

SAMA INSIDER

OCTOBER 2020

**Do doctors need to
belong to a trade union?**

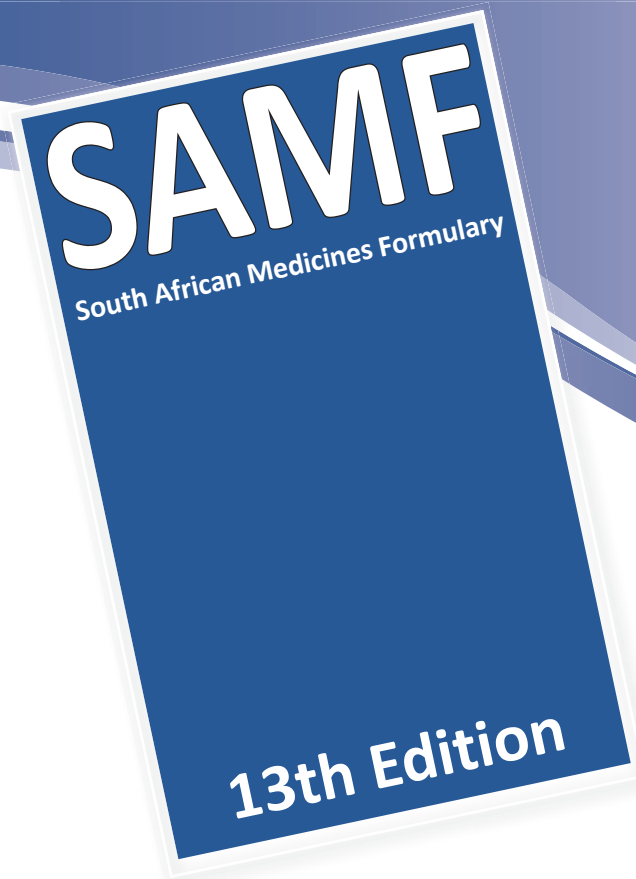
**Advocating occupational
health services for
all health workers**



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Diane de Kock
Editor: *SAMA INSIDER*

A reawakening?

As the country eases back into a new 'normal', the need to address issues highlighted by COVID-19 becomes paramount.

In this *SAMA Insider* we focus on some of these issues. In his article (page 5) Prof. Gumede says, "SA's governance model, the way the country is run, is broken ... without a new governance model, the country will be unable to sustainably, quickly and peacefully overcome the COVID-19 health, social and economic crisis."

SAMA President Dr Maweya questions whether doctors need to belong to a trade union (page 4): "Unionisation of doctors has its own challenges, and creates ethical and moral issues for the doctor"

Speaking from the frontline, Dr Randall Ortel (page 6), who works at Mitchell's Plain Hospital in Cape Town, believes there is a "great need for occupational health practitioners to be a part of any hospital's management composition ... medical personnel's wellbeing is as important as that of patients."

SAMA's health policy researcher, Bernard Mutsago, says (page 9): "Now more than ever, SA needs to reshape and maximise its public and environmental health capabilities if the country is to overcome the raging epidemics of contemporary times." He appeals to readers to use World Environmental Health Day (26 September) "to reflect on the welfare and health effects of environmental approaches to combat epidemics."

The COVID-19 pandemic has exposed the fragility of the health system in SA (page 10). Dr Adil Khan, the executive producer of the documentary "Behind the Frontline", launched an investigative exploration into the toxicity of the health workplace in SA 3 years ago. "Our selfless, heroic and fragile frontline healthcare workers need our attention and protection now more than ever."

Prof. Nathavitharana and Isabel Foster (TB Proof)'s article "Afraid to die, afraid to go to the clinic" emphasises that "it is critical to understand and address the reasons why SA men have historically ignored their coughs, including socioeconomic barriers and mistrust in the healthcare system" (page 11).

The need for a reawakening is great – COVID-19 has provided an opportunity to refocus as we move into our new "normal". Let's grab it with both hands.

Editor: Diane de Kock
Head of Publishing: Diane Smith
Copyeditor: Kirsten Morreira

Editorial Enquiries: 083 301 8822 | dianed@samedical.org
Advertising Enquiries: 012 481 2062 | 021 532 1281
Email: dianes@samedical.org

Senior Designer: Clinton Griffin

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Block F, Castle Walk Corporate Park, Nossob Street
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Do doctors need to belong to a trade union?



Dr Sizeka Maweya, SAMA President

A trade union is an organisation of workers that promotes and protects the interests of its members in issues such as wages and working conditions, primarily through negotiations with employers. Trade unions do not have to be registered with the Department of Labour, but registered unions have additional rights.

Recently, SAMA has experienced turbulence around the issue of a trade union. One question that has arisen is whether doctors might benefit from organising themselves through unionisation. Professional bodies exist all over the world. However, in SA, for one to be heard in employment disputes with an employer, the assumption is that one must belong to a trade union.

The Labour Relations Act No. 66 of 1995 (LRA), emphasises collective agreements and the need for organised labour and business to regulate their relationship. Organised labour needs to enter into collective agreements that bind the employer and the union members. Before 1994, this law did not exist, and workers did not belong to trade unions. Immediately after the advent of the LRA, workers felt that they needed to belong to a trade union to have a say in their conditions of employment.

Do doctors need to belong to a trade union, and what is the primary duty of a doctor? According to Howard (2020), doctors have to consider that before unionisation

can take place, they face many practical, emotional and moral obstacles. A doctor must take care of patients. Doctors are not allowed to strike, while in the case of trade unions, strikes are seen as the only way to make the employer listen to employees. Doctors have a moral duty toward their patients and society at large not to strike.

It is unethical for a doctor to neglect patients in order to prioritise his or her pay. Unionisation, therefore, cannot be ethically correct for the doctor. The ethical principle of "do no harm" cannot support a strike since a doctor must be available to his or her patients. The doctor must always fight for the rights of patients.

There are many advantages of unions, including collective bargaining for better working conditions, protection from legal action and the ability to advocate for improved patient care.

However, we can achieve these results by negotiating with the Department of Health. Unionisation of doctors in our country has created many divisions in the already strained relations among medical professionals. Doctors must consider a few things before joining a union: they must evaluate whether the union's objectives are in line with their values. Ironically, in order to fight for autonomy in clinical practice as union participants, doctors would have to sacrifice some of their individuality. The ethos of unions is that an injury to one is an injury to all. Individuality is not promoted when one belongs to a union.

Doctors have a moral duty toward their patients and society at large not to strike

When doctors join a union, they must take cognisance of the fact that actions taken by the union will reflect on them. These actions could affect how they are viewed by their patients, peers, supervisors and future employers. We, as doctors, must reflect on these issues since we will be judged by society and our families. In April 2009, doctors went on strike in SA to fight for the improvement of their salaries.

By utilitarian reasoning, a doctors' strike for a fair wage, better hospital infrastructure and improved working conditions is justifiable if it causes little harm to present patients and the greater good for future patients.

This action would not have been necessary if the government had met the promises they had made about occupation specific dispensation. In order to achieve what they wanted, doctors needed to gain the sympathy of the general public first. In SA, doctors are considered essential workers, and as such, they are not allowed to strike. Doctors' strikes bring suffering and sadness to the majority (the patients, the public and the government). A doctors' strike can never be morally justifiable. It is time for doctors to look for better ways to be heard by their employer.

Unionisation cannot be ethically correct for the doctor

Strikes imply failure by everyone in the organisation (including the strikers themselves), not only the responsible government or authority. Unions, by their very nature, gain leverage by striking if their demands are not met. Doctors cannot be seen to engage in strikes, while for unions, their last bargaining chip is to go on strike. Collective action poses ethical complexities for doctors, who are among the few professionals bound by oath to those they serve.

According to the American Medical Association's Principles of Medical Ethics, "a physician shall, while caring for a patient, regard responsibility to the patient as paramount." Doctors in SA also follow this principle. However, due to the unionised environment they work in and the nature of the profession in the country, they are often divided.

Unionisation mostly affects doctors employed by the state. Labour unions have often been used as political pawns for politicians to gain access to government, and to fight battles for politicians, which SAMA cannot be part of. SAMA must strive to come up with a strategy to represent its employed doctors. Unionisation of doctors has its own challenges, and creates ethical and moral issues for the doctor.

SA needs a new governance model post COVID-19

Prof. William Gumede, Wits School of Governance



SA's governance model, the way the country is run, is broken.

Without a new governance model, the country will be unable to sustainably, quickly and peacefully overcome the COVID-19 health, social and economic crises, and is likely to plunge into protracted economic stagnation, breakdown of the social order and potentially violent unrest. To save SA from such a frightening fate, a new governance model is urgently needed.

Here are 10 pillars that should be the foundations of a new post-COVID-19 governance model for SA.

Evidence-based policy must be a key pillar of the management strategy model of the country. This will make government policy more logical, credible and palatable to wider constituencies. Over the past few years, government policy-making has often appeared to be based on ideology, wishful thinking or corruption.

Merit must be principle of government operations. The talents of all South Africans, no matter their colour, ethnicity or political affiliation, must be used to rebuild the economy. Merit-based appointments to government positions and to structures that oversee COVID-19 economic restructuring are crucial. Crony, cadre and pork-barrel appointments to government structures have wrought destruction since 1994, undermining public service delivery, wasting scarce public funds and destroying government's credibility. Government contracts must be awarded based on merit, fairness and value for money.

Common sense must drive government decisions, actions and policies. Many government policies, decisions and actions

over the past years have made little rational sense. This definitely has to change.

There has to be greater **accountability** from elected and public representatives. There must be consequences for wrongdoing, and people must be held accountable. The culture of impunity must come to an end. Accountability strengthens the credibility of government, and importantly, motivates citizens to willingly comply with government directives. If citizens perceive a lack of accountability among elected and public representatives, they will readily defy government injunctions.

There need to be **partnerships** between the public, the private sector, civil society and communities to reconstruct the post-COVID-19 economy. The private sector and civil society are not the enemies of government, as many ANC leaders may misguidedly believe. It is also a fallacy to think, as many ANC leaders do, that the state can go it alone to tackle COVID-19. The state simply lacks the capacity, resources and ideas to execute economic policies on its own. Partnerships not only bring goodwill, they bring skills, resources and wider buy-in for policies, decisions and delivery.

The capacity, resources and talents of the public sector, private sector and civil society will have to be combined to tackle COVID-19. To deal with the lack of public sector capacity, the private sector and civil society could each be assigned to deliver specific services, which the state is either incapable of doing or is doing ineffectively. In the health sector, for example, there must be a sharing of resources, based on a partnership between the public and private health sectors, in a public-private partnership model of delivery.

Similarly, as part of the partnership approach, civil society groups could help co-deliver public and basic services in communities – from tackling gangsterism, combating gender-based violence and fostering community-building programmes to keep crime down and supporting the vulnerable.

