

Your Health ▶ It matters

Correct cancer diagnosis vital for recovery

Eight-year-old NIGEL NJORGE'S journey with Hodgkin's lymphoma is testament that proper diagnosis, raises chances of survival

by Adalla Allan
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In December 2020, Nigel Ngigi Njorge started feeling unwell. He had a cough that wasn't going away. His parents Willy and Eunice Njorge took the eight-year-old boy to a paediatric chest specialist who diagnosed the problem as asthma.

Nigel was treated for asthma until February 2021, but the cough persisted.

"He was then referred to an allergist to check if he had any allergies that were making the cough persistent. He was placed on a diet without most of his favourite foods. Still, the cough did not go away. On the fourth visit to the paediatric chest specialist, they found a mass in his chest cavity. He was referred to Gertrude's Children's Hospital, where they established he had lymphoma, cancer of the lymphatic system," his aunt, Loise Njorge narrates.

The disease was at stage four; it had spread to other body parts including the spleen, abdomen, bone marrow and other lymph nodes. Nigel needed urgent medical attention.

"His parents took him to Apollo hospital in Ahmedabad, India at the beginning of May 2021, where he was diagnosed with classical Hodgkin's lymphoma after several tests that included a biopsy of the mass and bone marrow, Positron Emission Tomography-Computed Tomography (PET CT) scans, ultrasound scans and blood tests. He was admitted and treated," Loise says.

Hodgkin's lymphoma is a rare form of cancer in which a particular type of white blood cells start multiplying abnormally and collect in certain points of the lymphatic system. Consequently, affected cells lose their properties, making the patient vulnerable to infections.

"After 10 days in hospital, Nigel was discharged to continue treatment as an outpatient. As we speak, he is well on the way to full recovery. He undergoes chemotherapy after every two weeks. He is strong and takes medication well. Hodgkin's lymphoma is curable. We expect he should be back home in this month," Loise says.

Blood related

Nigel is among thousands of children in Kenya infected with cancer.

Professor Jessie Githanga of the University of Nairobi's Haematology and Blood Transfusion Unit says blood-related cancers are the most common in children.

"They are at 35 per cent. Cancers affecting children include leukemia, lymphoma, cancer of the brain and nervous system, kidney, cancer, eye cancer, bone cancer and soft tissue sarcoma," she starts.

According to the World Health Organisation, 400,000 children and adolescents aged be-

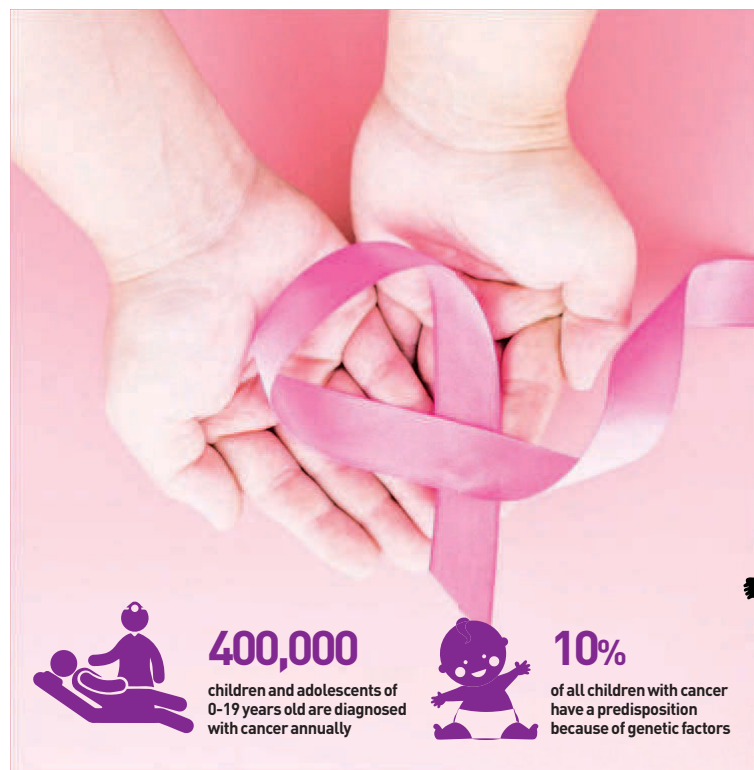
HODGKIN'S LYMPHOMA

● Lymphoma is the general term for cancers that develop in the lymphatic system.

● Hodgkin's lymphoma is a rare form of cancer in which a particular type of white blood cells start multiplying abnormally and collect in certain points of the lymphatic system

● Hodgkin's lymphoma is distinguished from all other types of lymphoma because of the presence of a special kind of cancer cell called a Reed-Sternberg cell, large, abnormal type of white blood cell that may have more than one nucleus.

● With treatment, most people can be cured.



tween zero to 19 years are diagnosed with cancer every year. In high-income countries, over 80 per cent of children with cancer are cured, and only between 15 and 45 per cent are cured in low and middle income countries.

"The National Cancer Control Institute of Kenya (NCI-K) is working with stakeholders to establish a population-based registry. In Kenya, only 19-30 per cent of children with cancer are cured. This is in stark contrast to high-income countries where the survival rate is 80 per cent," she says.

