA's approach is collaboration. The Association works closely with institutions such as the Ministry of Health, Ghana Health Service, regulatory bodies, universities, and international organisations to co-create solutions and support national health priorities. It also plays a critical role in strengthening diagnostic services and patient care indirectly—through improved policy, training, community education, and system-level interventions that reduce disease burden and enhance clinical outcomes.

A key emerging dimension of its work is its partnership with the Health Community of West Africa Association (HCOWA). Although still in its early stages, this collaboration is already opening new pathways for regional engagement, innovation, and knowledge exchange. Through HCOWA, GPHA is gaining exposure to digital health advancements and artificial intelligence applications in healthcare, while also benefiting from expanded opportunities for cross-border collaboration, conferences, and access to emerging diagnostic and treatment technologies. This partnership is expected to significantly strengthen GPHA's capacity to operate not only as a national leader but also as an active contributor to regional health transformation.

Looking ahead, GPHA remains focused on strengthening governance, expanding membership, deepening partnerships, and advancing the integration of digital and AI-driven solutions into public health. By positioning itself as a credible and visible voice in health discourse, and through strategic collaborations like that with HCOWA, the Association is poised to play an even more influential role in shaping resilient, inclusive, and forward-looking healthcare systems across Ghana and the wider West African sub-region.

The Spleen

By Marilyn Tiphaine



When we think of vital organs, the heart and brain get most of the attention. Yet, tucked quietly beneath your left rib cage lies the spleen a fist-sized organ with a job description that is nothing short of heroic. Often called the "guardian of the bloodstream," the spleen is essential for immune defense and blood health.

The spleen performs two primary functions. First, it acts as a sophisticated blood filter. As blood flows through its complex network of sinuses, the spleen identifies and removes old, malformed, or damaged red blood cells. It also recycles the iron from these cells, sending it back to the bone marrow to create healthy new ones. Without this quality-control process, your circulation would be clogged with dysfunctional cells.

Second, the spleen is a frontline immune fortress. It contains large numbers of white blood cells (lymphocytes and macrophages) that constantly patrol for foreign invaders, such as bacteria, viruses, and parasites. When it detects a threat like the Neisseria meningitidis bacteria that causes meningitis or malaria-

A healthy spleen is easy to overlook until something goes wrong. An enlarged spleen (splenomegaly), often caused by infection, liver disease, or blood cancers, can become fragile and prone to rupture. A ruptured spleen is a life-threatening emergency, causing severe internal bleeding.

Perhaps most telling is life without a spleen. People who have had their spleen removed due to injury or disease are highly vulnerable to severe infections, especially from encapsulated bacteria. For this reason, they require strict adherence to vaccinations (pneumococcal, meningococcal, and Hib) and often daily antibiotics. The spleen may be silent, but its protective role is irreplaceable.

Special Report

Health Community of West Africa Association Drives Strategic Liaoning–Ghana Economic and Trade Exchange Meeting

The Health Community of West Africa Association played a central role in a high-level Liaoning–Ghana Economic and Trade Exchange Meeting held on Friday, 24th April, at GS Plaza Hotel in Accra 2026 bringing together government officials, health sector regulators and industry leaders to deepen cooperation in healthcare innovation, trade, and industrial development between Ghana and Liaoning Province of China.

The meeting formed part of a broader push to strengthen sub-national collaboration under Ghana–China relations, with a strong emphasis on health systems development, pharmaceutical manufacturing and investment-led industrial transformation.

The meeting opened with remarks from Mr. Pang Baoguo, Chairman of the CCPIT Liaoning Sub-Council, who reaffirmed Liaoning Province's commitment to strengthening friendly exchanges with Ghana across multiple sectors. He emphasized mutual benefit through expanded investment cooperation, noting that the platform served as a catalyst for "win-win results" between both regions. His address set the tone for a session focused on practical partnerships rather than symbolic diplomacy.

Representing Ghana's Ministry of Trade, Agribusiness and Industry, Dr. Frank Edem Koffigah welcomed the Liaoning delegation and described the gathering as a timely intervention in an increasingly competitive global economic landscape. He highlighted Ghana's strategic intent to reposition itself from a raw material exporter to a value-added industrial hub.

Dr. Koffigah outlined the importance of aligning key national institutions—including the Ministry of Trade, Agribusiness and Industry, Ghana Export Promotion Authority, Ghana Free Zones Authority, and regulatory bodies such as the Food and Drugs Authority—to support structured investment cooperation. He stressed that Ghana-China relations, long anchored in frameworks such as the Forum on China-Africa Cooperation (FOCAC), are now entering a phase defined by industrial transformation, productivity, and technology transfer.

She extended an open invitation to Liaoning medical enterprises to participate in West Africa's evolving health market, particularly through localized production of pharmaceuticals and medical devices.

According to her, the association is committed to facilitating policy navigation, market access, and

institutional partnerships to ensure sustainable cooperation.

"The medical cooperation between Liaoning and West Africa will bear fruitful results through joint effort," she stated, emphasizing the role of structured collaboration in improving healthcare access and affordability.

Adding a regulatory and academic dimension to the discussions, Reverend Tony Oduro, Head of HR at TMPC, speaking on behalf of Dr. Yakubu Tobor Yusuf, Registrar of TMPC, expressed strong institutional readiness to support the partnership. He noted that Ghana's traditional medicine ecosystem, combined with Liaoning's scientific and technological expertise, presents a unique opportunity for pharmaceutical innovation.

TMPC pledged full administrative and regulatory support for joint ventures, research initiatives, and exchange programs aimed at reducing operational barriers and fostering sustainable cooperation. The vision, he noted, is to develop medical products capable of serving both domestic and international markets.

From the private sector perspective, Mr. Yan Liquan, President of the Ghana China Northeast Chamber of Commerce and the Ghana Chinese Entrepreneurs Association, emphasized the importance of long-term trust and structured collaboration. He noted that the compatibility of both industrial ecosystems presents significant opportunities, particularly in medical services and manufacturing.

Mr. Yan stressed that international business cooperation must go beyond transactions to focus on risk management, standardized operations, and sustainable engagement. He further encouraged stronger collaboration with Ghanaian enterprises to jointly explore wider regional markets through resource sharing and complementary strengths.

The event also featured enterprise presentations, including a promotional showcase of Liaoning Province's biopharmaceutical industry and a presentation highlighting the development potential of Gomoa East in Ghana's Central Region, emphasizing how strategic investment partnerships could accelerate local infrastructure and industrial growth.