Government must govern **honestly**. Without honesty, there cannot be trust, the glue for effective partnerships, citizen compliance and willingness to behave in a public-spirited manner. This includes government communicating honestly to citizens, beyond the traditional faceless press

statements, doublespeak and gobbledygook, and is crucial to rallying citizens behind government initiatives.

Entrepreneurship has to be at the heart of post-COVID-19 economy reconstruction. Entrepreneurs create new industries, new jobs and new wealth. They increase the size of economies. They fuel economic growth. They inspire a virtual cycle of others trying their hand at starting new businesses, new developments and new initiatives too. In SA, entrepreneurship will have to be promoted across society – within the state, the private sector, civil society and communities.

Corruption has to be tackled with greater seriousness. No successful post-COVID-19 reconstruction is remotely possible without the government seen to be tackling corruption, especially that of politically connected untouchable ANC cadres, political capitalists and tenderpreneurs, who get government tenders solely because of their connectedness to the ANC and government leadership. Corruption that is not dealt with destroys trust and the credibility of government, and encourages corruption across society.

The rule of law is fundamental. It must apply to everyone equally. The rule of law cannot only be applied to ordinary citizens. The politically connected cannot be exempted from the law, as has been the case since the end of apartheid. Neither should there be untouchables who appear to be above the law such as minibus taxi drivers and bosses, gangsters and building hijackers.

The **poor, vulnerable and marginalised** must always be cared for: without this, any post-COVID-19 reconstruction will be undermined, as their anger will explode into protests, violence and social disorder. A new governance model is a crucial, basic necessity to mobilise all SA's resources, talent and ideas to sustainably, quickly and with the least social disruption tackle the multiple health, financial and social crises unleashed by COVID-19.

This is an edited extract from the academic review "Priority setting for interventions in pre- and post-pandemic management: The case of COVID-19", analysing government's COVID-19 response. The report was prepared in partnership with the SA Technology Network and national scientists and organisations.

Advocating occupational health services for all health workers

SAMA Communications Department

It is a well-worn cliché that health professionals are single-minded in their care for patients, but often forget to also look after themselves. Unfortunately, the care of health workers, including in medical facilities, is often overlooked, a situation that can lead to burnout, compassion fatigue, anxiety and stress among the very people who are looking after others' wellbeing.

"Too often we see that medical facilities are so focused on patients that they don't focus enough – or at all – on medical staff. My aim is to provide some insights to managers on how to reverse this trend, which will make doctors, nurses, and other health workers more comfortable in their workplaces and, in the end, benefit patients," says Dr Randall Ortel, occupational medical practitioner and senior family medicine registrar at UCT.

Following the announcement by President Ramaphosa of a national lockdown on 26 March, many places throughout the country began to experience surges in coronavirus cases. In the Western Cape, the number of patients – and staff – at the Mitchell's Plain District Hospital (MPDH) with COVID-19 began picking up in May 2020.

At the time, the Western Cape health department called on hospital managers to intensify efforts to mitigate the risk of contracting COVID-19 among healthcare workers. Dr Ortel, who was then rotating at the MPDH as part of his registrar time in obstetrics and gynaecology, was appointed to the Occupational Health and Safety Clinic at the hospital to assist with staff care and management as an additional role.

While consulting COVID-positive staff daily, he spent June and July 2020 investigating the issues around COVID-19 and healthcare workers at the facility.

"Among our key findings was that higher age groups were more susceptible, and more females at the hospital tested positive, purely because of the ratio of males to females who work there. In terms of comorbidities, patients with hypertension and diabetes had higher infection rates. This was all important data, but there is more to the story than purely the numbers. Ultimately, I needed to establish how these workers were managing, and being managed, after their positive results," he says.



Dr Randall Ortel, Joan le Roux (enrolled nurse) and Ruweyda Philander (admin clerk) at Mitchell's Plain District Hospital

It was at this stage of the research that Dr Ortel identified certain problems.

"Firstly, while most health workers tested at the hospital's facilities, some tested privately because of convenience, not knowing that the testing service existed at the hospital, or because of a possible perceived stigma around being infected with COVID-19. These workers didn't realise that as healthcare workers, if they tested positive during the course of performing their work duties, this may be a case of occupationally acquired COVID-19 that would need to be reported for possible compensation as per the Compensation for Occupational Injuries and Diseases Act [No. 130 of 1993] (COIDA)," he says.

The Act makes provision for medical expenses, temporary and permanent incapacity and death benefits to be paid in the event of a worker contracting an occupationally acquired disease. While differentiating between community and occupationally acquired COVID-19 infection became more challenging with the progress of the pandemic, because of the high risk inherent in healthcare duties, all such workers should be given the benefit of the doubt and reported as potential cases of occupationally acquired COVID-19 in the workplace.

Dr Ortel says it frustrates him when health workers are asked to "prove" where they were

infected, when in fact it is accepted that as health workers, they acquired it from their place of work, a fact that places an onus on the employer to provide care at its cost, via the compensation process with the Department of Employment and Labour (DoEL). If in doubt, employers are encouraged to submit the necessary compensation documentation, and allow the DoEL to make the final decision.

Occupational health practitioners should be part of any hospital's management composition

"When some of these workers presented for treatment, their medical aid information was obtained, and where there was uncertainty as to who to bill for treatment of an occupational disease, I would intervene and use this as an opportunity to advocate for fair practices in line with the necessary occupational health legislation and departmental guidelines. Many health workers were not aware of what

costs the DoEL is likely to pay, and I used the time in the clinic to raise this awareness and ensured that they are informed of this," says Dr Ortel.

And, Dr Ortel notes, the care provided by the employer must extend to cover for medication, must include a worker being paid while on occupational health leave (note, not annual leave), and must include assistance with completing the necessary COIDA forms required by government to process claims. The allocation of COVID-19 leave v. sick leave is in discussion with higher authorities at present.

"Part of my involvement at the MPDH was also to educate health workers and management on each of their rights and obligations to ensure that everyone is protected within the framework of what the law allows. It's a critical element of managing healthcare workers, but I think it's an element that is too often neglected," says Dr Ortel.

Following his initial research and findings, Dr Ortel made several recommendations in relation to occupational health to the MPDH.

"What I wanted to highlight was that staff are also affected by COVID-19, and their care is as important as the care patients receive," Dr Ortel explains.

"Another recommendation is that line managers become better equipped, or acquire skilled personnel who can, to do risk assessments in the workplace and on individual health workers, risk mitigation, medical surveillance and regular training on a continuous basis rather than during a crisis. This means that risks are identified, managed and treated before adverse health outcomes are encountered, such as contracting COVID-19. This is important because non-communicable diseases such as high BMIs (overweight and obesity), diabetes and hypertension, for instance, are not going away and can be mitigating factors in the future," he notes.

Dr Ortel says the lessons learnt from the MPDH are important, and must be applied to other health facilities. He says the same amount of energy that goes into educating patients about health risks, and their rights as patients, needs to be extended to health workers. But, he notes, this must be done proactively and not as an emergency measure when crises arise.

"Health workers also have an obligation to be actively involved in protecting their own health and that of coworkers. This can be done by asking about the necessary infection prevention and control and health and safety protocols, about standard operating procedures, how the law affects them at work, and what their rights and responsibilities are, thereby educating themselves as well. It's absolutely critical that all health workers are equipped with the right knowledge and become active participants in ensuring the health and safety of all in their workplace. This includes becoming part of occupational health and safety committees, something many health workers would prefer not to do, but yet is so vital," he cautions.

"Medical personnel's wellbeing is as important as that of patients"

Importantly, he says, health workers and colleagues must have access to occupational health services in the future, as government has realised that investing more into this sphere of healthcare will be beneficial.

Dr Ortel says it was important that management at MPDH appointed him to set up this clinic, as it demonstrates their commitment to ensuring the wellbeing of their medical staff.



Dr Randall Ortel

"My experience working at MPDH with COVID-19 positive staff was amazing, and I applaud the hospital for taking this step, and was grateful for the opportunity they gave me. My hope now is that other hospital managers consider doing something similar in the interests of their colleagues; once they see the results they will realise that a united effort will yield collective improvement across all facets of care," he says.

As for his research and findings, Dr Ortel says the MPDH management is extremely receptive to his advice. He says he has discussed his findings with other managers in the district, and that his recommendations were also well received by them.

"I think there is a great need for occupational health practitioners to be a part of any hospital's management composition, either in permanent or consultative roles. They come with a different view in terms of staff, but also with a medical background. It's a critical function and will, I believe, ensure that staff has access to occupational health services and is better cared for in terms of their occupational environment in future," he says.

Letters to the Editor

The *Letters to the Editor* page aims to give members the opportunity to comment on, query, complain or compliment on any matter, topic, incident, event or issue in their particular field or with regard to general healthcare, which you feel should be shared with your colleagues and fellow readers.

Please note that letters:

- should be no longer than 500 words
- can be published anonymously, but writer details must be submitted to the editor in confidence
- must be on subjects pertinent to healthcare delivery
- should be submitted before the 6th of the month in order to be published in the next issue of *SAMA Insider*.

Please email contributions to: Diane de Kock, dianed@samedical.org.



Memorial to hospital workers unveiled

SAMA Communications Department

A memorial to frontline workers during the COVID-19 pandemic was launched at a dialogue organised by the Board of Healthcare Funders to celebrate women healthcare workers (HCWs) as part of Women's Month in August.

The Healthcare Workers Heroes Memorial aims to recognise and remember all those "who have fallen in the line of duty". Yet, unlike soldiers, for whom monuments and memorials have traditionally been constructed, the duty of those who fell in the COVID-19 "war" was not to take lives but to save them. They lost their lives saving others. They could have stayed at home and refused to work. They did not. They followed their calling and worked in the line of fire.

The audience of 150 mainly women HCWs watched a digital list containing the names of many of those who have died. It brought home the scale of the pandemic and the effect it has had (<https://www.youtube.com/watch?v=7PPTnYHtbKw&feature=youtu.be>).

The loss of so many doctors and nurses in SA alone is shocking. The Minister of Health, Dr Zweli Mkhize, reported 181 deaths (the number has still not been calculated for Africa), and this has huge implications for future healthcare in Africa.

Dr Maggie Mojabelo, the doctor who initiated the memorial, said the memorial is a "long overdue" recognition of all HCWs who die in the line of duty, be it from COVID-19, multi-drug resistant-TB or mental illness, something that many healthcare workers develop as a result of the stressful conditions they work under.

"After seeing all the pain, it just said to me we cannot go on as usual," she said.

"I did the same thing in the East Rand with Thokoza Monument, at the time when there was hopelessness, death and destruction ... My practice was situated in the middle of Khumalo Street, a no-go area at the time, and it became the casualty treatment centre as the ambulance could not get in."

Sadly, the roll of honour is far from complete. Within hours of the launch on 11 August, the names of three more doctors who had died came in.

