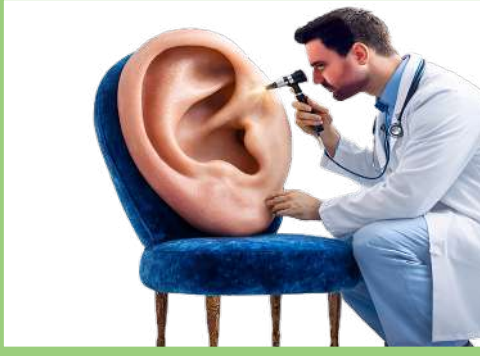




MEDICAL AND ACADEMIC NEWSLETTER





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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.

EXECUTIVE PUBLISHERS

Mr. David Tai
Anna Jiang

DEPUTY PRESIDENT

Prince Opoku Dogbey

GROWTH AND STRATEGY TEAM

David Tai
Sihong Jiang
Prince Opoku Dogbey

CHIEF EDITOR

Gloria Addo

EDITORIAL CREATIVE DESIGNERS

Emmanuel Teleno Lawoh
Banahene Kwame Osei-Assibey

INFORMATION TECHNOLOGY

Prince Kudowor
Gilman Shan

CONTENT DEVELOPERS

Gloria Addo
Priscilla Akorfa Fomevor
Marilyn Tiphaine Fifame
Alberta Okyere



H@WAA Welcomes GIPC as Official Partner for the 2026 China–West Africa Medical & Health Industry Expo.

The Health Community of West Africa Association is pleased to announce the Ghana Investment Promotion Centre (GIPC) as an Official Partner for the 2026 China–West Africa Medical & Health Industry Expo Featuring AI Deployment and Project Cooperation Summit, scheduled to take place from August 19–21, 2026, at the Ghana International Mall, Spintex- Accra.

This strategic partnership marks a significant milestone in the Expo's mission to position Ghana as a leading destination for healthcare investment, innovation, and international business collaboration. As Ghana's foremost investment promotion agency, GIPC plays a critical role in attracting foreign direct investment, facilitating business partnerships, and creating an enabling environment for sustainable economic growth.

The collaboration is expected to strengthen the investment dimension of the Expo by connecting global healthcare companies, technology innovators, manufacturers, investors, and policymakers with opportunities across Ghana and the wider West African region. With growing

demand for modern healthcare infrastructure, medical technologies, pharmaceutical production, digital health solutions, and AI-powered healthcare systems, the partnership provides a platform for meaningful investment discussions and project development.

Through its participation, GIPC will help showcase Ghana's favorable investment climate and highlight opportunities within the healthcare and life sciences sectors. The Centre's involvement is also expected to facilitate engagement between international investors and local stakeholders, encouraging partnerships that support healthcare modernization, job creation, knowledge transfer, and industrial growth.

The 2026 Expo is anticipated to attract more than 300 exhibitors, over 5,000 healthcare professionals, and participants from more than 20 countries. Beyond exhibitions and product showcases, the event will feature investment forums, business matchmaking sessions, policy dialogues, and strategic networking opportunities designed to accelerate healthcare development across the region.



The partnership aligns with the Expo's overarching theme, "Deepening AI Deployment, Empowering Healthcare in West Africa, and Reshaping the Development Landscape." By bringing together investment leaders, healthcare innovators, and industry stakeholders, the event seeks to drive transformative projects that improve healthcare delivery while fostering economic growth.

With GIPC coming onboard as an official partner, the 2026 China-West Africa Medical & Health

Industry Expo is further strengthened as a premier platform for healthcare investment, international cooperation, and sustainable development in Africa's rapidly evolving healthcare sector.

The Health Community of West Africa Association welcomes GIPC's partnership and looks forward to working together to unlock new opportunities that will advance healthcare innovation, investment, and regional prosperity.



Headaches vs. Migraines:

Causes, Differences, and Effective Management Approaches



Lieutenant Colonel Osei Boateng

Parmacist, 37 Military Hospital

A headache is generally not a disease but a symptom of an underlying condition. It can be triggered by stress, fatigue, dehydration, poor sleep, or other health issues. Most common headaches present as mild to moderate pain that affects both sides of the head. The pain is usually described as a dull ache, pressure, or heaviness rather than a sharp or throbbing sensation.

These headaches are typically short-lived, lasting from about 30 minutes to several hours, and sometimes up to a full day. They are usually not associated with nausea, vomiting, or sensitivity to light and sound. In most cases, rest, hydration, sleep, or simple over-the-counter medication provides relief.

