

Health Gists from the Doctor on Air WhatsApp Platform.

@ourowndocor .Doctor on Air .The Michael Agbaakin Foundation.



**Doctor on Air**

**Copyright 2018 - Doctor on Air**

Doctor on Air is the health education and promotion media arm of the Michael Agbaakin Foundation.

See: <http://michael-agbaakin.com/>

The objective is to engage and provoke our public on topical health and development issues. Connect on

Facebook: <https://www.facebook.com/DoctorOnAir/>

### **Topic.1**

**Topic:** Type-2 Diabetes

**Date:** 02/07/2016

**Presenter:** @ourowndocor [OLAGBENRO Michael, Dr.]

There are times when a generation is faced with a challenge. More so when the challenge constitutes a "clear and present danger". Diabetes (and other non-communicable diseases) is such a challenge. The textbooks say that about 6-7% of the adult population are diabetic, with about twice of that on the way to becoming diabetic. However, results from my community outreaches in Kano show that up to 40% of persons aged 40 and above are diabetic (and/or hypertensive. Or are on the way to develop one or both of these healthcare challenges).

#### **What does this mean?**

a- For each of us, it means that we have a personal responsibility to protect ourselves and our loved ones from diabetes and its complications.

b- For Nigeria, it means that we may have well over 15million persons in the next 5-15years who will need ongoing care for diabetes and its complications.

If the emerging diabetes epidemic is not abated, it will cause a huge level of human suffering, financial and human costs as well as economic losses! Remember that we will still have the burden of malaria as well as the infectious diseases to cope with, if we add the growing burden of cancers to the mix, it implies that HEALTHCARE ISSUES WILL BE A NATIONAL EMERGENCY, and possible disaster 20years down the line.

The year 2036 may be our year of sorrows.

The good thing about this danger is that it is a war that we can win. With the current knowledge available, we can protect ourselves, loved ones and our nation Nigeria. The disaster does not have to happen.

#### **The questions then are:**

- 1- What is diabetes?
- 2- What causes it?
- 3- How does it develop?
- 4- What are the dangers and complications?

5- What are the early signs?

6- How may we prevent it, or protect ourselves?

### **Question-1:** What is Diabetes?

Diabetes is a condition in which the cells of the body cannot use the glucose derived from food that we eat. This causes the glucose in our blood to rise to persistently high levels. The persistent high levels of blood glucose causes problems with how the cells of the body use the breakdown products of fat and protein in our diet.

The result is that even though breakdown products of food are high in the blood, the cells of the body do not get enough so they starve (while surrounded by plenty!!).

In an attempt to solve this problem of "starvation in the midst of plenty" the liver produces even more glucose. In some instances the protein in muscle cells are even broken down so that the liver can use them to produce more glucose.

However, the corrective actions simply cause more glucose to accumulate in the blood. The persistently high levels of glucose in the blood (and inside the cells of some tissues) is the cause of the symptoms and complications of Diabetes.

Remember from Biology: glucose is the final breakdown product of carbohydrates in our food. Also, breakdown products of fats/oils & proteins can be converted to glucose

### **Question-2:** What causes diabetes?

The hormone "Insulin", produced by the pancreas (an organ at the back part of our tummy) is a main regulator of glucose and how the body cells use the breakdown products of the food we eat.

Diabetes may be caused by anything that:

- a- Makes the pancreas produce less (or no) insulin.
- b- Makes the pancreas produce "abnormal" insulin.
- c- Makes the body cells unable to respond to insulin.

There are several things that will predispose to the factors listed above, including:

- Genetic make-up.
- Obesity
- Pregnancy

- Lack of exercise
- Infection by certain viruses
- Others.

**Question-3:** How does diabetes develop?

Diabetes develops slowly, like "a thief in the night"! The process of persistent continuing increase in blood glucose happens over a number of years (up to ten years!) till the blood glucose is high enough to cause damage to cells, tissues and organs.

As the process continues, organs such as the skin, brain, eyes, heart, kidneys, blood vessels, nerves, pancreas and reproductive/sexual organs are affected.

Diabetes is quiet and deadly; by the time it shows itself, up to 80% of persons affected will have developed complications. This means that we have to look for diabetes, and not wait till it shows itself.

**Question-4:** what are the danger signs of diabetes?

Usually, diabetes does not show a sign; the symptoms of diabetes are actually indications of complications. What are the complications of diabetes?

1- In the blood vessels and heart.

Diabetes results in damage to big and small blood vessels in the body. I mean any blood vessel, from the ones in the brain to the ones in the feet can be affected. The effect on the blood vessels of the heart is the most common cause of death.

Effect of diabetes on the big blood vessels also causes hypertension.

2- In the kidneys.

Diabetes causes destruction of the cells of the kidney. Over time, the kidneys are no longer able to function. This effect is called "end stage kidney disease".

3- In the liver.

The liver becomes bigger and begins to accumulate fat. This effect is worsened in persons that abuse alcohol. In fact, a person with diabetes is advised to stop alcohol consumption.

#### 4- Reproductive system.

##### **a- in women:**

- . Frequent whitish discharge from the vagina.
- . Irregular menses
- . Reduced fertility.
- . Increase risk during pregnancy
- . Increases risk of babies dying in the womb.
- . Increased risk of need for surgery for delivery of babies.
- . Increased risk of babies dying in the first week of life.
- . Increased risk of infections.

##### **b. In men:**

- Reduced sexual performance.
- Increased risk of infections.

#### 5- In the eyes:

- . Cataracts.
- . Blindness.

#### 6- In the skin:

- . Wrinkled skin
- . Wounds that do not heal, or heal with difficulty
- . Wound infections that may cause death.
- . Wound infections that may cause legs to be cut off.

7- Brain:

. May cause reduced function in advanced cases.

**8- Persistent high levels of blood glucose may predispose to cancers.**

**Signs/symptoms of diabetes:**

- Repeated vaginal discharge.
- Frequent need to change eye glasses.
- Skin wounds that do not heal within a week.
- Sudden chest pains (may suggest effects on the heart).
- Weight loss, despite usual diet.
- Frequent thirst.
- Frequent urination (even at night time).
- Unusual tiredness, even after rest.
- Frequent skin infections.
- Blurred vision.
- Glucose in urine.
- Protein in urine.
- Unusually foamy urine.