Mojabelo explained that her team had created the list from many sources. They drew upon a WhatsApp grapevine that carries



The memorial aims to be inclusive and to flatten hierarchies

news of each new death, but there were also newspaper reports and word-of-mouth networks that revealed names.

It is a dynamic and developing memorial: names will be added as they come to light and Mojabelo appeals in particular for names of nurses and ancillary workers whose deaths often get less attention than those of prominent doctors.

The memorial aims to be inclusive and to flatten hierarchies – it will accord the clinic cleaner, security guard or driver (often the most exposed and least protected from infectious disease) the same honour as the

specialist surgeon or medical doctor. Class or qualification are not criteria for inclusion.

The memorial includes HCWs from other African countries, recognising that those across the continent work under the same difficult conditions, often in health systems that are under-resourced and with populations that bear the same diseases of poverty and inequality.

A second video (https://www.youtube.com/watch?v=IS5WMQGuw_Q&feature=youtu.be) conveyed short messages from HCWs in Eswatini, Lesotho, Nigeria, Tanzania, Egypt and Ghana. In keeping with the memorial's pan-Africanism, the unveiling was led by Dr Matshidiso Moeti, regional director of the WHO, who said: "I've seen HCWs across Africa working in the most deprived conditions, but still showing love, comfort and sacrifice. That is why they deserve investment in their safety and conditions, and to not have their lives placed at risk ... We need to make the health workplace fair and safe," said Moeti.

As far as Mojabelo is concerned, the aim of the memorial is not just to preserve the memory of those who have passed on, but it's also about advocacy for HCWs who still serve in our healthcare facilities. It's about support for the families of those who have died. "We need to look at proactive interventions that minimise risk in the health workplace."

Specifically, she talked about the need to "research reasons for the suicide rate among health professionals", and why rising stars like Prof. Bongani Mayosi take their own lives.

When it comes to families, she records names such as Sister Nombimbi Elizah Kosie, who died on 26 July after working for three decades at Thelle Mogoerane Hospital in Gauteng.

Mojabelo lamented that "when the bells and church services are over, the reality dawns on the families. The deceased are often breadwinners; sometimes they leave behind young children. Aftercare is important, but there's no strong support system."

If you have a friend, relative or colleague whose name should be added to the memorial, please send to: info@healthcareheroes.co.za or WhatsApp +27829016112 or e-mail: drmaggz@gmail.com.

Source: Daily Maverick.

Environmental health demands stronger commitment in SA

Bernard Mutsago, health policy researcher, SAMA Knowledge Management, Research and Ethics Department



Now more than ever, SA needs to reshape and maximise its public and environmental health capabilities if the country is to overcome the raging epidemics of contemporary times. The most recent epidemic, COVID-19, has highlighted the country's health system deficiencies and social protection loopholes. This year's World Environmental Health Day (26 September) is aptly themed "environmental health, a key public health intervention in disease pandemic prevention". Coinciding with the eye of the COVID storm, the 2020 theme reinforces environmental safety as a crucial protective measure against current and future outbreaks.

Environmental health is concerned with the assessment and control of those environmental factors that can potentially affect health, and is targeted towards preventing disease and creating health-supportive environments. Safe environments are an element of the social determinants of health emphasised by the WHO Commission on the Social Determinants of Health. Sustainable Development Goal 3.9 targets a substantial reduction in the number of deaths and illnesses from hazardous chemicals, as well as air, water and soil pollution and contamination, by 2030. Sadly, as widely documented globally, COVID-19 has aggravated the situation by generating massive amounts of medical waste in the environment.

The most recent catastrophic disease outbreaks globally include Ebola, cholera, the H1N1 flu pandemic, MERS, SARS and meningitis. The great majority of emerging and re-emerging diseases globally have links

to the environment. Today, 60% of all infectious diseases in humans, and 75% of all emerging infectious diseases globally, are zoonotics (i.e. diseases transmitted between animals and humans). Evidence recognised by the WHO suggests that COVID-19 has a zoonotic source, i.e. it is likely that its first transmission to humans was through an animal species. Zoonosis is bred and driven by humanity's interaction with the environment.

A substantial proportion of SA's multiple burdens of disease is attributed to the environment. This calls for better investment in environment health by the SA government than currently seen. In the SA context, environmental health services are a function of all three spheres of government, namely national, provincial and local. Local municipalities bear the greatest responsibility for municipal health services, which include water-quality monitoring, food control, environmental pollution control, vector control, surveillance and prevention of communicable diseases, health surveillance of premises, waste management and general hygiene monitoring, disposal of the dead and chemical safety management. Port health is a function of the National Department of Health (NDoH).

COVID-19 has highlighted the country's health system deficiencies and social protection loopholes

Two of the top five leading causes of death in children under 5 – diarrhoea and pneumonia – are linked to environmental factors. The WHO estimates that in SA, 124 of every 100 000 deaths of children under 5 are linked to the environment. Sadly, SA's situation with respect to environmental determinants of health is precarious. The World Wildlife Fund

identifies SA as one of the 30 driest countries in the world. In 2018, nearly 20% of SA households did not have access to improved sanitation facilities. The scarcely available surface water and groundwater sources are rendered undrinkable due to irresponsible mining, medical, sewer and agricultural waste pollution – ascribable to deficient environmental safety law enforcement. The most recent (2019) SA Health Review notes that, based on a WHO framework for Universal Health Coverage (UHC) service coverage index, SA had environmental health services compliance rates of 43%, 63%, and 62% in 2016, 2017 and 2018, respectively.

Even before the COVID pandemic arrived in SA, the country's environmental health landscape was cause for concern. The current distribution of environmental exposure in SA first of all shows inequitable patterns that may be traced back to the apartheid and colonial past. The SA government's delay in settlement development has resulted in a huge housing backlog. In consequence, more than 4 million South Africans live in the 2 700 informal settlements found across the country. Such dwellings are characterised by indoor pollution, overcrowding and unsanitary conditions that enable a perfect ecosystem for illnesses to evolve. Similarly, despite robust national and international policies and legislation in place, government's laxity in monitoring and enforcement has seen unrestrained environmental contamination and poor pesticide management practices, among other harms, which have affected water potability for surrounding communities. As we have seen in the media, ongoing acid mine drainage, especially in the Gauteng West Rand region, is devastating to the livelihoods of surrounding communities, and these have begun mounting an organised push back involving the courts.

In the face of COVID-19, the already scarce resource at the centre of environmental health services – the environmental health practitioner (EHP) – was further constrained. There are currently about 1 - 2 EHPs per 100 000 population in SA, far below the WHO and NDoH norm of 10 EHPs per 100 000 population. The consequences of such compromised

staffing norms and poor budgetary resources have been catastrophic. Compromised service delivery by municipalities has contributed to the low environmental service compliance rates reported among municipalities.

A substantial proportion of SA's multiple burdens of disease is attributed to the environment

One of the most vital battles in ensuring an effective response to current and future epidemics is the battle to achieve interprofessional, interdepartmental and intersectoral collaboration on environmental

issues. For too long, professional disciplines in SA and globally have enjoyed working in silos. Recognising this, in June 2018, SAMA hosted its first meeting on multiprofessional collaboration on One Health in SA. The meeting drew international delegates from the One Health Commission and the One Health Initiative. Local participants were the SA Veterinary Association, the HPCSA, the National Institute for Communicable Diseases, the University of Pretoria, the Public Health Association of SA and the SA Nursing Council. Participants were unanimous about breaking professional silos, integrating One Health into the training curricula and strengthening existing One Health networks in SA, such as the One Health Forum, among other things. Medical management alone, with its focus on individual-level factors, is insufficient to address the quadruple burden of disease in SA. More emphasis should be placed on the

full range of environmental or population factors.

Let us all use World Environmental Health Day to reflect on the welfare and health effects of environmental approaches to combat epidemics. COVID-19 is a wakeup call for the government and multiple stakeholders to place more emphasis on less costly, preventative, life-saving approaches such as creating a safe environment for our citizens. As an illustration, in the absence of a COVID-19 vaccine or a confirmed treatment regime, SA has survived the worst of COVID-19 through, by and large, implementation of environmental, preventative approaches, namely social distancing, hand-washing and mask-wearing. We cannot take solace in the anticipation of a post-COVID era, as the disease may be with us for a long time, and so investing in what is proven to work and is cheapest for the country is the winning formula.

Tygerberg Hospital dives into a novel PPE solution

SAMA Communications Department

Personal protective equipment (PPE) shortages are being tackled in a novel way at Tygerberg Hospital, the Western Cape's largest hospital. Combining creativity, diving equipment and the need to stay healthy, doctors and nurses are using modified snorkel masks to stay safe while intubating critically ill patients.

"These masks cover the whole face, forming a tight seal, and are usually used for snorkelling in tropical waters," the hospital said. "They have been modified with the addition of a breathing filter where the snorkel would usually be. Using these full-face modified snorkel masks, the doctors are now completely protected from breathing in the COVID-19 virus while performing highly contagious airway procedures."

The idea originated in Europe, after hospitals ran out of PPE at the peak of the COVID-19 outbreak. Tygerberg Hospital's neonatologist and paediatrician Dr Lizelle van Wyk bought into the idea when she heard about it.



Van Wyk, who is also an avid diver, approached her colleagues Dr Jack Meintjies and Prof. Pierre Goussard with the idea, and to modify and approve this mask. "The modified snorkel masks are now routinely used by the paediatricians

for intubation and bronchoscopy in children suspected of being COVID-19 positive," the hospital said.

Source: Medical Brief.

Investigative documentary looks at the effects of toxic work conditions for frontline healthcare workers

SAMA Communications Department

The COVID-19 pandemic has exposed the fragility of the health system in SA. Dr Adil Khan, executive producer of the documentary *Behind the Frontline*, says: "We were made acutely aware of the collective need to protect health resources, to flatten the curve, in order to maintain a functioning health system. However, prior to COVID-19, the system was already fragile due to the fragility of its main functional cog: the healthcare worker."

Almost 3 years ago, he launched an investigative exploration into the toxicity of the health workplace in SA, collecting real-life anecdotes and lived experiences of everyday healthcare workers in the country. "We crafted a documentary around these anecdotes (that are devoid of personal identifiers) to explore the landscape of the healthcare worker/health system interface."

The investigative documentary exposes the discrimination, bullying, working conditions and harassment experienced by the country's healthcare workers on a daily basis. The underlying systemic reasons for this are highlighted: patriarchy, toxic hierarchy, tough working conditions, lack of accountability and leadership, and the fear of reprisal when speaking up or whistleblowing, among other factors. A common theme in these anecdotes was that of the internalised effects on respondents' mental health. "I've seen it with colleagues and friends at university. Probably the most shocking and notable revelation was the suicide of Prof. Bongani Mayosi at UCT, but there were many others," says Dr Khan.

