SOME OBSERVATIONS ON HIV & MORTALITY IN SOUTH AFRICA: 2007, 2008 AND 2013.

Annually Statistics South Africa (Statssa) publishes a very comprehensive Report on *Mortality and Causes of Death in South Africa*.

In this context it is necessary to keep in mind that Statssa prepares its Report on the basis of documentation ('death notices') it receives from the Department of Home Affairs.

This is because this is the Department which has the statutory authority to receive and keep reports of births, deaths and marriages.

It is also necessary to recall that all deaths and their causes should be certified by a medical doctor and that this should be reflected in the 'death notices' lodged with Home Affairs.

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We looked through some of the **Statssa Reports** in an attempt to understand the impact of *HIV*, if any, on mortality in our country.

In this regard, one of the Findings in the Report on Mortality in **2007** says:

'*Human immunodeficiency virus [HIV] disease'* was the **ninth** leading cause of death.

The Report on Mortality in **2008** says:

15 097 people died from '*Human immunodeficiency virus [HIV] disease'*. This contributed **2,5%** to all deaths in the country that year.

The Report goes further to say that:

'*Human immunodeficiency virus [HIV] disease'* was the **ninth** leading cause of death that year and gives the total number of deaths as 15 296, which is fractionally larger than the figure above.

It proceeds further to disaggregate this Finding by saying:

"*HIV disease* was the **eighth** and the **ninth** leading cause of death for males and females, respectively."

For its part the Report on Mortality in **2013** says:

23 203 people died from '*Human immunodeficiency virus [HIV] disease'* that year, accounting for **5,1%** of all deaths.

It places deaths from '*Human immunodeficiency virus [HIV] disease'* as the **third** leading cause of death.

Among its Findings the Report on Mortality in 2013 says:

"The **first** leading underlying cause of death amongst **black Africans** was <u>tuberculosis</u> responsible for **10,7%** of deaths in the black African population group, **followed** by <u>HIV disease</u> responsible for **6,2%** deaths.

"For the **white population** group, <u>ischaemic heart diseases</u> were the **leading** cause of death accounting for **11,1%** deaths in this population group **followed** by <u>other forms of heart diseases</u> accounting for **6,7%** deaths.

"For both the **coloured and the Indian/Asian population groups**, <u>diabetes mellitus</u> was the **first** leading cause of death responsible for **14,7%** deaths amongst the **Indian/Asian** population group and **7,5%** amongst the **coloured** population group.

"The **second** leading cause of death amongst the **coloured population** was <u>tuberculosis</u> responsible for **7,1%** deaths while for the **Indian/Asian population** group, <u>ischaemic heart diseases</u> was the **second** leading cause of death accounting for **12,9%** of the deaths."

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Observations

The Statssa Reports indicate that the number of people who died from what it calls '*Human immunodeficiency virus [HIV] disease'* **increased** from 15 097 in 2008 to 23 203 in 2013, that is by 8 106 – a 54% increase over five years.

They also state that in terms of ranking, in 2008 '*Human immunodeficiency virus [HIV] disease'*, accounted for **2,5%** of all deaths in the country, whereas this **increased** in 2013 to **5,1%** of all deaths.

They also say that '*Human immunodeficiency virus* [*HIV*] *disease' rose* from being the **ninth** leading cause of death in the country in 2008 to take the **third** position in 2013.

These *increases* are puzzling given the fact that it is precisely during the period since 2008 that, avowedly, the South African Government engaged in a large scale distribution of anti-retroviral drugs (ARVs).

In this regard, a recent article in the *Sunday Times* says: "*The (South African) department (of Health) has 3.1 million patients on antiretroviral treatment – the largest number of people on treatment in the world."* ['We cannot afford not to roll out Aids drug' by Palesa Vuyolwethu Tshandu: *Sunday Times*, October 11, 2015.]

Indeed on March 18, 2014, *SA^{news}*, a Government News Agency, reported that Statistician General Pali Lehohla *had* "*attributed the decrease in the number of deaths to the massive government intervention to provide treatment to tuberculosis patients and people living with HIV."*

In this context we must note that *tuberculosis* is not treated with ARV drugs.

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We would also like to make this **second observation** that under its "Appendix L: Detailed description of the broad groups of natural causes of death which were among the ten leading causes in 2013" in the Report on Mortality in 2013, Statssa provides a breakdown of what it means by the category "Human immunodeficiency virus [HIV] disease'.

Accordingly it identifies various impacts of '*HIV disease'* as:

- "resulting in infectious and parasitic diseases",
- "resulting in malignant neoplasms",
- "resulting in other specified diseases",
- "resulting in other conditions", and includes
- "unspecified human immunodeficiency virus (HIV) disease".

