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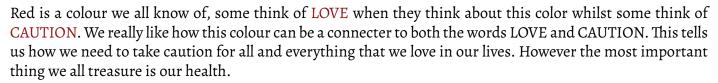
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# From the Editors' Desk

Dear esteemed readers,

#### RED.



Once again, Whitecoats brings you a reminder about your precious health, but this time with a red theme that covers many aspects that deal with the colour itself. So anything red you can think of we have tried to cover in here, including; the heart, blood, menstrual health, dental problems and many more. We have handpicked articles with the hope of aiding you all to move forward and work towards adapting a healthier lifestyle and overcoming the challenges/diseases that we are all most likely to encounter in our lives.

The success of this magazine would not have been possible without our wonderful team who have worked tirelessly from researching on all the information, to running around to make sure things are in place. Our heartfelt appreciation goes out to each and every one of them. We could not have made it through without an amazing team like yours- Asante Sana! A special thank you to our talented designers, Dr. Sibtain Moledina and his better half Dr. Khadija Bhimji, for making this magazine look as beautiful as you see. You both have been patient and kept up with us despite your busy schedules.

Furthermore, you would not be able to hold this copy in your hands without the immense generosity and support of ours sponsors! Every accomplishment we actualize from our efforts will be partly due to their continued backing. May Almighty bless them all abundantly for the contributions made for a good cause like this. As they say when you educate someone you empower them and as that knowledge passes on we expect to have the community empowered as a whole.

We really hope you enjoy reading this as much as we did when compiling it! Should you have any queries or suggestions, we welcome them happily and await your feedback via email at whitecoats.mhi19@gmail.com.

Here's to a healthy you, a healthy us and a healthy community!

Dr. Sukaina Gulamabbas Khimji and Dr. Aamir Mohamedraza Kanji **Chief Editors of Whitecoats 2019** 

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# MAHDI HEALTH INITIATIVE

By: Shaneabbas Jaffer & Maryam Mohamedali

"Who you are tomorrow begins with what you do today..."

On an evening three years ago, pondering over the potential that lay within our health professionals and the ailing status of health in the community, a group of farsighted medics took on the task of redefining and transforming how to achieve a healthy and active society. Thus, they brought together the leaders of the Khoja Shia Ithna-asheri Jamaat and the community health professionals side by side to discuss how best the community health professionals can serve the needs of our growing community. The resolutions of this meeting laid the foundations of Mahdi Health Initiative.

Mahdi Health Initiative aims to bring together Khoja Shia Ithna-Asheri health professionals in order to create a platform where the professionals can grow and develop themselves while also creating an impact on the health outcomes of Tanzanian citizens. As such, we aim not only at building a healthier community but also at improving the aptitude and skills of the health professionals.

Fast-forward time and here we are 3 years later with over 200 members from all medical and allied health fields from various parts of the world. To organize and give direction to our efforts we have a Core Team of seven members at the head of the organization comprised of two chairpersons, a secretary, a treasurer, a media & communications coordinator and two members.

Over the year of 2019, we were able to organize many events including the following:

- Health Seminars Similar to the past two years, we organized a series of health seminars based on relevant health issues in the community. This year we chose the topics of Dengue, Sports related knee injuries and Respiratory diseases in Children.
- Continuous Medical Education (CME) sessions. This year we have organized multiple sessions to increase the medical knowledge and skills of our members. Each CME aims at building a practical skill and providing supportive knowledge on topics of interest to the members.
- SHIA Which stands for Source Health Information Access. This is one of our most successful health information dissemination campaigns for the community. Every month we circulate information on a topic, which is divided

into 4 or 5 slides that are released every Friday.

- Health Sessions for Madrasah Boys together with the Husayni Madrasah Boys Section, we have been able to organize informative sessions for the adolescents in our community addressing relevant topics such as hygiene and drug abuse.
- Ignite Forum this was a forum for the health professionals. It aimed at shedding light on the various pathways one can follow in the medical field & the advantages and challenges associated with each. The session was very fruitful and fostered networking and mentorship among the members.

We thank the Almighty for giving us the opportunity to serve the community and we hope our efforts translate into the nurturing of healthier lifestyles within the community.

Asanteni Sana.



Practical CME session on POP insertion with Dr. Muhammad Mohamedhussein

# MHI events this past year



Health Screening in collaboration with KSIJ Mwanza Jamaat



IGNITE Forum for health professionals



Health talk by Dr. Zainabbas Ladha at Husayni Madrassah on Importance of Sports



Health talk by Dr. Aamir Kanji at Husayni Madressa on Mental Health



Public Health Seminar on Dengue by Dr. Sibtain Moledina



CME session on Ophthalmology and Fundoscopy technique with Dr. Dilawar Padhani

# SUICIDE AND SELF HARM

By: Ijaz Mubin Lalji

Suicide is the act of taking one's life. Among youth ages 10 to 24 years, suicide is the second leading cause of death. According to a survey in 2016 over 6000 individuals in the age group lost their lives by committing suicide. Suicidal behavior refers to talking about or ending one's own life. Suicidal thoughts and behaviors should be considered an emergency and must be addressed immediately.

### Warning signs that someone may attempt suicide:

You can't exactly see what a person is feeling on the inside, so it is not usually easy to identify someone who is having suicidal thoughts. However, some of the outward signs that a person may be envisioning suicide may include:

- Talking about feeling hopeless, trapped, and alone or having no reason to live.
- Making a will or giving away personal possessions.
- Searching for a means to cause personal harm.
- Sleeping and eating too much or too little.
- Engaging in reckless behavior including excessive drug consumption.
- Avoiding social interaction.
- Expressing rage or intention to seek revenge.
- Showing signs of extreme anxiety and/or agitation.
- Having dramatic mood swings.
- Talking about suicide as the only way out.

It can feel scary, but taking action and getting someone the help they need may help prevent a suicide attempt of even death.

### What increases the risk of suicide?

There's usually no distinct reason why someone decides to take their own life. Several factors can influence suicide, such as having a mental disorder. However, more than half of all people who die by suicide don't have a known mental illness at the time of their death. Depression is the top mental health risk factor, but others include bipolar disorder, schizophrenia, anxiety disorders and personality disorders. Apart from mental health conditions, other factors that can increase the risk of suicide include:

- Incarceration (State of being imprisoned or confined).
- Poor job security or low levels of job satisfaction.
- History of being abused or being continuously abused.
- Being diagnosed with a serious medical condition such as HIV or cancer.
- Being socially isolated or being a victim of bullying.



- Substance use disorder.
- Childhood abuse or trauma.
- Difficulty in seeking for help or support.

### How to talk to someone who is feeling suicidal?

If you suspect that a family member or a friend may be considering suicide, talk to them about your thoughts. You can begin by asking questions in non-judgmental way. Talk openly and don't be afraid to ask direct questions such as "Are you thinking about suicide?"

During the conversation make sure you:

- Stay calm and speak in a reassuring tone
- Acknowledge that their feelings are legitimate
- Offer support and encouragement
- Tell them that help is available and that they can feel better with treatment.

Make sure not to attempt at shaming them into changing their mind. Listening and showing your support is the best way to help them. You can also encourage them to seek help from a professional. It can be frightening when someone you care about shows suicidal signs. Nonetheless, it's critical to take action if you're in a position to help. Starting a conversation to try to help save a life is a risk worth taking. •

5



# **MENTAL HEALTH - RED FLAGS!**

### By: Fatema Kermali

"It's all in your head", "Just snap out of it", "You're just looking for attention" are just a few among the many phrases commonly heard by individuals who take the first step in expressing their mental health concerns. These are the very statements that lead people to refrain from discussing observed changes in their sleeping patterns, energy levels, thoughts and emotions.

Based on how we cope with stress, the signs that our mental health is at stake might take the shape of common, daily struggles. Hence, it is important to familiarize ourselves with the early symptoms of mental health illnesses. Otherwise, we might put ourselves at the risk of suffering longer, not to mention more severely over time.

Below are a few seemingly minor issues that may indicate a larger mental health problem:

- Significant feelings of tiredness and low energy.
- Problems falling asleep or maintaining sleep.
- Major changes in eating habits.
- Rapid shifts in emotions such as feeling extremely sad or being irritable.
- Sudden overwhelming fear, worry, or feelings of guilt.
- Recent withdrawal from friends and family.
- Losing interest in things that were previously enjoyed.
- Unusual drop in functioning at school, work or in recreational activities.
- Self-harm and/or suicidal thoughts.
- Problems with concentration, memory or logical reasoning.
- Heightened or reduced sensitivity to sights, sounds, smells or touch.

A decline in mental health cannot be predicted by

the presence of one or two of the above symptoms. Rather, a persistent display of these concerning symptoms may indicate the need for a mental health assessment. Identifying the red flags is an essential starting point in managing a mental health condition.

Of course, the set of symptoms vary from one disorder to the other, but there are a few common early signs of mental illnesses. Often, a close friend or family member notices new signs and differences in character quicker than the individual experiencing them. If your loved one shows these early signs, have an open and honest discussion with him or her about your concerns. In fact, Allah (SWT) in The Holy Qur'an (15:97), consoles the Holy Prophet (saw) and acknowledges how his sensitive heart was unable to withstand the blasphemous statements, making him deeply saddened: "And (O Prophet!), We certainly know your breast (heart) is strained by what they say". Similarly, we should also provide acknowledgement, coupled with utmost support, care and understanding to our loved ones struggling with their mental health.

It's natural to deny the warning signs due to concerns about people's opinions. However, acceptance of the feelings associated with mental health illness should be normalised as it's common among families going through similar situations of strife. Finding out more about the illness by speaking to mental health professionals as well as those who have struggled with their mental health, are positive and healthy ways to combat such issues. Share what you have learned, talk about your journey, encourage one another to look out for the warning signs, and promote an environment where speaking about mental health is not stigmatised. •



# **BLOOD TRANSFUSION**

By: Maysam Hussein Manji

A blood transfusion is the transfer of blood or blood products from one person (donor) into another person's bloodstream (recipient). This is usually done as a lifesaving maneuver to replace blood cells or blood products lost through severe bleeding, during surgery when blood loss occurs or to increase the blood count in an anemic patient. Although in most situations the likelihood of a blood transfusion associated with surgery is uncommon, at times patients may require blood products.

Blood can be provided from two sources: autologous blood (using your own blood) or donor blood (using someone else's blood), the latter being the most common source. All donor blood is tested for safety making its risks very small, but no screening program is perfect. Risks such as contraction of the hepatitis virus or other infectious disease still exist.