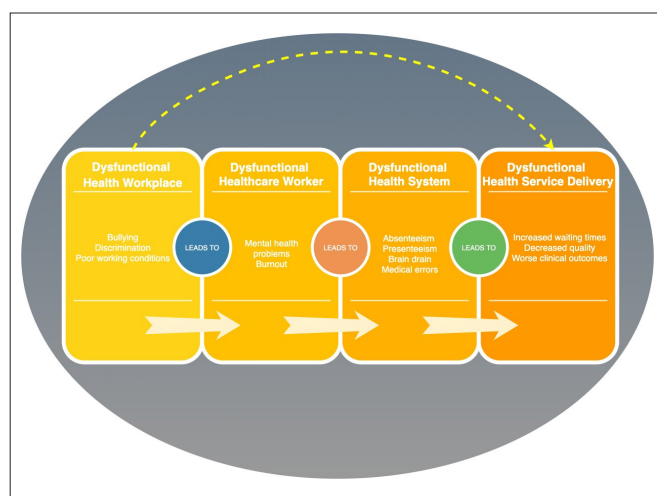
How issues such as gender discrimination and racial bias impact the mental health of medical professionals, and the overall implications for SA's healthcare system, are also investigated. The final segment focuses on potential solutions.

"The intention was to craft this narrative into a high-impact investigative documentary. We are upfront that the tone/purpose of the documentary is not to be sensationalist, to name and shame or ruin careers. With this in mind, we were successful in persuading a shortlist of candidates to share their stories and experiences on film. In addition to this, we interviewed a representative from the Junior Doctors Association of SA, an occupational psychologist and a medical media personality," says Dr Khan.

"A key message that we are driving home for lay viewers is that there are not only individual effects (burnout, mental health problems) to the healthcare worker of a toxic medical workplace, but systemic effects too (brain drain from the health system, increased medical errors, increased absenteeism/presenteeism)." These effects and the importance of this work are summarised in the figure.

"Our selfless, heroic and fragile frontline healthcare workers need our attention and protection now more than ever," comments Dr Khan. "Thus we believe the climate to deliver a powerful message of hope is ideal."

The live virtual premiere is scheduled for 30 September 2020, and is free to view. Visit <https://www.btfdocumentary.com> to register.



Afraid to die, afraid to go to the clinic

Prof. Ruvandhi Nathavitharana, vice-chairperson, TB Proof, Isabel Foster, research assistant, TB Proof

This summer, 3 years after being cured of extensively drug-resistant TB, Goodman Makanda began to cough again. He immediately thought of COVID-19, but hesitated to act, not knowing what to do. "I was afraid to die, afraid to go to the clinic," he said recently. After his long battle with TB, Goodman knew the personal cost of being diagnosed with a heavily stigmatised airborne disease. He had insight into how little support he could expect from the SA healthcare system. In addition, he was aware of emerging reports indicating that people affected by TB were at higher risk of acquiring and dying from COVID-19, leaving him fearful and without hope. Thankfully, Goodman overcame the instinct to ignore his cough, and sought COVID-19 testing. The doctor who called with his results told him to isolate even before explaining that his test was positive. Similarly to his experience with TB care, no counselling was offered.

Despite its initial prompt lockdown response, SA now has the fifth-highest incidence of COVID-19 worldwide. There has been an emphasis on increasing testing capacity, but if large numbers of people are afraid to seek care, we have to adapt our approach. Our experiences with TB and now COVID-19 teaches us that men are less likely than women to seek healthcare when they develop symptoms, often delaying until their illness becomes severe. So what can we learn from earlier efforts that tried to make TB testing more acceptable and accessible for SA men?

Men are less likely than women to seek healthcare when they develop symptoms

The first lesson from TB is simple: fear keeps people away from testing clinics. Public health messaging targeted at COVID-19 would do well to revise existing messages to focus on the benefits of early diagnosis from both the individual and community perspective, rather than perpetuating the fear of testing positive. This is particularly important for people with

risk factors for COVID-19, to ensure that they understand when to seek medical evaluation, and are not afraid to do so. For countries such as SA that are grappling with COVID-19, TB and HIV, there is an opportunity to integrate testing for TB and HIV alongside COVID-19 testing.

It is important to support a person beyond their treatment

Our second lesson is that if someone – usually a man – foresees a negative impact on their earning capacity, diagnosis is further delayed. "It is important to support a person beyond their treatment," Goodman explained. "When you have a disease like TB or COVID-19, you are not supposed to go to work for a certain amount of time." While disability grants from the SA Social Security Agency (SASSA) are available for people with TB, they often must face long queues and lengthy processing times, which are now compounded further by COVID-19. A social safety net is critical to mitigate the risk of work lost due to illness, including the need to quarantine. The existing systems in place are not sufficient to remedy the resultant stress and catastrophic costs.

The third lesson is that the stigma of being diagnosed with contagious diseases such as TB or COVID-19 adversely affects health-seeking behaviour. Goodman is part of TB Proof, an advocacy organisation that emphasises the importance of platforms for TB survivors to share their experiences, as key to dismantling the unfair shame and stigma surrounding TB. Goodman now serves as a counsellor for people with drug-resistant TB. Since the COVID-19 pandemic, he has gone above and beyond his duties to crowdfund for food packages due to gaps in SASSA coverage. Goodman suggests that TB survivors can help to fill the COVID-19 counselling gap. "TB survivors can tell you exactly: What is a quarantine? What is isolation? How to wear a mask? Why it's important to wear a mask? Because we've been through this," he said. Public health and media outlets must facilitate the telling of COVID-19 survivors' stories, and policy-makers should include



Goodman Makanda, featured in a Médecins Sans Frontières TB leaders photos series commissioned for World TB Day, 24 March 2019 (photo taken in Khayelitsha, Cape Town by Jelle Krings, MSF)

their perspectives when developing response plans.

Early data from the COVID-19 pandemic demonstrate worse outcomes for men. Men's exclusion from testing has similarly long hindered TB care. Although Goodman's course with COVID-19 was fortunately mild, his story serves as a stark reminder of the gaps in public health messaging and counselling for both TB and COVID-19. It is critical to understand and address the reasons why SA men have historically ignored their coughs, including socioeconomic barriers and mistrust in the healthcare system. Promoting survivor perspectives can help to dismantle the perceived risks of seeking care, and strengthen the COVID-19 response. As a TB and COVID-19 survivor, Goodman's message for policy-makers is to listen. "Come to the grassroots and listen to society to understand what we need and what we can do," he said.

This article was written in close collaboration with Goodman Makanda, who is an extensively drug-resistant TB survivor and TB advocate with TB Proof.

Source: Think Global Health (<https://www.thinkglobalhealth.org/article/afraid-die-afraid-go-clinic>).

The ethics of rationing healthcare resources

Brandon Ferlito, *bioethics researcher*, Shelley McGee, *health policy researcher*, SAMA Knowledge Management, Research and Ethics Department

There is scarcity in all resources at some stage, and this is definitely true of healthcare. The rationing of limited healthcare services is a politically controversial issue, and poses a range of ethical dilemmas for those responsible for making treatment decisions.

Rationing in health has been described in a number of ways, but it often plays out in a practical reality: denying a potentially beneficial intervention to a patient or group of patients on the grounds of a scarcity of resources. A potentially beneficial healthcare intervention might be a healthcare programme, a new technology, a medicine or even a referral to specialist level of care, all in the name of managing resource use.

Rationing of resources is inevitable, as need for those resources is infinite while the resources are not. How rationing happens is important, since it not only affects individual lives but also reflects the most fundamental values of society. For decades, healthcare workers have struggled with the dilemmas surrounding rationing of healthcare resources.

The need to ration resources does not mean that all such rationing is ethically justifiable, and a fair rationing decision in one healthcare system might not be equally justifiable in another. For a population of around 60 million, SA has limited healthcare resources, such as ICU beds and ventilators – and this is particularly relevant during the COVID-19 pandemic.

Resource limitations are not new to the SA healthcare system. Healthcare workers make difficult choices every day regarding rationing in access to ICUs, dialysis machines, organ transplants and other specialised services. Such decisions are protected by the limitation clause of the SA Constitution's Bill of Rights. This makes provision for healthcare access when resources are available.

This article will highlight some of the ethical principles that could guide the rationing of resources in the SA healthcare system, and briefly discuss explicit and implicit rationing.

Rationing of resources

The concept of distributive justice – the equal allocation of scarce resources – has long been fundamental to healthcare decision-

making. Many concepts may form the basis for rationing healthcare decisions, with each reflecting a different understanding of distributive justice. Scheunemann and White have proposed the following as legitimate substantive concepts of distributive justice:

- “to each person an equal share,
- to each according to need,
- to each according to effort,
- to each according to free market conditions,
- to each so as to maximise overall usefulness”.

A foundational debate about distributive justice is how to navigate the conflicting impulses towards maximising efficiency (making decisions so as to produce the most good with the least expenditure), equity (treating individuals equally) and prioritarian conceptions of justice (favouring the worst off).

Scheunemann and White briefly discuss four approaches to allocating scarce resources based on fundamentally different philosophical conceptions of justice: utilitarianism, egalitarianism, priority and the rule of rescue.

Utilitarianism

Utilitarianism generally seeks to maximise overall benefits at the societal level. There are various methods of quantifying healthcare benefits. Many health economists recommend using quality-adjusted life years (QALYs) as the best measure. QALY rationing involves two steps: selecting outcome measures that adjust quality life-years, and then allocating them to maximise QALYs. Using QALYs makes comparisons of efficacy across diseases and services possible that otherwise would be difficult to compare.

Egalitarianism

Egalitarianism emphasises the equal moral status of individuals by seeking equal opportunities to possess the basic goods in life. A simple example of an egalitarian rationing strategy is a lottery to decide priority to obtain a scarce resource. Lotteries need little knowledge of the recipients, can happen quickly and can prevent corruption. On the other hand, lotteries – and egalitarian concepts of justice in general – are

indifferent to considerations that are also intuitively important to many, such as the need and probability of patients benefitting from care.

Prioritarianism – the life-cycle principle

Generally speaking, prioritarianism aims to support those who are considered worse off, by prioritising them in cases where everybody cannot access a specific resource. For example, a preference should ideally devote medical services to the young over the elderly, since the young have had the least chance of surviving through the stages of life. The rationale for this theory is not based on considerations of one's intrinsic value or of social utility. Rather, the purpose is to provide equal opportunities for all individuals to live a normal lifespan. The life-cycle theory ignores the prognostic variations between individuals when used alone to direct allocation decisions. This form of argument indicates that multi-principle allocation strategies can better take into account the complex moral factors involved in such decisions compared with single-principle allocation strategies.

The rule of rescue

The rescue rule describes a powerful psychological impulse to try and save those facing death, regardless of how expensive this may be or how small the chance of benefit. The instinct that underlies the rule of rescue is in many respects an exemplary human reaction to suffering, but it may also lead to decisions that confuse goal-setting with optimising results at the population level.