**Now, the question is:**

What may you do to protect yourself, loved ones and Nigeria? What we are to do is on four levels:

- 1- Information and awareness.
- 2- Screening and risk assessment.
- 3- Advocacy/lobbying.

Health Gists from the Doctor on Air WhatsApp Platform.

@ourownddoctor .Doctor on Air .The Michael Agbaakin Foundation.

4- Change in exercise, diet & habits.

Here at The Michael Agbaakin Foundation, we organize community outreaches on these four levels.

We also have our WhatsApp and Facebook platforms.

### **1- Information and awareness:**

We need to be informed about the types of nutrients in our common food items and menus (we will have a session on sample diet plan and cooking methods later).

We also need to be aware of indices such like our Body Mass Index.

### **2- Screening and risk assessment** (we offer this for free in select communities).

There are certain simple tests that can be done to assess risk of diabetes and its complications. Everyone aged 40 or above should have these bouquet of tests once a year (if the results are normal).

The tests include; personal and family medical history, physical examination, an eye test, a blood test., a urine test.

### **3- Advocacy:**

Even when we want to do some things as individuals, the environment may not be conducive for us. For example, the snacks around and the meals served in cafeterias around us may not be what is best for us.

To change our environment, we need to be socially/ politically active. We need to influence practices and regulations in a way that benefits our health. For example, we can influence the types of meals served in our cafeterias and the kind of snacks at our fast-food joints. It was lobbying like this that brought about "Coke Zero" and such innovations.

We can influence policy to ensure that the right kind of foods are available at the right price for most of us to purchase. We can influence what our children are taught in school about a healthy diet. We can influence the meals served to our children in schools.

#### **4- Exercise, diet and habits.**

**Exercise:** every adult needs 30minutes of exercise daily at least for four days in a week (not more than a day break in between). This exercise should be of moderate intensity (just enough to make you slightly breathless and sweaty) and should be consistent.

**Diet:** here are a few tips-

- take breakfast every day.
- avoid late night meals.
- take vegetables (&fruits) every day.
- ensure that each meal you have is a balanced diet.
- take 3litres of water every day.
- reduce the amount of salt and "maggi" cubes in meals.

Use a pinch of salt per pot of food (salt does not give taste to food; it only brings out the taste in the ingredients used to make the meal).

Adverts by the makers of Maggi says "use 2 cubes of Maggi". So, why do we use more than the manufacturer's recommendation?

- Use as little oil in cooking as possible
- . Do not make stews that leaves oil floating on top
- . Roast instead of frying
- . Avoid deep frying food.

- minimize or avoid foods that are high in free sugar, e.g most soft drinks (Coke, Fanta, ice-cream, salted nuts e.t.c).

- eat when u are hungry. Eat enough to stop the hunger, then stop eating.

It is better to eat several small meals each time you are hungry than to eat large meals.

- reduce the quantity of carbohydrates in meals. Most of our native menus/diets consist of large amounts of carbohydrates. Ideally, the tuwo/amala/eba that you eat should just be about the size of your fist, or less. Do not serve more than a third of a plate of rice. And always chew food well before you swallow.

#### **Habits to change:**



Health Gists from the Doctor on Air WhatsApp Platform.

@ourownddoctor .Doctor on Air .The Michael Agbaakin Foundation.

1 - Sleep well, 8hours of sleep daily helps your body control glucose better. It also helps to reduce stress.

2 - Avoid late night meals, have the last meal of the day 2hours before bedtime.

3 - **AVOID TOBACCO SMOKE** in any form. Tell those smoking around you that they are free to commit suicide but that you will not permit them to murder you. Tobacco smoke worsens diabetes and hypertension; makes you likely to have a cancer.

4- ensure that all your meals are a balanced diet. Each meal should have the right nutrients in the right quantity cooked the right way.

Now, there are a few things that I need each of us to do.

Share the information you got here today with 20 of your contacts.

I have a book, “You CAN Defeat Diabetes”. It willhelp you to understand how to tame the beast.

Also, ask your friends to join us on Facebook. Search for Doctor on Air. You may also join our WhatsApp gist forum.

Topic.2-

**Topic:** Cervical Cancer

**Date:** 09/07/2016

**Presenter:** @ourownddoctor [OLAGBENRO Michael, Dr]

On Mothers' Day 2013, the Cervical Cancer Crisis Card gave some shocking news. 137,817 women died from Ca Cervix. And that was just in 5 countries. Nigeria is ranked 5th in global cervical cancer deaths with 9,659 of our precious Women killed EVERY YEAR. Each year, by cervical cancer. This means that 26 Nigerians died yesterday, and 26 more will die today!

At least 1 Nigerian dies each hour of each day from cervical cancer. It is said that about 14,000 Nigerians were diagnosed with cervical cancer last year. It is projected that by the year 2030, about 500,000 women will die yearly from cervical cancer.

To put the overall burden of cancers in Nigeria in perspective, let us look at the year 2012 figures:

- **Population:** 166.6million.
- Number of **new people diagnosed** with cancer: 102,100
- Risk of getting **cancer before age 75:** 10.4%
- **Cancer deaths:** 71,600.

NOTE: over 10% of Nigerians will have cancers by age 75. Imagine what happens when by 2036 we have over 300million living Nigerians.

So you see, OUR GENERATION IS FACED WITH A CHALLENGE.

We have a clear and present danger that we owe it to ourselves, our children and our grandchildren to resolve. If we do not prevent the calamity, WHO WILL?

### **What is the Cervix?**

It is a part of the female reproductive system. It is the outlet from the womb to the vagina. It is the entrance for the sperm into the womb in its journey to produce a baby. It feels like the tip of the nose, and can easily be felt by a finger inserted into the vagina.

For some women, it provides sexual pleasure when stimulated.

The cervix is about an inch long, and has an internal (to the womb) & external (to the vagina) opening. As a woman moves into puberty, reproductive age & "retirement from childbirth" after menopause, changes happen in the cervix.

You see, the cervix and vagina have different type of cells covering them. And the type of cell covering for different parts of the cervix differ.

The vagina is a bit acidic, also there is mechanical pressure during sex & childbirth. So the cell covering of the vagina and outer part of the cervix is like a pavement; it is similar to interlocking tiles that we use on the ground outside the house that cars and boots can pass over.

