



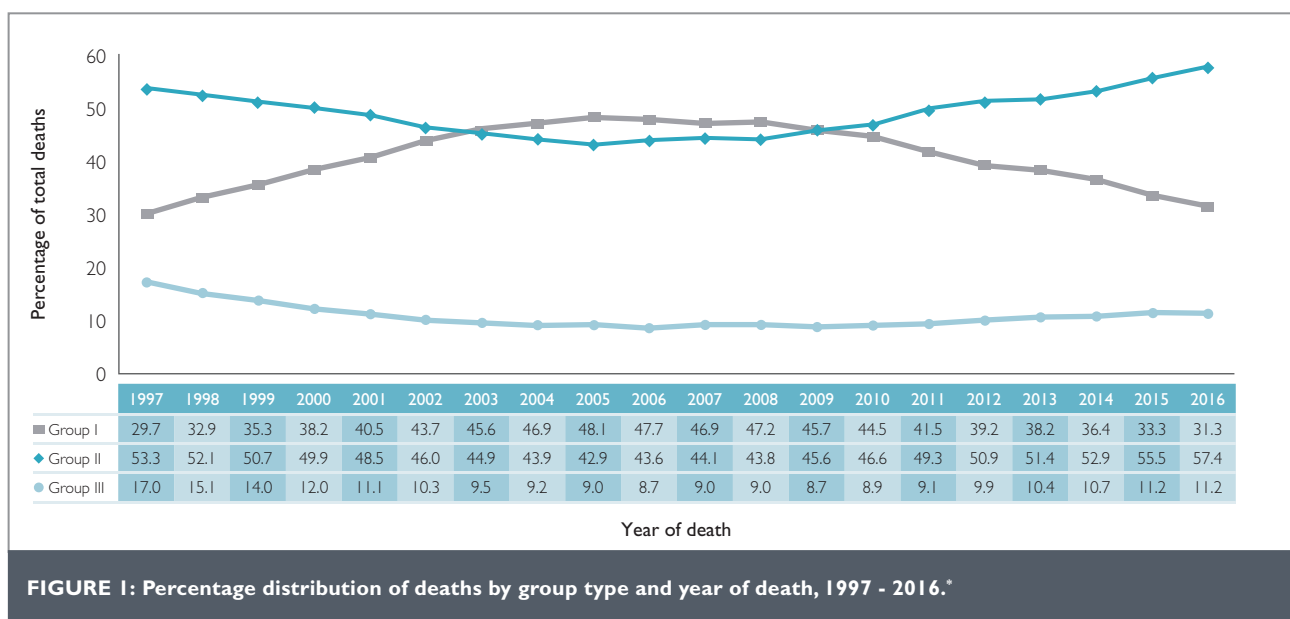
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# The future of cardiovascular disease in South Africa and the role of the South African Heart Association