Blood banks collect, test, and store blood. They carefully screen all donated blood for possible infectious agents, such as viruses, that could make you sick. Getting a blood type that doesn't work with your own blood type will make you very sick. That's why blood banks are very careful when they test the blood.



There are four blood types: A, B, AB, or O. Every person has one of the above four blood types. In addition, each person's blood is either: Rh-positive, or Rh-negative. For example, if a person has type A blood, it's either type A positive or type A negative. The following table summarizes the blood transfusion scheme:

Recipient	Donor							
	0-	0+	А-	<b>A</b> +	В-	B+	AB-	AB+
0-	✓							
O+	✓	<b>✓</b>						
А-	✓		<b>√</b>					
A+	✓	<b>√</b>	<b>√</b>	<b>√</b>				
В-	✓				✓			
B+	✓	<b>√</b>			✓	✓		
AB-	✓		<b>√</b>		<b>√</b>		✓	
AB+	✓	✓	✓	✓	✓	✓	<b>√</b>	<b>√</b>

(such as your temperature, blood pressure, and heart with death or destruction: "A Muslim is a brother to rate). The intravenous (IV) line is taken out. You may every Muslim: he neither lets him down, nor does have some bruising or soreness for a few days at the him injustice, nor gives him away", i.e. he does not site where the IV line was inserted.

Researchers are trying to find ways to make blood. There's currently no manufactured alternative to human blood. However, researchers have developed medicines that may help do the job of some blood parts. For example, some people who have kidney problems can now take a medicine called erythropoietin that helps their bodies make more red blood cells. This means they may need fewer blood transfusions. Surgeons try to reduce the amount of blood lost The following are basic principles of Islam with during surgery so that fewer patients need blood regards to blood transfusion: transfusions. Sometimes they can collect and reuse the blood for the patient.

Islamic law urges every Muslim to be in constant support of his brother, and even makes such support a legal requirement in many cases. According to a Hadith (saying) by the Prophet Muhammad, (peace be upon him) "He who relieves a believer of one form of distress in this life shall be relieved by God of a greater distress on the Day of Resurrection"; and "God will help any servant of His, as long as he continues to help his brother". The Prophet (peace be upon him) enjoined Muslims not to abandon their

After a blood transfusion, your vital signs are checked fellow community members when they are faced let his brother fall victim to the enemy, or to a killer disease if he can prevent it. Therefore, if giving blood to a patient is necessary for his survival, or to relieve his complaint, then, according to Islam, it becomes mandatory, as a case of implementing a basic Islamic principle to preserve human life. Two important main Islamic rules are also applicable here, namely: "Harm must be eliminated," and "Necessity overrules constraints".

- While spilled blood is considered impure, donated blood is not spilled and the status of impurity does not apply to it.
- Blood transfusion between a man and his wife will not invalidate their marriage.
- It is forbidden to sell blood. However, if a person who is fit to donate blood refuses to do so without payment, it is permissible to pay on the part of the payer, but the payee commits an offence by mixing a bad deed with good one.
- Giving blood does not invalidate fasting; giving blood by transfusion to a fasting person does not invalidate the latter's fast.



### **HISTORY OF MALARIA**

By: Fatemazahra Moledina

It's a disease from the past, That has affected every caste, Yes, it's called Malaria, No, it's not caused by bacteria.

The source of which is Plasmodium, Anopheles mosquito is its medium, Scientifically classified as a parasite, It commonly spreads in the night.

Known to cause fever and chills, It can now be prevented with a few pills, But this wasn't the case in its early days, When malaria was indisputably a major craze!

To rescue came the Cinchona tree, Whose alkaloid set the patients free, Quinine was its name, That bagged all the fame.

It was taken as a paste, But bitter to the taste, So the British turned it carbonic, In the form of a Gin and Tonic.

But tagged as a deadly disease, Malaria would not go with ease, Following Quinine's existence, Came new drugs and resistance.

The latest being Artemisinin, That transpired from Chinese medicine, Such is the malaria history, Eradication of which is still a mystery!















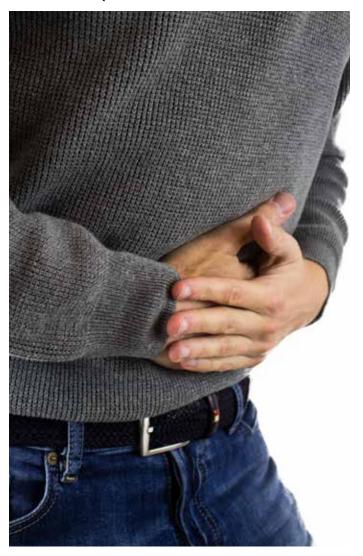
# કબજયાિત

### By: તાહેરા જાફર

પાયન તંત્ર ની એ સ્થતિનિ કહે છે જેમાં કોઈ વ્યક્ત (કે જાનવર) નું મળ બહુ કડક થઈ જાય છે તથા મળત્યાગ માં કઠનાઈ થાય છે. કબજયાત આમાશય (આંતરડા) ની સ્વાભાવિક પરવિર્તનની એવી અવસ્થા છે, જેમાં મળ નિષ્કાસનની માત્રા ઓછી થઈ જાય છે, મળ કડક થઈ જાય છે, તેની આવૃતિ ઘટી જાય છે અથવા મળ નિષ્કાસનના સમયે અત્યાધિક બળનો પ્રયોગ કરવો પડે છે. સામાન્ય આવૃતિ અને અમાશયની ગતિ વ્યક્તિ વિશેષ પર નિર્ભર કરે છે. (એક સપ્તાહ માં ૩ થી ૧૨ વખત મળ નિષ્કાસનની પ્રક્રિયા સામાન્ય માનવામાં આવે છે.

### કારણો

- ઓછા રેશાયુક્ત ભોજનનું સેવન કરવું
- ઓછું યાલવું કે કામ કરવું
- અમુક ખાસ દવાઓં નું સૈવન કરવું
- મોટા આંતરડામાં ધાઁ કે વાગવું તૈને કારણે કે મોટા આંતરડાનું કૈસર
- થાયરૉઇડ હાર્મોનનું ઓછું બનવું
- કેલ્શયિમ અને પોટેશયિમ ની ઓછી માત્રા
- મધુમેહ ના રોગિઓમાં પાયન સંબંધી સમસ્યા
- કંપવાત (પાર્કસિન બીમારી)



- અનિયમિતિ ઊંધ કરાવી કે વધુ પડતા ઉજાગરા કરવા
- યતાિ કરાવી

### ઉપાય

- રેશાયુક્ત ભોજન નું અત્યધતિ સેવન કરવું, જેમ સાબૂત અનાજ
- તાજા ફળ અને શાકનું અત્યધકિ સેવન કરવું
- પરયાપત માતરામાં પાણી પીવું
- વધું સમેસ્યા થેતા યકિત્સિક ની સલાહ લેવી જોઈએ.

### અમુક વશિષિટ પરયોગ

ખાવામાં આવી યોજો લો, જેનાથી પેટ સ્વયં જ સાફ થઈ જાય.

- મીઠું નાની હરડે અને કાળું મીઠું સમાન માત્રા માં મેળવી પીસી લો. નિત્ય રાત્રે આની બે નાની યમયી ગરમ પાણી સાથે લેતા દસ્ત સાફ આવે છે.
- ઈસબગોલ બે નાની ચેમયી ઈસબગોલ ૬ કલાક પાણીમાં પલાળી એટલી જ સાકરશ્રી મેળવી જળ સાથે લેતા દસ્ત સાફ આવે છે. કેવળ સાકર અને ઈસબગોલ મેળવી પલાળ્યા વના પણ લઈ શકાય છે.
- યણા કબજિયાત વાળા માટે યણા ઉપકારી છે. આને ભીજાવી ખાવા શરેષ્ઠ છે. જો ભીજાવેલા યણા ન પયે તો યણા ને ઉકાળી નમક આદુ મેળવી ખાવા જોઈએ. યણાના લોટની રોટલી ખાતા કબજિયાત દૂર થાય છે. આ પૌષ્ટિક પણ છે. કેવળ યણા ના લોટની રોટલી સારી ન લાગે તો ઘઉં અને યણા મેળવી રોટી બનાવી ખાવી પણ લાભદાયક છે. એક કે બે મુઠી યણા રાત્રે પલાળી દો. પ્રાત: જીરું અને સૂંઠ પીસી યણા પર નાખી ખાવ. કલાક બાદ યણા ભીજવેલ પાણી ને પણ પી લો. આનાથી કબજિયાત દૂર થશે.
- લીબુ લીબુ નો રસ ગરમ પાણી સાથે રાત્રિમાં લેતા દસ્ત સાફ આવે છે. લીબુ નો રસ અને સાકર પ્રત્યેક ૧૨ ગ્રામ એક ગ્લાસ પાણીમાં મેળવી રાત્રે પીતા અમુક જ દવિસોમાં જુના માં જુનો કબજયાત દૂર થઈ જાય છે.
- નારંગી સવારે નાસ્તામાં નારંગી નો રસ ઘણાં દવિસો સુધી પીતા રહેવાથી મળ પ્રાકૃતિક રૂપે આવવા લાગે છે. આ પાયન શક્તિ વિધારે છે.
- મેથી ના પાનનું શાક ખાવાથી કબજયાત દૂર થઇ જાય છે.
- ધઉં ના જ્વારાનો રસ લેવાથી કબજયાત નથી રહેતી.
- ધાણા સૂતા સમયે અડધી યમયી પીસેલી વરયાળીની ફાંકી ગરમ પાણી સાથે લેવાથી કબજયાત દૂર થાય છે.
- તજ સૂઠ, એલચી જરા મેળવી ને ખાતા રહેતા લાભ થાય છે.
- ટમેટા કબજયાત દૂર કરવા માટે અયૂક દવા નું કામ કરે
   છે. અમશય આંતરડા માં જમા મળ પદાર્થ કાઢવામાં અને અંગોં ને યેતનતા પ્રદાન કરવામાં ખૂબ મદદ કરે
   છે. શરીર ના આંતરકિ અવયવોં ને સ્ફૂર્તિ દે છે.

### **GINGIVITIS**

By: Tatheer Shabbir Sachedina

A common question we should all ask ourselves: "Do we experience pain in our gums? Are our gums bleeding while brushing? Are our gums sensitive and swollen?" If yes, this is a warning sign towards the most common condition known as gingivitis {inflammation of gums} also referred to as gum infection in laymen terms.