The cells of the inner part of the cervix, on the other hand, produce a mucus like fluid that protects the cervix, and does other functions. Most cancers of the cervix happen at the zone where the outer part of the cervix changes.

*Cervical cancer is disorderly growth of cells that form a covering to the cervix.* Sex is natural; it is part of life: it is one of God's gifts to humanity. However, sex is also a means of transfer of micro-organisms from one individual to another. One of this micro-organisms is a virus called "Human Papiloma Virus". It is so tiny that it requires a special type of microscope to look at it. I will call this virus "HPV".

HPV is widespread; up to 90% of those of us who have had sex will have encountered HPV. It is implicated in a number of cancers, particularly cancers of the head and throat/neck areas, and cancers of the genital area. It is responsible for warts seen in the private parts of some people.

There are different types of HPV (just like we say there are different groups among the Yoruba, though all are Yoruba), and some of these are notable for causing cervical cancers. These are HPV 16 & 18 (among others).

In most people that contact HPV, the body is able to clear it off: the immunity system destroys the affected cells before they become cancer. However, in some women the virus is not cleared; over a period of up to 10years HPV causes a series of changes in the cells of the cervix that leads to cancer.

HPV is particularly able to infect cells when there are tiny cuts/bruises on the overlying layer of cells. It is these series of changes in the cells of the cervix and the time it takes to progress to cancer that makes it possible to avoid/escape cervical cancer.

However, sex and HPV are not the only reasons for cervical cancer, up to (or more than, in some areas) 5% of cases of cervical cancer do not involved HPV. Nonetheless, it is now accepted as a medical fact that cervical cancer may be considered as a sexually transmitted cancer.

**PLEASE NOTE: CERVICAL CANCER DOES NOT GIVE A SIGN UNTIL IT IS ESTABLISHED.**

**THE ONLY WAY TO KNOW IS TO BE SCREENED**

### **What are the risk factors for developing cervical cancer?**

The number factor will be not getting screened and not getting vaccinated.

- 1- Starting sex early: the earlier you start having sex, the more your chances of contacting HPV, the more your chances of developing cervical cancer.
- 2- Multiple sexual partners: This may be direct or indirect. Direct when you(rself) have more than one sexual partner, and indirect when your partner has more than one sexual partner (in or out of marriage).
- 3- Having other sexually transmitted infections increase the chances of contacting HPV
- 4- Exposure to tobacco/cigarette smoke
- 5- Anything that weakens your immune system.
- 6- Others: Giving birth to more than 3children. Using birth control tablets for more than 5years
- 7- HIV infection

### **The beautiful thing about cervical cancer is the relative ease of prevention.**

- 1- Stay away from sex till it is due.
- 2- From age 21years (or, within 3 years of your 1st coital encounter, get screened.
- 3- If you are screened & are negative for HPV,
- 4- GET VACCINATED. Vaccines provide up to 5years of protection.
- 5- Go for screening once in 3years thereafter.
- 6- If you are screened and you are positive for HPV or changes in the cervix, get into a follow-up program.

**The early stages of cervical cell changes are "curable", as it is possible to remove all the tissue that have undergone changes before (or even after) they become cancer.**

### **How do we prevent it?**

1. Meet and discuss with your Doctor for review.
2. There are options, but the best option is the one that checks for the DNA of the HPV.
3. Other tests look for changes in the cervix that are indicative of cancer.

So, what are you waiting for? **CALL YOUR DOCTOR NOW!** Schedule an appointment for cervical cancer screening.

**CALL YOUR FRIENDS NOW!** Confirm if they have been screened for cervical cancer.

**CALL YOUR SISTERS AND GIRLFRIEND NOW.**

Now to answer questions posed:

1- Use of condoms has been found to reduce cervical cancer, though condoms do not protect against viruses.

2- Concerning virgins;

. Screening is recommended for persons who have initiated sex.

. It may not be possible to pass materials needed if there is an intact hymen.

3- Signs of cervical cancer:

. Bleeding during/after intercourse.

. A baaaad smelly vaginal discharge (NOTE: this may also be caused by infections).

4- Pap smear

. A test done to obtain samples of cells covering the cervix. A Cyto/Histopathologist then examines the cells for signs of cancer. As an addition to this, the woman is tested for HPV and vaccinated if negative. If there are signs of cancer, and it is not advanced, the affected part of the cervix is removed.

. If the cancer is advanced, other modes of treatment are used.

5- Female circumcision: this is not a known cause of cervical cancer.

6- Men and HPV

. Men can also have cancers from HPV

. Cancer of the throat (from oral sex). Risk increases if a man has/had more than 4 oral sex partners and if he smokes.

. Cancer of the penis

. Warts on the penis.

Health Gists from the Doctor on Air WhatsApp Platform.

@ourownddoctor .Doctor on Air .The Michael Agbaakin Foundation.

7- Pap smear is advised to start within 3years of initiating coitus.

. For women aged 30 and above, checking for HPV DNA is also advised

- The frequency of Pap smear will be determined by the result of previous test.

**What will YOU do to stem the tide of cervical cancer? What will YOU do to protect yourself and loved ones?**

A major put off for some women is the fear of pain during the Pap smear procedure. Pain can be controlled, or even avoided, the procedure is not painful (except there are other factors), but the emotional response anticipates discomfort to the point of pain! A stitch in time save 9,999!

**[[www.facebook.com/DoctorOnAir/videos/1243167042362359/](https://www.facebook.com/DoctorOnAir/videos/1243167042362359/) Our video on climate change from SilverBird TV].**

HPV can also promote cancer of the throat (from oral sex). The risk increases if you have had more than 4 oral sex partners and if you smoke.

***Topic.3-***

**Topic:** Blood and its issues.

**Date:** 23/07/2016

**Presenter:** @ourowndactor [OLAGBENRO Michael, Dr.]

Blood!

Blood! The fluid of life, RED, couched in mystery and even awe! Blood is possibly the most essential component of the human body. It provides a connection between all tissues, and conditions the local environment and economy of practically every cell.

Blood brings the requirements for life to the tissues and cell, and takes away the waste products. It brings oxygen, takes away carbon dioxide. It brings glucose and other final products of digestion to the cells, and takes materials to the kidneys to be excreted from the body.

