



NTRH
TURNS TO
Leasing of
Medical
EQUIPMENT FOR
BETTER AND
QUALITY SERVICE

Regular Screening
is Key to Preventing
Cervical Cancer

EMPOWER Cancer Clinic
Improving Quality of Health Care

Undescended Testis- A Painless
but Common Pediatric Disease



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OUR VISION

A Centre of Excellence in Health Service Delivery

OUR MISSION

To provide quality comprehensive health care services, through adaptive systems of care, that meet the needs of, and for the best quality of life of, the largest range of individual patients, households, patient groups and other members of the society

CORE VALUES

Integrity: The NTRH will adhere to the principles of good governance to ensure transparency and accountability in undertaking its programmes and activities.

Professionalism: The NTRH will strictly abide by professional considerations, including ethics on methods, standards and procedures for provision of quality health services.

Innovation: The NTRH will continuously embrace creativity and novel solutions for value-addition in achieving excellence in healthcare.

Teamwork: The NTRH celebrate working together in pursuing timely attainment of targeted results at all levels, and supporting each other to resolve, share and settle the diverse health service challenges.

Customer focus: The NTRH commits itself to align its health service programmes to the expectations of its stakeholders and in attaining the highest standards in service delivery.

Quality: The NTRH embraces its responsibilities, enjoys the process of solving problems, and provide effective solutions and added value to customers.



The Services that we offer

Outpatient

- General Outpatient Services
- Maternal and Child Health (MCH) Clinic
- Specialist Clinic Services (Different Clinics for each day)
- Emergency Services 24 hours, 7 days a week
- Pharmacy Services (we service both internal and external prescriptions)
- Laboratory Services (we service both internal and external laboratory request)
- Radiology Services (Digital X-ray; Ultrasound; Mammography; OPG for both internal and private patients)
- Renal Dialysis (Daily on weekdays)

Specialist Clinics

- High Risk ANC Clinic – Weekly, every Monday
- Medical Outpatient Clinic (MOPC) – two times weekly, Tuesdays and Thursdays
- Paediatric Outpatient Clinic (POPC) – every Wednesday
- Gynaecology Outpatient Clinic (GOPC) – every Wednesday
- Diabetes Outpatient Clinic (DOPC) – Monday to Friday
- Surgical Outpatient Clinic (SOPC) – every Friday

Elective surgeries

Patients seen in the High Risk, GOPC and SOPC clinic may be eligible for a planned surgery which will take place as follows:

- Tuesdays – General Surgery
- Thursdays – Gynaecology Surgeries
- Fridays – Elective Caesarean Sections



Feedback Lines

For enquiries, compliment or complaint, Kindly call:

0722 478 289

NTRH Board



Mr James Wachira,
NTRH Board chairman



Dr Timothy Panga,
CEO and Secretary of the Board



Ms Rose Wamuyu Wachira,
Member



Mr Peter Githehu, Chairman, Finance,
Administration and HR Committee



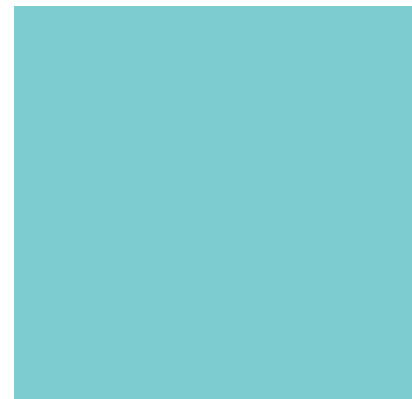
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**Dr Sharon Wagemu, Manager,
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**Ms Joyce Wangui Mwirigi,
Manager, Human Resource**



**Ms Mary Wakarima Mathenge
Manager, Laboratory**

Happy New Year 2021!

We, now at the 86-year-old Nanyuki Teaching and Referral Hospital, welcome you once again for an opportunity to learn more from us through this newsletter. In the first issue of the NTRH Quarterly, we reminded you of the journey we have come from our incredibly early days as 'Nanyuki Native Dispensary' through those days as 'Nanyuki District Hospital' and now as 'Nanyuki Teaching and Referral Hospital'. We will continue to connect you with our past in the subsequent editions because we believe you need to know where we are coming from to understand where we are going. Some of you may not know about *Dr Balwant Singh*, whose name is emblazoned on a brass plate in his memory in one of the oldest buildings in the hospital. Our management team has followed up on this individual among the oldest families in Nanyuki and will be keen to have a story on him



in the subsequent editions. We remind you that we provide a broad range of outpatient, inpatient and specialised services to the more than 700 patients who seek our services every day. These patients have varied and individualized needs. We have started various clinics to take care of the needs of these wide variety of patients. We realise that some of our clients are able to pay for the full cost of their healthcare, mainly through private insurance. We have responded well to a new pandemic that did not give us enough time to learn; and we are glad that we have now seen the worst of it.

As an institution under the management of a Board, we have introduced the principles of governance expected of a County entity. We continuously work to inform the ongoing review of the County Structure as the hospitals of our size are transformed into independent customer focused institutions. We have set up the base for the Code of Governance adapted from that of State Corporations through the use of the *Mwongozo*. We have set up new systems, in the spirit of the County Government commitment on a pathway towards autonomy / semi-autonomy of the operations of its major hospitals; for efficiency and to realise rapid growth. We believe that hospitals can operate as business entities while delivering a social good.

As we are now well into the last year of this Board, our focus is to give the hospital a roadmap for the next few years in form of a Strategic Plan. In our strategic orientation, we had envisioned that Nanyuki Teaching and Referral Hospital will continue providing basic care ac

ording to its Kenya Essential Package for Health (KEPH) level, on the medium term as Level 4 and on the long term as a Level 5 facility beginning with an immediate improvement of bed capacity from 180 to 300. That NTRH will strive to be a centre of excellence in trauma care. That the hospital will invest in continuous emergency services of increasing quality and complexity. That clinical, trauma care and life support skills will be further developed for staff working in the emergency and all other clinical departments. We had envisioned that critical care capacity will be developed with at least four (4) ICU and six (6) HDU beds. We wanted to improve patient experience and flow from the first point of contact. Critical to this state of efficiency was the automation of our processes. We wanted the staff and patients to have pleasant and adequate infrastructure, and for this infrastructure to follow the master plan already in place.

In addition to the construction of the 120-bed Mother and Child Hospital, we have now worked to have these facilities equipped. We now have also completed a 17-bed critical care unit, with six beds reserved for Intensive Care Unit (ICU) and now have just obtained an anaesthesiologist to get the service set up and running. A nurse has been sponsored by the hospital to specialise in critical care, and more will continue to be developed in this manner. Our amenity clinic continues to accept privately insured patients and is getting empanelled by more insurers. The hospital has now been connected to the National Optic Fibre Backbone Infrastructure (NOFBI) and the is tapping on its telemedicine potential. All departments have now been networked using optic fibre and advanced cabling. We continue training and receiving 'home-grown' specialists after the time in schools, and back to our service delivery

We continue seeking you support as our clients, stakeholders, the community and partners to move this hospital forward.

As we are now well into the last year of this Board, our focus is to give the hospital a roadmap for the next few years in form of a Strategic Plan.

Welcome to our second edition of the NTRH Quarterly.



We are delighted to have another opportunity to provide you exciting developments in our quest to make our good better.

We continue to enjoy tremendous goodwill patients, staff suppliers, payers, partners, peers, the community, and the larger organization we are part of - the County Government. Our staff continue to provide services with dedication, consistency and sacrificially. Our commitment remains to ensure that there is continuity of care for all patients visiting us, with an emphasis on achieving optimal health outcomes in the shortest time possible, and possible discharge back to the society in good health.

We keep a constant eye on these processes of care with a view to become better efficient, more effective and be constantly improving. We do these as part of the routine management of healthcare and in the more deliberate quality improvement activities where we review, change, reflect on the changes of our processes. We invite you to see the exciting articles and features in this second newsletter focusing on various services provided in the hospital.