Explicit and implicit rationing

Finally, rationing can take place explicitly or implicitly.

Explicit rationing generally refers to decisions made by an administrative authority (in SA, this may be the government, healthcare facilities or private medical insurers) as to the amounts and types of resources to be made available, eligible populations and specific rules for allocation.

Significant amounts of explicit rationing occur in public and private sectors in SA

regarding levels of available technology, benefit designs, listing of medications on formularies and expenditure levels on specific disease areas and programmes. These are not always popular with healthcare workers, and become limiting in the face of an individual patient who does not fit the mould.

Implicit rationing, in contrast, takes place through mechanisms such as patient cost-sharing, waiting lists and forcing allocations decisions at a local level by requiring professionals to work within a constrained budget. These mechanisms also tend to negatively impact access to healthcare for

the most needy. Implicit rationing is generally considered ethically challenging as it often becomes inconsistent and inequitable.

Conflicts between efficiency, equity and the rule of rescue

Significant conflicts exist between the concepts of efficiency, equity and responding to patients facing death. People generally prioritise treatment that can be made available to everyone, but impulses to maximise utility and rescue those in need temper this view.

This may result in disproportionate allocations of resources, with little hope of real health gains, in end-of-life situations. It remains a serious challenge for the development of rationing policies to find an acceptable balance between these competing ethical objectives.

Ultimately, all decisions for resource allocation in a health system are at their core ethical ones, requiring transparency, consistency and rationality in their approaches if they are to be acceptable to both healthcare workers and patients.

References available on request.

Mass testing, high science, good behaviour = low COVID-19 deaths in Germany

SAMA Communications Department

In response to several COVID-19 “super-spreader” events in Germany in May-June this year, the government quickly locked down, first the hotspots and then nationwide, and initiated aggressive targeted testing with hugely innovative, technology-driven interventions. The result of these and other strategies is an exceptionally low fatality rate compared with neighbouring countries, and globally.

Germany has emerged as a world leader in using high science and technology to lower the northern hemisphere summer decline in COVID-19 infection rates. The German population’s behavioural compliance further strengthened the fight against the coronavirus.

This emerged from a webinar featuring Prof. Dr Hendrik Streeck of the University of Bonn, a respected virologist and COVID-19 researcher who is currently spearheading some of Germany’s most important and innovative regional studies. Streeck is director of the Institute of Virology at University Hospital Bonn, and also directs the Centre for HIV & AIDS there.

He was guest speaker at a webinar hosted by the Desmond Tutu Health Foundation and *Medical Brief*, and held on Tuesday 1 September 2020. The webinar was moderated by Prof. Linda-Gail Bekker, a leading researcher with the Institute of Infectious Diseases and Molecular Medicine at the University of Cape Town, and COO of the Desmond Tutu Health Foundation.

Massively boosted testing capacity

Streeck told an audience of mostly SA healthcare workers and clinicians that besides three “super-spreader” events, many infections in Germany happened in refugee camps and homes for the elderly, both of which were under-protected.

He partially attributed a recent infection rate rise in Germany to a huge increase in testing capacity, calling this the “second wave”.

“We’re performing nearly 1 million tests a week, double that of 2 months ago, and finding even more infections. The percentage of test-positives is surprisingly stable, but a month ago we had an increase in the positive rate that nobody really noticed,” he said.

“If you look at the pattern of the of first and second wave in Germany, it is similar to all of Europe, except Sweden, but there’s been no increase in deaths.” This was in marked contrast to Spain and Italy, where healthcare facilities were overwhelmed as the infection rate soared.

Streeck put the lack of severe COVID-19 cases in most of Europe down to behavioural and hygiene compliance, adding his suspicion that the prevalence of multiple flu viruses historically might be boosting immunity for up to 2 years. He added: “1 200 infections per day in Germany, with 80 million inhabitants, is pretty low.”

Bekker observed how the COVID-19 outbreak pattern was markedly different to

the tragic Spanish flu pandemic of 1918 – adding that with COVID-19, case fatality rates mattered far more than the actual number of infections in ranking how serious an epidemic was.

Streeck said the German government’s current spring-summer strategy included the continued cancellation of all large events until December, while focusing on how many people were being hospitalised and/or becoming very sick.

“We have about 30 000 ICU beds, but only 200 are currently being used for COVID-19 patients. It’ll be more important to focus on health system resources than to look at infection numbers, though that helps in predicting ICU and medical ward requirements,” he added.

Germany’s innovation outlined

Asked by Bekker to expand on Germany’s “extraordinary” testing and its innovative technological responses, Streeck said polymerase chain reaction (PCR) testing was still the gold standard, but that a confirmatory test had been added to increase accuracy.

Streeck’s department has been working with the university’s human genetics department “using tons of robots and a large machine to do hundreds of PCRs and extraction at the same time. With this platform we can do 4 000 tests per day, but have only reached 1 200 [per day] so far. We’re discussing

using even more advanced technology to allow one lab to do up to a million tests per week," he revealed.

However, this provided "only a small snapshot" from when the swab was taken. Streeck emphasised that quick test turnaround times were vital for efficacy. Beyond a 3-day test result turnaround, a person was no longer infectious.

Testing in Germany was only done for close COVID-19 contacts or symptomatic people to avoid the drain on common reagent resources globally. Testing turnaround times in Germany, dependent on the degree of urgency, varied from between 90 minutes and, more generally, 6 hours. SA's initial turnaround result times, although geographically patchy, were very often longer than 3 days, although they are now between 24 and 48 hours in most labs.

A "no-harm" German government-backed cellphone application that uses Bluetooth technology to detect anyone who has been within 2 metres of a COVID-19 infected person for longer than 15 minutes, and alerts its owner, had already had 20 million downloads in Germany, Streeck told the webinar.

The cell phone app, which is fully data-protected to ensure confidentiality, exchanges

code numbers via Bluetooth and recommends COVID-19 testing to their owners if they are exposed to risk. Streeck described the application as a "very good experimental programme, and another tool in our box".

On 3 September, Germany would experiment with a live television show with a volunteer, mask-wearing audience sitting safely apart, undergoing COVID-19 testing before and after the show – to see if such events were safe to resume.

How Germany handled "super-spread"

Streeck outlined three super-spreader events in Germany, the first being a 15 February 2020 evening carnival in Gangelt, where 44% of carnival-goers were found to be infected 13 days later, resulting in a lockdown of the city and 1 000 party-goers being quarantined. His research shows that the carnival-goers had more symptoms and were sicker than people infected elsewhere (by a factor of 1.63), emphasising the relevance of airborne spread.

Then, in the tiny ski resort of Ischgl in the Tyrolean Alps, one of Europe's worst COVID-19 outbreaks saw the virus spread to 45 countries

as holidaymakers returned home. Hundreds of people are preparing to sue local authorities, with lawyers ready to bring the first cases at the end of this month.

The third began on 28 June 2020 at a slaughterhouse in the west German town of Gütersloh. Within 5 days there were 2 203 coronavirus infections recorded in the town district, most of them workers at the meat plant or people associated with it. An estimated 21 people died.

Streeck said Germany had adapted very well to the pandemic, its government admitting to having over-reacted in closing down certain areas where COVID-19 was not spreading and subsequently conducting ongoing rational analyses. He felt strongly that a multidisciplinary mix of expert viewpoints was needed early on to manage pandemics, with lessons from other countries also taken on board.

"We could have learnt a lot more from the early days of the outbreak, but at the same time people were hesitant to trust the data from other countries," he added.

Source: Medical Brief 2 September 2020.

WHO Africa achieves wild polio-free certification

World Health Organization

On 25 August, the Africa Regional Certification Commission certified the WHO African Region as wild polio-free after 4 years without a case. With this historic milestone, five of the six WHO regions – representing over 90% of the world's population – are now free of the wild poliovirus, moving the world closer to achieving global polio eradication. Only two countries worldwide continue to see wild poliovirus transmission: Pakistan and Afghanistan.

The Global Polio Eradication Initiative (GPEI) congratulates the national governments of the 47 countries in the WHO African Region for today's achievement.

"Ending wild poliovirus in Africa is one of the greatest public health achievements of our time, and provides powerful inspiration for all of us to finish the job of eradicating polio globally," said WHO Director-General Dr Tedros Adhanom Ghebreyesus. "I thank

and congratulate the governments, health workers, community volunteers, traditional and religious leaders and parents across the region who have worked together to kick wild polio out of Africa."

Strong leadership and innovation were instrumental in stopping the wild poliovirus in the region. Countries successfully coordinated their efforts to overcome major challenges to immunising children, such as high levels of population movement, conflict and insecurity restricting access to health services, and the virus's ability to spread quickly and travel across borders.

In addition, the continued generosity and shared commitment of donors – including governments, the private sector, multilateral institutions and philanthropic organisations – to achieving a polio-free world helped build the infrastructure that enabled the African region to reach more children than ever before with polio vaccines and defeat wild polio.

"During a challenging year for global health, the certification of the African region as wild poliovirus-free is a sign of hope and progress that shows what can be accomplished through collaboration and perseverance," said Rotary International President Holger Knaack. "Since 1996, when Nelson Mandela joined with Rotary, the GPEI, and governments of the African region we've achieved something remarkable. Today's milestone tells us that polio eradication is possible, as long as the world remains committed to finishing the job. Let us work together to harness our collective energies to overcome the remaining challenges and fulfil our promise of a polio-free world."

The resources and expertise used to eliminate wild polio have significantly contributed to Africa's public health and outbreak response systems. The polio programme provides far-reaching health benefits to local communities, from supporting the African region's response to

COVID-19 to bolstering routine immunisation against other vaccine-preventable diseases.

While this is a remarkable milestone, we must not become complacent. Continued commitment to strengthening immunisation and health systems in the African region is essential to protect progress against wild polio and to tackle the spread of type 2 circulating vaccine-derived poliovirus (cVDPV2), which is

present in 16 countries in the region. Pockets of low immunity mean that such strains continue to pose a threat, and the risk is magnified by interruptions in vaccination due to COVID-19, which have left communities more vulnerable to cVDPV2 outbreaks.

The GPEI calls on countries and donors to remain vigilant against all forms of polio. Until every strain is eradicated worldwide,

the incredible progress made against polio globally will be at risk.

The WHO African Region's success against wild polio has shown the world that progress against some of the biggest global health challenges is possible. The GPEI is grateful for every person, partner, donor and country who helped bring about this incredible achievement.

Will climate change cause millions more to die from malaria?

SAMA Communications Department

The spectre of climate change threatening our futures is a conversation that has been dropped in recent months in the wake of COVID-19. But it has not gone away, and will continue to haunt us in the years to come.

What is at stake now is not climate change's effects on malaria directly, but on human poverty, famine and drought. It will steepen the conditions that already make it an uphill struggle to get protection and treatment to those who need it. Dr Benji Pretorius, GP and founder of ERADA Technology Alliance, explains why it is imperative to do all we can before it's too late.