The blood consists of 3parts:

- Cells and cell fragments (red cells, white cells & platelets).
- Serum, the liquid of blood, contains water and salts (electrolytes).
- Proteins within the blood, for example; hormones, antibodies.

The human adult has approximately 70-75mls of blood per Kg body weight. The blood is run through a system of pumps, pipes and valves and it takes just about 20seconds to complete the circuit through the body!

The body can tolerate loss of 5% of blood volume and still shake body like say nothing dey! However, loss of more than 5% places the control systems under some form of stress, and loss of more than 10% may be catastrophic!

The exact volume loss that the body can safely tolerate depends on;

- Age
- General health
- Health of the heart
- Health of the lungs
- State of nutrition.

For medical uses, any component of blood may be used:

- Whole blood

- Red cells
- White cells
- Platelets
- Antibodies
- Clotting factors.

The specifics will depend on the clinical situation.

However, issues of blood make me sad, and give me hope. Sad at the sheer unmet burden of need, hope that we can mobilize in our common humanity and rise to the challenge.

Let me tell you a story, a true life story.

Sometime in 2007, I was a Medical Officer in Obstetrics and Gynaecology at the Murtala Muhammed Specialist Hospital, Kofar Ruwa, Kano. I was a street or two away from one of Africa's most ancient thrones, the Palace of Ado Bayero, shugaban sarkokin Nijeriya, Emir of Kano.

A plump dark skinned pretty woman in her twenties came to deliver, having spent some time in labor. She had lost quite some blood before I got to meet her, and she was decompensating. Her breathing was rapid and shallow, her face was pale and sallow, her heartbeat and pulse were weak and fast, her palms and feet were cold. Her blood pressure had dropped to about 90/50mmHg; she had not made urine that day. She was medically in shock.

Before I resumed call-duty, her blood sample had been taken for "grouping and cross-matching", she had drips on both arms and was on oxygen. But you see, at this point, all she needed was simple. She needed some units of blood. And blood was not available. Not in our blood-bank, and there was no one to donate.

I went through agony over the next few hours; all I could do was hold her hands and comfort her as I watched her die. I swore by the Almighty and by all names He is called in the thousand odd languages on the earth that such will not happen again under my watch.

Sometime later, I came in on call-duty and met another woman in a similar situation. The mood around her bed was gloom and dark. Sniffles of "inna-liLah" were wrung out of pained hearts. And her husband was nowhere to be seen. She allocated her kids to friends to care for, and told them where she kept her valuables. She informed her kith of who and who had offended her, and pronounced her forgiveness.

This was the scene I met.



I did a brief review, tried to optimize her, then I asked for her blood group, and realized that it was the same as mine! I almost ran all the way to the blood bank. I got them to take a unit of my blood. I took a brisk walk back to the labor room. I transfused the SINGLE unit of blood. I quietly prayed in my heart, then I continued with my other patients.

She did not die.

Two weeks later, on a Friday, while my colleagues went for the Jumat prayers, I went on a Ward Round to discharge patients who were fit. As I came into the ward, here was this dark and lovely woman sitting up in bed, surrounded by friends. Playful and joyful shouts of "nagode! mungode maka!" were in the air.

The woman sitting up in bed gave me the sweetest smile I have ever been given in my life, till date. It was the woman to whom I gave my SINGLE unit of blood. Somehow, that single unit sustained her till the next day. Encouraged that her Doctor donated his own blood, her friends mobilized and got her 3more units over the next 2days.

She went home alive, with her baby, 2weeks after.

This is one out of thousands of stories that are enacted in our clinics and hospitals on a regular basis, from Gwoza to Ikwere, from Gusau to Esa-Oke, from Shepeteri to Jalingo: **Nigerians need safe blood**, and THEY ARE NOT GETTING IT

### **Why do our people need blood?**

- 1- Complications of pregnancy and child birth.
- 2- Cancers and cancer therapy.
- 3- Persons with sickle cell disease.
- 4- Accidents and trauma.
- 5- Surgeries.

In some instances, the need for blood transfusion is an emergency. In others, it is an urgency.

**My challenge to YOU is this; I am a voluntary blood donor, ARE YOU?**

This brings my earlier question to the fore. Husbands disappearing when they are needed most. The most annoying thing for me is that this woman be in the labor room again giving birth to a 13th child.

Health Gists from the Doctor on Air WhatsApp Platform.

@ourowndocor .Doctor on Air .The Michael Agbaakin Foundation.

*The Michael Agbaakin Foundation's initial activities (long before formal incorporation) began after this episode as I sought to make SAFE BLOOD available in our hospitals.*

My experience during my Haematology rotation also brought the matter home to me in agonizing detail.

The BloodCCARE! Initiative of the Foundation is a bold goal to recruit, motivate, organize, maintain and deploy 10,000 Nigerians as regular voluntary blood donors who donate 2times in a year.

Who may be a Blood Donor?

Any Nigerian Citizen, who is motivated and is:

- 1- Aged 18-50years of age.
- 2- Free from viral infections, particularly HIV & Hepatitis.
- 3- At least 50Kg in body mass.
- 4- You do not have hypertension
- 5- You do not smoke
- 6- You do not abuse alcohol
- 7- You do not have a chest infection or a lung disease
- 8- You do not have a heart or kidney problem.

When you come to donate, Doctors will review your medical history, then examine you and request simple tests that help us ensure that it is safe for you to donate, and that your blood is safe for the recipient.

**Is blood donation safe?**

**What will be done to keep you the donor safe?**

**How do we ensure that your freely given blood does not become an item for commerce?**

1- Any, in fact, EVERY medical procedure carries a risk. It carries a risk of harm, & in the extreme, a risk of death. However, when routine measures are put in place, blood donation is safer than drinking a glass of water.

How shall we keep you safe?

Health Gists from the Doctor on Air WhatsApp Platform.

@ourowndocor .Doctor on Air .The Michael Agbaakin Foundation.

2- At The Michael Agbaakin Foundation BloodCCARE donor centers, we shall:

- operate with standard operating protocols and quality management processes.
- ensure that staff and volunteers are trained, appraised and re-trained.
- take your medical history, examine you and test you to ensure that IT IS SAFE FOR YOU to donate.
- take your vital signs before, during and after donation.
- keep you with us for 30-40minutes AFTER you donate (so we may observe you).
- make materials available to care for any medical emergency that can be reasonably anticipated
- **we shall however be indemnified from occurrences that may result from you the donor giving us false or misleading information.**
- update and review our practices to KEEP YOU SAFE.

