# PHARMACEUTICAL COMPANIES MUST MAKE GREATER COMMITMENT IN AFRICA THAN EVER BEFORE IF WE WERE TO ACHIEVE UNAIDS 2015 VISION

### <u>Pharmaceutical Companies need to do more</u>

Have you ever wondered why despite IDU, MSM and several other high risk sexual practices in the Western World that is uncommon in Africa, the prevalence of HIV is still very low.

The pandits would argue that the subtype C of HIV 1 that is more common in Africa which is easily transmittable than other subtypes of HIV is to blame, while others would argue over the practice of dry sex which causes inflammation and tears in the genetal tracks and other unsafe sex practices for the high prevalence of HIV in Africa, well this might be true to some extent, but the fact of the matter is that pharmaceutical companies who are well established in the western world have not made the kind of investment that Africa needs in providing more health care in terms of information sharing, treatment and care for its people.

# **Despell the myths**

There is a gap in knowledge sharing relating to health issues. There is a need to fill this gap through greater dialogue and close participation of pharmaceutical companies with all stake holders.

Knowledge is key to healthy living. If you ask a common man about condoms and safe sex, you would get an immediate answer, but try asking what sero-conversion is? Or what are the subtypes of HIV 1?

You would most likely never find an answer, on the contrary if you ask some one, Can you get rid of HIV by changing ones blood? Or does 'O' blood group offer immunity against HIV? The answer would resoundingly be a Yes.

Stakeholders need to go deeper into the knowledge sharing aspect of HIV, if you said that only 2% of HIV circulates in the blood and the rest are in the lymphoid tissues, brain and bone marrow and that the concept of changing ones blood will not work, it would certainly raise eyebrows!

If you said that people irrespective of their blood groups can contract HIV and there is no exception to the 'O' group of blood, because all blood types have CD4 cells and that without CD4 cells the immune system will not function, this would raise eyebrows as well.

Some people think that circumcision offers 100% protection against HIV, which is not true, such mistaken beliefs can perpetuate HIV.

Hence there is greater need to reach out to the masses to remove the myths and impart quality information with the participation of all stake holders.

#### Use of therapy other than ARV'S

Belief in alternate therapy and faith healings are rampant in Africa. More work needs to be done in creating awareness on the correct use of ARV's with emphasis on adherence.

Usually those who experience drug resistance (either acquired, or due to non adherence or poor absorption of ARV's) and some times those who see improvement in their CD4 count tend to neglect treatment and eventually experience opportunistic infections and premature death, this has been played over and over again.

The stake holders should enforce measures to disseminate information and knowledge about drug resistance and create more awareness on the efficacy of ARV's.

It should be explained to those one ARV's that alternate medicines when taken together without proper medical evaluation can cause toxic side effects, poor drug absorption in the blood and can be fatal.

Some people spend what little money they have in buying certain supplements to boost their immunity and thus spend too little on the essential foods to maintain a balanced diet as a result there is malnutrition.

Studies have shown that HIV positive people require 30% more calories than HIV negative people and are required to maintain a Body Mass Index (BMI) of around 25, further children who are HIV positive would require as much as 50 to 100% more calories than children who are not HIV positive.

#### Medical issues that needs attention

On the medical front, introducing P24 Ag /Ab testing (4<sup>th</sup> generation testing method) would shorten the window period from 3 months (stand alone Ab test) to 4 weeks, this would help bring down the rate of new HIV infections.

The Viremia is very high during the first few weeks of infection, and a stand alone Ab tests will not detect early HIV infection, there is as much as 2 million copies of HIV in 1 ml of blood during that period, and as result the transmission rate of HIV is very high.

If the 4<sup>th</sup> generation type of testing methods could be introduced, that looks directly for the piece of the Virus which is the P24, that appears even before seconversion, then it would go a long way in controlling the spread of HIV.

This type of testing would help the individuals to be counseled early and corrective action may be taken. Also early testing methods can help in screening pregnant women, and if they are HIV positive, they can be put on early treatment, there by reducing the incidences of Vertical transmission.

Other cost effective measures would be to introduce rapid screening tests at VCT centres for STD's, this can be done for those who test HIV positive. Such spot screening tests would go a long way in reducing the burden on Hospitals where such tests are usually done.

#### **Drug resistance and treatment adherence**

There are several contributing factors such as non adherence of ARV's, reinfection with new strains, poor drug absorption and some times treatment interruption that has caused the virus to mutate and multiply, there by making treatment harder.

If pharmaceutical companies can partner with stakeholders in providing Genotypic and Phenotypic testing for resistant strais of HIV, it would help in choosing the right type /class of ARV's for the patients, and this would improve the quality of life for PLWHA.

# Other diagnostic tests

There is need to develop existing medical facilities and also build more health centres to reach out to the rural masses.

There is need for more awareness about CD4 percentage, CD8 count, determing the timing of M tropic to T tropic switching, CD4 / CD8 ratio, as these diagnostics can add value and will help in studying the disease progression and as result provide better care for PLWHA, these tests will also help to ascertain the right timing for switching from first line to second line of treatment.

There are those who adhere to their treatment regime but due to poor drug absorption or drug pressure may develop resistance to ARV's, such people should have easy access to therapeutic drug monitoring test (TDM).

# Can the pharmaceutical companies take up this challenge?

A boon to Africa will be the availability of ARV's like CCR5 Antagonists and fusion inhibitors since these ARV's inhibit the HIV Virus even before it enters the CD4 cell.

These ARV's which are accessable only to the privileged western World must be made more cheaper and easily accessable, since these could be considered for 3<sup>rd</sup> line of treatment.

Studies have shown that when the viral load is less than 1500 copies /ml of blood, the chances of HIV transmission is very low and this can be achieved only through proper care and treatment provided to PLWHA.

If pharmaceutical companies can make serious commitment by providing good health care facilities to Africa it can turn the tide and we can defeat HIV.

#### **Coinfections**

One of the biggest challenges that Africa is facing is malaria and with a combination of HIV it becomes a double burden with high morbidity.

Malaria is known to increase the Viral load, people with HIV experience an increase in the severity of malaria, and can have multiple occurrences of malaria in guick succession.

HIV positive women who have placental malaria have a greater chance of passing on the Virus to the unborn child as a result of inflammation and ruptures in the placenta.

The other challenge is coinfection with T.B, which is the number one killer of HIV positive people. The two diseases work in deadly synergy.

All these factors emphasises the need for greater partnership and concerted effort in fighting the deadly trio AIDS, MALARIA and T.B.

# **Achievements and hope**

Zambia has made great strides in reducing vertical transmits to almost Zero, in HIV care and treatment, in controlling malaria through roll back malaria programme, sensitising the public about male circumcision and in create greater awareness of T.B as a coinfection with HIV, however many challenges lie ahead in stopping the spread of HIV.

Each year there are newer and better pharmaceutical drugs, diagnostic kits and equipment's that are improve the lives of people.

If only we all can join hands and partner together we can stop HIV cold in its tracks, and make the UNAIDS 2015 vision a reality.