In this edition, we focus on the new stage of our transformation into a Centre of Excellence in integrated care. World over healthcare provision has been described based on the predominant focus of the healthcare setting. We are generally

viewed as an acute care hospital, meaning we concern ourselves more with managing of patients suffering from often sudden and/or unexpected illnesses or injuries as an 'episode' of care. Yet we are expanded our package of health services that address pre-existing or long-term illnesses, which then qualify us as a chronic care setting. We are both a primary care (outpatient) and a secondary care (specialist clinics and inpatient services) health facility. Terminologies aside, we are moving on in the increasing options for patients and clients in service provision to fill in the gaps in access to services within our geographical areas and are moving a step further to attract patients from far flung areas of the country for specific health services that we can deliver more conveniently and cost-effectively.

Our main article focuses on the bold step taken by the County Government of Laikipia to lead in the leasing of Medical Equipment. The program enables us to provide a wide range of services provided using costly equipment obtained in a relatively short time. The program is structured as an operating lease, meaning with one payment, we address equipment rental, their maintenance and associated continuous supply of consumables. From this unique structural adjustment, we can always assure our clients of service readiness and service availability. We are often the first point of call for many patients. We will use this advantage to tap maximum benefits from our increased capacity, capability and readiness to provide services.

In the premier edition, we informed you about the then several new services in public health certifications, amenity clinic services, and new clinics. Several articles from in this edition have been written by our staff providing services in those clinics. You will learn about our exciting partnership in combating diabetes in children. You will also learn about our new EMPOWER clinic and what it focuses on. Another article is on how we intend to penetrate further into the private insurance market. Yet another one is focusing on the importance of annu-

al medical checkup, and why you need to plan to do that at NTRH.

We have included in this edition classical articles focusing on providing medical advice and information to patients and general public. These are derived from the traditional medical departments of medicine, surgery, paediatrics and obstetrics/gynaecology. Others are from the pharmacy, nutrition and radiology. Then there are those that give you wider perspectives and make you appreciate more the multiple disciplines and teams in healthcare. We have contributions from on quality improvement focus and the projects we have undertaken. You probably did not know how much our Medical Social Workers always contribute to your healthcare and access to it. Read them all here.

Finally, in this era of COVID-19 pandemic, there has been an intense focus on Infection Prevention and Control than ever before. It's no longer just a good practice; it saves lives. Our Infection Prevention and Control (IPC) Focal Person introduces you to an exclusive IPC Community of Practice Network of East Africa that we are part of - only six hospitals per country, public and private are participants in Kenya, Ethiopia, Uganda and Tanzania.

We thank our partners - NHIF, Britam, Jubilee and Minet - for taking up space in our newsletter to widen their reach to the community that we serve and are part of. We further thank Jubilee Health Insurance for contributing an article that focuses on wellness, showcasing the Maisha Fiti Wellness program. This message is consistent with our own that urges you to prioritize your Annual Medical Checkup and afford yourself an opportunity to address potentially serious health problems head on earlier on.

Thank you once more for taking time to go through our offering.

Dr Timothy Panga
Ag. CEO

NTRH turns to Leasing of Medical Equipment for Better and Quality Service

Dr Timothy Panga Ag, CEO, NTRH

The County Government of Laikipia has once again led the way in county health service delivery through the new programme on the leasing of medical equipment. This comes at a time when the country is in need of innovative solutions in the health service delivery in the context of limited budgetary provisions. The medical equipment leasing program is an operating lease where equipment, their comprehensive maintenance and associated consumables are bundled together as one cost item, the master lease agreement to the hospital; to mitigate the inefficiencies and high costs and unnecessary delays to delivery that come with fragmented public procurement services. In effect, the County Government and its hospitals are able to pay for outputs and outcomes for patient services provided through the use of these equipment.



Having constructed two Mother and Child (M&C) Hospital Complex of a capacity of up to 120-beds each; and with the need to expand our diagnostic and operational capacity that comes with running a combined 600 bed capacity for the two County Referral Hospitals at Nanyuki and Nyahururu; the County Government set out in this new path to ensure that the hospitals are fully equipped in a matter of a few months. With this program, we are now able to commit to our clients that we will have new diagnostic services within the next 6 months.

These leased equipment and services include radiology [1.5T Magnetic Resonance Imaging (MRI); 64-slice Computed Tomography (CT scan); Picture Archiving and Communication System (PACS) and Digital Imaging and Communications in Medicine (DICOM) standard for remote reporting

The County Government of Laikipia has once again led the way in county health service delivery through the new programme on the leasing of medical equipment.



and hospital wide viewing of images from all the existing and the new radiology services]; laboratory [advanced haematology; expanded biochemistry; immunocytochemistry; automated ID/ AST and culture systems for microbiology; blood gas analysis to support our critical care unit; and a set-up of probably one of the most modern cytology and histology in the country]. There will also be a fully equipped maternity, theatre to bring our theatre capacity to five simultaneous major operations, a new renal unit for our sister hospital and an expanded capacity of the current renal unit to ten dialysis bed up from the current seven; a 1000 litre per minute output oxygen plant and a new laundry equipment set that does washing, drying and ironing of linen. Other services that will be delivered include a modern incinerator of a minimum capacity of 200kg per hour and sets of equipment for rehabilitative services.

To integrate all these and ensure maximum performance at the service delivery level is a new Healthcare Management Information System that not only perform the traditional patient care, billing and inventory functions, but also does end-to-end patient and visitor management and manages referrals and appointments across all the Laikipia health facilities. The system is also expected to manage the performance of staff, contracted specialists and technical professional services. The system will be aided by close circuit television and camera surveillance for the improvement of security of staff, patients and assets. There will be less wastage of supplies and other consumables, as there will be more rigorous cost accounting in place.

During the inception of this program, all the Laikipia public health facilities were considered and we mapped the

patient journey from the very lowest level, the community, to the apex of the county referral system at the two County Referral Hospitals. All health facilities are required to prepare and present for approval their business plans to guide decision on what to lease first, and the schedule for other equipment. The core of the business plan is in the understanding of market needs and responding to those needs in a financially sustainable manner. This comprehensive approach ensures that we will achieve of service readiness and service availability goals at Nanyuki Teaching and Referral Hospital, and links us with lower health facilities that will depend on us better than ever before.

Leasing of assets is not a new concept. People have always rented. There has been a precedence in government for which our medical equipment leasing programme has borrowed from and

improved on. The County Government has published regulations on leasing of assets, the Public Finance Management (Laikipia County Assets Leasing Fund) Regulations of 2020. The fund ensures that the rental and operations of the leased assets are financed on a timely schedule, while at the same time provides services at a fee to realise revenue from the leased assets to supplement budgetary resources.



How you can help in the Fight against **Antimicrobial Resistance**

By **Edna Kathure Kubai**



Antimicrobial agents are different classes of molecules that suppress the multiplication, growth or kill microorganism bacteria, fungi and viruses. They include antibiotics, anti-parasitic and Antiviral Agents

Antimicrobial Resistance (AMR) occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. As a result of drug resistance, antibiotics and other antimicrobial medicines become ineffective and infections become increasingly difficult or impossible to treat.

In 2011, the WHO stated **“if no action today, no cure tomorrow”**. In an effort to emphasize to the consequence of the widespread and irregular use especially of antibiotics and the need for immediate action to preserve antibiotics for future use. Antimicrobial resistance is occurring everywhere in the world, compromising

the treatment of infectious diseases which therefore increases the morbidity and mortality. It represents one of the biggest threats to global health today and can affect any one, of any age, in any country.

Antimicrobial resistance is becoming a global public health concern. The cost of AMR to national economies and their health systems is significant as it affects productivity of patients through prolonged hospital stays and the need for more expensive and intensive care.

Globally, according to a report by Centre of Disease Control and Prevention, more than 2.8 million antibiotic-resistant infections occur in the U.S. each year, and more than 35,000 people die as a result. Regionally in Africa, a report done by African journal of laboratory medicine revealed worsening trends of resistance and diminishing effectiveness of antibiotics in Uganda.