How do we ensure that your blood is not in any way traded?

3- We shall have MOUs with the beneficiary centers for the blood that our donors give. The MOU shall among other things provide for:

- A triage of blood requests, to ensure that those most in need get blood
- A tracking of each unit of blood or blood product from us, from donation to dispatch, to reception and administration.
- The recipient will not be charged for blood given.

Now to our questions:

1- A man may donate once in 3months, a woman once in 4months. However, our standard shall be twice a year in our initiative.

2- Only a unit, a pint, about 450ml of whole blood is taken at once.

For blood products, the amount required will be taken (the process requires blood to be taken out of the body, needed parts extracted and the rest returned to the body in a continuous process).

3- Blood is not given free in Nigerian medical facilities because:

Health Gists from the Doctor on Air WhatsApp Platform.

@ourowndocor .Doctor on Air .The Michael Agbaakin Foundation.

a. blood donation, banking, screening and administration carries a cost. We at The Michael Agbaakin Foundation have deconstructed the cost elements. The BloodCCARE Initiative seeks to remove some of these cost items. However, the personnel and facility overhead cost of each facility are peculiar and must be borne by, well, someone!

b. there is no policy enacted to make blood transfusion a free service.

4- ALL OF US must be involved in educating our populace on the need for safe blood, and the fact that it is our *duty as Citizens and as Persons of Faith to donate blood*.

I am yet to research why Men in Northern Nigeria are particularly reluctant to donate blood (I once had a husband tell me to go donate for his wife, as he was NOT WILLING to donate. He even said it was my duty, not his!).

5- Platelets are cell fragments that are responsible for blood clotting, when it is deficient, the affected persons may bleed uncontrollably.

I have lost patients who bled into the brain, bled from the lining of the intestines and bled to death. The sad thing is that platelets are quite expensive; a single unit costs #90, 000 and a single person may need up to 15units at a single instance.

This is why we want to have our own blood components machines and blood bank, so we can help bring down the costs.

6- If you come across someone bleeding from a fracture or a cut:

a- identify the area of bleed and tie above it. I once had to stop at the scene of a vehicular accident. I removed the woman's scarf and tied it above the point of bleed.

b- give as much water as the person can drink in the first few minutes of massive bleeds, encourage the person to keep drinking. Tell the person to urinate as often as the urge comes, keep giving water. This will help maintain the blood pressure and blood supply to vital organs.

CAVEAT:

this will be effective only if:

. you have stopped further bleeding

. you start within 20-30minutes after this period, depending on the amount of blood lost, the intestines may not be able to absorb the water.

7- When the blood loss is less than 10% of blood volume,

- The kidneys retain more water

- Blood is shunted to the brains, kidney and vital organs, shunted from the stomach, skin and intestines. This is why persons who have bleed may develop stomach ulcers
- The urge to drink water increases, as the body attempts to regain blood volume.
- Hormones are released that make note blood cells.
- The heart beats faster,
- The breathing is faster, as the body attempts to extract more oxygen from the air.

On the questions on alternatives with transfusion:

1. Depends on the percentage blood loss, and the rate of blood loss. If, for example there is a bomb blast and a limb is lost, with massive rapid blood loss, nothing else will replace the need for blood. Other fluids may be given to increase the blood volume as a temporary measure.
2. If the blood loss is planned, then there are options to transfusion:
  - a- donate your own blood a few weeks before date of surgery. This unit of blood will be given to you at surgery.
  - b- the surgeon uses a technique that reduces blood loss as much as possible.
  - c- the blood "lost" during surgery can be collected, "refined" and transfused back to you.
  - d- other fluids are given to maintain the blood volume
  - e- hormones (expensive option!) are given to you to stimulate blood cell production.
  - f - your diet will be adequate and be supplemented with Vitamin-C.

On the question of "too much blood", there are two possibilities:

- 1- An unusual or disease process that increases the volume of fluid part of blood. (This will result in high blood pressure because you have a higher quantity of fluid in a fixed space within blood vessels).
- 2- Any condition that will increase the quantity of blood cells. The cells increased may be red cells or white cells. When there are increased quantity of cells in the blood, the blood becomes thicker and blood flow becomes sluggish, such that body tissue does not get well nourished.

On prolonged bleeding:

- There is a condition known as Haemophilia. It is manifested by male offspring and is the most likely thing your student had.

- If blood lost is say, 5%;

. The person may be a bit drowsy, the person produces less urine than usual (depending on fluid intake), and the heart beats faster.

What is important is not just quantity of blood loss, but rate of blood loss; a person may lose up to 15-20% of blood (as measured by PCV) and show little or no signs. Depends on over what period the blood is lost, and if the heart and lungs are healthy.

**Participant:** Blood lost during surgery can be collected and transfused back to the patient. Is this safe?

**@ourowndactor:** yes sir, there are equipment for this.

**Participant:** Does the loss of blood during a woman's menstrual period affect the blood level in the body. Secondly is it advisable for a woman in her cycle to donate blood?

**@ourowndactor:** normal menses should not affect blood levels. However, the aggregate effect of menses and the fact that women make a bit less of the hormone that promotes red cell formation is why it is advised to donate blood 3x a year (compare with 4x for Men).

If a woman has a heavier flow than usual (with clots in the flow) and women with menses more frequent than usual (e.g, once in 18days compared to 21-35days), particularly if it is of recent onset, may be advised not to donate till review by a Dr.

#### ***Topic.4-***

**Topic:** Albinism

**Date:** 16/07/2016

**Presenters:** @ourowndactor [OLAGBENRO Michael, Dr] and The Albino Foundation.

Certain issues in life are simply profound, and profoundly simple. One of these is Albinism. This issue highlights how we develop prejudices & unhealthy attitudes as persons. It also provides an opportunity for us as individuals and communities to be aware and to take responsibility for the communal good. It provides a platform for us to emphasize that the rights, privileges and potentials of EVERY Citizen of Nigeria MUST be promoted and enforced by each and every one of us.