By definition, gingivitis refers to the inflammation of gums resulting from a bacterial infection. It all starts when plaque {food remains and bacteria} builds up and the bacterial activity taking place causes the gums to swell and easily bleed while brushing. This is the early stage where by the gums are irritated but teeth are held firmly in place. At this stage no damage has been caused to the bone and gum tissue. However if left untreated it may advance to "PERIODONTITIS" which is the advanced stage referred to as gum disease.

Gingivitis can be caused by hormonal changes which makes the gums sensitive, by auto-immune diseases like SLE (Systemic Lupus Erythematosis) reduced saliva production{could be due to certain medication}, smoking, poor oral hygiene and inheritance.

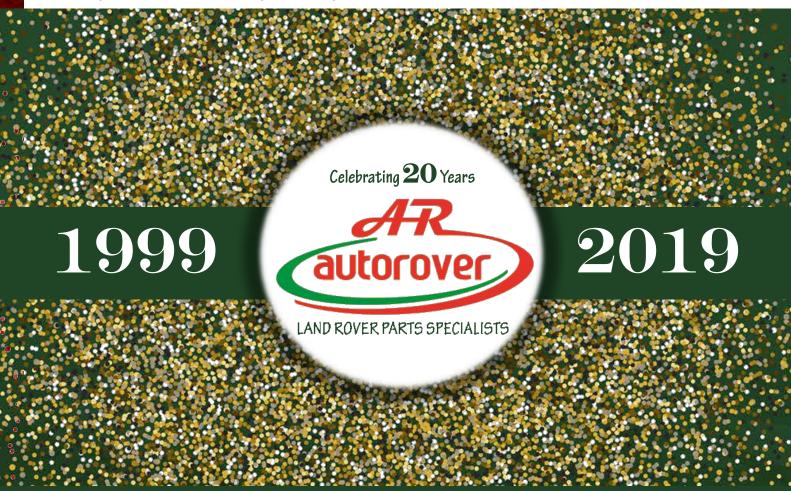
It could present as bleeding gums during or after brushing, red, swollen and tender gums, changes in the

way teeth fit together upon biting or in the fit of partial dentures, receding gums and persistent bad breath.

We can treat this problem by going for professional dental cleaning called scaling and root planning, taking medications such as antibiotics prescribed by your dentist to prevent bacterial growth, using special toothpastes such as "parodontax" or "sensodyne", all of which help preventing bleeding gums, reducing sensitivity. Our natural home remedies like gargling with warm salt water as well as the use of miswaak which is highly encouraged in Islam also play a major role in preventing bleeding gums.

Some of the benefits of using miswaak are: gaining the pleasure of Allah, if used prior to salaah, the reward of salaah is multiplied 70 times, strengthening of gums and also preventing tooth decay. It creates a good fragrance in the mouth, eliminates bad odors, improves sense of taste, and sharpens memory and cure headaches too. So whenever we notice any of the symptoms from the above do visit your dentist or dental hygienist for further guidance and management.

THE BALL IS IN OUR COURT!! •



# SICKLE CELL ANAEMIA

By: Nazeemabbas Suleiman

This is an inherited blood disorder characterized by presence of a mutated hemoglobin gene. Hemoglobin allows red blood cells to carry oxygen from your lungs to all parts of your body.

The sickle cell gene is passed from generation to generation in a pattern of inheritance called autosomal recessive inheritance. This means that both the mother and the father must pass on the defective form of the gene for a child to be affected.

If only one parent passes the sickle cell gene to the child, that child will have the sickle cell trait. With one normal hemoglobin gene and one defective form of the gene, people with the sickle cell trait make both normal hemoglobin and sickle cell hemoglobin. Their blood might contain some sickle cells, but they generally don't have symptoms. However, they are carriers of the disease, which means they can pass the gene to their children.

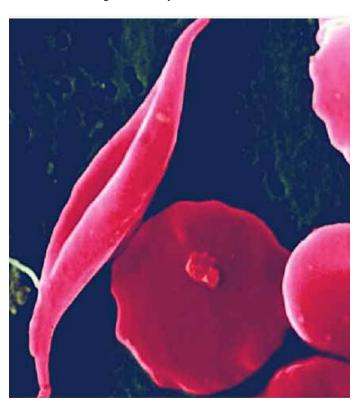
In Sickle cell anemia, during certain circumstances, the red blood cells become rigid and sticky attaining a shape of a sickle or crescent moons. These irregular shaped cells then lead to blockage of the blood vessels impairing the oxygen supply to the specific parts of the body.

Patients with sickle cell anemia usually present with repeated episodes of pain crisis which can involve the bones, abdomen, chest etc. This is due to clogging of the blood vessels. Further complications include repeated infections, stroke, delayed growth, leg ulcers and gallstones.

Bone marrow transplant offers the only potential cure for sickle cell anemia but it's challenged by finding a donor and high burden of cost. As a result, treatment for sickle cell anemia is usually aimed at avoiding crisis, relieving symptoms and preventing complications.

People suffering from sickle cell anemia are usually initiated on medications such as folic acid tablets (to reverse the anemia), penicillin prophylaxis against infections as well as pain relievers for the painful crisis. Hydroxyurea is a disease modifying drug in sickle cell anemia as it improves the quality of life by reducing the number of the repeated painful crisis, less hospitalizations as well as less need for blood transfusions. Please note that any medications taken must be prescribed by a licensed health care professional. Additional preventive measures include

encouraging adequate fluid intake, balanced diet as well as advising on timely vaccinations schedules.





# STUDENTS' CORNER

### Zahra Rashid

# We are made of stardust (and genes)

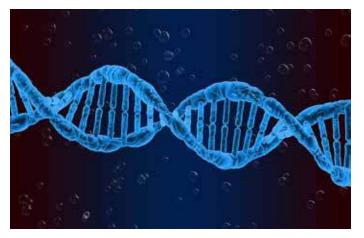
While still in high school, my knowledge of genetics was pretty limited: I'm sure most of us still remember how information from DNA eventually gets translated to proteins. Now that

I'm three years into my undergraduate degree at the University of Cape Town, I can confidently say that there's way more to it than what we learn in school!

Genetics is a complex and quick growing field in medicine, agriculture and even in the mainstream with personal DNA kits becoming increasingly common. It's the foundation of our existence and there's always something to learn – which is what drew me into the field. However, for those without a degree in a relevant field, this can be a lot to take in and process. This is where a genetic counselor comes in.

A genetic counselor works with patients who have or think they might have a genetic disorder. These include cancer, Down's syndrome, thalassemia, and a myriad of other diseases. They are able to filter through large quantities of information to educate a patient regarding their risk of a genetic disease. Also they can be educated about the treatments available so that an informed decision can be made.

I aspire to be a genetic counselor, since if university has taught me one thing and it's that some things can appear complicated at first until someone guides you through them. Acknowledging our own complexity teaches us more appreciation about our Creator. Success to me is when I can help the complexity and beauty of our genes easier for someone to understand.



### Malika Pyarali

The question that I have encountered most frequently since I joined the field is "What is Biotechnology?" Well my answer to that is, what is it not? Biotechnology is an immensely vast field that encompasses most, if not all



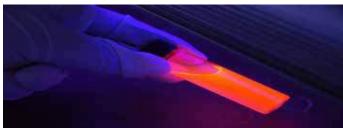
the scientific disciplines. It is a subject that deals with the art of scientific discovery; the discovery of fire a few millennia ago ignited a spark that grew at an ever-shortening pace into the raging wildfire of knowledge that we see today.

The need to evolve in the face of immediate challenges led mankind on a trail that started with the development of simple vaccines as a result of a plague that wiped out half of the human population to ultra-sophisticated techniques used today that allow us to modify our own DNA or even engineer an entire organ synthetically to replace damaged ones that are vital for survival.

However, that is only the beginning; a degree in biotechnology equips one with the skills required to work in several related fields such as Zoology, Botany, Genetics, Molecular Biology, Tissue Engineering, Nanotechnology, Forensics and many more. In addition, it enables development of critical thinking abilities, resilience, diligence, teamwork, leadership and above all, allows you to explore and quench the thirst for knowledge that catapults the process of research.

In my opinion, biotechnology is a field best suited for curious minds who are passionate about biology and related aspects and are ready to persevere in order to achieve their goals – after all, your success will create a ripple that will resonate to every inch of the earth; humans, animals and the environment. I would like to conclude with the following words:

'The greatest inventions on this planet have come from minds rarer than radium and without them, we would still be crawling in the mud.' •





### Sayyada Master

As a kid I saw myself doing a number of professionsa pharmacist vowing to make medicines taste like strawberries, a marine biologist who still squirms at some sea weed and even a forensic scientist thanks to hours of

CIA and the likes. When the time to make a decision came, I was very conflicted choosing a profession that either included my hobbies or my passion- both very opposite sides of the spectrum.

Looking at occupational therapy, I found it to be a perfect mixture of health sciences that I was interested in; I saw it as an opportunity to make a difference as well as an outlet for creativity hence making it my dream job.

Picking my career path, started at the beginning of secondary school. I made sure to attend every career fair and university information session available to me. At that time a few people thought I may be young to start thinking about university, but I am glad that I did. I started my international baccalaureate (IB) and therefore had 2 career options- one of them being OT (Occupational Therapy).

Just like the decision of picking a career choice, I am nearing another major decision in my professional life-honestly, I am not sure. I am open to all avenues available to me, however I am passionate about mental health and that is something I would like to pursue further. I believe that passion is enough to get me where I want to be by the grace of God.

I am incredibly lucky to have the opportunity to study abroad. However with it comes many challenges including staying away from home, loneliness and managing your life on your own. From cooking to cleaning and grocery shopping, I personally feel that 80% of the learning you get from university is the independence that you gain and the responsibilities it comes with. Not many people will tell you this, but along with being the best time of your life, university can also be a very isolating experience. My advice would be to find good friends whose values align with yours as well as learn to enjoy your own company.

On a final note, it's always good to look for work experience during university - be it unpaid or paid. It will always look good on your CV and help you gain skills outside the classroom to be a better professional.

### Dr. Mohamed Shabbir

I love screaming patients, broken bones, blood splatters and long hours outside home.

It's more than 10 years ago when I wore a white coat for the first time during my undergraduate studies at Muhimbili University of Health and Allied Sciences.



Young, energetic and enthusiastic defines a regular medical student.

Success in Medical school all around the world depends on one aspect in particular – Passion. Perseverance and sacrifice are needed, the days will be long and the nights even longer with consistent exams with so many new arenas covered. In contrast Postgraduate studies focuses on the interest/specialty chosen and hence more time given to a particular field.