In Kenya, the situation is not any different. Studies and reports undertaken in Kenya, which have documented trends in Antimicrobial Use and AMR in humans

and animals. From the findings, Kenya is already experiencing increasing level of antimicrobial resistance.

Laikipia County has given its input on Antimicrobial resistance through research on rational use of antimicrobials in pediatric ward, NTRH.

Antimicrobial resistance occurs naturally over time, usually through genetic changes. However, there are drivers this is due to the overuse of antibiotics that clearly mitigates the evolution of resistance. Several countries especially in middle and lower income countries, antibiotics are unregulated and available over the counter without a prescription. This lack of regulation results in antibiotics that are easily accessible, plentiful and cheap, which promotes overuse. Currently, availability of antimicrobial agents over-the counter without prescription is a common malpractice both in human and animal health. There is evidence of uncontrolled access and overv-the-counter dispensing of antimicrobials without prescription and sometimes in open

market to the general public.

Apart from misuse, sale of counterfeits, substandard drugs and smuggling of drugs through the porous borders have been identified as challenges to controlled access to antimicrobials for humans.

Inappropriate Prescribing and incorrectly prescribed antibiotics also contribute to the promotion of resistant bacteria. There has been advocacy in the utilization of culture sensitivity before prescribing antimicrobials.

There is also a growing concern in the extensive Agricultural Use of antimicrobials where antibiotics are widely used as growth supplements in livestock. This occurs through the following sequence of events: unnecessary use of antibiotic use in food-producing animals allowing antibiotic-resistant bacteria to thrive hence resistant bacteria are transmitted to humans through the food supply

Kenyan Government has been

advocating against Antimicrobial resistance. This is through Kenya's National Action Plan that was launched on 13 November 2017 during the World Antibiotic Awareness Week. The plan provides a collaborative and interdisciplinary framework for managing antimicrobial resistance and prioritizes (i) awareness raising through communication, education and training, (ii) strengthening the evidence base for tracking antimicrobial use and resistance through improved surveillance and research, (iii) reducing the incidence of infection through effective sanitation, hygiene and infection prevention measures to limit reliance on antimicrobials, (iv) optimizing antimicrobial use in human and animal health and (v) developing an economic case for sustainable investment taking into account the needs of the country and investments in new medicines, diagnostic tools and vaccines. The plan should now be used to guide a coordinated response to limit antimicrobial use and the transmission of antimicrobial-resistant bacteria.(3)

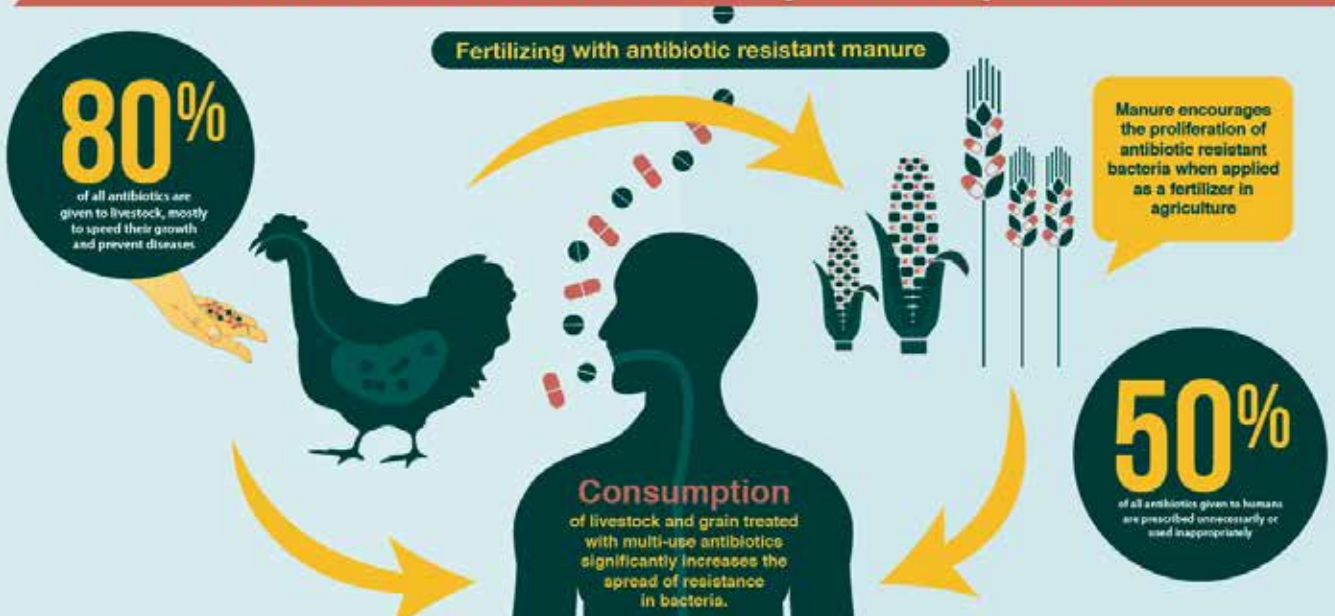
The war against Antimicrobial Resistance is a collective responsibility and the public plays a big role in this fight. This is by

- 1) Always purchasing antibiotics using a VALID prescription,
- 2) Always get your antibiotics from qualified LICENSED medical personnel
- 3) Avoid Self Diagnosis,
- 4) Ensure you always finish your antibiotic doses
- 5) Avoid sharing of antimicrobials especially antibiotics
- 6) Infection and prevention through proper sanitation and hygiene to avoid transmission of preventable infections in our communities
- 7) Farmers to avoid prophylactic use of antibiotics in animals, and their use as growth promoters this is discouraged as this aid in the development of AMR.

ANTIBIOTIC RESISTANCE

Will Kill More People Than Cancer and Diabetes Combined By 2050

How Resistance Develops and Spreads



Uasin Gishu County

Learns from NTRH About Health Information and Revenue Systems for UHC

Alice Makena Mboroki, Ag. Head of Corporate Services



On December 15, 2020, NTRH was pleased to host a team from the County Government of Uasin Gishu. The team was drawn from the Health Services, Revenue, Audit, Health, ICT and Infrastructure departments on a visit to Laikipia from 14th to 16th December 2020. The team was led by the County Executive Committee Member for Finance and Economic Planning. The visit was mainly inspired by the reputation that the County Government of Laikipia has developed nationally on the collection and accelerated growth of own-source revenue.

In a broader meeting involving the entire County Government, both teams exchanged information and learnt from each other's approaches to the generation of own source revenue. The visiting team were especially delighted to learn about the Laikipia County approach: the collection and the use data to inform decision making; the need to hold team members accountable in their own establishments; and to continuously seek outcomes and impact in our work.

Specifically at the Nanyuki Teaching and Referral Hospital, the visiting team were interested in learning about how we have

Specifically at the Nanyuki Teaching and Referral Hospital, the visiting team were interested in learning about how we have benefited from the County Government focus on Universal Health Coverage, our Hospital Management Information System (HMIS), our revenue systems, our banking systems and how our funds flow.



benefited from the County Government focus on Universal Health Coverage, our Hospital Management Information System (HMIS), our revenue systems, our banking systems and how our funds flow.

Some of the learnings from this visit for both governments from the exchange of information and the sharing of our experiences include:

1. The hospital management information system (HMIS) that performs unique hospital patient identification (UHID), track first visits and revisits and meets all the requirements of the Ministry of Health registers for new attendance and revisits; and accounts for all visits will enable us safeguard patient data and prevent revenue losses. Our HMIS with its 100% application in registration of patients has been our bedrock; and has improved our confidence that it is the universal source of truth for our patient data.
2. There has been tremendous growth registered in revenue in the last few years, save for slight drop during the pandemic period, and there is potential for more going forward. With over 60% of the households in the county having the basic social health insurance package from NHIF, the number of patients paying out of pocket have become the minority and progressively reduced since 2018. The hospital has taken advantage of the lower acceptability of this market segment in the private sector to gain market advantage through economies of scale. In any case our experience in this segment had been dominated by requests for waivers and visits by those who qualify for automatic exemptions.
3. That public finance managements systems can easily result in inefficiencies and extra effort that our competitors in the private sector do not have to contend with. That



said, we learnt the differences in the ways our counties have implemented the law in revenue collection. The team noted that all our revenue collection is now automated and all transactions are now cashless. Laikipia County has a dedicated revenue account for each hospital, while our colleagues in Uasin Gishu have used a singular collection account for all hospitals. We shared how the funds flow in both institutions to support compliance with the law and effective and timely facilitation of service delivery. We learnt that as much as we are ahead in this endeavour, we can still improve more and assure the stability of our operations.