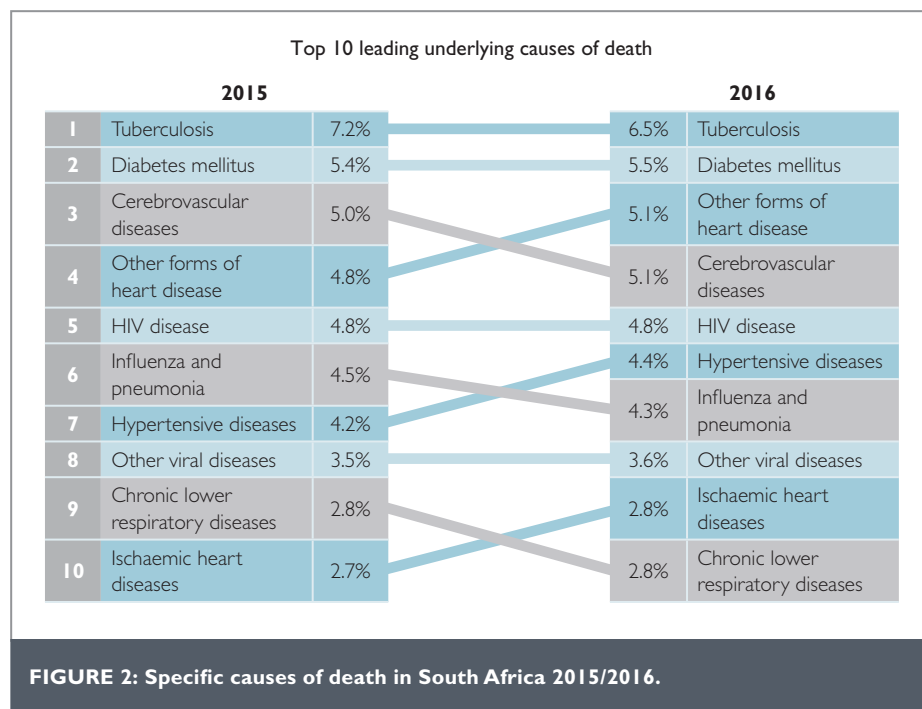
### REFLECTIONS FROM THE OUTGOING PRESIDENT

The Global Burden of Disease (GBD) Study is a programme of disease burden that assesses mortality and disability from major diseases, injuries, and risk factors.<sup>(1)</sup> It allows for systematic quantification of prevalence, morbidity, and mortality for hundreds of diseases, injuries and risk factors of global health importance, and allows for comparison between countries and regions. It has thus been used extensively to inform policy and set priorities, and most importantly to understand the changing health challenges facing people across the world. The GBD has condensed ICD-10 causes of death into 3 groups: (1) Communicable diseases (e.g. tuberculosis, pneumonia, diarrhoea, malaria, measles); Maternal and perinatal causes (e.g. maternal haemorrhage, birth trauma); and Nutritional conditions (e.g. protein-energy malnutrition). (2) Non-communicable diseases (e.g. cancer, diabetes, heart disease and asthma). (3) External causes of mortality (e.g. accidents, homicide and suicide). The South African Statistical Bureau (Stats SA) recently released the mortality and causes of death in South Africa, 2016, with some particularly interesting findings for the cardiovascular community.<sup>(2)</sup> Figure 1 shows the pattern observed over the past 7 years in South Africa (2011 - 2016), with a clear shift to deaths occurring mainly as a result of non-communicable diseases. Non-communicable disease is now clearly the most common cause of mortality (and no doubt morbidity) and is on the increase, while communicable disease is in steady decline. Although the single major cause of death



**FIGURE 1: Percentage distribution of deaths by group type and year of death, 1997 - 2016.\***

\*Data for 1997 - 2015 have been updated with late registrations/delayed death notification forms processed in 2016/2017. Redistribution ill-defined diseases (R00 - R99) proportionately to causes in Group I and Group II.



remains tuberculosis, cardiovascular disease occupies the third position – with an increase from fourth position in 2015 (Figure 2). How do we as an association respond to these realities?

I started writing this editorial a week before the devastating loss of the President of the South African Heart Association 2008 - 2010, Prof Bongani Mayosi, and considering the future of cardiovascular disease in our country without undoubtedly the greatest scientific mind in our community. This has been challenging, but in writing, I am reminded of our very last conversation – his vision for an end to cardiovascular diseases of the poor.<sup>(3,4)</sup>

It is clear to me that our role as an association in the next decade needs to focus on *our* end game – to provide a leadership role in the prevention, detection and response to the huge public health threat of cardiovascular disease in this country, and in so doing preventing premature CVD deaths in all age groups. How as an association are we to do this? I believe we should be attacking this on 5 major fronts:

**Science**

Our association currently convenes the largest national meeting at our annual congress each year and is intricately involved in our special interest groups' educational activities such as AfricaPCR. These meetings showcase science from our established and emerging clinician scientists, as well as that from allied and associated professions. In addition, SA Heart® provides small research grants for scientific endeavours. However, we are aware of large numbers of publications from the communicable disease community, in comparison to the cardiovascular community. In some cycles, we have no applications for our research awards, and in some congresses fewer abstracts from fellows than we would like to see. As an association, we need to lead in science, and we need to empower and support scientific endeavours and provide

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direction for the academic project. This needs to be rooted in our context, the needs of South Africa, and has to be inclusive and growing and promoting a diverse group of researchers.<sup>(5)</sup> I believe we should lobby for significant funding for research into CVD and continue to encourage partnerships for research, coordination and consolidation of research initiatives.

### Human investment

In 2016, several key members of our association and community published a report of the deep concerns around human investment within cardiology, paediatric cardiology, and cardiac surgeons.<sup>(6)</sup> In the following years, we do note some improvement in the numbers of graduating cardiologists as well as the creation of a few new posts around the country. However, we also note with concern reports of severe inadequacies in certain areas. Cecelia Makawane Hospital, rebuilt to great acclaim, has not yet been equipped with a modern echo machine for the paediatric cardiology unit, for example. There are still 4 provinces with no specialised paediatric cardiology services. As an association, we will need to step up into a strong position to highlight these inadequacies and the effect they have on our patients and practice – and as far as possible consider, promote and provide evidence-based solutions to policy-makers and politicians.