Climate change will have some direct effect on malaria and the mosquitoes that carry it. Given their hot tropical preferences, you may expect a simple correlation between heat and mosquito, such that rising temperatures would cause both mosquito and malaria to spread. But it is not that simple.

In some places, higher temperatures will cause the disease to spread – notably, in highland areas that were cooler to begin with. In places like Debre Zeit in Ethiopia, where 43% of the Ethiopian population live, people have had the good fortune of being relatively malaria-free, due to its elevation and cooler temperatures.

But as they have less resistance to the disease, future cases may be devastating. Warmer temperatures will bring mosquitoes higher up, to places they didn't go before, and they will bring malaria with them. It is estimated that in these highland areas, an increase of only 1°C would lead to as many as 3 million extra children being infected every year.

Cases will also rise in areas where winter usually provides some respite from the disease. The most common malaria parasite, *Plasmodium falciparum*, cannot complete its life cycle in



Dr Benji Pretorius

temperatures below 20°C. If winter temperatures rise above this, the parasite will be free to reproduce all year round.

But while climate change will cause malaria increases in some places, it will cause malaria to decrease in others. In areas of sub-Saharan Africa, climate change is expected to reduce the amount of rain. Mosquitoes require stagnant fresh water to breed and lay their eggs. The lack of puddles and waterbeds or rain accumulation in places such as old tires and buckets would prevent them from reproducing. No water, no mosquitoes, no malaria.

But how much the result of this reduction in water will compare with the result of malaria spreading to new places is unclear. It will vary according to place, and depends on how high global temperatures rise. But mosquitoes are adaptable, and may persist despite increasingly dry conditions. What is clearer is how climate change will affect people, and how malaria prevention ties into that.

Treating malaria is not free. It creates a financial burden, both in terms of direct cost

of treatment and in work hours lost. If you are a subsistence worker, working hand to mouth, you may not be able to afford this loss of income. You work through the vomiting, headache and nausea, or you go hungry. In Nigeria, where the impact of malaria is highest, 40% of people live below the poverty line. Living on less than one US dollar a day makes it difficult to afford the needed nets, insecticide and malaria medication.

Now imagine if this situation was worse.

Despite being the area of the world with the lowest CO₂ footprint, sub-Saharan Africa is likely to be where the effects of global warming are most keenly felt. The majority of African agriculture relies on seasonal rain. This leaves it vulnerable to an increase in climate change-induced drought, flash flooding and extreme weather conditions. This creates food shortages and uncertainty, which drives up prices, reducing people's ability to pay for the cost of treatment.

Treatment for malaria will also become more difficult to access in a healthcare system that is already strained. There are insufficient numbers of doctors and nurses in proportion to national populations. This, in conjunction with rural villages being difficult to reach, makes community healthcare workers necessary. The hiring and training of healthcare workers to disseminate diagnostic tests, medication and inform local communities is an essential part of anti-malaria programmes. This cannot be done when there is little food, and in the chaos of extreme weather conditions. Furthermore, worsening climate change will cause a host of other medical issues to deal with alongside malaria: over-heating, malnutrition, dengue and damages caused by flash flooding and storms. Each crisis creates competition for the limited

healthcare resources, funding and manpower available to deal with the problem.

People will flee unbearable conditions in the hope of food and safety. This means that it will be harder to disseminate resources to those who need them. These conditions put people in a more vulnerable position, sleeping outside or in temporary accommodation, where they can be bitten by mosquitoes. Large numbers of people without access to sanitary waste disposal

systems will also cause additional healthcare problems.

All these effects combined will make simply holding back malaria exceedingly difficult, let alone eradicating it, as per the directives of the WHO's Global Technical Strategy for Malaria. Surveillance and administration of malaria requires a level of national stability and order that cannot be maintained in nations plagued by the worst consequences of climate change.

Climate change is already having a catastrophic impact on people's lives, and will hit the poor and vulnerable the hardest. An additional 250 000 people will die each year between 2030 and 2050 from climate change-induced malaria, heat stress, diarrhoea and malnutrition, according to the WHO.

Consequently, we must do all we can to save people while we still have a window of opportunity.

Insubordination as another form of misconduct

Phumzile Gwala, *employee relations advisor, SAMA Public Sector Department*

The employer's common right to issue reasonable and lawful instructions, and the employee's obligation to comply with these instructions, is a central element of the employment relationship. Without this right, an employer would not be in a position to co-ordinate the running of its affairs. In instances where the employee fails to carry out such a reasonable and lawful instruction, (s)he commits an act of insubordination.

There is often confusion between two forms of misconduct: insolence and insubordination. For the purposes of this article, my focus is on the latter. First and foremost, let me define what is meant by "insubordination" in the workplace context: the term refers to the disregard of an employer's authority, or lawful and reasonable instructions. This usually occurs when an employee refuses to accept the authority of a person in a position of authority over him or her. This constitutes misconduct because it assumes a calculated breach by the employee of the obligation to adhere to and to comply with the employer's lawful authority. In terms of the Disciplinary Code and Procedures for the Public Service, insubordination is a more serious offence than mere rudeness or insolence, because it presupposes such a calculated breach by an employee of this duty. In addition, it includes a wilful and serious refusal by an employee to adhere to a lawful and reasonable instruction of the employer. Insubordination and insolence have one thing in common, however: in both cases, the employee effectively defies the authority of the employer or the employer's managers.

Looking more closely into this form of misconduct, we find that it contains two elements essential to understanding its

definition: lawfulness and reasonableness; and deliberate refusal to obey.

Lawfulness and reasonableness

An employee is insubordinate if, and only if, the instruction which (s)he refuses to obey is a reasonable and lawful instruction. Disputing this is not an issue that commonly arises in the context of charges of insubordination. A clear example of an unlawful instruction would be a case in which the employer asks interns to continue working without any form of supervision, bearing in mind that in terms of the HPCSA guidelines, such workers must work under supervision, since they are still undergoing training.

Employees sometimes try to justify their insubordination by saying that the instruction they refused was to do something not in their job descriptions. Sadly, this line of argument may go only so far – it depends, first and foremost, on the extent to which the employee's job has been defined and described in the contract, and whether that job description is a fixed job description, the language used in the job description and any number of other issues that may arise. In fact, the employee's contract of employment may require him or her to do "any task that may reasonably be expected" in the position – in which case, the employee's argument falls flat entirely. If an employee raises this point during the arbitration proceedings, however, a commissioner will be required to consider the employee's job description and its scope and nature. This was confirmed by the court in *Noosi v Exxaro Matla Coal* [2015] ZALCJHB 186 (25 June 2015).

Deliberate refusal to obey

The second element is that the refusal to obey must be a deliberate and calculated refusal. As the Labour Appeal Court pointed out in *Armitage Shanks SA (Pty) Ltd v Mnisi* (1995) 16 ILJ (LAC), an employee who disobeys an instruction on the spur of the moment can hardly be said to be insubordinate. The problem with this approach is that it shifts the entire enquiry to one of contract: in order to establish whether insubordination has occurred, one must consider whether there was a breach of contract. This seems needlessly complicated, but the crucial question remains as to whether the employee refused to comply with a lawful and reasonable instruction.

Case law

In *SA Commercial Catering & Allied Workers Union & others v Mahawane Country Club* (2002) 23 ILJ 902 (LAC), the Labour Appeal Court linked the employees' refusal to obey an instruction to breach of their employment contracts. In this matter, the employees were asked to sign an updated employment contract. They refused to do so, and were summarily dismissed for that refusal. Because their refusal did not amount to a breach of contract, the Labour Appeal Court said, their refusal did not constitute insubordination. By contrast, in *Arangie and Abedare Cables* (2007) 28 ILJ 249 (CCMA), the employee refused to undergo random alcohol testing, or to leave the premises, as required by the company policy. The persistent refusal to obey that instruction was found to be a justifiable reason for dismissal by the CCMA Commissioner.

As such, few decisions have laid down any useful general principles regarding insubordination, and it remains clear that each case must be decided on its own merits.

Prioritise gut health to achieve nutrition and health goals

SAMA Communications Department

The One Health Summit, “Your Gut’s Instinct”, took place on 27 August 2020. The event, hosted in webinar format due to the current COVID-19 context, was attended by 500 healthcare professionals and key opinion leaders. Two renowned international experts and SA’s own Mpho Tshukudu, a registered dietitian with a special interest in SA’s food culture and heritage, shared developing science on the topic of gut health, and its applied relevance to the SA context, considering local beliefs, behaviours and dietary practices.

Prof. Rob Knight, the founding director of the Center for Microbiome Innovation in California, explored the emerging science of the gut microbiome as a gateway to overall health, and described the gut and its microbiome as “the new factors impacting your whole lifespan and health outcomes”. According to Knight, the microbiome can be a predictor and influencer of traits and outcomes for health and disease. In fact, some traits are better explained by the microbiome (with up to 90% accuracy for obesity) than the host genome (with up to 60% accuracy). A review conducted by Montiel-Castro *et al.* summarised the evidence regarding several health conditions that may be affected by intestinal microbiota, including pain, autism, obesity, cardiovascular risk, anxiety, depression and multiple sclerosis.

Maintaining equilibrium in the gut is protective against disease. However, modern life stressors can negatively influence the gut microbiome. Evidence has shown that modern lifestyles have resulted in the disappearance of large groups of microbes, leading to gut dysbiosis.

Lifestyle factors strongly influence the structure, diversity and composition of the microbiome, and diet can have a large effect, even compared with the impact of disease and drug intervention. According to Knight, “We can reshape the gut microbiome with nutrition.” In particular, the intake of fruits and vegetables rich in fibre and phytonutrients, and fermented foods, may have a positive effect.

Andrea Hardy, a registered dietitian known as “Canada’s gut health expert”, explored the role of nutrition in influencing gut

health. According to Hardy, “Nutrition is the quickest and easiest way to influence our gut microbiota.” A Western diet characterised by a high intake of sugar and fat, red and processed meats consumed in excess and low intake of dietary fibre is associated with depletion of microbial diversity and abundance, impaired growth and function of the mucous layer affecting gut permeability, and low-grade chronic inflammation. Conversely, a diet focused on adequate fibre and variety, with an intake of phytochemicals, omega-3 fats, probiotics, prebiotics and fermented foods, is associated with microbial diversity and abundance, enhanced function of the mucous layer and decreased inflammation. The latter dietary approach promotes the production of short-chain fatty acids, which help maintain the gut microbiota, the gut barrier function and overall gut health.