A major highlight of the meeting was the signing of two strategic agreements. The first was a Framework Cooperation Agreement between the CCPIT Liaoning Sub-Council, the Ghana Traditional Medicine Association, and the Health Community of West Africa Association. The second established the Ghana International Joint Health R&D Innovation Center between Ghana Essence Medical Laboratory & Health Screening Centre and Shenyang Mongolian Medicine Jishi Health Management Co., Ltd. The signing ceremony was witnessed by Mr. Pang Baoguo and representatives from both Ghanaian health institutions and West African health stakeholders.

The meeting concluded with a group photograph and networking session, where participants engaged in direct discussions on investment opportunities, technical cooperation, and future exchange programs.

Ultimately, the engagement underscored the growing strategic role of the Health Community of West Africa Association and Liaoning Province in shaping a new phase of cooperation focused on healthcare innovation, medical industrial development, and cross-regional knowledge exchange—laying a foundation for sustained partnership with long-term regional impact.

Women's Health

Malaria's Hidden Toll on Women's Health

By Marilyn Tiphaine

When we discuss malaria, we often picture a feverish child. But for millions of women, especially in sub-Saharan Africa, this mosquito-borne parasite represents a unique and devastating threat one that strikes at the heart of their reproductive health and survival.

The most severe impact occurs during pregnancy. A pregnant woman's immune system is naturally altered to protect her growing baby, but this change makes her three times more likely to contract severe malaria than her non-pregnant counterpart. The parasite thrives in the placenta, where it can multiply undetected, leading to maternal anemia, dangerously low birth weight, and a heightened risk of miscarriage or stillbirth. For a new mother, postpartum malaria can cause severe blood loss, compounding the dangers of childbirth.

Beyond biology, gender roles create silent barriers. In many endemic regions, women are the primary caregivers, meaning they spend more time indoors near sleeping children where infected mosquitoes often bite at night. Yet, they may lack the resources or permission to purchase insecticide-treated nets. Even when symptomatic, women often delay seeking care, prioritizing family needs over their own until it's too late.

The consequences ripple outward. A bout of severe malaria can cause profound fatigue and organ stress, leaving women unable to work, farm, or breastfeed. Repeated infections lead to chronic anemia, robbing them of energy and increasing risks during future pregnancies. And for adolescent girls, repeated malaria episodes correlate with school absenteeism, perpetuating cycles of poverty.

The good news is that prevention works. Intermittent preventive treatment during pregnancy (IPTp) and insecticide-treated nets significantly reduce risks. Protecting women from malaria isn't just about a fever it's about safeguarding mothers, futures, and entire communities.

Africa CDC Warns of Rising Cholera Cases as Rainy Season Begins

The Africa Centres for Disease Control and Prevention (Africa CDC) has issued a public health alert over a surge in cholera cases across several African countries as the rainy season begins, raising concerns about potential widespread outbreaks.

According to the agency, countries in West, East, and Southern Africa are already reporting increased infections, with vulnerable communities at the highest risk. Heavy rains and flooding are contributing to the contamination of water sources, creating ideal conditions for the spread of cholera, a waterborne disease caused by ingesting contaminated food or water.

Health officials warn that limited access to clean drinking water and sanitation facilities remains a major challenge, particularly in rural and densely populated urban areas. In many communities, flooding disrupts water systems and forces residents to rely on unsafe water sources, significantly increasing the risk of infection.

Africa CDC is urging governments to strengthen surveillance systems, preposition medical supplies, and intensify public awareness campaigns. Early detection and rapid response, officials say, are critical to preventing large-scale outbreaks. The agency is also encouraging countries to scale up the use of oral cholera vaccines in high-risk areas.

Public health experts emphasize that cholera is both preventable and treatable, yet it continues to claim lives due to delayed treatment and weak health infrastructure. Symptoms such as severe diarrhea and dehydration can quickly become fatal if not managed promptly.

In response to the growing threat, several countries are mobilizing emergency response teams and working with international partners to improve water, sanitation, and hygiene (WASH) interventions. Community health workers are also being deployed to educate residents on safe hygiene practices, including handwashing and proper food handling.

The Africa CDC has called for increased regional coordination, noting that cholera outbreaks often cross borders, especially during seasonal migrations and trade activities.

With the rainy season expected to intensify in the coming weeks, health authorities stress the need for urgent and sustained action to prevent further spread and protect vulnerable populations across the continent.
Source : WHO

Health & Technology

Malaria:

An Ancient Parasite in a High-Tech World.

In the grand theatre of infectious diseases, malaria remains one of the most persistent adversaries—an uninvited guest that refuses to leave. Despite decades of global effort, it continues to pose a major public health challenge, particularly across tropical and subtropical regions. Yet, while the disease adapts, so too does science. Today, the fight against malaria is increasingly being shaped by advances in health technology, offering new hope in the battle against this age-old threat.

Malaria is caused by Plasmodium parasites, transmitted through the bite of infected female Anopheles mosquitoes. Among the five species that infect humans, Plasmodium falciparum is the most dangerous, especially in sub-Saharan Africa, where it accounts for the majority of severe cases and deaths. The disease often begins with symptoms such as fever, chills, headache, and general weakness—signs that can easily be mistaken for less serious illnesses. However, without timely diagnosis and treatment, malaria can rapidly progress to severe complications, including cerebral malaria, anemia, and organ failure.

Samuel Boye Hinson
Medical Lab, Scientist

One of the most significant shifts in malaria control has been in the area of diagnosis. Traditionally, microscopy using thick and thin blood smears stained with Giemsa has been the gold standard. While effective, this method requires skilled personnel and laboratory infrastructure. In many low-resource settings, this has proven challenging. The introduction of rapid diagnostic tests (RDTs) has transformed this landscape. These portable tests detect malaria antigens in minutes, allowing for quicker decision-making and immediate treatment, even in remote communities. Although not always as precise as microscopy, RDTs have become a critical tool in expanding access to diagnosis.

Beyond diagnosis, technological advancements are also shaping treatment strategies. Artemisinin-based combination therapies (ACTs) remain the cornerstone for treating uncomplicated P. falciparum malaria. However, the emergence of drug-resistant strains has prompted ongoing research into new drug formulations and treatment protocols. Digital health tools are now being used to monitor treatment outcomes, track resistance patterns, and improve adherence to medication—ensuring patients complete their full course of treatment.

Prevention has equally benefited from innovation. Insecticide-treated bed nets and indoor residual spraying remain foundational strategies, but newer technologies are enhancing their effectiveness. For instance, improved insecticide formulations are being developed to counter mosquito resistance, while data-driven mapping tools help identify high-risk areas for targeted interventions. Environmental management, supported by geographic information Vauthorities to predict mosquito breeding patterns and respond proactively.