### Service

One of the quotations we heard this past week was “The purpose of life is to live a life of purpose”. Our association was constituted to represent the professional interests of all cardiologists and cardio-thoracic surgeons in the country, and on our website we declare that SA Heart® is there to represent, promote and protect the professional interests of cardiologists and cardiac surgeons, as well as promote public welfare by education directed at the prevention and treatment of diseases of the cardiovascular system. All of these are important and needed; however, it is time to move our association beyond our own professional and personal interests and engage more completely and fully into community-level service outside of our professional responsibilities. We can take our example from associations such as the European Society of Cardiology who support outreach and foundation initiatives in many countries. This may be seen as premature in a young association, but we remain part of the African continent, with many parts of our country and continent not as blessed with resources as we are. It is time to link with units that have not had large research endeavours when we consider joint applications, and it is appropriate to consider how we can partner with hospitals with less equipment and fewer projects and initiatives that go beyond professional interests, and consider how we link our positions and associations to service. It was clear to me when I became President that there was not a good understanding in our country of what SA Heart® was. We have attempted to ensure wider visibility and a bigger media presence; however, the issue of what we do and what we represent is the next major frontier – and this needs to be tackled directly.

### Transformation

Prof Mayosi was the first SA Heart® President of colour and thus set the bar for transformation within our community. These past 2 years were the first time that the South Africa Heart Association was led by a paediatric cardiologist. We also see that our executive, special interest groups and board members reflect the diverse nature of our community and cardiovascular practitioners. This represents real progress, but this needs to continue unabated. Women remain in the minority, and representation from private, public and research is not always ideal.

The relationship with special interest groups and allied professionals should be more complementary than competitive, and multidisciplinary initiatives should be encouraged. We should also work very closely with civil society and patient and family support groups to disseminate our messages for prevention, promotion and cardiovascular wellness – as the philosophy of integrating patients into the discourse around their health becomes not only stronger, but based in evidence.

### Professionalism and financial accountability

In general, associations and societies have become professionally run and organised. We, in SA Heart® have had significant financial challenges over the last years and now also face a renewed financial and sponsorship climate. We have had to take some difficult decisions in this context over past years, and this will also continue over the next terms. The possibility to carry out the first 3 thrusts adequately will also largely depend on funding, and thus this does represent 1 of our major challenges. Again, this has called for innovative and inventive thinking, different approaches to our aims of supporting students, fellows and faculty (this year we were the recipient of a major NRF award and have been able to fully support 18 African fellows to attend our meeting and also almost 30 South African fellows), and different links with industry. As we look forward to 2019 and our joint meeting with PASCAR, this will no doubt also require careful consideration and thinking. The key is to remain fiscally prudent, but strong in our vision to be an association that supports its members, the community and science – while remaining true to our position as a South African and African association.

These are my personal reflections, and I hope they will resonate with the new leadership and with the leadership in years to come. I of course will continue to support these and other endeavours into the future – but I can also imagine that David Jankelow and his team may have other priorities and thoughts. It has been an honour to serve in this capacity over the past 2 years, and I wish SA Heart® only the best in years to come. I look forward to watching our association become one rooted in science and service, with a large and diverse group of individuals heavily involved in a professional and accountable association.

**Conflict of interest: none declared.**

### REFERENCES

1. Wang H, Abajobir AA, Abate KH. Global, regional, and national under-5 mortality, adult mortality, age-specific mortality, and life expectancy, 1970 - 2016: A systematic analysis for the Global Burden of Disease Study 2016. *Lancet* 2017;390(10100):1084-1150.
2. Stats SA. Mortality and causes of death in South Africa report for 2016: Findings from death notification. Retrieved from: <http://www.statssa.gov.za/publications/P03093/P030932016.pdf>.
3. Sacco RL, Roth GA, Reddy KS, et al. The heart of 25 by 25: Achieving the goal of reducing global and regional premature deaths from cardiovascular diseases and stroke: A modeling study from the American Heart Association and World Heart Federation. *Glob Heart* 2016;11(2):251-264.
4. Kwan GF, Mayosi BM, Mocumbi AO, et al. Endemic cardiovascular diseases of the poorest billion. *Circulation* 2016;133(24):2561-2575.
5. Commerford P, Mayosi B. An appropriate research agenda for heart disease in Africa. *Lancet* 2006;367(9526):1884-1886.
6. Sliwa K, Zühlke L, Kleinloog R, et al. Cardiology-cardiothoracic subspeciality training in South Africa: A position paper of the South Africa Heart Association. *Cardiovasc J Afr* 2016;27(3):188-193.