4. The visiting team were delighted to learn that we have embraced private clinic model within a public hospital, and we are keen to move further to take this private model to inpatient services. Several private insurance companies have supported us in this effort, and more are reaching out to us based on the shared experience within the industry.

These visits continue to inspire us that through peer cross learning and benchmarking we are indeed at the height of driving an exchange of ideas and an infusion of new landscapes that will continue to strengthen devolution and secure the gains that have been made so far.

The visiting team were especially delighted to learn about the Laikipia County approach: the collection and the use data to inform decision making; the need to hold team members accountable in their own establishments; and to continuously seek outcomes and impact in our work.



Regular Screening

is Key to Preventing Cervical Cancer

By Dr Karen Muthembwa



The cervix is a very essential part of the female body. It is the part of the womb that opens into the vagina. The cervix remains closed during your pregnancy to keep the baby in the womb until term and opens fully to allow the baby to be born vaginally.

The cervix however can be affected in several ways and this can affect its ability to maintain its normal function. Any problem with the cervix can lead to recurrent pregnancy losses, premature labour, chronic

pelvic pain, painful deep penetrative sexual intercourse, inability to conceive, cancer and death. Therefore, you should be aware of the various conditions that exist and can be managed accordingly to avert the possible life threatening complications.

Cervical infections are very common and can occur in any sexually active female. These include Chlamydia, Gonorrhoea, Trichomonas Vaginalis and HPV. They may not present any symptoms at first but the complications can be devastating.

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Cervical Cancer is among the top five cancers causing death in women all over the world and the top in Kenya. ”

The commonest symptoms if any could be a change in your vaginal discharge.

Cervical Cancer is among the top five cancers causing death in women all over the world and the top in Kenya. A sexually transmitted virus called Human Papilloma (HPV) causes it. It develops over years and it often has no symptoms in the early stages. In people living with HIV/AIDS, cervical cancer can develop earlier than expected. If advanced, the symptoms are; postcoital bleeding, painful coitus, copious foul smelling discharge, inability to pass stool, or pass urine, swelling in the lower abdomen. This condition is preventable and can be screened to detect early cervical changes. A pap smear and the HPV virus screen are the tests that could potentially save your life. Should be done after every 3 years as long as you are above 21 years old and yearly for those who have HIV/AIDS and the ones who have been cured of cervical cancer.

Cervical infections are very common and can occur in any sexually active female. These include Chlamydia, Gonorrhoea, trichomonas vaginalis and HPV. They may not present any symptoms at first but the complications can be devastating.

To prevent cervical infection and cancer there is need to understand safe sexual practices like consistent and correct use of condoms, maintaining a single consistent sexual partner, regular cervical cancer screening and the use of vaccines against the Human papilloma virus (HPV) which causes cervical cancer.

Make sure to regularly visit a doctor for general reproductive health check. It may just save your life.



NTRH Diabetic Clinic

Improves Quality of Patient Care

Josephine Gichuki, KRCHN, Diabetic Clinic Nurse



The intention of NTRH clinic is to improve quality patient care by reaching the below 21years through phone calls and home visits. It also issues the needy children with glucometers so that they can closely monitor their blood sugars as well as providing free renal and liver tests to clients aged below 21.

It has been able to enroll approximately 510 patients who are on follow up so far.

The clinic was initiated by the Ministry Of Health through the non-communicable diseases division in October 2017. It runs

from Monday to Friday 8:00am – 5:00pm with an average of 500 patients per month. .

Non-communicable disease division linked the clinic to diabetic management association. The clinic works closely with NORVORDISK that targets patients aged below 21.

Free insulin syringes and HBA1C tests are provided every three months. It also avails free glucometers to the registered patients.

The range of services provided at the clinic

- include;
- v Triaging patients i.e. blood test
 - v General counselling to diabetic patients
 - v Nutritional counselling
 - v Clinical management
 - v Follow up of patients through calls and home visits
 - v Issuing glucometers to registered patients
 - v Documentation of all activities and details of a patient



nhif
Afa Yetu. Bima Yetu
SUPA+COVER

Outpatient Cover

General consultation, Diagnosis and treatment of common ailments, Lab tests including ante natal profiling, Health education, wellness and counseling, Routine screening for conditions e.g. cervical and prostate cancer, Minor surgical services.

EMPOWER Cancer Clinic

Improving Quality of Health Care

By Jane Matimu, KRPCN

When it was commissioned in October 2020, NTRH Empower Cancer Clinic was the sixth such facility to be constructed in the country through the initiative of the County First Ladies Association (CFLA).

Its main goal is to take cancer screening, detection and treatment closer to citizens.

EMPOWER is an acronym that stands for Enabling and Motivating Partnerships Owned by Women who Engage and Reclaim their lives. It draws extensive membership from health advocacy institutions among them Beyond Zero, ROCHE, Women4Cancer, Africa Cancer Foundation and International Cancer Institute.

Palliative care is an approach that improves the quality of life of the patients and their families facing the problems associated with life-threatening illnesses, through the prevention and relief of pain and other problems, physical, psychological and spiritual.

Patients with cancer suffer from severe pain and many symptoms that need to be controlled. Pain is a common symptom that can be managed but is mostly ignored or untreated.

- Triage of patients with life threatening illness.
- Taking of observations: Blood pressure, pulse, temperature, weight and height. Any deviation from normal is managed.
- History taking is done; present, past, family, medical and surgical
- Examination of the patient from head to toe to assess for any abnormality



- Counselling of patients on care, diagnosis
- Breaking of bad news after patient have been diagnosed with cancer
- Pain management is critical as no patient is supposed to suffer even at the end of life
- Family conference to the affected families
- Wound care of cancer wounds, management of foul-smelling wounds with crushed flagyl tablets

We have a support group for patients with cancer started in February 2018 which has 40 active members.

- Palliative care rights
- Pain relief
- Essential drugs for palliative care
- Family centered care
- Receive home-based care when dying and to die at home if desired.
- Information about diagnosis, prognosis.
- Not to be discriminated against in the provision of care because of age, gender,

nationality or means of infection. Right to a dignified death. Empowering others to make medical decision on your behalf.

Always give the patient your ear and the patient to do more of the talking. Screening of cancer of the cervix, prostate and breast is done at the clinic.

Health education on nutrition, prevention and early diagnosis is done.

In a message delivered by Beyond Zero Coordinator Angella Langat in Nanyuki during the launch of Empower Project cancer clinic in Laikipia County, as part of the breast cancer awareness activities in the month of October, the First Lady committed to continue providing free cancer screening services during Beyond Zero Medical Safaris.

“Her Excellency commits to lend her voice and support to initiatives that will steer Kenya to reduce incidents of

cancer and mortality as well as improve the quality of life of those who develop the disease,” Ms Langat said.

First Lady Margaret Kenyatta appreciated the cooperation she has continued to receive from County First Ladies who are championing causes that promote better health and wellbeing of women and girls in their respective counties.

She also commended the strong partnerships between her Beyond Zero initiative, County Governments and stakeholders in the health sector, noting that the collaborations have boosted delivery of health services to Kenyans at the grassroots level.

Speaking at the occasion where cancer survivors gave emotional testimonies of their journey with the disease, Laikipia Governor Ndiritu Muriithi expressed the need for more interventions to fight cancer similar to those dedicated to the Covid-19 pandemic.

“If you look at the Covid-19 pandemic and the number of deaths resulting from this disease compared to what has happened with cancer, you can see that the way we have been putting a lot of effort to slow down the Covid-19, we should do the same to slow down cancer,” Governor Muriithi said.