Migraines, however, are neurological conditions characterized by moderate to severe throbbing or pulsating pain, often on one side of the head. The pain may also be felt behind the eyes and can be intense enough to interfere with daily activities. Migraines are commonly accompanied by symptoms such as nausea, vomiting, dizziness, and extreme sensitivity to light and sound. In severe cases, even normal lighting becomes unbearable. Episodes may last from four hours up to three days. Although headaches and migraines share common triggers such as stress, dehydration, poor sleep, and certain foods, headaches can also signal underlying medical conditions. Infections such as malaria or typhoid may initially present as persistent headaches that do not improve with simple pain relief.

This makes proper diagnosis essential, especially when headaches are frequent or prolonged. Treating only the pain without addressing the root cause may lead to recurring symptoms.

Over-the-counter pain relievers such as paracetamol are commonly used for relief. However, these medications do not treat the underlying cause. Instead, they temporarily block pain signals in the nervous system, providing short-term comfort. If the cause remains untreated, the pain is likely to return.

For example, if a headache is caused by an infection, it will persist until the infection is properly managed. This highlights the importance of identifying and treating the underlying condition rather than relying solely on pain medication.

Persistent headaches that do not respond to basic treatment should be medically evaluated. Healthcare professionals often look for accompanying symptoms such as fever, fatigue,

body weakness, or unusual sensations to determine possible causes. Laboratory tests may also be required in some cases to confirm infections or other conditions.

Once the underlying cause is treated, the headache often resolves completely, reinforcing the importance of proper diagnosis in effective care.

Lifestyle factors also play a major role in both prevention and management. Poor sleep, high stress levels, long working hours, irregular meals, and lack of exercise are common triggers. Adults are advised to maintain seven to eight hours of sleep daily, as sleep deprivation significantly increases the risk of both headaches and migraines.

Regular breaks during work, stress management, physical activity, proper hydration, and a balanced diet can significantly reduce the frequency of episodes. Nutrient-rich meals support brain health and help minimize common triggers.

Special caution is required when treating headaches and migraines in pregnant women, children, and individuals with chronic illnesses. Not all medications are safe for these groups, and treatment must always be guided by a proper medical history and professional assessment. Some migraine medications may not be suitable during pregnancy, making careful evaluation essential.

A common challenge in headache management is the misconception that recurring headaches are normal. This often leads to self-medication and delayed diagnosis. In reality, persistent headaches may indicate underlying infections or untreated conditions that require medical attention.

Modern treatment approaches emphasize accurate diagnosis, patient education, and lifestyle modification alongside medication. While combination drugs may be useful in managing migraines, they are most effective when the root cause has been identified and addressed.

In conclusion, headaches and migraines are distinct conditions that require different levels of care. While simple headaches often resolve with rest and basic treatment, migraines and persistent headaches may signal more serious underlying issues. Effective management depends on identifying the cause, adopting healthy lifestyle habits, and seeking timely medical attention.

Importance Of Blood Donation

By Nurse Esther Offeibea Ankrah

Nurse, 37 Military Hospital

Blood donation is one of the most important acts of saving human life because hospitals rely on donated blood to treat patients in emergencies. People who are involved in accidents, major surgeries, childbirth complications, cancer treatment, and blood disorders often need blood transfusions to survive. Since blood cannot be manufactured in laboratories, it can only come from voluntary donors, making donation a critical part of healthcare systems.

Donated blood is used in different ways depending on the patient's condition. It is separated into components such as red blood cells, plasma, and platelets, which can each help different patients. This means one donation can help more than one person. Accident victims, for example, may need red blood cells to replace lost blood, while cancer patients may require platelets to support blood clotting during treatment. Pregnant women experiencing heavy bleeding may also depend on donated blood to survive complications.

There is a constant need for blood donors because blood has a limited shelf life. Some components last only a few days or weeks, which means hospitals must continuously restock supplies. Emergencies also happen without warning, so a steady supply of donated blood is always necessary. Blood transfusions are commonly required for severe injuries, anemia, sickle cell disease, major surgeries, and bleeding disorders.

Blood donation is also safe and beneficial for donors. It helps the body produce new blood cells and improves circulation. Donors also

receive a basic health screening before donating, which can help identify any hidden health issues. Young and healthy individuals are especially encouraged to donate regularly because they help maintain a stable supply of blood for the population.