There are many additional responsibilities as a postgraduate student including patient care and educating the juniors and of course, family. Surgical specialties are best trained in an environment where there is high patient flow and hands on experience – Tanzania has both, hence making it a wonderful place to practice. It is without a doubt the road is long, tiring, frustrating and demanding but in the end- bright, rewarding, peaceful and satisfying. The only way to be able to have a smooth sail is to love the profession.

Don't chase money or success, chase Excellency – money and success will come running towards you! Love what you do and do what you love, otherwise this field will be a disaster for you ending up in dejection, guilt and depression. Indeed, whoever saves a life, it is like s/he has saved humanity. And don't forget, it doesn't take an individual effort to make a doctor, it's the family.

I love calming screaming patients, fixing broken bones, stopping blood splatters and long hours at hospital doing what I love doing.



# ALCOHOLISM DISEASE OR SATAN'S HANDIWORK?

By: Zainab Meghji Nasser

Alcohol and other intoxicants are forbidden in the Quran as they drive people away from the remembrance of God. Alcohol consumption particularly heavy drinking; is an important risk factor for many health problems and thus is a major contributor to the global burden of disease.

In fact, alcohol is a necessary underlying cause for many diseases and illnesses and a contributing factor to many more. The most common disease categories that are entirely or partly associated with alcohol consumption include infectious diseases, cancer, diabetes, neuropsychiatric diseases (including alcohol use disorders). It is also associated to heart, liver and pancreas disease. Furthermore, it also leads to unintentional and intentional injury.

#### Brain

Alcohol interferes with the brain's communication pathways, and can affect the way the brain looks and works. These disruptions can change mood and behavior, and make it harder to think clearly and move with coordination.

### Heart

Heavy drinking over a long time or too much on a single occasion can damage the heart, causing ailments including:

- Cardiomyopathy Stretching and drooping of heart muscle
- Arrhythmias Irregular heart beats



- Stroke
- · High blood pressure

#### Liver

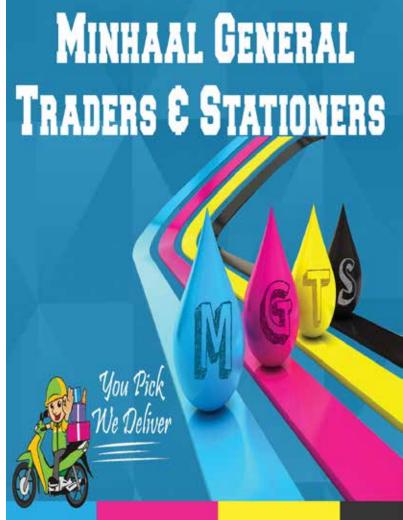
Heavy drinking takes a toll on the liver and can lead to a variety of problems and liver inflammations including:

- Steatosis, or fatty liver
- Alcoholic hepatitis
- Liver failure

#### **Pancreas**

Alcohol causes the pancreas to produce toxic substances that can eventually lead to pancreatitis, a dangerous inflammation and swelling of the blood vessels in the pancreas that prevents proper digestion.

Alcohol is a deviation from this natural state, for the individual as well as for society. Hence, the consumption of alcohol is prohibited in Islam.



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# DENTAL EXTRACTIONS RELIEF OR NIGHTMARE

By: Sukaina Gulamabbas Khimji

"Life is short, SMILE.... when you still have all your teeth" this quote has inspired my article.

How many of us have been to a dentist before? Also, let's be honest when and why? How serious are we with our annual dental visits? The whole idea that some of us only visit a dentist when we have unbearable pain that interferes with our sleep at night is when we see the necessity to go to the clinic.

Once the pain is bearable, your dentist will take a thorough history, examination of the tooth associated with the problem. Dental radiographs if need be will be required to ensure the treatment plan he/she advices you about is appropriate and for the long run. When the tooth has been a problem for a long time and you have ignored it the possible and most common restorable technique used is the famously known as "Root canal treatment". Root canal is a treatment used to repair and save a tooth that is badly decayed or has become infected. During a root canal procedure, the nerve and pulp are removed and the inside of the tooth is cleaned and sealed. Without treatment, the tissue surrounding the tooth will become infected and an abscess (pus collection) may form and it could later lead to EXTRACTION!

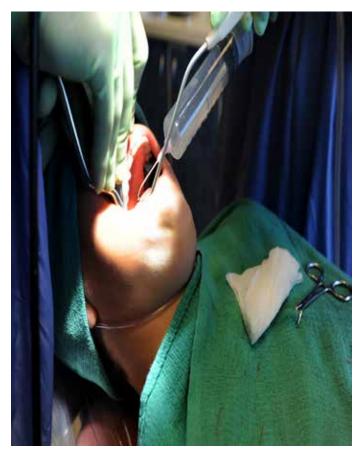
Extraction involves the removal of a tooth from the alveolar bone in the mouth. They are performed for a wide variety of reasons, but most commonly to remove teeth which have become untreatable through tooth decay, dental crowding (when there are bigger teeth and a smaller jaw size that affect the spacing of teeth as a whole), periodontal disease (disease to the teeth supporting structures), or dental trauma (fractures or loosening of teeth) that are especially associated with toothache. We all want to keep our teeth for life. However, the above circumstances force us to remove our teeth, sometimes due to our own negligence.

In ancient times, extractions were a very horrifying experience. Thanks to medicine today, we have local anesthetics and modern dental equipment to make the process smooth and pain free. Extractions are only a relief when there is no other way to save the tooth but a nightmare when you tend to neglect the problem and go for an extraction due to your own irrationality. Teeth are expensive and precious as we all say, but do we know what's pricier? The treatment of your teeth when they are forsaken. A good example

is how a simple filling when you see a small cavity in your teeth is cheaper than a root canal treatment of your tooth that you disregarded for years. Even worse is a tooth extraction that leaves a wide space on your beautiful smile and adds an expense to get that hidden through other esthetic dental procedures.

Finally, I am not saying that we should not at all do extractions in our life. There are situations where its unavoidable and it can be done. Nevertheless, let's try to be more attentive towards our teeth and oral hygiene to avoid surgical procedures and go for early interventions and prevention. The best way forward is to consult your dentist whenever there is a slight change you notice or feel on your teeth. Also, go for your biannual checkups even if you have no complain at all. Don't forget brushing effectively twice in a day using a fluoridated toothpaste. This can actually save you from an extraction and practice flossing once in a day. It's funny how we take our oral hygiene lightly despite knowing that once a tooth lost it's a functional loss. You will experience impaired chewing, speech and aesthetics and I am sure we would not want that.

LET'S SAVE SMILES, BECAUSE TOGETHER WE CAN! •



### **HAZARDS OF RED MEAT**

### By: Zahra Asadali Hirji

Lamb, beef, mutton and veal are red meat. *Mishkakis* and *nundus* melting in our mouths, available at every brink and corner of Dar-es-Salaam, at street-stalls and five-star hotels are among the most famous East African dishes.

Red meat is a rich source of protein, saturated fat, iron, zinc and B-Vitamins. Many teenage girls and women in their childbearing years lack iron. The heme iron in red meat is easily absorbed by the body and help prevent iron-deficiencies. Red meat also supplies vitamin B12, which helps make DNA and keeps nerves and red blood cells healthy. Furthermore, zinc in red meat keeps the immune system working appropriately. Red meat also provides protein, which helps build bones and muscles.

The Department of Health advises people to consume **90g or less of red meat per day**. A thin slice of lamb or beef equivalent to the size of half a slice of bread provides about 30g of meat.

Red meat isn't all bad, but too much of it in one's diet can pose potential hazards. Evidence suggests that high consumption of red meat is associated with an increased risk of several major chronic diseases.

### Hazards of Red Meat

- Over-consumption of red meat has been linked with increased incidences of heart diseases (i.e. heart failure, atherosclerosis, coronary heart diseases) and type 2 diabetes.
- Risk of cancers. Bowel cancer, stomach cancer and pancreatic cancer are more common among those who eat a lot of red meat.
- Increased mortality/death. Research has proven that people who increased their red meat intake over 8 years had a higher death risk than people whose meat intake stayed the same.
- Red meat consumption may raise the risk of kidney disease as well as Alzheimer's disease.

### How to Cook Red Meat?

# Did you know cooking red meat in high temperature is harmful?

Yes! High-temperature cooking of red meat generates compounds in food that may increase cancer risk. They're called heterocyclic amines (HCAs) and polycyclic aromatic hydrocarbons (PAHs). These increase the risk of several cancers especially bowel and stomach cancer.

· Gentler cooking methods like stewing and

steaming are recommended over grilling and frying.

- Trim the fat from meat before cooking.
- Avoid eating any portion of the meat that has been burnt or charred and barbecue slowly to prevent charring.
- Marinate the meat in vinegar or lemon juice to reduce the release of cancer causing chemicals.
- Turn meat frequently when cooking. Use tongs or a spatula rather than a fork to avoid releasing juices that can drip and cause flare-ups. Do not press burgers with a spatula to release juices.
- Don't overcook meat. Well-done meat contains more of the cancer-causing compounds. But make sure that meat is cooked to a safe internal temperature to kill bacteria that can cause foodborne illnesses.



#### Conclusion

Red meat can be dangerous to our health if taken more than the required amount. And this is why Islam emphasizes 'Eating in moderation'. Prophet Muhammad (PBUH) stressed the practice of eating less to prevent diseases, which is also advised by doctors today. The Islamic practice of eating in moderation suggests your stomach should be filled by ½ of food, ½ liquid, and ½ empty. Within the past 20 years, studies have shown that mindful eating can help you lose weight and reduce anxious thoughts about your body and food.

The Messenger of Allah (S) has said, "I warn you in relation to eating too much because surely this act poisons the heart by making it hard (no emotional feelings), and makes your body parts lazy and lethargic in relation to obedience of Allah (SWT), and it deafens the ears from hearing advice and good counsel."

Therefore, it is crucial for us to be vigilant in our dietary habits by opting for healthier choices (vegetables, fish, white meat and etc.) thus promoting a vibrant community.

# **SMOKING - A SILENT KILLER**

By: Kulsoom Kassam



Smoking is considered to be the leading preventable cause of death and illness in the world. According to the WHO, Tobacco kills more than 8 million people each year. Over 7 million of those deaths are the result of direct tobacco use while around 1.2 million are the result of non-smokers being exposed to second-hand smoke.