Perhaps one of the most groundbreaking developments in recent years is the introduction of malaria vaccines. While not yet a complete solution, these vaccines represent a major step forward, particularly for children in high-burden regions. Combined with existing preventive measures, they offer an additional layer of protection and signal a shift toward long-term disease control.

Malaria remains a formidable opponent, but the integration of health and technology is steadily changing the narrative. From rapid diagnostics to digital surveillance and vaccine development, innovation is strengthening the global response. The path to elimination will require sustained commitment, but with technology as a powerful ally, the possibility of a malaria-free future is becoming increasingly within reach.

Gauteng Health Sounds Alarm as Malaria Cases Surge, Deaths Increases - South Africa

The Gauteng Department of Health has issued an urgent warning on Monday, 20th April,2026 as malaria cases spike across the province, with deaths already surpassing last year's total in just the first three months of 2026.

The department urges residents to seek immediate medical attention if they develop fever, chills, headache, or fatigue, especially after traveling to high-risk areas such as Limpopo, Mpumalanga, Mozambique, Zimbabwe, and Malawi.

Recent surveillance data reveals a worrying upward trend. Between January and December 2025, Gauteng recorded 666 malaria cases and seven deaths. But the first quarter of 2026 alone has already logged 414 confirmed cases and eleven fatalities. This represents a dramatic increase compared to the same period in 2025, which saw only 230 cases and one death.

The timing of the surge follows a predictable pattern. Many residents travel to malaria-endemic regions during the festive season and return home in January through March, unknowingly carrying the parasite. This annual movement heightens transmission risk and demands heightened vigilance every early year.

Malaria transmits through the bite of an infected female Anopheles mosquito. The disease remains preventable and treatable, but delay in diagnosis or treatment leads directly to severe illness and death. The department stresses that early detection and prompt treatment save lives.

Health officials call for strengthened surveillance and public health interventions to control the spread and reduce mortality across the province. They remind residents that preventive measures work. Using insect repellent, wearing long-sleeved clothing, and sleeping under treated bed nets significantly reduce infection risk.

The warning arrives just days before World Malaria Day on April 25, 2026. The global observance aims to raise awareness about malaria prevention and treatment, but Gauteng health officials want action, not just awareness.

The department continues to monitor the situation closely and strengthens public health responses across the province. Anyone experiencing malaria-like symptoms must not wait. Seek medical help immediately. A few hours can mean the difference between recovery and tragedy. Residents planning travel to endemic areas should consult their healthcare provider about prophylactic medication before departure and remain vigilant for symptoms for weeks after returning home.

Source: South African Government News Agency

Myth Buster: No, That Meningitis Shot Won't Stop Every Strain

By Priscilla Akorfa Fomevor

Many people walk out of a doctor's office believing one dangerous falsehood. They think their vaccination against meningitis closes the door on every possible cause of the disease. That belief could prove deadly.

The myth states that vaccines protect against all types of meningitis. The fact tells a different story. Vaccines offer the strongest defense medicine can provide, but they do not cover every strain of bacteria, virus or fungus that leads to meningitis.

Here is what every parent, traveler and young adult needs to understand. Scientists have developed highly effective vaccines for specific high-risk pathogens. One set targets meningococcal disease, caused by Neisseria meningitidis. Another set fights pneumococcal meningitis, triggered by Streptococcus pneumoniae. A third blocks Hib, or Haemophilus influenzae type b. Together, these shots have saved countless lives and dramatically reduced cases of bacterial meningitis.

However, no single vaccine and no combination of existing vaccines covers all causes. Other bacterial strains continue to circulate without a targeted vaccine. Viral meningitis, while often less severe than the bacterial form, also escapes these shots entirely. Fungal meningitis, rare but serious, remains completely unprotected by routine immunization.

Why does this gap exist? The simple answer is biology. More than fifty different bacterial species can cause meningitis, and hundreds of viral strains join that list. Creating a universal vaccine for every possible pathogen proves medically impossible with current technology. Scientists continue searching for broader solutions, but those breakthroughs remain years away.

This reality does not mean people should skip vaccination. On the contrary, health officials urge everyone to stay current on all recommended meningitis vaccines. Those shots remain the single most effective tool for preventing the most common and most dangerous forms of the disease. The Centers for Disease Control and Prevention recommends routine meningococcal vaccination for preteens, teens, and first-year college students living in dormitories. High-risk individuals, including those with compromised immune systems, need additional protection.

But vaccination alone does not guarantee safety. Anyone who develops sudden high fever, severe headache, stiff neck, nausea, vomiting, or sensitivity to bright lights should seek immediate medical attention, regardless of their vaccine history. Recognizing symptoms early saves lives. Meningitis can kill within hours, making rapid response essential.

Mental Health

Meningitis Triggers Multiple Cognitive Deficits Including Memory Loss After Recovery

By Priscilla Akorfa Fomevor

The fever breaks. The antibiotics work. The hospital sends you home. But for thousands of meningitis survivors, the battle is not over.

Meningitis does not stop at inflaming the protective membranes around the brain and spinal cord. It often pushes deeper, invading brain tissue itself. The result leaves survivors struggling with cognitive deficits that mimic traumatic brain injury, yet too few receive the rehabilitation they desperately need.