There are many misconceptions about blood donation, such as the belief that it is painful or weakens the body. In reality, the process is safe, and the body quickly replaces the donated blood. Strict safety procedures are followed, including the use of sterile, single-use equipment to prevent infections.





People with rare blood types are particularly valuable donors because their blood is harder to find during emergencies.

A healthy person can usually donate blood every few months, depending on medical guidelines, allowing the body enough time to recover. However, many blood banks still face shortages due to lack of awareness and fear among potential donors. Communities such as schools, churches, and organizations play an important role in promoting blood donation through awareness campaigns and donation drives.

Overall, blood donation is a simple act that carries a powerful impact. It saves lives, supports healthcare systems, and strengthens communities. Encouraging more people to donate regularly ensures that no patient is denied treatment due to a lack of blood.

Malaria: A Preventable Killer We Are Now Equipped to Stop



**Maame Achiaa
Adu-Kofi**

Pediatric Resident, Greater Accra
Regional Hospital



Every year, global attention is drawn to communicable and non-communicable diseases that continue to pose a significant public health burden. One such disease is malaria, which remains a leading cause of morbidity and mortality in many parts of the world, particularly in sub-Saharan Africa. World Malaria Day is observed annually on April 25, and this year's theme (2026), 'Driven to End Malaria: Now We Can. Now We Must.', is an important reminder of the need for sustained action against this preventable and treatable disease."

Malaria is transmitted by the female *Anopheles* mosquito. Although there are over 500 species of *Anopheles* mosquitoes, only about 30–40 are responsible for transmitting malaria in nature. These species can breed in almost all sources of water and in various ecological settings – urban or rural. Their eggs develop rapidly into larvae and eventually into adult mosquitoes, often in large numbers. Over time, *Anopheles* mosquitoes have adapted to environmental changes and developed resistance to commonly used insecticides, making malaria control and eradication more challenging.

While anyone can contract malaria from a single mosquito bite, certain groups are at higher risk of severe disease. These include children under five years of age, pregnant women, the elderly, and travellers from non-endemic regions. Malaria can present with a variety of symptoms, including fever, chills, general body weakness, headache, nausea, vomiting, abdominal pain, and diarrhoea. Symptoms may appear anywhere from one week to a month after infection.

Early diagnosis is critical, as malaria can rapidly become life-threatening if not treated promptly. The good news, however, is that malaria is curable! Effective treatment depends not only on early initiation but also completion to the full course of prescribed medication. Over the years, antimalarial treatment has evolved in response to drug resistance. Current treatment regimens include more effective ways to improve compliance on antimalarial treatment through daily dosing of medication.

In addition to treatment, significant progress has been made in prevention. The introduction of malaria vaccines in 2025 is a major milestone in the fight against the disease. In Ghana, pilot implementation of the malaria vaccine has led to reductions in severe malaria cases and child mortality. Plans are underway to integrate the vaccine into the national immunization program, offering broader protection to children across the country.

Other preventive measures remain essential. These include eliminating mosquito breeding sites by clearing stagnant water, using insecticide-treated bed nets, indoor insecticide spraying, and installing screens on doors and windows. Personal protective measures such as using repellents and wearing clothing that minimizes skin exposure, especially in the evenings, can further reduce the risk of mosquito bites.

Malaria remains a deadly disease, but it is one we can defeat. With sustained effort and increased awareness we can win the fight against malaria. Now we can—and now we must.



HEARING LOSS, BALANCE DISORDERS, AND THE IMPORTANCE OF EARLY HEARING CARE

By Barimah Agyiri

Audiologist, 37 Military Hospital

Intro: Hearing is central to communication, learning, emotional connection, and daily functioning. Yet hearing health often remains overlooked until difficulties begin to disrupt conversations, work performance, or social interaction. According to audiology expert, hearing and balance disorders affect people across all age groups, making early assessment, prevention, and intervention essential.

Audiologists play a critical role in diagnosing and managing hearing and balance conditions through a range of specialized assessments. Hearing evaluations commonly involve procedures such as otoscopy, which examines the ear canal and eardrum, immittance testing to assess middle ear function, pure tone audiometry, and advanced tests such as Auditory Brainstem Response and Auditory Steady State Response for patients who may be difficult to test. For individuals experiencing dizziness or balance challenges, assessments may include the Dix-Hallpike maneuver, video nystagmography, rotary chair testing, and other balance evaluations tailored to patient symptoms.