Cigarette smoke contains more than 4000 chemical substances some of which are toxic including nicotine and carbon monoxide (CO) that interfere with proper functioning of the cardiovascular system.

With each puff of a cigarette, a smoker takes in nicotine and other harmful substances into his lungs, where it is absorbed into the blood and travels to the brain very quickly. It causes blood vessels to constrict or narrow, hence reducing the amount of blood that flows to the body organs, leading to a decrease in the quantity of oxygen and nutrients your body cells receive. This way the body struggles to obtain more oxygen and there is an increase in heart rate.

Another chemical found in cigarettes is Carbon monoxide. It diffuses into red blood cells where it usually binds hemoglobin, (the molecule in your blood that carries oxygen). When carbon monoxide is bound to hemoglobin, oxygen cannot bind. This again decreases the amount of oxygen delivered to your body cells.

The chemicals found in cigarettes and cigarette smoke may accumulate in the inner walls of blood vessels. This deposition builds up a waxy material called plaque. Plaque with time hardens and narrows the arteries, which reduces the flow of blood to organs and body cells. Plaque may also build up in the coronary arteries (the arteries supplying oxygen to the heart muscles) reducing oxygen supply to the heart muscles that may cause chest pain, heart attack, or in severe cases, death.

Apart from affecting the cardiovascular system, smoking has other health hazards too, to mention a few; Lung damage, Fertility problems (has an impact on female hormones and causes erectile dysfunction in males), arises complications in pregnant women, increases the risk of certain cancers and a weakened immune system. Majority of health symptoms do not show at an early age, but as time progresses, usually after the age of 60 years is when serious complications associated with tobacco smoking occur.

### SAVE YOUR HEART!

Any amount of smoking, even light or occasional smoking, significantly damages the heart and blood vessels, but the damage can be reversed for most smokers who stop smoking. Even long-time smokers can see health improvements when they quit. Within a year, heart attack risk drops dramatically. Within a few years, most smokers have a reduced risk of stroke. So the only way to keep your heart safe from the effects of smoking is to quit.

If you or a loved one is, or was, a smoker, it's crucial to take action when it comes to health. It's never too late! Early detection can improve the treatment outcome. It's a step taken towards a healthier and longer life.

Quit smoking now, its never going to be easy, but it's always possible! •

### UNDERSTANDING MENSTRUAL HEALTH

By: Jafari A. Ahmed

Menstrual health is a very broad term which embodies menstrual hygiene as well as other diverse factors that are either directly or indirectly linked to menstruation and health. The essence of discussing the subject matter is to address numerous sociocentric and socio-cultural issues that have appeared to portray menstruation as shameful, ridiculously weird or a biologically determined process that must be solely dealt by women.

### Unveiling the Stigma

Indeed across culture and vast religious doctrines, "menstruation" is regarded as an impure state whereby a menstruating female is forbidden from performing prayer, abandoned from participating routine activities, or even isolated from associating with other peers in day to day activities. Within those rural patriarchal societies and societies that embrace or uphold male dominance systems there exist bizarre taboos. There are norms that view menstruation as a sign of misfortune or bad luck and the stigma plus discrimination is much more formidable. Although, from an Islamic perspective it is quite understandable that performing ablution and purifying yourself prior to prayer is mandatory to both genders. This justifies the seclusion of women and girls in their periods from prayers. However, my biggest concern remains with the indigenous culture which emphasizes on undermining female sexuality. One of the reasons being menstruation.

### The bitter outcomes of a faulty outlook

As a result of this societal inclination to female embarrassment, there have been increased cases of school-girl drop-outs, inconsistent school attendance, early pregnancies and body shaming. Gender based violence is also a major constituent of this existing stigma.

Bridging the gap, Breaking the norms and deconstructing the myths

I view the importance of adopting a holistic approach in addressing menstrual health as a solution. In order to completely curb the problem there must be a multi-stakeholder intervention. Special focus on disseminating sexual and reproductive health campaigns, menstrual health, gender equity and promoting girls education. Men and boys must be included to end the menstruation stigma within their societies. Policy reform and tax policies must aim at reducing costs and increase affordability of sanitary



pads. Also, easy accessibility of female sanitary pads to school girls and impoverished households should be addressed.





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# HEPATITIS B PREVENTION IS BETTER THAN CURE

By: Shaina Yusuf

There are a lot of deadly diseases that can be transmitted through infected body fluids e.g. blood and Hepatitis B is one of them. Hepatitis B is a viral disease that primarily affects the liver. It starts with inflammation, scarring (Cirrhosis), failure and eventually cancer of the liver. This disease can be in acute (less than 6 months) or chronic phase. WHO estimated in 2015, 257million people were living with chronic Hepatitis B infection.

Hepatitis B is most commonly spread from mother-to-child at birth, through infected body fluids. Development of chronic infection is very common in infants infected from their mothers before the age of 5 years. Hepatitis B virus can survive outside the body for at least 7 days. During this time, the virus can still cause infection.

Minority of patients might have symptoms such as abdominal pain, nausea, poor appetite, yellow discoloration of skin and eyes or simply not have any symptoms. People who get symptoms may end up being tested if they seek medical attention. Patients without symptoms may never discover their status unless they get screened for it.

There is no treatment for acute or chronic hepatitis B virus. Anti-viral treatment is given to patients with chronic hepatitis B in early stages to supress the replication of the virus and slow down the process of cirrhosis.

Hepatitis B can be prevented by having Hepatitis B vaccines that are safe, available and effective. Vaccination can be given after being screened and the result is negative. The blood test is easily available in laboratories in Tanzania. MCH vaccinations in Tanzania have now in-cooperated Hepatitis B vaccine with other vaccines since 2002. WHO recommends that all infants should receive their first dose of vaccine as soon as possible after birth, preferably within 24 hours. Those who were born before 2002 or did not receive the Tanzanian MCH clinic vaccine can be vaccinated as below. •

Hepatitis B Vaccination	Number of Vaccines	Interval of Vaccine	Booster Needed
Child (Newborn)	4	At Birth 6 Weeks 10 Weeks 14 Weeks	After 20 years
Adult	3	0 time 1 month 6 months	After 20 years



# **MISCARRIAGE**

By: Fatema-zehra Haider Rajpar

A miscarriage is when an embryo or fetus is expelled or extracted from the mother before the 28th week of pregnancy when it is not capable of independent external survival. In other countries, it may be lowered to 20 weeks. If it occurs after 28 weeks, the baby may be viable and can be supported in an incubator and other resuscitative measures. They often occur early in pregnancy with 80% occurring during the first three months. Furthermore, 10-20% of pregnancies end in miscarriages although it is quite common, it can be emotionally quite difficult.

Miscarriages are often a devastating event to the woman who suffers from it, leading to a wide range of implications ranging from mental to physical. In addition, the surrounding stigmatisation of this unexpected event often leads to a negative mental effect on the woman causing fear, anxiety and depression.

It can be difficult to know why exactly a miscarriage happened, but it is almost never caused by something the pregnant woman did. It is to be noted that minor injuries such as falling or daily activities do not cause miscarriages or increase your risk towards it. Normal activities like intercourse, exercise, working and taking most, but not all medicines, cause a miscarriage. If you are worried about the medication you are using, it is best to consult your obstetrician to get an opinion on whether to stop or continue with your medicine.

So what causes a miscarriage? Often there are uncontrollable factors such as fetal chromosomal abnormalities i.e. when the fetus has an abnormal number of genetic materials it often aborts itself. Certain maternal diseases such as diabetes may also cause an early abortion, a very serious infection or major trauma such as a motor vehicle accident is also implicated. In addition, some women have repeated miscarriages — 2 or more which predisposes to the next miscarriage and these women are often counselled for anatomic abnormalities (when the reproductive organs are physically abnormal) or infertility.

How do you know that you're having a miscarriage? Sometimes there are no signs and you may discover it at your next ultrasound scan or you may not feel symptoms of pregnancy anymore. However, more commonly there are signs which include vaginal bleeding (ranges from heavy to slight), severe

cramping and lower belly pain. Remember, that other less severe problems may cause these symptoms as well, so it is best to see your doctor immediately to be safe.

There's no one way a person feels after having a miscarriage. It can be upsetting for the couple and the couple may feel a mix of emotions which is normal and these usually fade as time passes. Take care of yourself physically and emotionally and allow yourself to grieve for your loss. Try to surround yourself with supportive and loving people who can comfort you, talking about it with your partner and supporting each other is the best away to feel better and get back to normal. Seeking professional help is also another option.

Prophet Zakariya asked Allah (swt) in the Qur'an, "He said, "My Lord, how will I have a boy when my wife has been barren and I have reached extreme old age?" Then an angel replied to him saying, "[An angel] said, "Thus [it will be]; your Lord says, 'It is easy for Me, for I created you before, while you were nothing.' "[Qur'an: Chapter 19: Verses 8-9]

Allah (swt) can easily bless a couple with children; it is just a matter of when. Put your trust in Allah (swt) and have faith that there is *barakah* in everything Allah (swt) does.



### **DENTAL TRAUMA IN CHILDREN**

By: Zahra Imran Abbas

Injuries to the teeth and supporting structures are extremely common worldwide. Approximately 30% of the general population experience traumatic injuries to their front teeth, mostly during childhood and adolescence.

A tooth can sustain different injuries: fractures, loosening or displacement. These are commonly caused by sport activities, falls or violence.

A broken tooth does not only have a physical impact on the child but also has **psychological** and **social** consequences on them. Therefore, prevention of traumatic injuries, **early** and **effective** treatment is of utmost importance.

### What can I do to prevent dental trauma in my child?

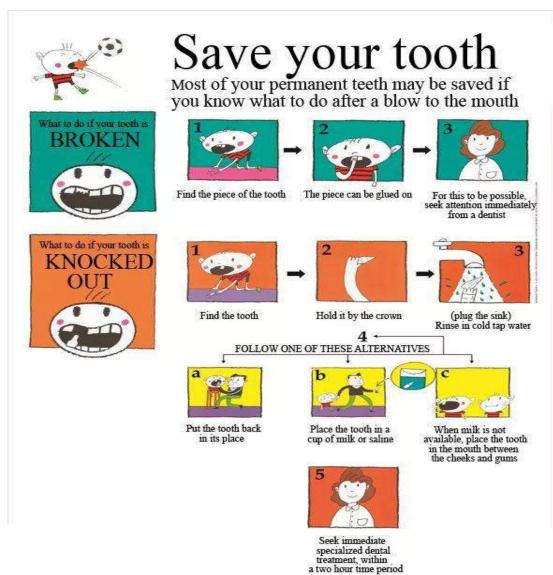
• Since sport injuries are one of the most common cause of dental trauma, ensure your child wears a **mouthguard** for all contact sports ( football,

hockey, martial arts etc).