The Laikipia Governor said his Government has invested heavily towards achieving Universal Health Coverage, noting that over 60 percent of the population of Laikipia is covered by the National Health Insurance Fund (NHIF).

County First Lady Maria Mbeneka said the County First Lady Association, which she currently heads, will remain focused in delivering healthcare services to Kenyans especially in the fight against cancer.

Ms Mbeneka appreciated Beyond Zero for providing the roadmap in improving access to healthcare services to



Kenyans through the mobile clinics and the Beyond Zero Medical Safaris.

On her part, Beyond Zero Coordinator Angella Langat pointed out that the investment in a clinic dedicated to providing screening, diagnosis and treatment of cancer complements First Lady Margaret Kenyatta’s efforts in the provision of quality healthcare for Kenyans.

“By embracing the EMPOWER project, the County First Lady of Laikipia Madam Maria Mbeneka, who is also the current Chair of the County First

Ladies Association has demonstrated her support for the National Cancer Control Strategy 2017-2022 that outlines broad areas of action along the cancer continuum and the roles that all actors can play therein,” Ms Langat said.

Other speakers included 14 County First Ladies, Roche Company Country Manager Frank Loeffler and International Cancer Institute Community Outreach Head David Kayode.



NTRH Lab Increasing its Diagnostic Capacity

By Franklin Mwiti

NTRH Laboratory has made tremendous progress in increasing its diagnostic capacity for quality services to the customers. First, the number of staff has increased to 20. Two of the new staff are from our programme funders and departments.

The EID PCR machine for early detection of HIV in infants was introduced in November 2019. Over the past one year the machine has served health facilities in the whole of Laikipia County. It has made an important milestone in early detection of HIV in infants with a sample size 504.

We made significant progress in food handlers' programme in 2020 by thorough screening of more than 10,000 customers to ensure enhanced food security. Through this programme, our staff identified several parasites that are not common from this region. These parasites have been archived for future reference and for study by students who come for industrial attachment and also the staff.

NTRH Laboratory has also been spearheading the collection and handling of Covid-19 samples since the onset of the pandemic in our country. A total of 6,447 samples have been collected to date.

We have also had a blood donation programme that ensures readily available screened blood for our inpatients if need be.

A Kemri-supported research project has been going on in our microbiology department for the past year. The project is mainly focused on antimicrobial resistance from most common infection like Urethral Tract Infections (UTIs).



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Normally, UTIs present a unique disease landscape that is generally poorly diagnosed and treated due to existing challenges in Culture and Susceptibility Testing (C&ST) in resource-poor settings. Of concern is the fact that, majority of laboratories in many African hospital laboratories are not able to accurately diagnose these infections and at best, rely on dipstick tests whose results may not accurately co-relate with asymptomatic bacteria (ASB) or acute UTI.

Such cases of misdiagnosis may be contributing indirectly to delayed or wrong diagnosis, or over-treatment or even unnecessary treatment of cases with antimicrobials. These practices could in turn lead to the emergence and

spread of multidrug resistant clones that eventually permeate into human and animal compartments (zoonotic link) with possible environmental phases. It is for example, not known if Staphylococcal strains that specifically colonize human and animal nasal passages are implicated in UTI cases in humans and if pathogenic UTI strains can be recovered from animals and environmental compartments. Luckily, NTRH Laboratory is adequately-equipped to carry out these test procedures. Little is known regarding factors that influence treatment-seeking behavior among UTI patients and the factors that influence doctors' empiric diagnosis and prescribing strategies with over 400 isolates of a variety of bacteria and fungi from patients.

As a modern customer-focused medical laboratory, we normally follow up with the patient on an in-depth and confidential manner to determine the root cause of the infection, frequency of recurrence and self-treatment. Once we have this information we take measures to have a more confirmatory test which is culture to determine which germs is affecting the patient and appropriate drug to clear the infection. Unfortunately, many patients have acquired the antimicrobial resistant gene due to use of over-the-counter drugs hence the recurrence of the germs (bacteria, fungi and parasite). Most common resistant and misused antibiotics is ceftazidime, amoxicillin, arithromycin, amoxclav.

We have isolated vcomycin intermediate staphylococcus, vancomycin resistant staphylococcus, extended spectrum beta-lactamase bacteria such as E.coli and klebsiella. Through the data we could identify a resistant strain from geo mapping data of where the patient is living to identify the root cause of resistance strains. We have also done microbiology testing from samples of



our inpatient departments on various samples such as wound, urine, stool, blood, pleural fluids and also sterility checks of most crucial departments such as theatre, New Born Unit (NBU) and Pediatrics. We have used this data to influence and assist our physicians and clinicians on better empirical treatment and antibiotic therapy to reduce the crisis of antibiotic resistance. With these data the pharmacy department could use it on procurement of appropriate antibiotics.



Take Food as Medicine Lest You Take Medicine as Food

NTRH Nutrition Department has tremendously grown to since its inception in the '90s with only one member of staff. Today the department has five nutritionists.

The department serves community, public health and clinical areas of nutrition in the facility focusing both preventive and curative aspects of health.

It quite evident in our county that we have double burden of undernutrition and over nutrition. Nutrition is vital at every stage of the life cycle

For instance, when mothers deliver their infant, exclusive breastfeeding for first six months of life is emphasized. This infant will not only have the best nutrition from the breast milk, but also have a great bond with the mother, be prevented from future ailments that they would have

otherwise be susceptible to were not for exclusive breastfeeding.

Breast feeding does not come with any cost attached to it. Instead it saves the infant lots of cost later in life. The protective elements in breast milk ensure that the immune system is not only growing but also strong enough to fight even the slightest flu infection.

The team is responsible for ensuring exclusive breastfeeding is initiated and maintained from at least the first 30 minutes of life. As easy as this may sound it isn't as the mother needs to ensure there is good attachment to the breast, the infant has a good sucking reflex and examine if the infant has any nutrition deficit.

Soon at six months of life, complimentary feeding begins. Babies grow well and fast when receiving proper nutrition. What to

begin with, why to begin with and how to begin with are questions we get to answer and help families through. At this point, allergies and intolerances to certain types of food the baby is exposed to may show therefore paramount for the mother to be watchful.

By the age of one, most babies are reaching out to have their own say and plate at the family table, tremendous milestone. The joy of seeing them handle and push food through their tiny mouths is to live for.

All this is coupled with supplementation of Vitamin A happening every Six months till the age of five.

Through nutrition, babies crawl, start walking while holding on to things and finally walk by themselves. They are able to support their necks, breastfeed and pass stool.

Some of our customers have infants born with some form of disabilities such as low hydrocephalus, spina bifida, cleft lip and palate and those born as low birth weight and very low birth weight infant.

This category requires specialized nutrition care from the team. Close assessment and interventions are on a daily basis while monitoring progress of growth. New Born Unit is the host of most of these cases.

A majority of these cases result from poor preconception nutrition and poor maternal nutrition mostly poor Iron and folic acid status.

To curb this, the team is active at the family clinic- ensuring that expectant mothers attending the clinic get iron and folate supplements and education on how to look at their own nutrition for a healthy baby.

From day one of life through fifty nine months, children are most vulnerable to diseases either appearing as congenital to inadequate nutrition which predisposes them to undernutrition also dubbed severe acute malnutrition. The World Health Organization warns that this is a stalemate and sadly our county is not out of the woods yet.

As a department, we strive to decrease these rates by intervening promptly through timely nutrition assessment and care for every child visiting the facility, those reached out to through Malezi board program which happens twice a year and other community outreach programs.

Our nutritionists in-charge Hawa Idris and Jecinta Njoroge have the mandate of taking care of the mother and child.

From the age of five to eighteen years, schooling would not be easy with proper nutrition. At this stage, there is rapid body system growth from brain development to reproductive health.

Some conditions get to show themselves at this stage, an example of type 1 diabetes which requires strict nutrition care to ensure continued growth and at the same time the stability of diabetes.