Githanga says awareness of childhood cancer is an important intervention to control childhood cancer.

"This awareness is not restricted to the public, but also to healthcare workers as many have little knowledge and this contributes to late diagnosis. Many childhood cancer organisations are thus holding activities to enhance awareness. There are also activities to engage stakeholders to provide a concerted approach to cancer control," she says.

She adds that many efforts have been made in the cancer agenda including the establishment of the NCI-K to harmonise and oversee control of cancer, working closely with other

stakeholders such as the Ministry of Health's National Cancer Control Programme.

She says there is still much to be done to ensure more information and awareness on cancer is available to the public, that early detection, diagnosis, treatment and palliative care is accessible to all and for better financing of cancer care.

Hiking for funds

"The government should offer better financing for cancer control given that it is a key cause of death. It should also work with stakeholders, both in public and private sectors for the establishment of more cancer treatment centres so care is accessible to the public. The location of the treatment centres should be harmonised for the best use of scanty resources. The cost of treatment should be reduced by having more effective health insurance for cancer such as strengthening National Health Insurance Fund," she says.

Louise says after having received nine chemo sessions, Nigel can pretty much do everything he used to. His school, Riara Springs Academy organised for him to take his classes via Zoom. He is, therefore, able to see his

NUTRITION

Consuming millet linked to reduced iron deficiency

Regular consumption of millets can reduce iron deficiency anaemia and improve haemoglobin levels, a new study by seven organisations led by the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) has revealed.

Researchers say iron deficiency anaemia has been on the rise globally, affecting 1.74 billion people in 2019. It has been proven that iron deficiency anaemia affects cognitive and physical development in children and reduces productivity in adults.

Researchers note that poor diets lacking in iron reduce brain development and capacity, hampering individuals' potential and societies. This is especially common

in poor third world nations where iron deficiency also leads to anemia in children and women.

Societies that are vegetarian are particularly at risk of iron deficiencies especially if green vegetables are lacking, according to researchers.

Positive impact

"Although the amount of iron provided depends on the millet variety and its form of processing, the research clearly shows that millets can play a promising role in preventing and reducing high levels of iron deficiency anemia," observed Dr S Anitha, the study's lead author and Senior Nutritionist at ICRISAT.

According to the study published in the

journal, *Frontiers in Nutrition*, millets increased haemoglobin levels by as much as 13.2 per cent.

Nearly 1,000 children, adolescents and adults consumed a mix of six different millet types: finger millet, pearl millet, sorghum and a mixture of kodo, foxtail and little millets for between 21 days and 45 years.

In Kenya and other African nations, millet is consumed in form of porridge or ugali especially in Western Kenya and in Uganda.

Previous studies have shown that millets have a significant positive impact on reducing the risks of diabetes and cardiovascular diseases—number one cause of diseases globally.

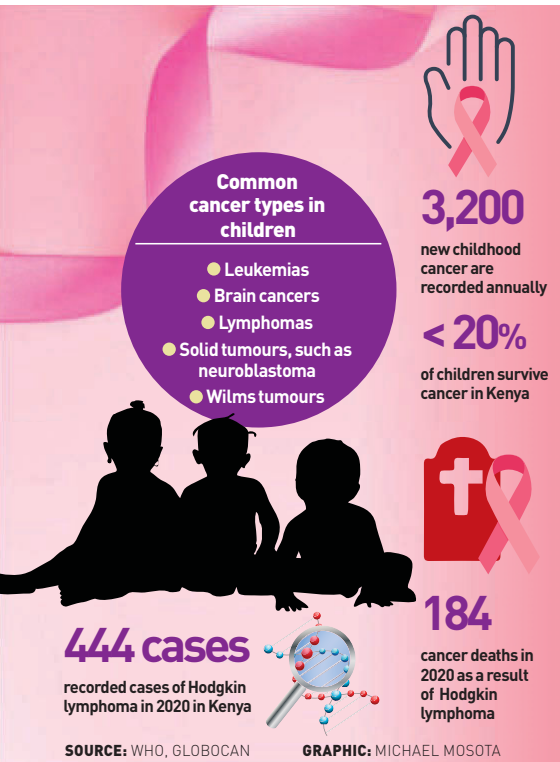
Researchers recommend that inclusion of millets in the daily diets of anaemic persons either as a meal or beverage decreases anaemia.

Value addition and processing of the millet have been found useful in millet consumption. The research also showed processing can significantly increase the amount of iron available. For example, millet snacks made by extrusion increased available iron 5.4 times, while fermentation, popping and malting more than tripled the iron available.

Germination (sprouting) and decortication (dehulling) more than doubled the available iron.

— Mwangi Mumero





teacher and classmates, ask questions and be asked questions during class. He transitioned from Grade Two to Grade Three while in India.

The immediate cost of the treatment is about Sh2million in India. Nigel will, however, still need to visit the hospital every year for review, for at least five years. To raise these funds, Loise started a campaign dubbed #IstandwithNigel, with the objective to climb Mount Kilimanjaro with her friends and family to help Nigel through the cancer journey.