- Refrain your child from placing **foreign objects** in the mouth.
- **Child proofing measures** for a toddler such as placing gates across stairs and padding sharp table edges and playgrounds/play areas.
- If your child has **prominent front teeth**, they are more likely to get damage to their teeth. **Early orthodontic treatment** can reduce this risk.
- Always ensure they **wear a seatbelt** when riding a vehicle to avoid falls.

### What should I do if my child sustains a tooth injury?

- The first step is to keep the patient **CALM** and yourself too;)
- Here is simple poster by IADT on what to do for a broken or knocked out tooth. This poster can be used as a guideline at homes, schools and play areas. It can help SAVE A TOOTH! ■



# IS DONATING BLOOD A WIN-WIN?

By: Aamir Mohamedraza Kanji

Blood donation in simple terms is to voluntarily get blood drawn from your body so that it can be used by a person who is in need of it. According to the World Health Organization only 3% of eligible donors come forward to donate blood. One unit of blood donated has the potential to save three lives. As of 2017, Tanzania reported that it only collected 36% of the blood that was needed for requirements. A healthy person is allowed to donate one pint of blood after every 3-4 months. This article will explore the benefits of blood donation to the donor and the recipient.

According to a report by the Mental Health Foundation, donating blood has been linked to reducing your level of stress, improving your emotional wellbeing and help get rid of negative feelings and thoughts. Research has also shown that donating blood helps to provide a sense of belonging and prevents isolation.

If you are a person who has donated blood you must have gone through a mini health screening before you are cleared to donate. Among the things you will be screened for is your blood pressure and hemoglobin levels. Of course, if you want to help someone you must first be healthy enough to be able to help others. Your blood is also screened for certain diseases such as hepatitis B, hepatitis C, syphilis and HIV/AIDS. If you are discovered to have any of the above conditions the blood donation committee contacts you to give you an update on your health.

In addition, donating blood on a regular basis has been shown to lower the risk of heart disease. There are conflicting results about this claim. However, when you donate blood you reduce the amount of iron stores in your body. High levels of iron stored in the body are linked to an increased risk of heart attacks.

Donating blood has obvious and multiple benefits to the recipient. Here we shall look at some of these benefits. Firstly, blood is much needed in cases of trauma and accidents, where it is lost in huge amounts. The blood loss needs to be compensated so that lives can be rescued. Situations resulting in mass casualties usually experience a shortage of blood units and many a times lead to the death of individuals who don't receive it.

Blood is also vital during surgeries. Many times surgeries have resulted in complications amongst which is blood loss in huge amounts. Donating blood in these instances help the surgeries to go smoothly



and be prepared for any unexpected outcomes. Many women during childbirth lose a lot of blood which is due to hemorrhage. Postpartum hemorrhage is one of the leading causes of death among pregnant women. Your one pint can save their lives.

Many people suffer from blood related conditions such as sickle cell anemia, thalassemia and some chronic cancerous conditions such as leukemia. Donating blood can help to save their lives especially during emergencies.

Certain diseases such as malaria and dengue also require blood if the complications become very advanced. In tropical regions of the world the mentioned diseases are very prevalent and as a result, many people suffer from low hemoglobin levels. Ensuring the availability of blood is vital to their survival.

It is important to be cognizant that blood can't be artificially manufactured. Blood as a whole has many components which include platelets and plasma to mention a few. Sometimes patients need plasma or platelet transfusion which can't be made artificially. This requires the availability of blood donors to make it possible.

In summary, we have just looked into the benefits of donating blood to the donor and to the recipient. Gifting someone blood is just the same as gifting someone a new life. It's not only the health professionals who save lives. You don't need a medical degree to save a life. Sometimes, the blood that you donate can go a long way to helping the lives of those who need it. In the end it's a win-win for everyone.

# **HEAVY METAL POISONING**

By: Kastuli A. Paulo

Heavy metals can be defined as metals with relatively high density, atomic number and atomic mass. They can be found in food we are eating, drinking water and in medicines. These metals include; Gold, Cadmium, Lead, Mercury, Thallium, Bismuth, Arsenic, Tin, Zinc, Iron and Antimony. Some of these metals play a crucial role as, trace elements in health of living organisms including human beings. Toxicity of these metals occurs when they are taken in large quantities than the amount required.

Heavy metals are of greater importance in medical field and nutrition as follows:

- Gold Rheumatoid arthritis
- Iron Anaemia
- Zinc Food supplement
- Selenium Food supplement
- Arsenic Leukemia

Toxicity of heavy metals differ from metal to metal. International Agency for Research on Cancer (IARC)



ranked arsenic as a group I carcinogen as it is known to cause lung, bladder and kidney cancer.

Arsenic is used in timber treatment in form of copper chrome arsenate (CCA). Leaching from timbers into the surrounding soil is the most serious risk because the plants grown around the area may absorb it and it may contaminate water that we drink. There is ongoing research on whether there is presence of arsenic in rice we are consuming every day because of the possibility of paddy that cultivates rice to absorb arsenic from the soil.

Also, currently Arsenic-containing compounds have been used as additives to feed animals like chicken. Most arsenic-containing animal feed additives are not used to treat diseases but for increased weight gain.

So, by consuming chicken raised by arsenate compounds you are also taking arsenic, therefore taking it in large amounts will cause arsenic poisoning. Metals like zinc in large quantities interfere with the synthesis of porphyrin a component in hemoglobin by forming complex called Zinc Protoporphyrin (ZPP) that can also cause poisoning.

Generally, we have seen that heavy metals are of great importance in medical field and agriculture when used effectively but otherwise it leads to toxicity/poisoning and can be a threat to our lives hence we need to be aware.

"...eat and drink and be not extravagant, surely He does not love the extravagant."

Quran 7:31

"One, who has many sorrows, his body too shall get sick." Prophet Muhammad (saw)

# EVERY SCAR HAS A STORY ACCIDENTS & TRAUMA

B; Hussein Karim Manji

There is nothing more dreadful than receiving a phone call telling you a relative has been involved in an accident and asking you to go to the hospital. Nothing more scary than having said goodbye to a healthy young sibling in the morning and having your whole life turned upside down by the time its evening. That's just the thing about accidents; they are unpredictable, unplanned and in most cases, the most difficult to understand. By definition, anything from a slip and fall, a motor traffic collision, an accidental poisoning down to a building collapse can be termed an accident. There are situations where there is no one to blame for these random events.

Being on the receiving end as an Emergency Medicine physician to most accidents and trauma; it is truly one of the most devastating of emergencies. The first steps to first aid in any accident is focused on the crucial first hour after having sustained an accident. Focus is on saving the life, preventing further harm and prioritizing pain relief. Life threatening issues especially in relation to the airway, breathing and circulation are key to survival in many cases.

The World's first Road traffic accident (RTA) is supposed to have occurred in 1896. Everybody concerned at that time must have said, "This should never happen again." But more than a century later, 1.2 million people were killed on roads every year and up to 50 million more are injured. For every one killed, injured, or disabled by RTA, there are countless others deeply affected. This is by the cost of prolonged medical care, loss of a family bread winner, or the extra funds needed to care for the people with disabilities. RTA survivors, their families, friends, and other care givers often suffer adverse social, physical, and psychological effects. If the current trends continue, the number of people killed and injured on the world's roads will rise by more than 60% by 2020. More than half of all road traffic deaths occur among young adults ages 15-44.

The Global Burden of Disease Study estimates that 10% of global deaths are due to injuries. It is generally acknowledged that this problem is growing rapidly in Sub-Saharan Africa. It is projected that by the year 2020, injuries in Africa will rank third among causes of disability. By 2030, road traffic crashes are anticipated to rank in the top 3 of all causes of disability right after depressive disorders and

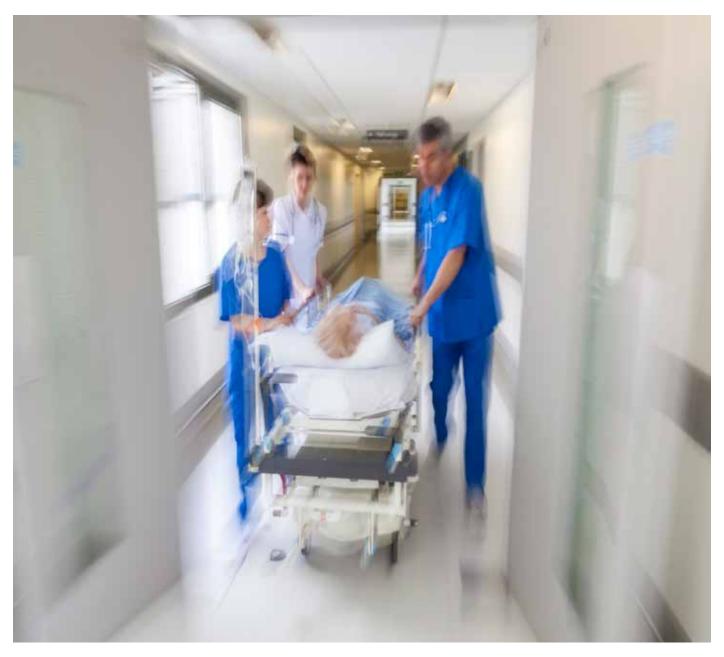
ischemic heart disease.

Road accidents happen most often due to reckless and speedy driving. Not obeying or following traffic rules and the attitudes of the "right of the mighty" bigger vehicles toward the smaller vehicles, overburdened or overcapacity hauling of public and transport vehicles all have ap art to play. Poor maintenance of the vehicles, drunk driving, driver fatigue, and above all the appalling condition of the already choked roads play a crucial part in the incidence of RTA. Motorcycle taxis or more popularly known as "Boda-bodas" have earned themselves a reputation of being reckless, rude and arrogant. Cases of hit and run accidents involving motorcyclists are not uncommon. Interestingly enough, another factor contributing to a vast majority of accidents is the use of mobile phones on the roads while driving or walking on roads.

Simple interventions like avoiding rash driving or over-speeding, drunken driving, use of helmets by two-wheeler drivers, use of seat belts and child restraints in cars can significantly reduce the incidence and mortality from accidents. Improving visibility, appropriate headlights, road lighting, obeying traffic rules, misuse of mobile phones and a general sense of awareness may save lives and curb a number of accidents.