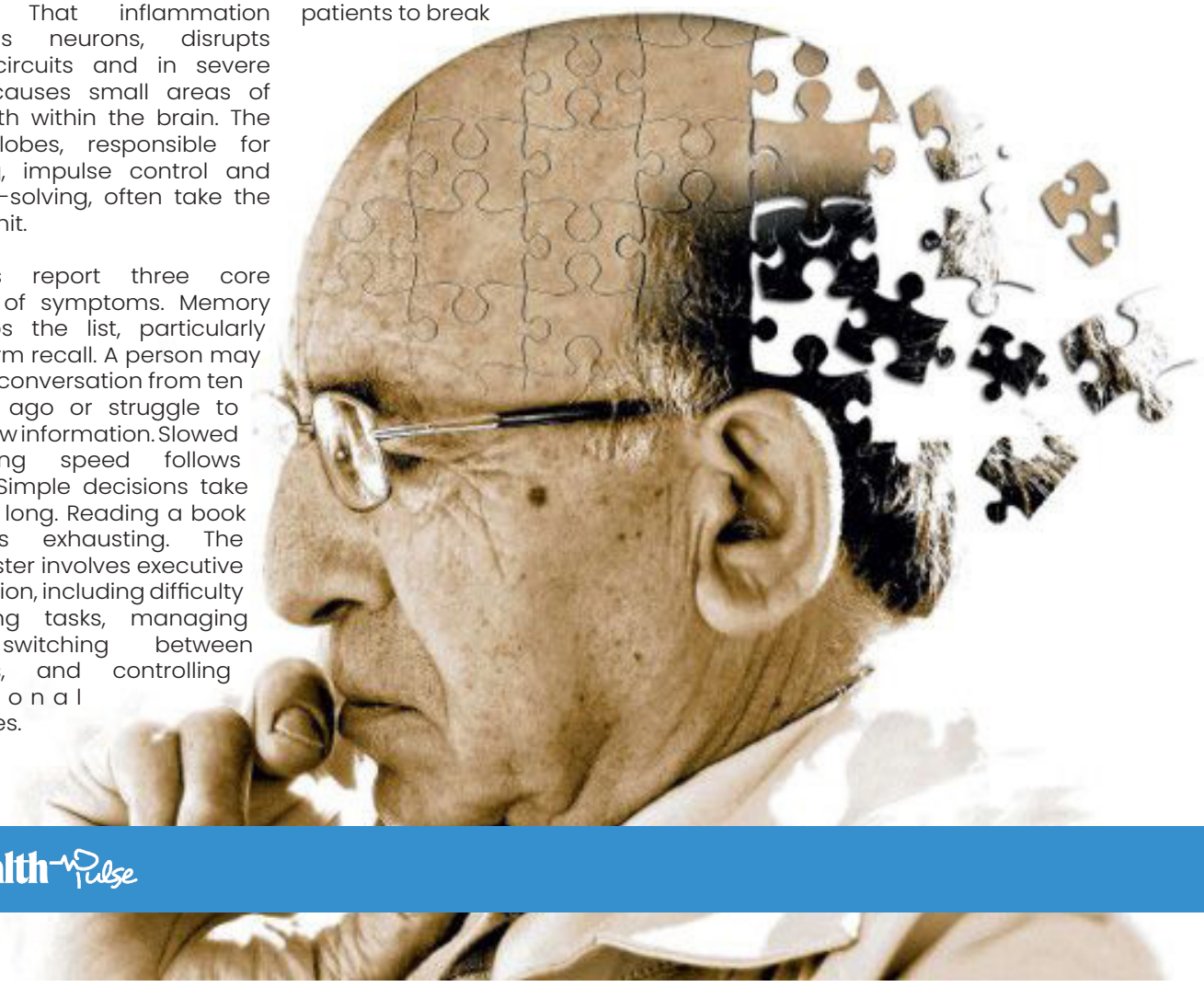
The biological mechanism follows a destructive path. Meningitis triggers a powerful inflammatory response throughout the central nervous system. That inflammation damages neurons, disrupts neural circuits and in severe cases, causes small areas of cell death within the brain. The frontal lobes, responsible for planning, impulse control and problem-solving, often take the hardest hit.

Survivors report three core clusters of symptoms. Memory loss tops the list, particularly short-term recall. A person may forget a conversation from ten minutes ago or struggle to retain new information. Slowed processing speed follows closely. Simple decisions take twice as long. Reading a book becomes exhausting. The third cluster involves executive dysfunction, including difficulty organizing tasks, managing time, switching between activities, and controlling emotional responses.

Research confirms the scale of this hidden crisis. A 2023 study in the journal Neurology found that more than forty percent of bacterial meningitis survivors exhibit clinically significant cognitive impairment one year after hospital discharge. Memory and attention show the greatest deficits. Younger survivors fare no better than older ones, debunking the myth that youth provides automatic protection.

The path forward requires neuropsychological rehabilitation, yet most survivors never receive it. Speech-language therapists target memory and attention through structured exercises
Occupational therapists rebuild executive function by teaching patients to break tasks into manageable steps. Neuropsychologists provide cognitive remediation therapy, training patients to compensate for damaged neural pathways.

Health officials now call for standardized post-discharge cognitive screening for all meningitis patients. Until hospitals adopt this practice, survivors must advocate for themselves. Anyone struggling to think clearly three months after meningitis should request a neuropsychological assessment. The brain can heal, but it needs the right tools. The infection may end, but the brain's recovery has just begun.



Meningitis:

A Silent Threat That Speaks Through Your Skin.

By Marilyn Tiphaine

Meningitis, an inflammation of the protective membranes covering the brain and spinal cord, is a medical emergency often associated with severe headache and neck stiffness. However, one of its most alarming and critical indicators appears on the skin. Recognizing these dermatological signs can be the difference between life and death.

While viral meningitis is more common and often milder, bacterial meningitis particularly the strain caused by Neisseria meningitidis has a profound and dangerous effect on skin health. As the bacteria multiply in the bloodstream, they trigger septicemia (blood poisoning). This leads to damage of blood vessel walls, causing them to leak blood and fluid into the skin tissue.

The most recognizable skin symptom is a petechial rash. Initially, it may look like faint pink pinpricks, often on the torso or limbs. Unlike other rashes, these spots do not blanch (turn white) when pressed with a glass a key diagnostic test known as the "tumbler test." As the infection worsens, these tiny spots rapidly merge into larger, purple bruises called purpura, resembling fresh bruising or patches of discolored skin.

In severe cases, the blood vessel damage can compromise circulation to the skin, leading to tissue necrosis. This causes affected areas frequently the fingers, toes, or extremities to turn dark, blue-black, and mottled, sometimes resulting in permanent scarring or, in extreme instances, requiring amputation.

If you or a loved one develops a sudden fever, severe headache, and a rash that does not fade under pressure, seek emergency medical care immediately. Meningitis progresses rapidly. While antibiotics are essential for treatment, the skin acts as a vital early warning system do not ignore what it is trying to tell you.

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Special Feature

The Role of Professional Health Associations in Strengthening Health Systems in West Africa:

Spotlight on the Ghana Public Health Association.

Across West Africa's evolving healthcare landscape, professional health associations play a critical yet often under-recognised role in strengthening systems, shaping policy, and improving population health outcomes. This profile highlights the Ghana Public Health Association and its strategic partnership with the Health Community of West Africa Association (HCOWA)—a collaboration that is advancing knowledge exchange, professional development, and regional health initiatives. Together, they are fostering stronger public health systems, driving innovation, and contributing to more resilient and coordinated healthcare delivery across Ghana and the wider West African sub-region.