This suggests that what the Statssa Reports list as deaths from "*HIV disease"* are in fact deaths from '*infectious and parasitic diseases'*, '*malignant neoplasms'*, etc.

Perhaps these are recorded on 'death notices' as "*HIV disease*" because those suffering from '*infectious and parasitic diseases*', '*malignant neoplasms*' etc, test positive for HIV!

If this is the case, serious questions would arise as to why *infectious and parasitic diseases* etc, all of which are well known to medicine, including their causes and treatment, should now be categorised as "*HIV disease*".

[**NB**: The nomenclature used by Statssa suggests that there <u>exists</u> a unique <u>disease</u> called "*HIV disease"* which itself results in other diseases such as the well-known '*infectious and parasitic diseases'* etc! HIV is a *virus*, **not** a *disease*. What then is the suggested unique "*HIV disease"*?

Obviously this is not a mistaken reference to *AIDS* as *AIDS* is **not** a <u>*disease*</u> but a <u>*syndrome*</u>, i.e. a collection of *diseases*!]

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Our **third observation** relates to the Finding in the 2013 Report which states that it is **only** among the **'black Africans'** that "*HIV disease"* is the **second** leading cause of death!

What accounts for this?

Why are **black Africans** unique among all sections of the South African population such that only they die from "*HIV disease*" as the **second** leading cause of death, accounting for as much as **6,2%** of all **black African** deaths?

Could it be that the reported incidence of "*HIV disease"* as it appears in 'death notices' is informed by various stereotypes that have emerged around the efforts to identify the causes of HIV infection and AIDS!

NB: The Statssa Report for 2013 has <u>**no statistics**</u> for **whites** and **Indians/Asians** for deaths from "*HIV disease*". It says that "*HIV disease*" accounted for **4,6%** of deaths among **Coloureds**, ranking **sixth** among the causes of death in this population group. Of interest, similarly it has <u>**no statistics**</u> for *tuberculosis* for **whites** and **Indians/Asians**.

This indicates that the incidence of "*HIV disease"* and *tuberculosis* among **whites** and **Indians/Asians** is so minimal that it is statistically insignificant!

This raises the important question about what is different in the life styles and material conditions of the **black Africans** and the **Coloureds** such that only they suffer from "*HIV disease"* and *tuberculosis!*

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Our **fourth and last observation** is more in the form of a question or query.

That question is – what is the specific Government (public health) response to the burden of disease and mortality as reflected in the Statssa Reports on Mortality and Causes of Death?

The *Sunday Times* article we have cited says:

"South Africa's 2015 total healthcare budget was R136-billion, with R22billion allocated directly towards HIV/Aids programmes. "The country's antiretroviral budget makes up R14-billion of the total HIV/Aids budget, which goes towards the cost of drugs, laboratories and human resources."

[Sunday Times op cit].

Thus the *HIV/Aids* programmes account for **16,18%** of the total national health budget while the cost of ARV drugs, etc, accounts for **63.6%** of the budget for the *HIV/Aids* programmes.

The question is – in what way are these expenditures related to the analytical information contained in the Statssa Reports on Mortality and Causes of Death?

What justifies spending **16%** of the national health budget on a '*disease'* which in 2013 accounted for **5%** of all deaths?

What justifies spending only **36.4%** of the HIV/Aids budget on prevention, counselling and other interventions, and **63,6%** on ARV drugs, laboratories and the associated personnel?

What impact does all of this have on Government expenditures on other causes of death such as the other top four leading causes of death which, together, accounted for **23,7%** of all deaths in 2013?

[In 2013 the four were: *tuberculosis*, *influenza and pneumonia*, *cerebrovascular diseases* and *diabetes mellitus*.]

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NB: With regard to the matter of the difference between a <u>disease</u> and a <u>syndrome</u>, in a 2000 article Smuts Ngonyama wrote:

"A **virus** cannot cause a **syndrome**. As represented by the letter "S" in AIDS, the syndrome includes a collection of diseases, according to the US Centres for Disease Control and others.

"Among these diseases are <u>TB</u>, <u>some pneumonias</u>, <u>certain cancers</u>, <u>diarrhoea</u>, <u>herpes</u> and <u>others</u>. It is because of this that it is said that "opportunistic diseases" cause the death of people living with AIDS."

All the foregoing emphasises the absolute imperative to have a rational discussion about the critically important issue of the health of the nation, which must include the important matter especially of our public health delivery systems as well as an assessment of what might have become accepted as "generally accepted truths".