Among the most common conditions encountered in audiology practice are noise-induced hearing loss, age-related hearing decline known as presbycusis, tympanic membrane perforation, otitis media, and vertigo. These conditions can significantly impact quality of life if left untreated.

Recognizing the early warning signs of hearing loss is vital. Frequent requests for repetition during conversations, increasing the volume on televisions or radios, and ringing sensations in the ears, commonly referred to as tinnitus, may indicate an emerging hearing problem. Sudden hearing loss or persistent tinnitus should never be ignored and warrants prompt professional evaluation.

Hearing impairment has different causes across various age groups. In children, factors such as jaundice, birth asphyxia, and infections like mumps can contribute to hearing loss. Among adults, excessive exposure to loud noise and ear infections such as otitis media are common causes. Older adults may face hearing decline associated with chronic ear conditions and age-related auditory changes.

In today's increasingly noisy world, protecting hearing has become more important than ever. Continuous exposure to loud music, industrial noise, entertainment venues, and prolonged headphone use can gradually damage hearing. Experts recommend practical protective measures such as wearing earplugs or earmuffs in noisy environments and adhering to permissible noise exposure levels to reduce long-term risk.

Despite advances in hearing technology, misconceptions about hearing aids remain widespread. One common myth is that hearing aids are only for older adults. In reality, individuals of various ages may require hearing support depending on their condition. Another misconception is that hearing aids completely restore hearing to "100 percent." While hearing devices significantly improve hearing ability and communication, they do not reverse hearing damage. Some people also believe hearing aids make every sound painfully loud; however, modern hearing technology is carefully programmed to provide clearer and more comfortable listening experiences.

Untreated hearing loss extends beyond reduced hearing ability. Individuals may become socially isolated, miss important details during conversations, and experience constant strain from

trying to understand speech. These challenges can affect emotional well-being, workplace productivity, interpersonal relationships, and overall quality of life.

The field of audiology continues to evolve through innovations that are improving patient care. Modern hearing aids offer increasingly sophisticated sound processing, while technologies such as 3D ear scanning and cochlear implants are expanding options for individuals with hearing impairment.

For parents, early hearing care begins with newborn hearing screening and close observation of developmental milestones. Detecting hearing issues early can significantly improve outcomes for speech, language, learning, and social development.





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AUDIENCE DEMOGRAPHICS

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✉ hcowaghanaltd@gmail.com

Protect Your Heart, Save Your Brain:

Understanding Stroke and Cardiovascular Disease



**Nurse Sylvia
Kumahor**

Korle Bu Teaching Hospital

Stroke is one of the major health conditions affecting people worldwide, and many cases are closely linked to cardiovascular disease. Cardiovascular disease refers to conditions that affect the heart and blood vessels, while a stroke occurs when blood flow to the brain is interrupted. This interruption prevents the brain from receiving enough oxygen and nutrients, which can lead to serious complications such as paralysis, speech problems, memory loss, or even death.

According to health professionals, high blood pressure remains one of the leading causes of stroke. When blood pressure stays high for a long period, it damages and weakens blood vessels, making them more likely to burst or become blocked. This is why people with hypertension are at a greater risk of developing stroke and other heart-related conditions.

Nurses and healthcare workers also explain that heart disease can directly contribute to stroke. Certain heart conditions may cause blood clots to form, and these clots can travel to the brain and block blood flow. In addition, high cholesterol levels can lead to fat buildup in the blood vessels, narrowing them and reducing proper circulation to both the heart and brain.

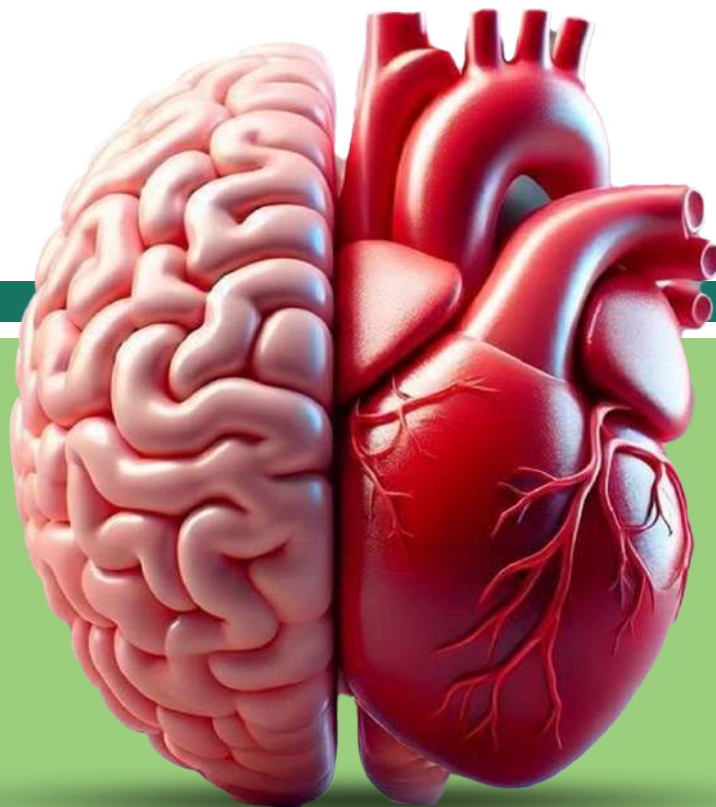
In recent years, stroke and cardiovascular disease have increasingly affected younger adults due to unhealthy lifestyles. Habits such as smoking,