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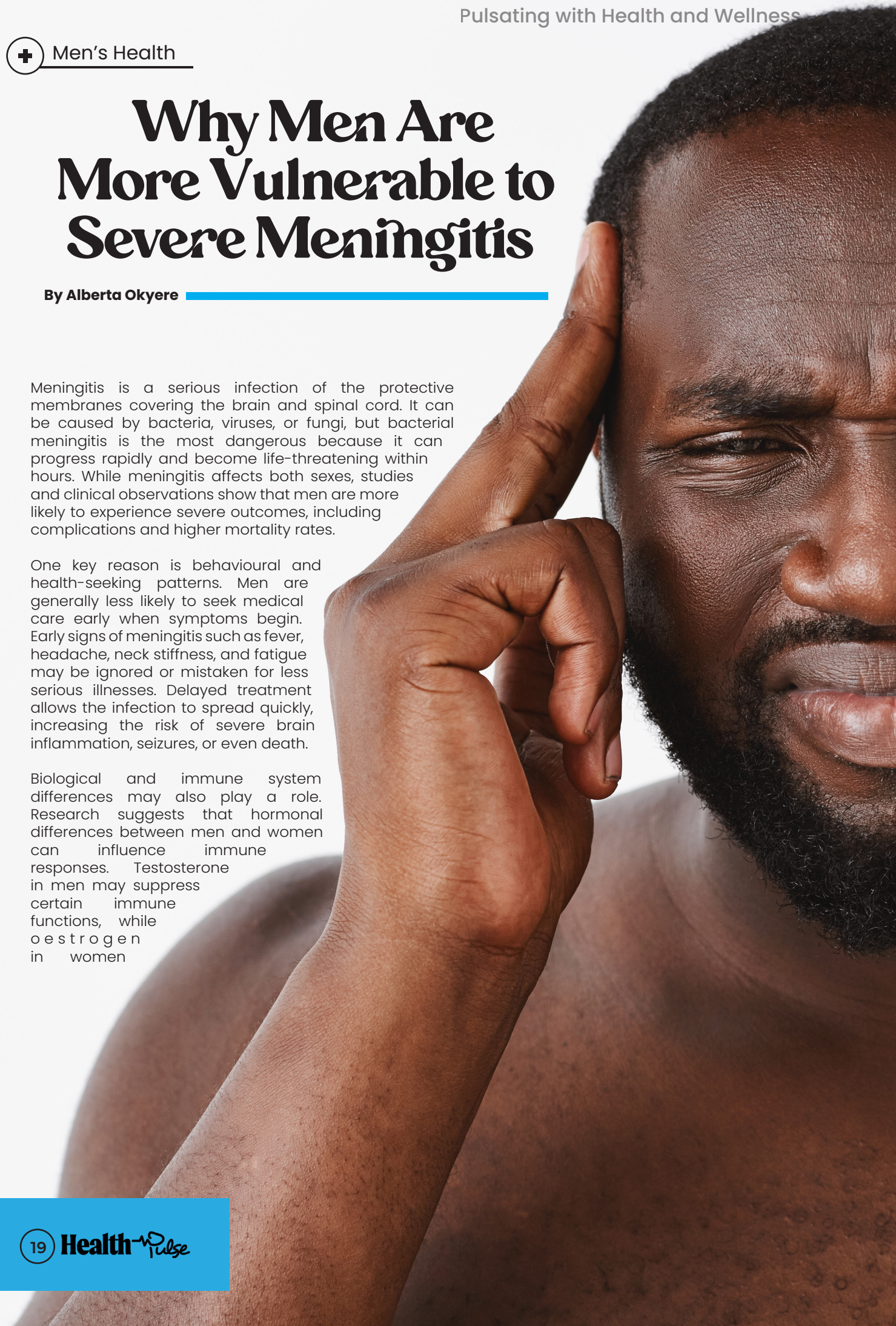
Men's Health

Why Men Are More Vulnerable to Severe Meningitis

By Alberta Okyere



Meningitis is a serious infection of the protective membranes covering the brain and spinal cord. It can be caused by bacteria, viruses, or fungi, but bacterial meningitis is the most dangerous because it can progress rapidly and become life-threatening within hours. While meningitis affects both sexes, studies and clinical observations show that men are more likely to experience severe outcomes, including complications and higher mortality rates.

One key reason is behavioural and health-seeking patterns. Men are generally less likely to seek medical care early when symptoms begin. Early signs of meningitis such as fever, headache, neck stiffness, and fatigue may be ignored or mistaken for less serious illnesses. Delayed treatment allows the infection to spread quickly, increasing the risk of severe brain inflammation, seizures, or even death.

Biological and immune system differences may also play a role. Research suggests that hormonal differences between men and women can influence immune responses. Testosterone in men may suppress certain immune functions, while oestrogen in women

may enhance immune protection. This difference can make men slightly more vulnerable to severe infections, including meningitis.

Lifestyle and environmental factors further increase risk among men. Young adult men, in particular, are more likely to live in high-density environments such as dormitories, military barracks, or shared accommodations where infections spread easily. Men may also have higher exposure to smoking, alcohol use, and stress, all of which can weaken immune defences and increase susceptibility to infections.

Another important factor is lower vaccine uptake among men in some populations. Vaccines against meningococcal, pneumococcal, and Haemophilus influenzae type B (Hib) infections are effective in preventing many cases of meningitis. However, reduced awareness or reluctance to seek preventive healthcare can leave men underprotected.

Health experts emphasize that early recognition and prompt treatment are critical in reducing the severity of meningitis. Public health education targeting men is essential to improve awareness of symptoms and encourage timely medical attention.

In conclusion, men are more vulnerable to severe meningitis due to a combination of behavioural, biological, and environmental factors. However, this risk can be significantly reduced through early diagnosis, vaccination, and improved health-seeking behaviour.

Article

Nursing Management of Severe Malaria: IV Access, Fluid Balance and Cerebral Malaria Monitoring

By Nelson Bedi
(Registered Nurse at the Emergency Department, The Bank Hospital)

Severe malaria remains one of the most life-threatening medical emergencies, particularly in regions where the disease is endemic. While medical treatment protocols are well established, the role of the nurse is often the decisive factor between recovery and rapid deterioration. From the moment a patient arrives, every second counts—and every action must be deliberate.