In the interest of the health of the nation, this process has to be based on a proper comprehension of what is factual and must therefore respect the objective truth.

A VIRUS CANNOT CAUSE A SYNDROME

By Smuts Ngonyama

Business Day (SA) 4 Oct. 2000

Many people in our country do not understand the issues that President Thabo Mbeki has been raising about AIDS.

Part of the reason for this is that the general level of knowledge about AIDS is abysmally low. This is clearly illustrated by the views of your correspondent Wyndham Hartley.

I refer to his article titled Robbie helped govt sidestep consequences of HIV notion (September 14, 2000) He says "President Thabo Mbeki (is) questioning whether the virus causes the syndrome".

I would have expected that, as a senior journalist, Hartley would know the difference between a disease and a syndrome. A virus cannot cause a syndrome. As represented by the letter "S" in AIDS, the syndrome includes a collection of diseases, according to the US Centres for Disease Control and others.

Among these diseases are TB, some pneumonias, certain cancers, diarrhoea, herpes and others. It is because of this that it is said that "opportunistic diseases" cause the death of people living with AIDS.

This is also why even some scientists who are convinced that HIV causes AIDS also argue that this virus negatively affects the immune system only when it acts together with other co-factors.

There are established treatments for each one of the diseases that together constitute the syndrome, based on contemporary scientific understanding of the causes and progression specific to each disease. It is therefore absurd for Hartley to suggest that all these diseases can be caused by a single, common virus, HIV.

Had he checked what "syndrome" means, he would have found that, according to the Oxford English Dictionary, the word means "a set of

concurrent things". It is in this sense that the word "syndrome" is used in the acronym AIDS. It signifies a set of different, concurrent diseases.

Hartley should read President Mbeki's speech at the Durban international AIDS conference and his comments in the recent issue of Time magazine. He will see that, among other things, what the president is challenging is the assertion that AID, AIDS without "S", is the exclusive fault of a single virus.

He is saying that he does not believe that immune deficiency can be acquired, the "A" in AIDS, from a single cause, the HI virus.

To substantiate his opinion, Hartley must produce evidence that HIV is the sole cause of AIDS. It is neither sufficient nor responsible for him merely to argue that all he is doing it to state "conventional wisdom".

After all, the controversy has arisen essentially because the president has asked that science must answer the questions posed by eminent ("dissident") scientists who question this conventional wisdom. The president's international advisory panel on AIDS is working precisely to consider the divergent scientific opinions on this matter.

Some journalists base their offensive against President Mbeki on an argument supposedly in favour of the integrity of science and scientists. They argue correctly that the president is a politician and not a medical scientist.

Yet they do not concede the importance of the panel. The scientists agree that the various factions must expose their views to scientific scrutiny.

On the contrary, the same journalists who pretend to defend the independence and integrity of science argue that there exists an established dogma that everybody must accept and not subject to scientific scrutiny.

Hartley argues that pressure must be put on government to admit "unequivocally the link between HIV and AIDS". He says that it is necessary to do this "simply because it is far safer for SA's youth to believe in the link and to take precautions".

In this context he pours scorn on Education Minister Kader Asmal's call to our "adolescents" to use condoms to avoid teenage pregnancies. Hartley seems unaware of the importance of the social problem of teenage pregnancies. Abstinence and the use of condoms must be some of our responses to this serious social problem, as Asmal correctly said. The minister might also have mentioned the critically important issue of sexually transmitted diseases, such as syphilis.

These diseases are of the greatest importance with regard to a more comprehensive and accurate understanding of how immune deficiency is acquired. Safe sex and the use of condoms are a vital part of the struggle we have to wage to reduce the incidence of sexually transmitted diseases.

SA's youth must take precautions for all these reasons, including the stopping of any other viruses that might be sexually transmitted.

As long as Hartley, and many others, refuse to take the trouble seriously to study all issues that pertain to HIV/AIDS, so long will it take us to have a rational discussion of this challenge.

Hartley writes that "the question whether HIV causes AIDS" must be answered. The question he must answer for himself is why this question is posed at all. It is patently irrational and absurd to ask a question about whether anybody believes that more than two dozen well-known diseases are caused by one virus.

Our country and much of our continent, face a serious health crisis to which all of us must respond, not only government. This crisis includes AIDS, but is not merely made up of AIDS.

We continue to pray that everybody in our country will understand these fundamental truths. This will enable all of us to respond appropriately to the real health crisis that confronts us.

All those among us who take the trouble to think must refuse to be driven to act on the basis of belief and strident propaganda, rather than scientific and medical truths.

Ngonyama is head of the African National Congress president's office.