Hardy elaborated on the role of probiotics delivered through foods, and described them as a “win-win” in which patients can obtain nutrients and beneficial bacterial cultures in a manner that is simple and easily adopted into most lifestyles. The International Scientific Association for Probiotics and Prebiotics and the International Probiotics Association have developed the following four criteria to define probiotics: the probiotic must be sufficiently characterised; be safe for intended use; be alive in sufficient numbers in the product at an efficacious dose throughout shelf life; and be supported by at least one positive human clinical trial conducted according to generally accepted scientific standards. Hardy cautioned that these factors should be investigated to ensure the efficacy of probiotic-containing foods, and illustrated this with an example of a yoghurt containing a blend of five cultures, including the bacterial strain *Bifidobacterium lactis* CNCM I-2494 (known by the trade name Bifidus ActiRegularis), which has been shown in clinical trials to reduce digestive discomfort. Some evidence indicates that this effect may be associated with an improvement in the objective markers of abdominal distension (bloating) and decreased transit time.

Mpho Tshukudu shared unique insights into the cultural and dietary factors affecting gut health among South Africans, and lobbied a call to action to all healthcare professionals



Mpho Tshukudu



Prof. Rob Knight



Andrea Hardy

to “better understand all the layers influencing an individual’s food choices and behaviours, in order to deliver relevant, meaningful advice”.

Although data exploring gut health explicitly in SA is limited, the insights gained from the study of the nutrition transition (showing an increase in the intake of total energy, added sugar, sodium and ultra-

processed foods associated with urbanisation) suggest that digestive wellbeing is neglected. Among SA women, initial interventions in response to digestive discomfort include the use of laxatives, herbal preparations and enemas. These interventions are not recommended as a first-line approach, and may perpetuate gut health disorders if used long-term. Lifestyle approaches, including dietary intervention, are the preferred first-line defence, minimising the need for extreme measures to achieve digestive comfort.

According to Tshukudu, in modern circumstances, some South Africans believe that rural, traditional foods have no role in a modern, healthy diet, and these traditional foods often carry negative connotations as "poverty foods", despite their valuable nutrient credentials. Tshukudu recommends integrating SA's traditional food culture with modern application for advice that appeals both to heritage and health trends. Some of her suggestions are listed here:

Encourage the use of prebiotics such as onion, ginger and garlic, as well as spices such as black pepper, cayenne pepper, cinnamon, oregano, rosemary and turmeric for the flavouring of foods. Through acculturation, these flavours have been adopted into SA cuisine over time, and positively impact the microbiome.

Sprouting, soaking and fermenting of grains, lentils, beans and vegetables has been

shown to reduce phytates, improve digestion and decrease flatulence and intestinal discomfort associated with the introduction of beans and legumes. Encourage these methods of preparation, which are culturally acceptable and carry a modern appeal popularised in the media.

Encourage the intake of fruits, which offer a source of polyphenols to support gut health. Fruits such as pomegranates, figs, blackberries and baobab grow in rural areas, and evoke positive childhood memories. Recommend these fruits with modern applications in smoothies, baking and dressings.

Encourage the intake of vegetables, particularly traditional leaves, of which SA has over 60 varieties. Morogo, for example, is rich in nutrients and fibre. Use these in modernised recipes, for example in pesto, salads and smoothies.

Advocate for the intake of legumes and nuts as easily accessible plant proteins. In SA, meat consumption is high, at the expense of vegetables, nuts and legumes, partly driven by the high status afforded to meat, while plant proteins are considered poverty foods. Leverage the benefits and modern appeal of the flexitarian diet to help improve the value associated with nuts and legumes as protein sources.

The sour taste associated with fermented dairy foods is a SA taste preference. However, due to the high prevalence of lactose

intolerance, many South Africans are hesitant about dairy foods. Educate patients regarding fermented dairy foods, in which a portion of the lactose is digested by the intrinsic cultures in the products, improving tolerance in lactose-intolerant individuals. Yoghurt offers a modern appeal to traditional fermented milk. Choosing a yoghurt containing a blend of strains, including a particular strain of *bifidus* bacteria, helps to promote digestive comfort and wellbeing when consumed daily.

The webinar recording, CPD opportunities and additional content from the speakers is available to view on the Danone website: <https://corporate.danone.co.za/one-planet-one-health/healthy-lifestyle/your-gut-s-instinct.html>, or see #onehealthsummit2020 @danonesouthafrica

The One Health Summit is sponsored by Danone Southern Africa. After 3 consecutive years of hosting the Yoghurt Summit, this year the summit was renamed the One Health Summit in line with Danone's global "One Planet. One Health" vision. This vision is a call to action for all consumers and everyone who has a stake in health to join the food revolution: a movement aimed at nurturing the adoption of healthier, more sustainable eating and drinking habits.

References available on request.

SAMAREC member profile: Prof. Mandisa Kakaza

Adri van der Walt, SAMAREC officer

If any time after 1996 you had the opportunity to rotate within the Neurology Department of the Steve Biko Academic Hospital (SBAH), you were bound to have run into the always friendly and exceptionally experienced Prof. Mandisa Kakaza.

Growing up in the rural area of then-Umtata, she was inspired to turn to a medical career as her late father was a professor of internal medicine.

After completing a BSc degree in zoology and biochemistry, she completed her MB ChB at what is now Walter Sisulu University (University of Transkei).

Returning to her roots, she did her internship at Umtata General Hospital.

During this period, she came across a mini-conference on neurology that was organised by the University of Pretoria, and was immediately inspired by this branch of medicine.

Prof. Kakaza went on to specialise in neurology at the University of Pretoria, and also obtained a Diploma in Tertiary Education from UNISA. In 1996 she joined the neurology team as a registrar, following a position as a junior consultant and then a senior consultant within the department.

She became the first black female neurologist at SA, and in 2013 she was promoted to professor of neurology.

She is extremely grateful for her position at SBAH, as she can combine her practical



Prof. Mandisa Kakaza

and theoretical knowledge base and skills on a daily level by tending to patients clinically, and has the opportunity to teach medical and allied health professionals.

Her major focus areas include treatment of headaches and epilepsy. She frequently publishes and presents on these topics.

Prof. Kakaza has recently been appointed acting HOD of the Department of Neurology at SBAH and the University of Pretoria. She is also a member of SAMA, the SAMA Research Ethics Committee (SAMAREC), the HPCSA and the Neurological Association of SA, and serves as an advisory member for the Civil Aviation Authority.

On a personal level, she is a proud mother of three beautiful girls and is a self-proclaimed bookworm, consuming anything from a magazine to a good novel to academic articles.

SAMAREC is extremely proud to have such an accomplished member on the committee.

Mental health is vital in treating infertility

SAMA Communications Department

The desire to have children is age-old, but for the one in five SA couples struggling with infertility, it is a double-edged sword – while infertility has a negative impact on mental wellbeing, its root causes can also lie in mental health disorders such as depression and anxiety.

Women with a history of depression are at greater risk for infertility, while depression and some antidepressant medications can negatively affect male fertility. At the same time, a struggle with infertility is deeply stressful, and can cause feelings of grief and isolation, through to full-blown anxiety disorders and depression, as well as conflict in relationships and families.

This makes psychological support a vital part of the infertility journey, both before starting on and during infertility treatment, because good mental health can have a positive impact on the success of fertility treatment, says Prof. Renata Schoeman, psychiatrist and member of the SA Society of Psychiatrists (SASOP).

"Infertility as a reproductive disease affects men and women almost equally, but women are especially vulnerable to severe negative social consequences of being stigmatised, ostracised, even abused, or having financial support withdrawn.

"With the focus of Women's Month on achieving gender equality, it is important too to highlight the impact of women's health on their social and economic status," she said.

Infertility is defined by the WHO as "failure to achieve a clinical pregnancy after 12 months or more of regular, unprotected intercourse", and it affects 8 - 14 % of couples, or 48 million couples worldwide.

The average fertility rate in SA is declining in line with global trends, and up to 20% of couples face a battle with infertility, while infertility is a major reproductive health

problem in Africa, with a prevalence of 30 - 40%, due to various factors including poor healthcare, infection control and lack of access to fertility treatments.

"The impact of a struggle with infertility can range from negative thoughts and feelings such as denial, guilt, anger, grief and isolation, which can lead to actual withdrawal from usually enjoyable activities, especially those involving families and children – through to formal diagnosis of mental health disorders," Prof. Schoeman said.

The average fertility rate in SA is declining

She said infertility is a complex phenomenon with a range of biological causes, while a worldwide rise in infertility due to causes that can not be medically explained points to there being underlying psychological causes of the problem.

Risk factors contributing to infertility include an existing diagnosis of depression or anxiety disorder, lower levels of happiness and poor overall health, while strong mental health – self-acceptance, independence, positive relationships and social skills, personal growth and a sense of meaning in life – contributes to better outcomes of fertility treatment, she said.

"This supports the importance of diagnosis and treatment of infertility being approached holistically, taking into account both biological and psychological factors. Psychological assessment before commencing with infertility treatments is crucial to understand each patient's individual risk factors, strengths and psychological resilience or vulnerability, and a collaborative approach to treatment that

includes ongoing psychological support or psychotherapy," Prof. Schoeman said.

This approach can assist with the negative impact on mental wellbeing of infertility, and the stresses of the treatment journey, she said, as infertility patients are more likely to suffer from depression, anxiety and social withdrawal, with rates of comorbid psychiatric disorders higher in women with infertility than in male patients.

"It is possible, however, that mental illness symptoms in men are reported less often, or not investigated. Male infertility is often associated with deep shame, and this can be a barrier to men seeking treatment, especially those rooted in African cultural traditions, and men also tend to suppress anxiety, which then manifests as psychosomatic illness," Prof. Schoeman said.

She said that in managing mental health as part of infertility treatment, education was vital: "The more information a patient has and the better they understand the basic principles of human reproduction and infertility, the less uncertainty (which contributes to anxiety) will be present."

"Knowledge helps to manage expectations, and helps patients to remain realistically hopeful."

The healthcare team should also look out for the psychiatric side-effects of some medications used for infertility treatment, which could lead to symptoms of depression, anxiety, mood swings, decreased libido, irritability, concentration and memory problems, sleeping problems, fatigue, changes in appetite and even psychosis.

Similarly, anti-depressant medication can influence fertility treatment, and this emphasises the need for a collaborative approach to infertility treatment that focuses as much on mental health as physical health, Prof. Schoeman said.

An expensive lack of consent?

Dr Heidi Mounsey, *medicolegal consultant, Medical Protection Society*

Mr N, a 44-year-old chemical engineer, consulted Dr B seeking laser eye surgery in order to correct short-sightedness. At that time, Mr N's prescription was -6.00 in the left eye and -5.5 in the right. A mild degree of astigmatism was also noted. Mr N wore contact lenses, and these provided adequate correction to his vision, with an acuity of 6/6 in both eyes.

However, Mr N reported to Dr B that he had been suffering from recurrent episodes of infection for the previous 16 months, making it difficult for him to wear the lenses. He was seeking an alternative to both contact lenses and spectacles.