Our team is also actively involved in containing HIV/AIDS and Tuberculosis by prompt nutrition assessment and interventions thus reducing the rates of malnutrition and promoting positive healthy living. Working in a multidisciplinary team has made this possible.

Our diverse cultures and way of life is a beauty to behold yet at it lifestyle diseases have come knocking on our doors, from Type 2 diabetes, Kidney failure, cardiovascular diseases, cancers, alcoholism and gout.

Unlike cancers that are selective in terms of the organ that they hit, other lifestyle diseases are not selective. For instance, cancer of the cervix and breast is female oriented and cancer of the prostate is male oriented. Kenya Cancer Association makes note that cancer of the esophagus is fourth in occurrence mostly predisposed by smoking and alcohol abuse.

Management of non-communicable diseases is multidisciplinary. Therefore

our team works with the other cadres to ensure that the patient has their condition controlled and is able to conduct their day to day activities.

This is both outpatient and in patient care. At the outpatient, we have daily Diabetes outpatient clinic with Gladys Wachinga as your Nutritionist.

In patient care involves different departments carrying the different lifestyle diseases these being, Internal medicine, Surgery and Renal Unit.

It is important to note that everyone's nutrition is personalized, you therefore must consult with the nutritionists to know what your requirements are like.

The best approach for your wellbeing is preventive care through nutrition. Don't grow the green vegetables and not utilize them every day, a piece of a fruit everyday enjoy those in season and take your whole grains, legumes, lean meats of chicken, fish. Replenish with fluids mostly water.

Remember, if we do not take food like medicine, we will end up taking medicine as food.



UTI: A Common Cause of Fever in Children



Urinary tract infections (UTIs) are common in kids. They happen when bacteria (germs) get into the bladder or kidneys.

A baby with a UTI may have a fever, vomit or be fussy. Older kids may have a fever, experience pain when peeing, need to pee a lot or lower belly pain. These infections won't get better on their own. UTIs are easy to treat and usually clear up in a week or so. Taking antibiotics kills the germs and helps kids get well again. To be sure antibiotics work, you must give all the prescribed doses — even when your child starts feeling better.

What are the signs of a UTI?

Most UTIs happen in the lower part of the urinary tract — the urethra and bladder.

This type of UTI is called cystitis. A child with cystitis may have: pain, burning or a stinging sensation when peeing an increased urge or more frequent need to pee (though only a very small amount of pee may be passed)

Fever, waking up at night a lot to go to the bathroom, wetting problems, even though the child is potty trained, belly pain in the area of the bladder (generally below the belly button) foul-smelling pee that may look cloudy or contain blood.

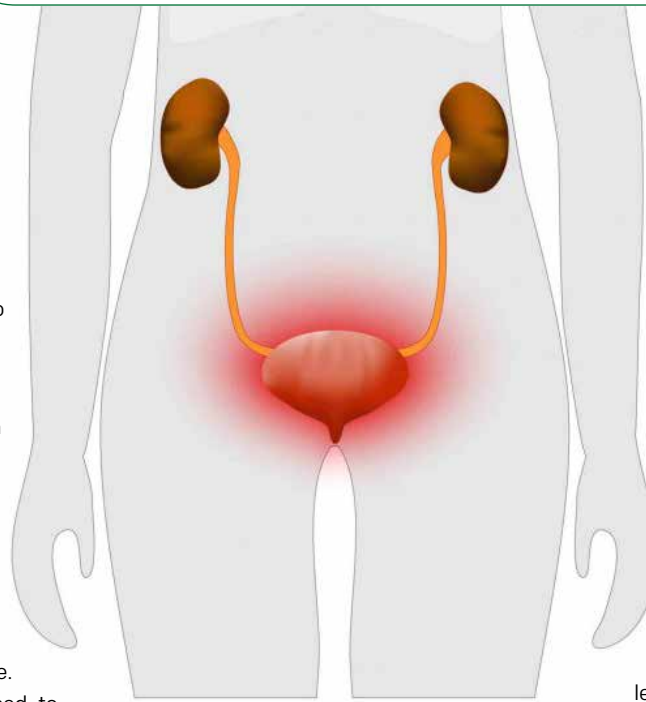
An infection that travels up the ureters to the kidneys is called pyelonephritis and is usually more serious. It causes many of these same symptoms, but the child often looks sicker and is more likely to have a fever (sometimes with shaking chills), pain in the side or back, severe tiredness, or vomiting.

Who Gets UTIs?

UTIs are much more common in girls because a girl's urethra is shorter and closer to the anus. Uncircumcised boys younger than one year also have a slightly higher risk for a UTI.

Other risk factors for a UTI include: a problem in the urinary tract (for example, a malformed kidney or a blockage somewhere along the tract of normal urine flow) an abnormal backward flow (reflux) of urine from the bladder up the ureters and toward the kidneys. This is known as vesicoureteral reflux (VUR), and many kids with a UTI are found to have it. poor toilet and hygiene habits family history of UTIs

UTIs are easy to treat, but it's important to catch them early. Undiagnosed or



untreated UTIs can lead to kidney damage.

How Are UTIs Diagnosed?

To diagnose a UTI, health care providers ask questions about what's going on, do a physical exam, and take a sample of pee for testing.

How a sample is taken depends on a child's age. Older kids might simply need to pee into a sterile cup. For younger children in diapers, a catheter is usually preferred. This is when a thin tube is inserted into the urethra up to the bladder to get a "clean" urine sample.

The sample may be used for a urinalysis (a test that microscopically checks the urine for germs or pus) or a urine culture (which attempts to grow and identify bacteria in a laboratory). Knowing what bacteria are causing the infection can help your doctor choose the best treatment.

How Are UTIs Treated?

UTIs are treated with antibiotics. After several days of antibiotics, your doctor may repeat the urine tests to confirm that the infection is gone. It's important to make sure of this because an incompletely treated UTI can come back or spread.

If a child has severe pain when peeing, the doctor may also prescribe medicine that numbs the lining of the urinary tract. (This medication temporarily causes the pee to turn orange.)

Give prescribed antibiotics on schedule for as many days as your doctor directs. Keep track of your child's trips to the bathroom, and ask your child about symptoms like pain or burning during peeing. These symptoms should improve within 2 to 3 days after antibiotics are

started. Encourage your child to drink plenty of fluids, but avoid beverages containing caffeine, such as soda and iced tea.

Treatment for More Severe UTIs

Kids with a more severe infection may need treatment in a hospital so they can get antibiotics by injection or intravenously (delivered through a vein right into the bloodstream).

This might happen if:

the child has a high fever or looks very ill, or a kidney infection is likely
 the child is younger than 6 months old
 bacteria from the infected urinary tract may have spread to the blood
 the child is dehydrated (has low levels of body fluids) or is vomiting and cannot take any fluids or medicine by mouth
 Kids with VUR will be watched closely by the doctor. VUR might be treated with medicines or, less commonly, surgery. Most kids outgrow mild forms of VUR, but some can develop kidney damage or kidney failure later in life.

Prevention

In infants and toddlers, frequent diaper changes can help prevent the spread of bacteria that cause UTIs. When kids are potty trained, it's

important to teach them good hygiene. Girls should know to wipe from front to rear — not rear to front — to prevent germs from spreading from the rectum to the urethra.

School-age girls should avoid bubble baths and strong soaps that might cause irritation, and they should wear cotton underwear instead of nylon because it's less likely to encourage bacterial growth.

All kids should be taught not to "hold it" when they have to go because pee that stays in the bladder gives bacteria a good place to grow.

Kids should drink plenty of fluids and avoid caffeine, which can irritate the bladder.

Most UTIs are cured within a week with treatment.

When to Call the Doctor

Call your doctor immediately if your child has an unexplained fever with shaking chills, especially if there's also back pain or any type of pain when peeing.

Call if your child has any of the following: bad-smelling, bloody, or discolored pee
 low back pain or belly pain (especially below the belly button)

a fever of over 101°F (38.3°C) in children or 100.4°F (38°C) rectally in infants

Call the doctor if your infant has a fever, feeds poorly, vomits repeatedly, or seems unusually irritable.