When people are involved in a motor vehicle accident, the last thing they might be concerned with is the emotional and psychological effects that it can have. Many times, the physical pain, soreness, swelling and bruising are hard to ignore and immediate medical attention is required in order to heal the body. It is common to think of the physical injuries that can occur with car accidents, but injuries are not always physical. Usually what is often overlooked following serious motor vehicle accidents is an increased risk for psychological problems such as Post-traumatic Stress Disorder (PTSD). PTSD can develop after any type of traumatizing event and car accidents, especially violent ones.

When someone survives a traumatic event, it is difficult to predict the long-term emotional side effects. Not every person will suffer from emotional distress serious enough to require professional medical treatment. However, some car accident



survivors do go on to experience severe emotional trauma which can result in many life-affecting symptoms that could be related to a brain injury. These symptoms include stress, depression, anxiety and panic attacks. After being involved in a serious car accident, survivors have reported experiencing feelings of shock, panic, anger, nervousness, worry, fear, loneliness, embarrassment or uneasiness. Some car accident victims have reported suffering from mood swings, chronic fatigue or exhaustion, and loss of appetite. Often, they find themselves reliving the accident through nightmares and flashbacks. These symptoms can be debilitating and can cause the sufferer to become avoidant, to withdraw themselves socially and to isolate themselves from their family, friends and work. Time and again, the trauma of the accident can render them unable to drive, or even be a passenger in a vehicle out of fear of another accident.

These feelings may arise immediately after the accident, or in the days, weeks or even months following. It is common to not fully realize that they have been emotionally effected by a traumatic event until some time has passed. This is especially true if they are preoccupied with following the course of treatment prescribed by the healthcare professionals focused on physical healing the body. It is important for them to reach out to their doctor or mental health professional to discuss the symptoms and the possible treatment plans that can help them return to their daily life.

All in all, accidents happen and there may be a reason behind this. But most are preventable and their consequences are painful. Therefore, be alert and be thankful for the day because life could change in the span of a moment. Stay safe. •

# THE SPLEEN UNDERSTAND YOUR BODY

By: Orujul Hassan

The spleen is an organ located in the upper left part of the belly under the ribs, to the left of the stomach. It varies in size and shape in different people. It's commonly fist-shaped and about 4 inches long. It plays multiple supporting roles in the body.

The spleen is part of the lymphatic system (a part of the immune system). The lymphatic system is an extensive drainage network consisting of vessels just like arteries and veins in the body. It carries lymph - a clear, watery fluid that contains proteins, salts, and other substances throughout the body. The lymphatic system works to keep body fluid levels in balance and to defend the body against infections.

The spleen helps fight certain kinds of infections such as pneumonia and meningitis. After the body being exposed to an infection, there's an introduction of an antigen (foreign substance produced by bacteria/virus. The spleen detects this and increases production of plasma cells (type of white blood cell) which are responsible for producing antibodies that fight against the antigens.

The spleen also acts as a filter. It clears out old and

damaged cells and helps control the amount of blood and blood cells that circulate in the body. In other words, old red blood cells are recycled in the spleen while platelets and white blood cells are stored there.

The spleen in an unborn child is a site for blood formation. As a baby is in the mother's womb, during the early stages the bone marrow isn't fully developed, so the spleen takes up the work to produce blood cells.

The normal spleen is usually not felt on touch. In many instances, the spleen enlarges as it performs its normal functions (as mentioned above). However, an enlarged or palpable spleen can be of clinical significance and medical advice is warranted.

Splenomegaly is defined as enlargement of the spleen, measured by size or weight. Sometimes the spleen can be enlarged through an infectious disease such as malaria, or liver disease (such as cirrhosis) or cancers such as leukemia or in sickle cell anemia. Sometimes, the spleen can rupture because it has become too large. It can also be ruptured by being hit hard. This can happen in contact sports like football (rare) or in road accidents.

There are certain occasions when the spleen destroys too many red blood cells or platelets and the person can become anemic and may need a blood transfusion. This can occur in various autoimmune disorders.

Sometimes the spleen may need to be removed by a surgeon. It can either be partially removed or totally removed. Unlike some other organs, like the liver, the spleen does not grow back (regenerate) after it is removed. If this needs to be done the body can continue working well without it. However, the person may be more likely to get certain infections since the spleen is an important organ in the body's defense system.

Although most people have spleens, we don't often think about the way they function as organs in our bodies. You may have heard people use the phrase "venting spleen" — not referring to the body part itself, but as a way to describe letting out anger or frustration. The word "spleen" has come to be used metaphorically as a synonym for "anger". Fortunately, we have learned a lot since then about the spleen's purpose in our bodies. •

# **TUTOKOMEZE MBU WAENEZAO MALARIA**



TANZANIA BILA YA

ALAZIA
INAWEZEKANA





# **FAMILY HISTORY & RISK ASSESSMENT**

### By: Mohamed Zahir Alimohamed

Diseases can run in families because related family members share some of their genetic components, often live together and share a similar environment. As a result, multiple individuals within the same family may be diagnosed with the same or similar illness. It is no secret that we can reduce our risk of disease by eating a healthy diet, exercising and not smoking. But, did you know your family history may be holding the biggest clue on your risk of developing heart disease, stroke, diabetes or cancer? Whilst it is currently not possible to change your genetic makeup, understanding your family history can help reduce your risk of developing health issues.

Family history plays an important role in examining the risk of inherited medical conditions and single gene disorders such as sickle cell anemia. Certain types of cancer, such as breast cancer and colon cancer, appear more frequently in some families, as do some unfavorable birth outcomes. Coronary artery disease, type 2 diabetes, depression and thrombophilia (blood clots) also have familial tendencies.

Family history is undoubtedly one of the most important risk factors for common, chronic disease that has recently received widespread attention as an important genetic tool for preventive medicine and public health. Recent studies have demonstrated the burden of familial risk at 30% for diabetes and

over 20% for cancers, including breast, ovarian, endometrial, prostrate and colorectal.

Taking and drawing a family history during a patient consultation can be a crucial first step in identifying a known inherited disease. It also helps in establishing a genetic basis within a family that warrants further investigation. Information collected can be visually represented on a simple tool known as the genetic pedigree. This can help establish a medical diagnosis, reveal a pattern of disease inheritance and substantially contribute to treatment and management.

Currently, family history assessment is underutilized in clinical practice. Medical assessment audit studies have reported up to 50% of patients at increased disease risk based on their family history were undocumented. Key barriers to implementing and use of family history include lack of time, effort and skills needed for family history collection and interpretation. Significant public health efforts are therefore required to overcome these challenges. This can be achieved by focusing on developing both electronic as well as paper-based family history tools to facilitate the process of documenting and interpreting family history.

Compared to risk assessment via genetic testing, family history offers several advantages. These



include lower cost, enhanced acceptability and an understanding of shared genetic and environmental risk factors. Furthermore, family history is regularly associated with desired health behaviors including cancer screening and self-reported changes in diet and exercise. This suggests that increasing people's awareness of their risk associated with family history can have benefits for motivating healthy lifestyle changes.

Many adult-onset diseases have familial tendencies that have a complex genetic-environmental interaction. Lifestyle modifications can result in an improved outcome or delay the onset of symptoms. For example, dietary changes, weight loss, exercise and glucose monitoring can significantly improve the outcome of an individual with a family history of type 2 diabetes. Similarly, individuals at risk of cardiovascular (heart) disease can benefit from environmental modifications, such as achieving normal blood pressure and cholesterol levels.

The key features of a family history that may increase risk are:

- Diseases that occur at an earlier age than expected (10-20 years before the average onset age of a particular disease)
- Disease in more than one family member
- · Disease that does not usually affect a certain

- gender (breast cancer in males)
- Combinations of disease in a family (diabetes and heart disease)

To learn about your family history, collect information about your grandparents, parents, aunts, uncles, nieces, nephews, siblings, and children. Important information includes, major medical conditions including cause of death, age of disease onset and death, ethnic background. These results are useful when discussing a pattern of disease in your family with your physician as it may reveal a sign of an inherited form of disease that is passed on from generation to generation. Remember, awareness of your family health history is an important part of a lifelong wellness plan. •



"Were it not difficult for my nation, I would order them to brush their teeth before every prayer."

Prophet Muhammad (saw)

"Do not sit for eating except when you are hungry.

Do not rise up from eating unless you have an appetite for food. Chew the food well and go to the water closet before you go to bed. If you follow these instructions, you will not be in need of any physician."

Imam Ali (as)

# ANTEPARTUM HAEMORRHAGE

### By: Fatema Zoher Tayabali

Is defined as bleeding from or into the genital tract after the 28th week of pregnancy but before the birth of the baby (the first and second stage of labor are included). The 28th week is taken as the lower limit of fetal viability especially in developing countries. It is a leading cause of maternal mortality worldwide and accounts for up to 50% of maternal deaths mostly in the developing countries. Up to 1 in 4 women have vaginal bleeding at some time during their pregnancy. Bleeding is more common in the first 3 months (first trimester) especially in the case of twin pregnancies.

#### What are the causes?

- Trauma to the cervix or vagina from intercourse (small amount of bleeding) or a recent pelvic exam.
- Ectopic pregnancy (when the fertilized ovum implants anywhere else except the uterus)
- Infections (vaginal and cervicitis)
- Early labor (bloody show)
- Abruptio placenta- the placenta separating from the inner wall of the uterus before the baby is born. There are 3 types revealed, concealed or mixed. Concealed is where blood collects behind the separated placenta or between the membranes thus not visible externally.
- Placenta previa- the placenta covering all or part of the opening to the cervix.
- · Miscarriage.
- Vasa previa- the baby's blood vessels exposed across or near the internal opening of the uterus.

### What are the risk factors?

The primary causes of premature placental separation remain unknown however it has been associated with the following risk factors:

- Hypertensive diseases of pregnancy.
- A previous history of previa or abruptio.
- More than 1 child.
- Previous cesarean section.
- Substance abuse e.g. cocaine, alcohol, cigarettes
- Abdominal trauma.
- Previous gynecological surgery which can cause scarring.
- Advanced maternal age.

### What are the complications?

Maternal complications:

• Post-partum hemorrhage which is a loss of more than 500 to 1000mls of blood within the first 24 hours following childbirth.



- Shock
- Anemia
- Premature labor
- Consumptive coagulopathy which is a condition where the body's ability to naturally stop the bleeding process is impaired

### Fetal complications:

- Prematurity
- Fetal death
- Low birth weight
- Congenital malformations.