### **What is Albinism?**

Albinism is a medical and social condition. As a medical condition, it has a physical and a psychological/psychosocial basis. As a social condition, it is rooted in myth, bias, prejudice, tradition and ignorance.

Albinism is THE issue that can bring out the best of us as Communities, and as Nigeria.

The physical basis for Albinism is simple; the cells of the skin have a deficiency in producing a pigment that gives color to the skin and its appendages. This pigment is called "Melanin" (from the Greek word "Melas", meaning Black). Melanin protects the tissues from the harmful components of sunlight. Its relative quantity and distribution is responsible for our differences in skin color.

Asides the lack of skin pigment, there is also some lack of pigment in the eye.

This means:

- 1- Reduced or absent pigmentation in the eyes, hair & skin.
- 2- Eyesight deficiencies, usually short sightedness.

The reduced pigmentation in the skin does make the person with Albinism look every in so lovely! (Particularly if the right care is given). It also means that the skin is prone to damage by sunlight.

### **How common is Albinism?**

- occurs in humans and animals.
- occurs in all races of humans.
- occurs in between 1 in 1000 persons to 1 in 25,000(or more) persons.

It is more common in Blacks than in Whites, and Nigeria is one of the countries with the highest occurrence of Albinos. It is more common among persons in the southern part of Nigeria. It is more common among settled communities than among the nomadic communities.

The Albino Foundation puts the number of Nigerians living with Albinism at up to 2,000,000 (two million) persons. It also says that about 600,000 of these Nigerian citizens are *victims of the rest of us*.

**Persons with Albinism have certain challenges:**

- 1- The skin is prone to wrinkling.
- 2- The skin is prone to cancers. In fact more than one skin cancer may occur at the same time in the same person, particularly on the face.
- 3- Challenges with eyesight. Usually short sightedness.

Now, I invite our volk from The Albino Foundation to shed more light on issues in Albinism and to share from their experience.

**The Albino Foundation:**

99.9% of Persons with Albinism (PWA) face discrimination and stigmatization on a daily basis from family members, neighbors and the society at large. Discrimination can be in the form of name calling [or worse] like "Oyibo pepper!", "Afin", "Bature", "Anyà Ùdara ocha". Consequently PWA tend to shy away, not from wild animals or zombies, but from fellow human beings because their self-confidence have been gradually eroded.

Many of us have, in one way or the other, encouraged the discrimination of a PWA. Take for instance you are standing by the road and you see a group of children laughing at an albino Lady and calling her derogatory names, do you take the initiative to call these children to order?

**[Participant:** *Thanks to the foundation for enlightening us, though this is not a form of illness but I want to know, are there efforts put in by the foundation to reach out to many albinos as possible so they can at least have somewhere to gather and discuss issues concerning them? Secondly, are there some form of support that they get from the government via the foundation to empower the less privileged amongst albinos? Do you organize programs and talk shows where they can gather and they are taught not to allow stigmatization to get to them and not to feel less of themselves?*]

The Albino Foundation was formed in 2006 to address the challenges that PWA face. Presently the foundation has established 42 chapters across the country. Each chapter has a coordinator. Each chapter has different days of the month when they hold their meetings. At such meetings



personal experiences are shared and tips on how best to tackle the challenges of albinism are given. Such meetings stand as support groups.

The foundation also uses her annual National Albinism day (5th May) and International Albinism Awareness Day (13th June) celebrations to bring members together to deliberate on strategic ways of addressing albinism issues.

Membership of the foundation is not just for PWA but any other person who shares the vision of building a society with equal opportunity for PWA is encouraged to register as a member. Volunteers are equally welcomed to be advocates and contribute to creating awareness around albinism issues.

Now back to discrimination. We have a lady who is a member of the foundation, though not an Albino Lady but had an Albino child. The husband drove her out of the house with their four children (of which one is an albino) and no job. Reason being that he believed that the albino child wasn't his due to the obvious skin colour. He believed the wife must have cheated on him. We at the foundation did invite him to enlighten him more on albinism but he refused to honour the invitation.

The thing is this:

1. The two parents, regardless of their skin color, must be carriers of the albinism gene.
2. There are no known test to determine who is a carrier or who is not (Dr please correct me if there is/are test(s) for this or if there is a ground breaking research on this).
- 3 Albinism is not contagious neither is it a disease. (I once was on a Radio program when someone called in and asked whether it is safe to buy from an albino person!).

Least I forget. If you want to know more about The Albino Foundation and what we do please visit our website @ [www.albinofoundation.org](http://www.albinofoundation.org)

Please keep your questions coming and well try as much as possible to answer them. Yesterday Maryann did ask whether albinism can be avoided. Well, yes if two persons with the gene of albinism do not end up in marriage. But again how do you know if you have the gene if none of the parties involve do not physically have the characteristics of a PWA. But again why would you want to avoid having children with unique, beautiful skin tones and remarkable intelligence quotients. I don't know about the albino gene in my family, but an uncle and a cousin from an aunt are really light skinned with pale eyes. Most of us are short sighted and are solar intolerant.

**[Participant:** *I am not so light skinned but develop welts when exposed to excessive sunlight and would be sick too. Eyes could get swollen with migraine. However, I believe that some of these challenges you mentioned are things that are gradually fading. Unless, I'm privileged to be in association with people lacking the flaws you mentioned.*

**Participant:** *Thank you all for the analysis. It is not easy to know who has the gene or not. A lot has to be done in terms of enlightenment to encourage acceptability. I am guilty of avoidance. I was once invited to give a talk in one of d chapters but I have avoided replying them. Now I know better. If those of us that are educated still have issues one can imagine d thoughts of the not so educated.]*

**@ourowndactor:** Myths about Albinism.

1- Albinism is contagious. NO! ALBINISM IS NOT A DISEASE!

Yes, the person living with Albinism does have some disability, but so did Mahatma Ghandi, Obafemi Awolowo and my humble self (we are all short sighted!).

2- Persons with Albinism can only give birth to Albinos. **This is false.**

3- Persons with Albinism have "spiritual powers".

Seriously! [rolls eyes]. "They" are as human as "We" are! Our differences are only skin deep!

4- Albinos are less intelligent and less confident than "the rest of us". Please view the musical video by S Keita on our Facebook page. The song "Africa" has been one of Africa's best musical output. This and Keita's other songs clearly show that a person with fair skin is as intelligent and as creative as any human can be!