excessive alcohol consumption, poor diet, lack of exercise, and unmanaged stress have become major risk factors. Smoking damages blood vessels, unhealthy foods increase cholesterol levels, and stress can raise blood pressure, all of which place extra strain on the cardiovascular system.

Health experts continue to emphasize the importance of prevention. Regular exercise, healthy eating, and routine medical checkups can greatly reduce the risk of stroke and heart disease. Foods such as fruits, vegetables, fish, whole grains, and meals low in salt and unhealthy fats help maintain healthy blood circulation and protect the heart.

Recognizing the warning signs of stroke is also very important. Sudden weakness on one side of the body, difficulty speaking, blurred vision, dizziness, severe headache, and confusion should never be ignored. Immediate medical attention can save a life and reduce long-term complications.

Healthcare professionals advise the public to take their heart health seriously by adopting healthier lifestyles, monitoring their blood pressure regularly, and seeking medical care early. Protecting the heart also means protecting the brain, and prevention remains the best way to reduce the growing burden of stroke and cardiovascular disease.



South Africa Highlights the Importance of Blood Donation in Saving Lives



In South Africa, health authorities and the national blood service continue to emphasize the critical importance of voluntary blood donation as a cornerstone of modern healthcare. Hospitals across the country rely daily on donated blood to treat trauma victims, surgical patients, mothers with childbirth complications, and individuals suffering from chronic illnesses such as cancer and severe anemia.

The South African National Blood Service (SANBS) plays a central role in collecting, testing, and distributing safe blood products across most provinces in the country. According to SANBS, blood donation is not just a medical act but a life-saving contribution that helps ensure patients in emergency situations receive timely treatment. One donation can be separated into components red blood cells, plasma, and platelets meaning a single donor can potentially save up to three lives.

Despite this vital need, South Africa continues to face challenges in maintaining a stable blood supply. Fewer than 1% of the population are regular donors, making it difficult to consistently meet hospital demand. Health experts warn that this shortage can become critical, especially during holidays, periods of high travel, or emergencies when accidents increase and demand for blood rises sharply.

Global health authorities such as the World Health Organization recommend that countries rely on voluntary, unpaid blood donors as the safest and most sustainable source of blood supply. The WHO stresses that regular donation systems help ensure

safety, as repeat donors are carefully screened and reduce the risk of transfusion-related infections.

Health professionals in South Africa also highlight that the donation process is safe, quick, and carefully regulated. Donors undergo health checks before giving blood, and the procedure itself typically takes less than an hour. Beyond saving lives, donating blood also promotes community solidarity and shared responsibility for public health.

To address shortages, SANBS and partner organizations regularly organize blood drives in schools, workplaces, churches, and communities. These campaigns aim to build a culture of regular donation, especially among young people, encouraging them to become lifelong donors.

However, challenges such as fear, misinformation, and lack of awareness still discourage some eligible individuals from donating. Health educators continue to use outreach programs and media campaigns to correct misconceptions and encourage more participation.

As South Africa strengthens its healthcare system, experts agree that a strong and consistent donor base is essential. Blood donation remains one of the most powerful and direct ways individuals can contribute to saving lives and supporting the country's healthcare system.

Source : South African National Blood Service (SANBS)



Nutritious Brain & Blood Boost Vegetable Soup

A simple, nutrient-dense soup designed to support overall wellness, improve blood health, and promote brain and heart function.