At the core of effective management is rapid assessment and stabilization. Nurses are trained to immediately prioritize the ABCs: airway, breathing, and circulation. An unconscious patient, for instance, presents an immediate airway risk, while irregular breathing or poor oxygen saturation may signal impending respiratory failure. Circulatory status—assessed through pulse, blood pressure, and capillary refill—guides urgent interventions. Simultaneously, checking blood glucose is critical, as hypoglycemia is both common and deadly in severe malaria cases. Prompt administration of parenteral antimalarials such as artesunate follows closely behind.

Establishing intravenous (IV) access is another crucial step, but one that must be approached with discipline. Repeated failed attempts can waste valuable time and increase patient distress. Best practice limits attempts to two before escalating to a more experienced clinician or considering alternative routes. This balance between persistence and prudence is a hallmark of skilled nursing care.

Fluid management introduces a delicate clinical challenge. Severe malaria patients are particularly vulnerable to both dehydration and fluid overload—each carrying significant risks. Too little fluid can lead to shock, evidenced by weak pulse, dry mucous membranes, and low urine output. Too much, however, may result in pulmonary complications such as rapid breathing, crackles in the lungs, or falling oxygen saturation. Nurses must continuously assess these signs, making real-time decisions that can mean the difference between stabilization and deterioration.

Perhaps the most critical—and complex—aspect of care is monitoring for cerebral malaria. This severe neurological complication demands vigilant observation. Nurses conduct frequent neurological assessments, evaluating consciousness levels using standardized tools, checking pupil responses, and observing motor reactions. Subtle changes, such as unequal pupils or altered posturing, can signal worsening brain involvement and require immediate escalation.

Emergencies within emergencies are not uncommon. A patient receiving IV fluids who suddenly develops respiratory distress requires swift action: fluids must be reduced or stopped, oxygen administered, and medical support urgently called. Similarly, managing seizures in cerebral malaria involves ensuring patient safety, maintaining airway patency, administering anticonvulsants, and checking glucose levels—all without compromising ongoing malaria treatment.

Underlying all these interventions is meticulous monitoring and documentation. Fluid input and output charts are indispensable tools, reviewed hourly in unstable patients. However, in many clinical settings, high patient-to-nurse ratios and limited resources make accurate tracking a persistent challenge. Unrecorded fluid intake or lack of proper measuring tools can undermine even the most diligent care efforts.

Another critical consideration is glucose management. A sudden drop in blood sugar requires immediate correction with intravenous dextrose, followed by adjustments in fluid therapy to include glucose-containing solutions. Continuous monitoring ensures stability and prevents recurrence.

In essence, nursing management of severe malaria is a dynamic interplay of observation, decision-making, and timely intervention. It demands not only clinical knowledge but also vigilance, adaptability, and resilience. In high-pressure environments where resources may be stretched, nurses remain the constant—quietly orchestrating care, minute by minute, saving lives through precision and dedication.

Feature Interview

Understanding Meningitis
Causes, Risks, and Prevention.

Intro: Meningitis is inflammation around the brain and spinal cord. The three main types—bacterial, viral, and fungal—differ in how fast they start, how sick a person becomes, who is at risk, and what treatment is needed.

This interview with Nurse Bernice Boateng seeks to explain those differences in simple, practical terms so one can understand what causes them, how fast they come on, what symptoms to expect, and why some are much more dangerous than others.

Q1: What exactly causes bacterial meningitis, and viral meningitis? Are they contagious in the same way?
Meningitis is an inflammation of the protective membranes surrounding the brain and spinal cord, and it can be caused by different infectious agents. Bacterial meningitis is triggered by bacteria such as Streptococcus pneumoniae, Neisseria meningitidis, and Haemophilus influenzae. These bacteria can live harmlessly in the nose and throat but become dangerous when they enter the bloodstream and travel to the central nervous system. It spreads mainly through close contact, including coughing, sneezing, kissing, or sharing utensils.

Nurse Bernice Boateng
Public health Nurse at Oda Government Hospital

Viral meningitis, on the other hand, is most commonly caused by non-polio enteroviruses, though other viruses like herpes viruses can also be responsible. It spreads more easily through respiratory droplets, contaminated hands, or poor hygiene practices. While both forms are contagious, bacterial meningitis typically requires closer, prolonged contact, whereas viral meningitis spreads more easily but is generally less severe.

Q2: How fast do symptoms appear in bacterial meningitis compared to viral meningitis? Provide a time frame for each?
Bacterial meningitis progresses rapidly and can become severe within hours. Symptoms may appear within 1–2 days after infection, making it a medical emergency. Viral meningitis develops more gradually, with symptoms usually emerging within 3 to 7 days. Though uncomfortable, viral meningitis is often self-limiting.

Q3: Which type of meningitis is most likely to kill a person within 24 hours if untreated? Why is it so much more dangerous than the others?
Bacterial meningitis is the most dangerous form. It can lead to death within 24 hours if untreated due to rapid bacterial multiplication and severe inflammation of the brain. Even with treatment, complications such as hearing loss, seizures, stroke, or long-term neurological damage can occur.

Q4: Can a person recover from viral meningitis without any medicine? What about bacterial meningitis—can the body fight it off on its own?
Recovery depends on the type. Viral meningitis may resolve without specific treatment, as the immune system can fight off the infection with supportive care like rest and hydration. However, bacterial meningitis requires immediate medical intervention with antibiotics and often intensive care. Without treatment, it is frequently fatal.

Q5: What are the early warning signs of bacterial meningitis that a parent should never ignore? Name three that are different from a normal flu.
Early symptoms can appear suddenly and worsen quickly. Key warning signs include high fever, severe headache, stiff neck, nausea, vomiting, sensitivity to light, confusion, and general weakness. In some cases, a distinctive rash may develop, particularly in meningococcal infections. Immediate medical attention is critical.

Q6: Why does fungal meningitis usually happen in people with HIV, cancer, or who take steroid medications? Does it spread from person to person?
Fungal meningitis primarily affects people with weakened immune systems. Conditions such as HIV, cancer treatments, or long-term steroid use reduce the body's ability to fight infections. This allows fungi like Candida or Cryptococcus to spread to the brain, causing a slower but serious infection that is often harder to treat.

Q7: What kinds of people are most at risk for fungal meningitis? Why doesn't it usually affect healthy children or adults?
High-risk groups include people living with HIV/AIDS, cancer patients undergoing chemotherapy, organ transplant recipients, individuals on long-term corticosteroids, the elderly, and those with chronic conditions like diabetes. These groups have reduced immune defenses, making them more vulnerable.

Q8: Can a child get the same type of meningitis more than once? Which type is most likely to recur?
Yes, although rare, a person—especially a child—can develop meningitis multiple times. This may be due to underlying immune deficiencies or structural abnormalities that make it easier for infections to reach the brain.