In all cultures, myths about Albinism are rooted in sheer ignorance. The attitudes and behavior arising from this ignorance has resulted in we all NOT DOING ENOUGH to support our co-citizens of Nigeria.

**So, what must we do?**

As individuals:

- 1- Make friends with an Albino. Some of my best friends are!
- 2- Stand up for anyone that you notice is being discriminated against on account of skin color.
- 3- Be part of creating awareness about Albinism. Share with friends and folk in your sphere of influence.

As a community:

- 1- Be aware of, and provide for needs in public places, e.g ensuring that we give seats at the front of the class.

Health Gists from the Doctor on Air WhatsApp Platform.

@ourownddoctor .Doctor on Air .The Michael Agbaakin Foundation.

2- Give chances for education, employment and self-expression. EVEN IF IT MUST BE VIA AFFIRMATIVE ACTION.

3- Do not obstruct chances for constructive romantic engagement.

4- Make provision for funds for care of skin and health conditions associated with Albinism, e.g care for skin cancers and a host of other things!

***Topic.5-***

**Date:** 30/07/2016

**Topic:** Cancer and Our Children

**Presenters:** @ourownddoctor and the Daivyan Children Cancer Foundation.

Sometime earlier in the year while I was in the Haematology Department, at about midnight, I received a consult to review a 7year old girl. She was the first child of the family, her mother's love, and her father's pride. She was the best student in her class, she ran errands at home, and she helped to look after her younger sibling. She was the darling of her teachers.

Why was a Haematologist (a Specialist Physician in diseases of/concerning the blood, and blood transfusion) required? Our lovely 7year old girl took ill about 4weeks before they came to the hospital where I practice [National Hospital Abuja]. They had spent 1week at home, and 3weeks at another "smaller" hospital before she was referred to us. She was referred when it was obvious that she needed Specialist care.

**What were her symptoms?** The father noticed that she was not as active as before, even her teachers complained that she was often sleeping during classes and was not playing with friends during the break. She had a high temperature (fever), and she suddenly became very pale; her eyes, palms and soles looked rather white. She also had headaches. At this point (in the first week of illness), her loving parents took her to a Pharmacy/Patent Medicine Store on the street, where she was dewormed and given medications for malaria.

She did not get any better.

Later in the week, she was taken back to the care point, and she was given another course of anti-malarials. To control the fever and aches, she was given Diclofenac (in the course of our diagnosis, it became obvious that this drug should have been avoided). By the second week of illness, she was noticed to have oval to round dark areas on her skin. She also began to have easily bleeding bruises on the skin, and at some point had some blood in her stool.

The fever persisted. At this point, she had been taken to a General Hospital, where basic laboratory tests were done. She was started on antibiotics, had a repeat of antimalarials, and blood transfusions.

She did not get better. At some point, during the night, the Nurse gave a routine injection into the muscle of the thigh. Within minutes, the thigh became very swollen and painful. So painful that our lovely 7year old girl could not stand on that leg, nor bear to have the thigh touched. The blood in the stool increased, and she also had bleeding in other areas of her body. At this point the parents panicked and requested transfer to a medical facility where a cure and care for our beloved child could be found. The child had been ill for over 3weeks and was not getting better. She was obviously weaker, and in need of urgent massive help. Of course, almost 3weeks of care in the hospital and at home had taken its toll on the family finances.

Then came in the Haematogists/Pathologists. We took samples from her blood and bone marrow. Our lovely child had a cancer affecting the "Grandfather cells" that make blood cells.

Each day she has spent without the right diagnosis and care was a day wasted, and a day lost in a 10meter race against time.

**We needed to institute urgent treatment. BUT:**

1- We needed to explain our diagnosis and its implication to the Family. The parents could barely take it. [Currently, there is no routine provision for psychological/counselling services]

2- They had been spending money for over 3weeks (they are of the lower income bracket), and had become short of funds.

3- They were now certain that this was a "Spiritual Attack", and as a grief response, were conjuring "enemies" as responsible.

4- The costs of care is rather expensive (both for drugs and supportive care); most parents need to write appeal letters to raise funds. Worse still, parents and care givers are taken off the activities that earn them income.

For example, a bag of platelets (a cell fragment that is one of the blood components responsible for clotting) is #90, 000. A person may need up to 15bags in the course of care.

5- The anti-cancer drugs themselves can be life threatening, so care and accuracy is required in the use. They require specific conditions of storage and transport. The Doctors and Nurses need to be on their toes to monitor.

6- There are numerous tests that will be done on an almost daily basis. Enough to make any Mother mad, and the Father angry at Doctors and Nurses.

To cut the long story short, within 4days of admission (and with financial constraint to appropriate care) our lovely 7year old was passing large quantities of blood in her stool. Her intestines were bleeding.

*Early in the morning, at about 4a.m, she went to be with the ancestors, without a chance to experience life as a Woman.*

This is just one instance out of many that I have been part of this year. The key to note here is that we observe a rising trend of blood cell cancers in our children. Is this due to an actual rise in the overall population, or are we simply having more sent to us because we are specialists?

*If this rise in cases represent an increase in occurrence of blood cancers in our children, what specific particular local factors are responsible?* WE DO NOT KNOW YET.

Not all cases are like I have said, I will now invite a comrade in the struggle, a Mother, a caregiver, The Oga of Daivyan Cance Foundation to share with us.

### **Daivyan Children Cancer Foundation:**

Good morning all!

I feel blessed to have this opportunity to share with you because not all cases get to share their stories. My little Daivyan was so full of life and always eager to share his very charming smile to all. All of a sudden became very weak, started having episodes of vomiting with a very high fever. We rushed him to the hospital because in his case, he had never fallen ill since birth.

Now on getting to the hospital, he was treated for malaria but in the course of his treatment I noticed he had a lump to the side of his abdomen, which he kept touching and complaining of pains. We drew the doctors' attention to this, they did an ultra-sound scan and said they couldn't find anything worrisome, so we overlooked it. But, in the course of the following days, he stopped passing stool and couldn't eat anything, he was getting pale and always had a very high fever, so they transferred us to their head office [this hospital is a very popular and reputable private hospital on the mainland in Lagos].