Adapted from: <https://kidshealth.org>

Undescended Testis- A Painless but Common Pediatric Disease

Dr Gakenia Kimani, MbCHb, MMed



End of year 2020 marked my one year anniversary as a surgeon in Nanyuki Teaching and Referral Hospital and like every new task, it's tough at the beginning but once you get a rhythm, the pieces of the puzzle fall into place.

In my Tuesday clinic I have come to love the people of Nanyuki and all the neighboring towns and counties. I see old and young, women and men, and even people in full cultural attire.

I thought of all the things I can write about in the surgical realm, there is a lot, so I chose to write about a disease that is very common and it is what I find in majority of my pediatric population. Undescended testis or in the fancy medical terms 'Cryptorchidism'. When a baby is in the uterus, the testis begins developing in the abdomen, then descends before birth to the scrotum. At birth, as he is being examined for '10 fingers and 10 toes,' we should also check the scrotum and make sure the two testis are present. Studies done show that 2-3% of full term male infants have undescended testis and 1% occurs on both sides. The numbers are much higher in premature infants.

The management for this condition involves surgically bringing down the testis to the scrotum, this procedure is known as Orchidopexy. What we emphasize on, is the timing of the surgery. The international guidelines advocate for surgery before 18 months. In Nanyuki, these children come to the hospital at three years and above. In the last year, I have operated on several seven-year-olds and a 14-year old. That means that the health care workers did not pick it up at delivery or even in the subsequent clinic follow ups. The task is left to the mothers



or when the boy child is lucky the father may notice that the scrotum is empty. In the older boys, when in school, they notice they are different from the others.

Why do we do the surgeries early? Delayed surgery causes long term complications. A study in Australia followed up Boys who have undescended testes. It showed that they have 2.4 times the risk of developing testicular cancer and 2.2 times the risk of infertility. According to Dr. Schnieder, both risks go up if you delay the corrective surgery. He further stated that for every six months' delay, there was a 6 percent increase in the risk of testicular cancer and a five percent increase in the risk of infertility.

The aim of this article, is to create awareness for the doctors and health care workers handling the male infants at birth and clinic to do a complete exam and send them to the surgical clinic.

Parents also have a role to play in early detection. Surgery is key to this painless disease.

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Public Health Department Improves Efficiency in Service Delivery



NTRH has come up with a mechanism that has shortened the process of obtaining a medical certificate under one roof. It ensures that all food handlers applying for medical certificates are served quickly, reducing the waiting time and receiving the medical certificates shortly after the application. This enables them to go back to work for increased productivity for the growth of the economy. These are written statements from a medical practitioner that attests to the results of the medical examination of a person. This serves as evidence that a person is fit or is of good health. It is a legal document and a mandatory requirement for all food handlers to have one.

Since May 2020, 2,700 medical certificates have been issued to food handlers. It is valid for six months.

NTRH Public Health Department offers several other services. Apart from issuing medical certificates, it also carries out medical examination of food handlers; a food handler means a person who works in any place where food or drinks are prepared, manufactured, handled, bottled, packed, stored or displayed for sale and

sold. The duties of a food handler or the circumstances under which they work, in the opinion of the department, involves the risk that the food handler may cause the spread of the disease.

Medical examination means a medical practitioner examines a food handler for any possible signs or symptoms of communicable diseases. They undergo a series of tests to ascertain their medical fitness to work.

More than 2,900 food handlers have been medically examined.

Thirdly, issuance of COVID-19 permits to eateries, hotels, restaurants and pubs to operate during COVID-19 Pandemic. The department ensures all the food establishment are issued with COVID-19 permits to enable them reopen after COVID-19 Pandemic hit the country. Since May 2020, we have issued 114 COVID-19 permits.

Lastly, testing of food handlers for COVID-19, since the pandemic hit the country, it is a requirement for food handlers to be tested for COVID-19, more than 1400 food handlers have been tested since May 2020.

From Foetal wellbeing to Placenta Location, NTRH Radiology Offers Wide Range of Service to Clients

In radiology department, we perform several ultrasound procedures depending on the region of examination and clinical history. The most common ultrasound examination is obstetric ultrasound that is performed to the expectant mothers.

There are several indications for this examination depending on the patient presentation.

The examination is done to ascertain:

1. The foetal wellbeing
2. Foetal presentation
3. Foetal anomalies
4. Placenta location
5. Adequacy of amniotic fluid
6. Foetal gestation age
7. Estimated foetal weight
8. Estimated date of delivery
9. State of the maternal cervix
10. Foetal biophysical profile among other indications.

Some of the mother's will request to know the sex of the baby. Mothers will give several reasons as to why they want to know the sex of the baby. Some will say it's for the purpose of naming the baby and some will say they want to be sure about the clothes they are going to buy, that is for boys or girls. Sometimes it is not advisable to tell the sex of the baby because the mother may have negative attitude to the unborn baby if the baby is not of the sex she was expecting.

Our Medical Social Workers Lend a Helping Hand to Needy Patients



NTRH medical social workers provide psycho-social counselling of patients with alcohol and drug abuse, mental illness, suicide attempts, teenage pregnancies, early marriages, female genital mutilation, marital problems and terminal illnesses.

They make follow-ups of the counseled patients to ensure they reach to a point of being psychologically stable and can take charge of living with challenges

The workers also conduct psycho social and economic assessment of both in and out patients. It is a Government policy that people who are too poor to pay can get a waiver, however to avoid abuse of this policy and loss of revenue, patients are genuinely assessed, presented to the waiver committee and the waiver committee gives its recommendations.

The patients and their relatives are sensitized on NHIF enrollment and encouraged to pay their bills in

installments to avoid paying large sums of money after discharge. Exemptions are granted to prisoners, patients under police custody and street children.

The department also conducts social investigations of patients through home visits, follow ups and home assessment to link the patients for appropriate assistance and establish true social family background.

It is also involved in social rehabilitation of patient through repatriation, resettlement, integration / reintegration and placement, handling of gender-based violence cases and referring patients for appropriate assistance. It also refers patients who are physically and mentally challenged and in need of social intervention, for fostering and adoption to appropriate offices for assistance.

The Medical social work department handles cases of child abuse, child negligence and child labour and referring

patients to the children's office for assistance

It conducts health talks to both inpatients and outpatients departments on behavioral and cognitive matters as well as providing psycho social support to patients supports groups.

The department also conducts social investigations of patients through home visits, follow ups and home assessment to link the patients for appropriate assistance and establish true social family background.



NHIF Enrolment Key to Health Systems Financing

By Alice Makena Mboroki, Acting Head of Corporate Service

By Nahashon Ngunjiri, NTRH Accountant

The purpose of health financing is to make funding available, as well as to set the right financial incentives for providers, to ensure that all individuals have access to effective public health and personal health care. This means reducing or eliminating the possibility that an individual will be unable to pay for healthcare or will be impoverished as a result of trying to do so.

The best practice and approach to health financing focuses on the delivery of its core functions:

- i. revenue raising (sources of funds, including government budgets, compulsory or voluntary prepaid insurance schemes, direct out-of-pocket payments by users, and external aid)
- ii. pooling of funds (the accumulation of prepaid funds on behalf of some or all of the population)
- iii. purchasing of services (the payment or allocation of resources to health service providers)

At NTRH, we are striving to deliver the best possible outcomes of health financing for the benefit of the patients utilizing our services and those of other health facilities around us.

We have progressively grown our revenue base and doubled our performance over the first three years, and only suffered in the last half of the financial year 2019/2020 when COVID-19 pandemic drastically reduced our revenues from all sources. The revenue raising measures also include safeguarding the revenue collected to achieve the intended health system goals. The hospital fully transitioned to cashless platforms in 2020, including MPESA Paybill No. 3131311, towards this endeavour. This has enabled



family, relatives, friends and benefactors pay for all rendered services remotely.