### What are the measures you need to take?

- Avoid sexual intercourse until your doctor tells you it is safe.
- Consume fluids if the bleeding and cramping are severe.
- You may need to cut down your activities and be on bed rest for the rest of the pregnancy. Either complete ambulation is advised, certain light activities like walking around the house or doing light chores depending on each individual.
- Do not take any medicines without talking to your doctor.
- Women are advised to avoid smoking and substance abuse during the course of the pregnancy.

### When to contact medical personnel?

- Vaginal bleeding during pregnancy is an emergency therefore take professional help immediately!
- If you have severe cramps or labor pains. •

# **VERTIGO - TAKING YOU FOR A SPIN**

By: Ali Jaffer

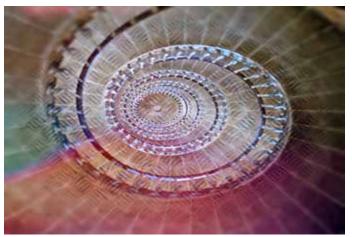
Dizziness, vertigo, and imbalance are all common complaints in consultation rooms worldwide; around 40% of people will experience these at some point during their lives. But what exactly is vertigo, and what could cause it?

### Dizziness & Vertigo

Dizziness is an umbrella term usually used to describe many different sensations - unsteadiness, imbalance, vertigo, light-headedness. This can sometimes make it difficult for a clinician to determine the type of dizziness one is experiencing, it's possible causes, and how to proceed with management. Often, it is used to refer to vertigo, which is the sensation of yourself or everything around you spinning, and an attack of vertigo can last between a few seconds to hours depending on the underlying cause. Surprising to many people, vertigo or long-term imbalance can actually be due to an ear disorder.

### The Inner Ear - Keeping us Balanced

"How can my ear be causing everything to spin?" many people ask. After all, the ear is the organ of hearing and is designed to detect and process the sounds around us. Divided into three parts (outer, middle, and inner), it is equipped with numerous structures to pick up sounds and their characteristics, and send them to the brain. The inner ear also has another little-known yet very important function – it contains the organ of balance. Three semi-circular canals and two pouches with 'crystals' attached to them, all filled with fluid, form a complex system known as the vestibular system. This system works like a gyroscope, accelerometer, and a gravity detector all inside our head! It tells our brain (and our eyes and body) whenever we move our heads in any direction at any speed, making it possible for us to keep our balance, maintain visual focus, and coordinate our



body – without the inner ear it would be very difficult to play most sports, and do numerous other activities the way we do. Which is why when things go wrong with it, it can indeed be very disabling.

### What causes things to go wrong?

There are numerous causes of vertigo related to the inner ear, the most common type being positional vertigo. This is where head movements - lying down, looking up, moving your head to the side - cause a brief spell of dizziness. It is usually caused when the 'crystals' within the inner ear enter one of the semi-circular canals and prevent the fluid inside from moving as freely as it should be. More severe attacks of dizziness or long-term unsteadiness and imbalance, especially when presenting with hearing difficulties and/or ringing in the ear (tinnitus), can be due to inflammation of the inner ear, or due to Meniere's disease. As with any illness and symptom, if you have any concerns regarding problems such as these, it is best to mention it to your physician, and see a specialist in vestibular disorders, such as an ENT doctor or an audiologist. •



### Sometimes, life spins you around.

Using state-of-the-art equipment, Hearwell Audiology Clinic offers comprehensive services for the diagnosis and management of vestibular disorders, for individuals who experience vertigo, dizziness and imbalance.

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- Ground Floor, Canal Residence Mindu Street, Upanga ■hearwell.tz@gmail.com Dar es Salaam, Tanzania

# ROAD TO A HEALTHY HEART ISCHEMIC HEART DISEASE

By: Hussein Karim Manji

"Rush to the hospital, your husband just had a heart attack!"

"Omg, she suddenly had a stroke and cannot move!"

Cardiovascular diseases like heart attacks and strokes are not unheard of and have been associated with grave outcomes. It does not take a doctor or medical personnel to tell you these are horrible conditions that require immediate attention and are a huge cause of death in our society. Interestingly though, there is never a 'sudden' component to heart attacks; there is a slow build up to a sudden major effect of a disease that was brewing within. A disease called ischemic heart disease; also known as coronary artery disease.

According to the WHO, Ischemic heart disease (IHD) and stroke are the world's biggest killers, accounting for a combined 15.2 million deaths in 2016. These diseases have remained the leading causes of death globally in the last 15 years.

Heart disease is a phrase used to encompass a variety of conditions that affect the heart's structure and function. Ischemic heart disease is what happens when there is a reduced supply of oxygen rich blood to the heart in relation to the heart's demand.

It is usually associated with a build-up of plaque, a waxy substance, inside the coronary arteries which can partially or completely block blood flow in the large arteries of the heart. Some variants of this condition involve diseases or injuries affecting these arteries and narrowing them, a condition called atherosclerosis, which also limits the blood supply to the heart.

The symptoms of IHD involve a broad spectrum and are sometimes different from person to person. The classical chest pain we hear of occurring post exertion or after eating, termed medically as stable angina, is not always seen in every patient. Because many people have no symptoms, they do not know they have ischemic heart disease until they experience complications such as a heart attack or sudden cardiac arrest. Any change in intensity, character or frequency of chest pain, especially on exertion or any other discomfort involving the jaw or the left arm should also be taken seriously and investigated in an Emergency Medicine setting to diagnose this condition early, before any complications occur. The problem with heart disease is that the first symptom

is often fatal.

Cardiovascular diseases are the number one cause of deaths globally, 17.7 million people die every year from cardiovascular diseases, and it accounts for 31 per cent of all global deaths, and sadly enough, the majority of them come from low and middle income countries

Heart attacks and stroke are on the rise in our country, mainly due to lifestyle changes. It is reported that at least 80 per cent of the cardiovascular premature deaths caused by cardiovascular diseases and cerebrovascular diseases like stroke can be prevented by controlling main risk factors such as unhealthy diet, tobacco and alcohol use, lack of physical activity, obesity, high blood pressure, poorly or untreated diabetes, and abnormal cholesterol.

Ways to reduce the risk of ischemic heart disease or its complications include a healthy diet rich in vegetables, fruits and high fiber. Avoiding transfat, regular physical exercise especially walking, jogging or swimming, maintaining a healthy weight that correlates with the body mass index, we can also avoid obesity, treating high blood pressure and maintain a good glucose control in diabetics; decrease psychosocial stress and not smoking or chewing tobacco to help prevent IHD.

It is also important to be screened regularly for any underlying heart disease to catch them early. To diagnose ischemic heart disease, your doctor may order blood, exercise, and imaging tests. If you have ischemic heart disease, your doctor will recommend heart-healthy lifestyle changes, medicinal treatment like cholesterol lowering drugs, beta blockers, nitroglycerin and others. Coronary interventions (surgery) like angioplasty, stenting, or a combination of these approaches to treat your condition and prevent complications such as a heart attack.

The most important thing to keep in mind is prevention is better than cure; and therefore a good adjustment to lifestyle and timely screening will go a long way in preventing this disease. Also, a high index of suspicion in case of any symptoms is important to rule out anything life threatening instead of writing things off casually, especially in the name of gastritis or 'gas'. Always take the road to a healthy heart; you only have one!



# **AM I HAVING A HEART ATTACK?**

By: Habib Mahdi

### What actually happens?

To keep it short and simple, our organs need oxygen. Oxygen in our body travels within the blood; our heart pumps blood to our body to keep our organs alive; the heart also pumps blood to itself to keep itself alive by giving itself oxygen. It does this by pumping blood through tubes known as the coronary arteries (see image 1).

Again, in simple words, a heart attack is when one of these so called coronary arteries gets clogged and blood does not reach that part of the heart. After not receiving blood, that part of the heart gets damaged and dies (See in image 1).

### **Symptoms**

The most common ones are a stabbing pain in the middle of the chest, with pain and numbness around the arm. Some people have felt pain in their neck, jaw and back too. Another complaint associated with heart attacks is shortness of breath. Some people also experience nausea and dizziness.

#### Risks

As with almost every disease, heart attacks are likely to occur in a specific group of people, however is not limited to them. People at an increased risk are smokers, people with a high cholesterol, people who live a stressful day to day life, people who have experienced a heart attack previously and as well as people who have any type of heart condition.

### Prevention

Try to have a good balanced diet (consult a professional), no smoking, try to reduce stress.



1

Do you feel chest pain? Is this not normal for you?

2

Do you feel any other symptoms mentioned above?

3

Call an ambulance!

Do not waste time

# MEDICAL HUMOUR





Doctor: I have some bad news and some very bad news. The lab called with your test results. You have only 24 hours to live.

Patient: 24 hours! That's terrible!! What's the very bad news?

Doctor: I've been trying to reach you since yesterday.



Husband: Call an ambulance fast, I think I'm having a heart attack! Wife: Quick, tell me the password! Husband: It's okay, I'm feeling better now.



Doctor: Why did you take your antibiotic at 6am instead of 9am?

Patient: I wanted to surprise the bacteria.



Patient: Well, yea see Doc, the problem is, obesity runs in my family.

Doctor: No, the problem is nobody runs in your family.



Ali: Quick, Husayn is losing a lot of blood! He needs an infusion, what his blood type?

Jafar: B Positive

Ali: I'm trying, but he's losing a lot of blood!

# WHITE COATS CHALLENGE

It's time to unleash the artist in you!!

Grab a plain white A4 sized manilla/sheet and create a painting of anything that inspired you the most from any of the articles!

### Rules

- Computer assisted artwork will be nullified.
- The artwork should be on a plain white sheet and strictly A4 sized.
- Write your full name, age and phone number behind your artwork together with the article title related to your painting.
- Submit your work to +255 778 780 786 or +255 759 585 786.

### Judging Criteria: Creativity, Originality & Relevance

- + The best artwork will get a mention in the next edition of White Coats Magazine!
- + An artwork with a red theme will earn an added advantage!

### A cash prize of \$100 for the winner

Submission Deadline: 20th November 2019

For further enquiries, contact us on whitecoats.mhi19@gmail.com





The department of obstetrics and gynaecology was established earlier in the year 2019 with our in-house gynaecologist and her team of skilled and experienced mid-wives and theatre staff.

Ebrahim Haji Charitable Health Centre now offers full time maternity and gynaecological services including ante-natal and postnatal clinics, delivery services, full time operating theatre, and other gynaecological services.

We are here to provide a very friendly environment keeping in mind affordability and comfort for all patients. Let us also give you a positive pregnancy experience.

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