Q9: What is the "glass test" for a rash, and which type of meningitis does it help identify?
The glass test helps identify a potentially dangerous meningitis-related rash. When a clear glass is pressed against the skin, a rash that does not fade (non-blanching) may indicate meningococcal infection, which requires urgent medical care.

Q10: How can meningitis be prevented?
Prevention is key and includes vaccination against common bacterial strains, maintaining good hygiene, avoiding close contact with infected individuals, and promoting overall health through proper nutrition and rest. Pregnant women should undergo appropriate screening, and maintaining clean environments also helps reduce transmission.

Healthy Recipe Hack

The "Anti-Inflammatory Electrolyte Booster"

Why it helps:
Meningitis and its treatments can cause dehydration, appetite loss, and inflammation. This hack focuses on easy-to-swallow, anti-inflammatory ingredients that support hydration and immune function.

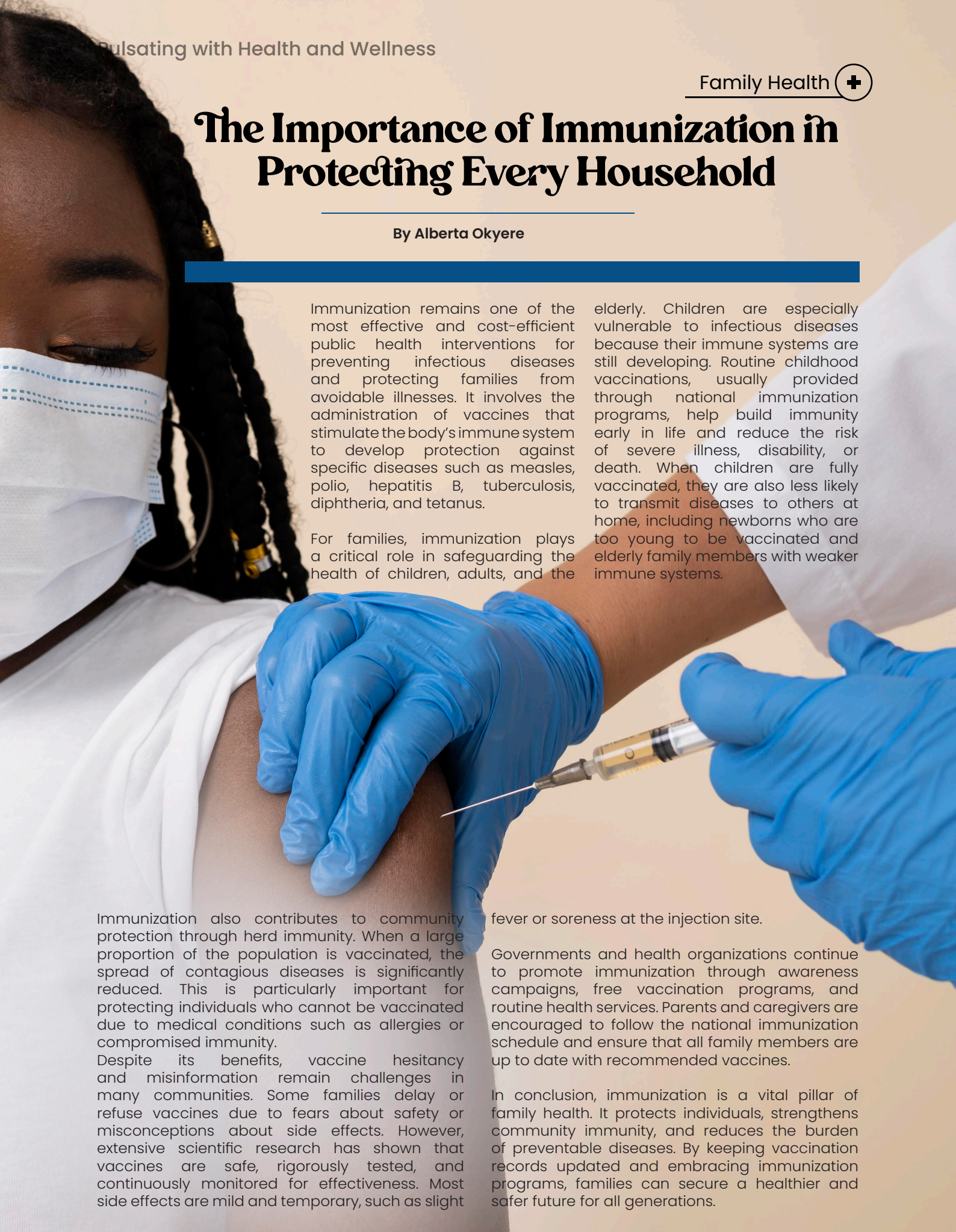
Base Recipe (1 serving):
- 1 cup coconut water (natural electrolytes)
- ½ ripe banana (potassium and easy energy)
- 1 tablespoon honey (soothes throat; mild antimicrobial properties)
- ¼ teaspoon turmeric powder (anti-inflammatory)
- Pinch of black pepper (activates turmeric)

Instructions:
1. Blend all ingredients until smooth.
2. Serve chilled or at room temperature.
3. Sip slowly, especially if nausea is present.

Why this works: Coconut water replenishes electrolytes lost from fever. Banana provides gentle calories and potassium. Honey can ease a sore throat (common in viral meningitis). Turmeric plus black pepper offers natural anti-inflammatory support, though it is not a treatment for the infection itself.

The Importance of Immunization in Protecting Every Household

By Alberta Okyere



Immunization remains one of the most effective and cost-efficient public health interventions for preventing infectious diseases and protecting families from avoidable illnesses. It involves the administration of vaccines that stimulate the body's immune system to develop protection against specific diseases such as measles, polio, hepatitis B, tuberculosis, diphtheria, and tetanus.

For families, immunization plays a critical role in safeguarding the health of children, adults, and the elderly. Children are especially vulnerable to infectious diseases because their immune systems are still developing. Routine childhood vaccinations, usually provided through national immunization programs, help build immunity early in life and reduce the risk of severe illness, disability, or death. When children are fully vaccinated, they are also less likely to transmit diseases to others at home, including newborns who are too young to be vaccinated and elderly family members with weaker immune systems.

Immunization also contributes to community protection through herd immunity. When a large proportion of the population is vaccinated, the spread of contagious diseases is significantly reduced. This is particularly important for protecting individuals who cannot be vaccinated due to medical conditions such as allergies or compromised immunity.