Loise, who has been hiking for the last six years, having conquered Mount Kenya and other peaks in the Aberdares, tabled the idea of climbing Mount Kilimanjaro to Nigel's parents and they were excited about it.

"I initially asked my hiking buddies about climbing Kilimanjaro, but it was short notice for most of them. So I called up my friend Duncan Kiema, the CEO of Xtrym Adventures, and he told me he had a group leaving for September 5-11. I had just a month to get ready. But I took up the challenge and started getting ready," she says.

With the challenge, they have been able to fundraise over half a million shillings towards Nigel's cause.

Kiarie Mwangi, team leader at Fariji Foundation, an organisation that uses sports as a change agent within the community, says they are active participants in the September childhood cancer awareness month.

Awareness creation

"September is not only used to raise awareness about childhood cancer, but to also express support for adolescents with cancer, their survivors and their families. Fariji organised a park based visit to Kenya Wildlife Service for children with cancer and their caregivers for them to appreciate nature. We have been part of creating cancer awareness and advocacy over the last five years. In 2017, in liaison with Kenya Cancer Organisation (KENCO), we organised an awareness session within Nairobi CBD as part of celebrating World Cancer Day," Kiarie says.

They were also instrumental in organising commemorative activities on International Childhood Cancer Day, held annually on Feb 15 with KENCO.

"Most Kenyans aren't aware of this important day. The theme for 2021 was 'survivorship' - aiming towards healthy survivors both physically and mentally. This year's theme acknowledged taking care of the mental health of caregivers as a way of reaching the goal of healthy survivors," he adds.

Loise says through the ailment of her nephew, they have learnt cancer is not a death sentence.

"I have had family and friends who have gone through the cancer and emerged victors. It is not a death sentence, and that is the focus for us now. We have learnt that having a positive outlook is very important. We have also learnt a lot about cancer. My sister has become a 'specialist' in the processes one has to undergo, and she offers advice to those who are in the same predicament and have reached out to her," she says.

Her plea to the government is that they should consider having a programme that makes cancer treatment affordable.

"A chemotherapy session in Kenya costs up to Sh70,000 and when you add the costs of admission, would cost up to Sh200,000. Initial treatment upon admission in Kenya is about Sh2,000,000. So if the patient requires say twelve chemo sessions, the total cost of treatment is Sh 4,400,000 without including



PROF GITHANGA

Cost of treatment should be reduced by having more effective health insurance for cancer



KIARIE

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medicines. This is out of reach for 99 per cent of Kenyans. India has made cancer treatment affordable; there is no reason Kenya shouldn't. This country can be the medical hub for East and Central Africa and generate a lot of revenue through medical tourism," she says in conclusion.

Heart, respiratory diseases lead in work-related deaths

Heart and respiratory diseases contribute to the majority of the work-related deaths across the world, a report by the World Health Organisation (WHO) and the International Labour Organisation (ILO) says.

WHO and ILO *Joint Estimates of the Work-related Burden of Disease and Injury, 2000-2016: Global Monitoring Report* indicates that work-related diseases and injuries were responsible for the deaths of 1.9 million people in 2016.

Non-communicable diseases accounted for 81 per cent of the deaths.

The key risk was exposure to long working hours - linked to approximately 750,000 deaths. Workplace exposure to air pollution - particulate matter, gases and fumes was responsible for 450,000 deaths.

The report shows the greatest causes of deaths were chronic obstructive pulmonary disease at 450,000 deaths, stroke at 400,000 deaths and heart disease at 350,000 deaths.

Occupational risks

Occupational injuries caused 19 per cent of deaths at 360,000 deaths.

The study considers 19 occupational risk factors, including exposure to long working hours and workplace exposure to air pollution, asthmagens, carcinogens, ergonomic risk factors, and noise.

"It is shocking to see so many people literally being killed by their jobs. The report is a wake-up call to countries and businesses to improve and protect the health and safety of workers," observed Dr Tedros Ghebreyesus, WHO Director-General.

According to the report, work-related diseases and injuries strain health systems, reduce productivity and can have a serious impact on household incomes.

Overall, work-related deaths per population fell by 14 per cent between 2000 and 2016 due to improvements in workplace health and safety.

However, death from heart disease and stroke associated with exposure to long working hours rose by 41 and 19 per cent respectively.

The report calls for more action to ensure healthier, safer, more re-

silient and more socially just workplaces. Workplace health promotion and occupational health services should play a central role.

Governments should create environments for discussions on better working conditions.

For example, the prevention of exposure to long working hours requires agreement on healthy maximum limits on working time.

To reduce workplace exposure to air pollution, dust control, ventilation, and personal protective equipment is recommended.

"Governments, employers and workers can all take actions to reduce exposure to risk factors at the workplace. Risk factors can also be reduced or eliminated through changes in work patterns and systems. As a last resort, personal protective equipment can also help to protect workers whose jobs mean they cannot avoid exposure," observed Guy Ryder, ILO Director-General.

The report notes that the total work-related burden of disease is likely substantially larger, as health loss from several other occupational risk factors must still be quantified in the future.

- Mwangi Mumero