In 2017, County Government embarked on a landmark aggressive registration of Laikipia households to NHIF, to access its basic social insurance cover. This involved visiting virtually every single household in the county in a scale unprecedented in the country. This resulted in the doubling of uptake of NHIF Supa Cover from 30% to 60% of the population.

NTRH immediately reaped from this exercise after its capitated customer base rose from 17,000 to 43,000 in two years. With this, we benefited from the economies of scale from the pooled funds paid for by members before access to services. At only KSh. 250 per member per quarter, the amounts were previously not adequate to meet the costs of providing healthcare. As the numbers crossed the 40,000 mark, the hospital was able to

balance costs and payments.

The COVID-19 pandemic resulted in reduced purchasing power, and many households defaulted on their monthly payments. This shrunk the numbers towards higher costs to the hospital. We however expect a recovery of this trend as the economy improves post-COVID. The hospital will continue providing a desk that targets clients who pay out of pocket to help continuous registration of new households and reactivation of previously registered households to maintain this important pool that strengthens our health system. Purchasing of services is the market-based allocation of resources to health service providers. It was clear to ourselves, and the larger County Government as an organisation that we have the largest and the most skilled human resource capacity and ability to provide the services needed by all the segments of the market.

Why Prevention is better than Cure

By Dr Florence Karanja, Medical Officer Internal Medicine

For many decades, patients have been diagnosed as having medical chronic conditions such as hypertension or diabetes as a coincidental finding. Why is this so? Because these conditions take their time to really harm you before you can realise. Deliberate planned and regular check-ups are your only chance for you to gain an advantage and catch the disease early in its progression. The insidious nature of this lifestyle diseases makes them the silent killers. This is especially important if we target to screen the younger adults between 18 to 40 years annually, and for those that are older at every available opportunity of the interaction with the health system.

The main goal of these check-ups is to prevent and promote health in order to reduce the burden of suffering from the main preventable diseases. Provision of these preventive care can be divided into three; primary, secondary and tertiary prevention. Primary prevention involves interventions that prevent disease in people at risk like we see with immunizations against vaccine-preventable diseases such as tetanus and influenza. This strategy may be possible for hypertension and diabetes



in certain situations. Secondary prevention come next when the person is found to already have the disease and can still benefit from lifestyle changes that may modify the disease. These include increasing physical activity, diet adjustments and weight control. At this point an individual has established risk factors for disease. These can be known for individual patients through physical

examination, the measurement of blood pressure, random/ fasting blood sugar, cholesterol, height and weight.

Tertiary prevention come in when we are much further along and involves optimization of health once a disease has been diagnosed. You will ideally be put on medication and your clinical data is updated during visits. The medication will be continually adjusted to maintain your health and prevent the development of complications.

For many individuals who may not know whether they already have a lifestyle disease, we recommend that you start visiting this and other health facilities on an annual basis, just for the purpose of these annual check-ups. In these visits, you will be a well patient. It may feel unusual to visit the hospital when you are not feeling ill. There could be various reasons for this, with the most common being that your previous hospital experience was not great. Or that hospital are is perpetually congested. While this is true, we cannot postpone the tackling of one potential problem because of another. Both have to be

addressed at the same time. It is our duty as a health system to address these barriers to access; and it is yours to ensure that you have put this important agenda in your calendar every year. Start today. It will do you good.



KAI HEALTHCARE

KAI Healthcare It is intended to cater for medical expenses arising out of illness and accidental injuries. Our focus is to provide ensure a healthy population through wellness programs through ought the cover period.

A wide range of health benefits are available i.e. Inpatient, Outpatient, dental, optical, maternity and funeral expenses.

Health complications covered include pre-existing, chronic, HIV/AIDS, psychiatric, congenital etc.

Benefits covered under KAI Healthcare

- Hospitalization and surgical coverage
- Emergency and non-emergency outpatient treatment benefits.
- CASHLESS admission to our panel hospitals.
- Reasonable Contribution rates for excellent benefits.
- Ante natal and Maternity benefits
- Dental benefits

Access to services

- Treatment will be on credit basis in appointed Medical Service Providers (MSPs);
- Members will present a Healthcare SMART card for identification;
- Upon identification, the member completes a claim form at the point of service;
- Cover outside Kenya on holiday & Business- Six weeks (On reimbursement)

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KAI HEALTHCARE



THE TEACHERS' MEDICAL SCHEME



Enhanced Comprehensive Teachers' Medical Scheme

Teachers and their dependants can now access the benefits below at any of our accredited facilities across the country. The following are eligible for this cover:

- Teachers employed by TSC and actively in service from eighteen (18) years to the mandatory retirement age,
- One (1) legal spouse to the teacher and upto four (4) dependant children (biological/legally adopted) from birth till the age of 18 or 25 years for those in a post secondary learning institution.
- There is no maximum age of eligibility for dependants with disabilities.

Job Group	Outpatient	Inpatient	Dental	Optical	Maternity	Group Life	Last Expense	Rescue Services	International Referral	International Travel	Wellness Service
B5	100,000	750,000	35,000	45,000	100,000	450,000	200,000	 Air fix wing and Helicopter: 2 (two) per family per Annum	1,000,000	200,000	Employee Assistance Program through a 24/7 Minet tele-counseling toll-free line, 0800720029 for conditions such as: • Chemical dependency • Stress • Counseling services • Relationship challenges • Anxiety and depression • Parenting • Legal • Financial distress • Chronic Disease Management
C1	100,000	750,000	35,000	45,000	100,000	450,000	200,000		1,000,000	200,000	
C2	100,000	750,000	35,000	45,000	100,000	450,000	200,000		1,000,000	200,000	
C3	100,000	850,000	35,000	45,000	100,000	550,000	200,000		1,000,000	200,000	
C4	150,000	1,000,000	35,000	45,000	100,000	550,000	200,000	 Road Ambulance Services	1,000,000	200,000	
C5	175,000	1,250,000	35,000	45,000	100,000	650,000	200,000		1,000,000	200,000	
D1	225,000	1,500,000	35,000	45,000	150,000	650,000	300,000		1,000,000	200,000	
D2	250,000	1,800,000	35,000	45,000	150,000	1,050,000	400,000		1,000,000	200,000	
D3	275,000	2,000,000	35,000	45,000	200,000	1,050,000	500,000		1,000,000	200,000	
D4	375,000	2,500,000	35,000	45,000	200,000	1,050,000	500,000	1,000,000	200,000		
D5	375,000	2,500,000	35,000	45,000	200,000	1,050,000	600,000	1,000,000	200,000		



Teachers' Medical Scheme Consortium



The consortium consists of underwriters, actuaries and medical scheme administrators to ensure scheme accessibility and affordability. Minet Kenya is the consortium lead.



Contact channels

Hotline: 1528	Mobile no: 0730 604 000	Website: www.minet.com/Kenya	Email: mmc.customerservice@minet.co.ke
Register: #865#	Find a hospital: *340# / *202*6#	Twitter: @Minet_Kenya	Self service portal: collaborationkenya.minet.com/TSC
Facebook: Minet Kenya	Google App Store: Minet TSC	Telegram: Teachers' Medical Scheme	Incidence Reporting: ⇒ Safaricom USSD code: *202*07# ⇒ collaborationkenya.minet.com/tscresponse



Nanyuki Teaching and Referral Hospital

P.O. Box 66-10400, Nanyuki Kenya

Email: nanyukihospital@gmail.com

Corporate Services email: ntrhamenity@gmail.com

Facebook: <https://m.facebook.com/NanyukiHospital/>

Twitter: @NanyukiH

Hotline (Hospital Coverage): 0722 478 289

Emergency Department: 0759 537 977

Outpatient Services: 0714 453 711

Amenity/Corporate Clinic: 0791 306 719

Comprehensive Care Clinic: 0727 093 360

Laboratory: 0799 655 568

Female Ward: 0794 517 762

Male Ward: 0706 617 305

Paediatric Ward: 0748 086 002

Maternity: 0703 766 323

New Born Unit: 0745 448 068

Theatre: 0727 545 247

Renal Unit (day only): 0740 175 267

Isolation and Quarantine Centre: 0799 844 665