So they did several tests, scans, x-rays and concluded there was a mass obstructing the intestine, my little boy was then referred for surgery. I was so devastated; he is my 3rd child and every attention just turned to him, my other kids were missing my care and love as we had already spent almost 3 weeks in the hospital.

So he was to have the surgery at LASUTH [the pediatric surgeon at the hospital, we were told was away and my son's case had been relayed to him, according to them, so he advised we be referred to LASUTH as intestinal obstruction was their conclusive report]. On getting to LASUTH, he was penciled down for surgery that night but God was at work and the surgeon on examining my son before surgery found out that there was faeces in his rectum and with that he said to my husband and I that "your boy doesn't have intestinal obstruction, we will have to refer you back to the hospital you are coming from, I will advise they treat sepsis". So he made his report and we left back, meanwhile the boy was without food or water for 72hrs because they had concluded he was going to have surgery. Getting to the initial hospital, they were shocked anyways but started treating sepsis and loading him with high doses of antibiotics.

After another couple of days, he started passing stool then temperature stabilized and we were discharged to go home. Was so excited but didn't know there was more to come. After a few days, my son's stomach started bloating, it distended so much, and he lost so much weight you could see his bones! We couldn't stand it anymore, a doctor friend advised we go somewhere else to run a scan. There I got a shocking news. They couldn't find his left kidney. Immediately we had to move for a CT-scan and this was where the news broke out. My little boy, exactly one month to his 2nd birthday had Wilm's tumor, Nephroblastoma, with metastasis to the lungs, making it stage 4 kidney cancer!

We felt like our world had fallen apart. I never knew children could have cancer, and at this point we had spent so much already. We had to start soliciting for funds to be able to fly him out, my husband was angry that a hospital like that should have been able to diagnose his actual condition from the onset, for crying out loud, the lump on my little boy's abdomen was a major sign that there was a tumor somewhere but for our ignorance at the time.

Daivyan is doing well now but trust me the journey has been good let me not say otherwise, the bills and treatment procedures?? God has been faithful. He had 6weeks pre-surgery chemotherapy then surgery and was placed 12 circles of post-surgery chemotherapy. He is presently receiving the 10th circle making it 2 more to go before running the follow up tests.

We decided as his parents to create awareness for children cancer as well as do all in our power to support children living with cancer and their care givers and that brought about the birth of our foundation, the **Daivyan Children Cancer Foundation**.

**@ourownddoctor:**

Thank you so so much for sharing. My hope is that we all use our challenges to initiate and follow through processes that improve our communities.

**Issues with Childhood Cancer in Nigeria:**

- 1- Awareness.
- 2- Timely diagnosis.
- 3- Costs of;
  - Diagnosis
  - Drugs
  - Supportive care.
- 4- Research.

Now, let us take a brief look at each, and what we may do as citizens and communities.

**1- Awareness.**

Most of us make the error of assuming that cancers ONLY happen in adults. There are cancers that occur in children, some may even occur in newborns. As scary as having a cancer sounds, finding it out in time and starting treatment on time can be THE game changer.

So, if a kid has unusual symptoms or a fever that does not go with treatment, **GO SEE A PAEDIATRICIAN**, not just a Doctor, but a Doctor who specializes in diseases of the kids.

It takes experience and exposure to identify some symptoms of cancers early. This is because it may be as non-specific as fever, weakness and body pain.

## **2- Timely diagnosis.**

This is possibly the most essential step. You will be shocked how many cases of cancers we will discover if we do an autopsy for everyone, I mean EVERYONE that died "after a brief illness".

### **What factors affect prompt diagnosis?**

- a- High index of suspicion by the physician.
- b- Experience and attention to detail by the physician.
- c- Early presentation; when the patient comes on time to seek medical attention.

Note that the parents of our 7year old wasted a week getting treatment from the pharmacy in the street. If the cancer had been picked, chances of success over the next following weeks would have been higher, even if not guaranteed.

d- Having the right equipment in our hospitals. You will be shocked to note that basic equipment such as high quality microscopes and other essential diagnostic equipment are not available in MOST of our hospitals (both public and private).

Even when the Doctor has a clinical suspicion, s/he needs a quality medical laboratory that is supervised by a Laboratory Physician Pathologist to determine the right tests to do, to do the tests the right way and to interpret the results.

e- Having trained and retrained Laboratory Physicians, Laboratory Scientists and Laboratory Technicians. Even if you have #1, 000, 000, 000 worth of equipment, it will be useless without the personnel with the right knowledge base and skill set.

**It is important that Nigeria trains and deploys MORE Laboratory Physicians.**

## **3- Costs.**



## Health Gists from the Doctor on Air WhatsApp Platform.

@ourowndocor .Doctor on Air .The Michael Agbaakin Foundation.

Costs of cancer care; diagnosis, drugs and supportive care can be rather expensive. I was a member of the care team for a patient that each dose of ONE drug per treatment is #500, 000. Imagine if that is the cost of ONE out of 3-4 medications that a patient has to use 2-3 times a month for 6-12 months.

Supportive care is often expensive or deficient. For example, we need to provide emotional support for persons with cancer; particularly children with cancer. When a member of the Family has a cancer, EVERY member of the Family needs emotional support.

We need to provide emotional and spiritual support, above all, provide a sense of hope and care for persons with cancer.

**Participant:** *Good morning. I am happy to be back. I was busy with our school's 20th year anniversary/graduation that was held yesterday. About 4 weeks ago we lost a child that graduated last year to cancer. It started with the student complaining of leg pain. We thought that he didn't want to wear the school's black leather cover shoes. For that, he was punished a couple of times until it became obvious that he was in pain so we let him be.*

*For almost 2 years the parents kept taking him to the hospital and were told several times that the scans didn't show anything. To cut a long story short d boy went through my primary and secondary schools, and died after doing his WAEC, NECO and finally got admission.*

*We were all angry because the teaching hospital is directly opposite my school. He was taken there several times. Why couldn't anyone detect earlier that he had cancer until towards the end?*

*I am angrier as I am writing this because the small street chemists have taken over our lives because of cost of medical care. Also our doctors are all too eager to send us to their private hospitals and chemists. The doctors need self-examination too because most of them are busy consulting for about 5 hospitals daily. So they have no time to examine many patients thoroughly.*