Ingredients:

- 2 medium carrots (chopped)
- 1 cup spinach or kontomire (cocoyam leaves)
- 1 small onion (diced)
- 2 cloves garlic (minced)
- 1 medium tomato (blended or chopped)
- 1 tablespoon olive oil or palm oil (light use)
- 1 small piece ginger (grated)
- 1 cup beans or lentils (boiled)
- 1 small fish (mackerel or sardine) or lean chicken (optional)
- Salt and pepper to taste
- 3 cups water or low-sodium broth

Instructions:

1. Heat oil in a pot and sauté onions, garlic, and ginger until fragrant.
2. Add tomatoes and cook for 5–7 minutes until softened.

3. Pour in water or broth and bring to a gentle boil.

4. Add carrots and allow to cook until slightly tender.

5. Add beans/lentils and protein (fish or chicken). Simmer for 10–15 minutes.

6. Stir in spinach or kontomire and cook for another 3–5 minutes.

7. Season with salt and pepper to taste.

Tip

Best enjoyed warm, with a small portion of whole grains like brown rice or boiled plantain for a balanced meal.



10-Year Study Reveals Hydroxyurea Slashes Death Rates in Children with Sickle Cell Anemia

A decade-long clinical trial in Uganda has delivered powerful evidence that low-cost hydroxyurea treatment dramatically reduces deaths and serious complications from sickle cell anemia in children.

The findings, published May 27 in the *New England Journal of Medicine*, show that continuous hydroxyurea therapy lowered the death rate to just 1–2% per year—an 80% improvement compared to the natural course of the disease in sub-Saharan Africa, where roughly half of affected children die by age 10.

“In a low-resource environment like sub-Saharan Africa...we have reduced the death rate to about 1–2% per year,” said Dr. Russell Ware of Cincinnati Children’s Hospital, the study’s lead author.

Sickle cell anemia causes red blood cells to become misshapen, leading to excruciating pain, organ damage, and life-threatening complications. An estimated 300,000 to 400,000 babies are born with the disease annually in sub-Saharan Africa.

Hydroxyurea—an older, off-patent medication costing as little as 10 cents per capsule—works by prompting the body to produce fetal hemoglobin, which prevents red blood cells from sickling. The study found that “maximum tolerated doses” (up to 30 mg/kg/day) are significantly more effective than lower doses, with no major long-term safety concerns.

Key benefits documented over the 10-year NOHARM trial included fewer hospitalizations, fewer blood transfusions, better growth and development, and reduced risk of death.

“These findings matter globally because they show that a proven sickle cell therapy can work safely and effectively even in settings complicated by malaria, malnutrition, and limited access to care,” Dr. Ware said.

Researchers have now replicated these positive results across six African nations, including Ghana, Kenya, Tanzania, and the Democratic Republic of Congo. Uganda, Kenya, and Tanzania have already incorporated hydroxyurea into national sickle cell guidelines, and WHO lists it as an “essential medicine.”

Earlier this year, a Ugandan company began local production of hydroxyurea, potentially lowering costs further. WHO is also developing new guidelines to expand access. Still, researchers caution that long-term studies are needed to understand effects on fertility and cancer risk as treated children reach adulthood. “As exciting as the progress has been, we still have a long way to go,” Dr. Ware said.

Source: Medical Express

Health Terms

This glossary provides simple, clear definitions of important terms featured in this edition—from headaches and malaria to stroke, hearing loss, and blood donation.

- 1. Hypertension:** A condition where blood pressure remains consistently higher than normal, increasing the risk of heart disease and stroke.
- 2. Thrombosis:** The formation of a blood clot inside a blood vessel, which can block blood flow and lead to serious complications such as stroke.
- 3. Anemia:** A medical condition in which the blood lacks enough healthy red blood cells or hemoglobin, leading to fatigue and weakness.
- 4. Pathogen:** A microorganism such as bacteria, virus, or parasite that can cause disease in humans.
- 5. Incubation Period:** The time between exposure to an infection and the appearance of the first symptoms.
- 6. Otitis Media:** An infection or inflammation of the middle ear, commonly causing pain and temporary hearing problems.
- 7. Vertigo:** A sensation of spinning or dizziness, often linked to inner ear or balance disorders.
- 8. Antigen:** A substance that triggers an immune response in the body, often found on the surface of pathogens or foreign cells.
- 9. Hemoglobin:** A protein in red blood cells responsible for carrying oxygen throughout the body.
- 10. Cerebrovascular:** Relating to the blood vessels of the brain, often used in conditions such as cerebrovascular disease or stroke.

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