Despite its benefits, vaccine hesitancy and misinformation remain challenges in many communities. Some families delay or refuse vaccines due to fears about safety or misconceptions about side effects. However, extensive scientific research has shown that vaccines are safe, rigorously tested, and continuously monitored for effectiveness. Most side effects are mild and temporary, such as slight fever or soreness at the injection site.

Governments and health organizations continue to promote immunization through awareness campaigns, free vaccination programs, and routine health services. Parents and caregivers are encouraged to follow the national immunization schedule and ensure that all family members are up to date with recommended vaccines.

In conclusion, immunization is a vital pillar of family health. It protects individuals, strengthens community immunity, and reduces the burden of preventable diseases. By keeping vaccination records updated and embracing immunization programs, families can secure a healthier and safer future for all generations.

Ask the Expert

Strengthening Family Health:

The Power of Immunization Across All Ages.

Immunization means getting vaccines to protect the body from serious diseases. It is one of the best ways a family can stay healthy. When everyone in the family is immunized, it helps stop diseases from spreading. This protects babies, parents, and grandparents from getting sick and passing infections to each other.

Immunization works by helping the body's defense system, known as the immune system, to fight diseases. A vaccine teaches the body to recognize germs like viruses or bacteria. It is like practice for the body. Once vaccinated, the body produces antibodies that can quickly fight the disease if it enters the body later.

Nurse Abigail Afoley Otu

General nurse ,Osusduku district Hosptital

Different people in the family need different vaccines. Children need vaccines like polio, measles, and DTP to protect them early in life.

Teenagers may need vaccines like HPV and tetanus boosters. Adults need vaccines such as hepatitis and tetanus, while older people benefit from flu and pneumonia vaccines to stay strong.

Many families worry about vaccine safety, but vaccines are very safe. They are carefully tested before use. Most side effects are mild, such as a sore arm, slight fever, or tiredness, and they go away quickly. However, families should go to the hospital if there are serious signs like very high fever or difficulty breathing, although this is rare.

Missing vaccines can be dangerous. People who are not fully immunized can easily get sick and spread diseases to others. Immunization also helps create herd immunity. This means when many people are vaccinated, diseases cannot spread easily, protecting those who are weak or too young to be vaccinated.

There are many myths about vaccines, but they are not true. Vaccines do not cause diseases and are proven to save lives. It is important to complete all doses for full protection.

Families should keep vaccination records, follow clinic schedules, and ask health workers for advice. Staying up to date with immunization helps keep the whole family safe and healthy.

Disease In Focus

Malaria:

A Preventable but Deadly Disease

By Priscilla Akorfa Fomevor

Malaria remains one of the most persistent and deadly infectious diseases globally, with a significant burden in sub-Saharan Africa. It is caused by parasites of the Plasmodium species and transmitted through the bite of infected female Anopheles mosquitoes. Despite being preventable and treatable, malaria continues to pose a major threat to public health, particularly among children and pregnant women.

There are five species of Plasmodium known to infect humans, and understanding them helps explain why malaria presents differently across regions. Plasmodium falciparum is the most dangerous and the most common in Africa, responsible for the majority of severe cases and deaths. Plasmodium vivax, found more commonly in Asia and Latin America, can remain dormant in the liver and cause relapses long after the initial infection. Plasmodium ovale, seen mainly in West Africa, behaves similarly with milder recurring episodes. Plasmodium malariae causes a chronic, less severe infection that can persist for years and may lead to kidney complications. Lastly, Plasmodium knowlesi, a zoonotic species found in Southeast Asia, can multiply rapidly and become severe if not treated early.

Once transmitted, the parasite travels to the liver where it multiplies before invading red blood cells. This cycle leads to the classic symptoms of malaria, which often begin with fever, chills, headache, fatigue, and muscle aches. Because these symptoms mimic common illnesses, malaria can easily be overlooked in its early stages.

If left untreated, malaria can quickly progress to severe disease. Warning signs include confusion, difficulty breathing, severe anemia, and seizures. One of the most critical complications is cerebral malaria, which affects the brain and can result in coma or death. This makes early diagnosis and prompt treatment essential.

Diagnosis is typically confirmed through blood tests such as rapid diagnostic tests (RDTs) or microscopy. Treatment depends on severity. Uncomplicated malaria is treated with artemisinin-based combination therapy (ACT), while severe malaria requires intravenous medications like artesunate, alongside supportive care.

Prevention remains a cornerstone in the fight against malaria. The use of insecticide-treated nets, indoor spraying, and environmental control of mosquito breeding sites significantly reduce transmission. In addition, malaria vaccines are being introduced in high-risk areas, offering new hope in reducing disease burden.

Malaria is more than a disease—it is a public health challenge that affects communities and economies alike. However, with increased awareness, timely treatment and sustained prevention efforts, it is a fight that can be won.

Health Terms

Here are 10 health terms, with 5 specifically associated with meningitis and 5 associated with malaria.

- **Bacterial Meningitis:** The most dangerous form caused by bacteria like Neisseria meningitidis and Streptococcus pneumoniae. Requires emergency antibiotics. Kills up to one in ten even with proper care.
- **Viral Meningitis:** The most common but less severe form. Enteroviruses cause most cases. Patients typically recover fully within seven to ten days without antiviral treatment.
- **Photophobia:** Extreme sensitivity to light. Normal indoor lighting triggers severe eye pain and worsening headache. A key warning sign distinguishing meningitis from routine illnesses.
- **Petechial Rash:** A distinctive rash of tiny red or purple spots that do not fade when pressed with a glass. Signals bloodstream involvement. Requires immediate emergency care.
- **Sepsis:** A life-threatening complication where the immune response damages its own tissues. Blood pressure drops and organs fail. Death can occur within hours.
- **Plasmodium:** The parasitic genus that causes malaria. Five species infect humans, with Plasmodium falciparum being the most deadly.
- **Paroxysm:** The classic cyclical fever pattern progressing through three stages: cold stage (violent shivering), hot stage (high fever up to 104°F), and sweating stage (drenching sweats as fever breaks).
- **Anopheles Mosquito:** The sole vector that transmits malaria to humans. Only female Anopheles mosquitoes bite and transmit the Plasmodium parasite.
- **Hemozoin:** A crystalline waste product produced by malaria parasites as they digest hemoglobin. The immune system recognizes it as foreign, triggering fever and chills.
- **Cerebral Malaria:** The most severe neurological complication of Plasmodium falciparum. Infected red blood cells block brain blood vessels, causing seizures, coma, cognitive impairment, or death. Primarily affects young children in sub-Saharan Africa.

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