Dr B took a medical history, but did not appear to have elicited that a year previously, Mr N had been reviewed by a consultant ophthalmologist in his local hospital and been diagnosed with dry eyes. Mr N was prescribed lubricant drops at that time. This information was not documented in the history obtained by Dr B. There was also no contemporaneous note made in relation to whether Mr N's tear film was normal, although in comments subsequently obtained from Dr B, he stated that it was. It was not documented whether or not Mr N was using eye drops at the time of the consultation with Dr B, although a note was made of other medication.

Following discussion, Dr B considered that Mr N would be suitable for LASIK laser vision correction.

Mr N consented to bilateral LASIK surgery, and this was performed without complication. The consent form was signed on the day of surgery, and included the following risks:

- corneal scarring or haziness
- glare and halos
- infection
- ongoing need for glasses/contact lenses
- problems with the corneal epithelium causing pain or discomfort
- irregular healing of the cornea resulting in reduced quality of vision.

Dry eyes were not mentioned as a specific complication.

It was unclear from the medical records whether the patient had been provided with the consent form prior to the day of surgery. Mr N did, however, sign the consent form, including a statement to say that he understood that laser surgery would not

prevent him from developing naturally occurring eye problems such as glaucoma, cataract, retinal degeneration or retinal detachment, and that he understood that if his myopia was corrected, then he would likely need reading glasses.

A week following the procedure, Mr N's vision was 6/10 in both eyes. Three weeks after the procedure, Dr B considered that there was evidence of punctate epithelial erosions bilaterally. He diagnosed dry eyes and inserted punctal plugs, as well as prescribing lubrication drops.

Some 6 months after the surgery, Mr N visited his optician and his prescription was found to be +1.00/-1.75 in the right eye and -1.00/-0.75 in the left eye. Once corrected, Mr N's visual acuity was 6/6.5 bilaterally.

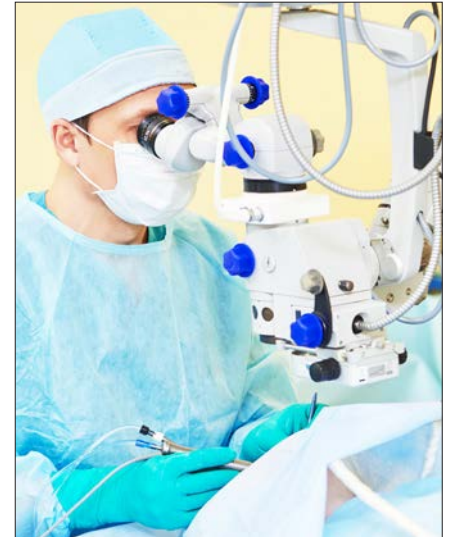
Mr N expressed a desire for further correction, and Dr B carried out LASEK treatment to the right eye. The consent form was signed on the day of treatment, and contained similar risks to those listed for LASIK. Dry eyes were not specifically mentioned as a possible complication.

A month after the LASEK procedure, Mr N complained that the vision in his right eye was very blurred. His refraction was noted to be +0.75/-2.75 with an acuity of 6/7. It was noted that his tear film was satisfactory, but there is no record of whether or not Mr N was continuing to use lubricating drops.

Mr N continued to complain of difficulties with his vision, with blurring and ghosting. It was also considered that the right eye had significant induced astigmatism following the LASEK procedure.

Ten months following the initial LASEK surgery, Dr B identified a posterior vitreous detachment in the left eye, and Mr N underwent a left vitrectomy. Six months after this procedure his refraction was +1.00/-2.25 in the right eye and -1.25/-1.00 in the left eye. With correction, Mr N's visual acuity was 6/6 in the right eye and 6/12 in the left eye, although this was noted to be variable.

Mr N continued to be followed up by Dr B, and 2 years after the initial LASIK procedure Mr N was noted to have bilateral lens opacities, more in the left eye than the right. Dr B discussed bilateral lens replacement using multifocal lenses. It was not clear in the medical records whether the option of a single focus toric lens was discussed with Mr N. In any



event, Mr N opted to have bilateral multifocal lens replacements.

Following the lens replacements, Mr N's visual acuity was 6/6 in the right eye, and 6/36 in the left, which improved to 6/20 using a pinhole. Dr B referred him to public health services for further review, at which point a left epiretinal membrane and an early full thickness macular hole were diagnosed. A left vitrectomy and membrane peel were performed without complications. Mr N remained under ophthalmology follow-up in the public healthcare sector.

Three-and-a-half years after the original LASIK procedure, Mr N's corrected visual acuity was 6/10 in the right eye and 6/38 in the left eye, although these acuities were noted to be highly variable with blinking. Uncorrected, his acuities were noted to be 6/15 in the right eye and 6/60 in the left. Mr N continued to complain of double vision and ghosting, and that his vision was particularly poor in low light. The Schirmer tear secretion test was reduced in both eyes. It was considered that Mr N's poor vision was due to a combination of poor pre-corneal tear film, especially in the left eye, induction of mild higher-order aberrations associated with laser refractive surgery, reduced optics associated with multifocal intraocular lenses and vitreous detachment and macular problems in the left eye.

The claim

Mr N subsequently brought a clinical negligence claim against Dr B, alleging that

it was a breach of duty to have performed bilateral LASIK, right LASEK and bilateral multifocal lens replacement surgery, and that he had not been adequately consented for any of these procedures. It was alleged that the surgeries resulted in very poor unaided vision bilaterally, including ghosting effects and double vision, and that the contact lenses he now needed to wear could only be tolerated for 3 hours a day, leaving him with significantly limited vision for the majority of the time. He alleged he was no longer able to work as a chemical engineer due to the limitations of his vision.

Mr N alleged that, had he been more fully informed of the risks of any of the procedures he had undergone, especially the risk of dry eyes in association with LASIK and LASEK, he would not have opted for the surgeries.

It was further alleged that there would have been signs of cataract at the time of offering the initial LASIK procedure, and this would have been a contraindication to performing the surgery.

In addition, it was stated that aberrometry should have been performed prior to recommending multifocal intraocular lens surgery, and that this would have demonstrated that Mr N was unsuitable for this procedure.

It was also alleged that although Mr N had suffered with complications likely unrelated to Dr B's interventions, namely the posterior vitreous detachment, epiretinal membrane and macular hole, these had not impacted significantly on Mr N's vision in his left eye. Mr N's solicitors valued the claim, including loss of earnings, ongoing care needs and loss of pension at a substantial amount.

Expert opinion

The opinion of an expert consultant ophthalmic surgeon was sought following a detailed evaluation of the case by the Medical Protection Society (MPS)'s clinical and legal teams.

The expert highlighted the following:

- A relevant history did not appear to have been taken by Dr B prior to advising and performing LASIK surgery. It was not noted whether Mr N had previously received any treatment in relation to his eyes, or whether he was currently using any eye drops.
- It was not clear from the medical records and the consent form that Mr N was fully advised of all the options available to him, including that of no surgery.
- The consent form did not specifically include the risk of dry eyes following LASIK surgery.

- It is unlikely that there were signs of cataracts in Mr N's lenses at the time of the initial assessment by Dr B.
- There was no consent form for the LASEK surgery in Mr N's records, or evidence that the risks and benefits of this, and the other options available, were discussed with Mr N.
- Aberrometry should have been performed prior to recommending multifocal lens surgery. Had this been performed, it is likely that Mr N would have been found to be unsuitable for this procedure. The use of multifocal lenses likely led to a worsening of Mr N's quality of vision.
- There were no consent forms in relation to the multifocal intraocular lens surgeries in Mr N's records, and no evidence that the risks and benefits of such surgery (and the alternatives) were discussed.
- Mr N's vitreous detachment, epiretinal membrane and macular hole were not as a result of any surgery performed by Dr B, and had made a significant contribution to the poor vision in Mr N's left eye.
- There were now surface abnormalities to Mr N's right eye, which meant that his vision could not be corrected with spectacles alone, and his dry eyes would make it more difficult for him to tolerate contact lenses.

Overall, the expert concluded that the consenting process for all procedures carried out by Dr B was inadequate, and that there was a failure to obtain a sufficient medical history and instigate appropriate tests to allow a fully informed discussion of the risks and benefits of the available options.

Outcome

After a conference and full discussion with the expert and Dr B, it was agreed that admissions of breach of duty in relation to consent for all the procedures and failure to perform aberrometry prior to offering multifocal lens exchange should be made in the response to Mr N's solicitors.

Following this, a number of other experts were instructed by Mr N's solicitors and by MPS on behalf of Dr B in order to consider the impact of Mr N's vision on his life, and the past and future financial losses incurred.

Expert opinions were sought in the areas of care and assistance, loss of earnings and pension loss, as well as ophthalmology and optometry.

MPS was able to use the statements produced by these experts to argue that Mr N would always have suffered a left vitreous detachment, epiretinal membrane and macular hole. It was put to Mr N's solicitors

that these non-negligent events did make a significant contribution to the reduction in the vision of Mr N's left eye.

It was further argued that there would not have been signs of cataracts at the time of the initial assessment, and therefore no contraindication for LASIK on that basis.

MPS therefore considered that the claim was worth significantly less than alleged by Mr N's solicitors, given that much of the reduced vision in Mr N's left eye was not as a result of any procedure carried out by Dr B.

Following the admissions of breach of duty, but in light of the discrepancies in relation to causation and the value of the claim, it was agreed that MPS and Mr N's solicitors would attend a meeting, in the presence of an independent mediator, in order to determine if the matter could be settled without the need for a trial.

The meeting led to settlement of the matter for over a third less than was originally claimed, and successfully avoided the need for Dr B to attend court, at which he would have been required to give evidence in relation to the treatment he had provided and the consent process he had undertaken.

Learning points

- When taking a history, important negatives should be documented, as this will help to prevent any future allegations that the questions were not asked or that particular aspects of the patient's history were not explored.
- Ensure patients are provided with all the information they will need to make a considered decision, including the consent form, prior to the day of the surgery. A suitable cooling-off period should also be given. In this case, although a month had elapsed between the consultation and the original LASIK surgery, it was unclear whether the patient had had the opportunity to fully discuss the risks and benefits of the available options and review the consent form in advance of the procedure.
- If using a pre-printed consent form, ensure that the appropriate risks are included on this, and if not, ensure that it is clearly documented when the patient is advised of a risk not listed on the form.
- Ensure that the necessary investigations are conducted, and the results reviewed before deciding whether a procedure would be suitable for a particular patient.

Treating COVID-19 symptoms in the home

Dr Eric Khumalo, SAMA Lowveld branch council member, recently appeared in an article in the *Mpumalanga News* about how to treat COVID-19 in the home.

With many hospital beds filled to capacity in the province owing to the escalation of COVID-19 cases, Dr Khumalo emphasised that not everyone needs to be hospitalised. "Not everyone who has been confirmed to have contracted the coronavirus needs to or should be admitted to hospital. Even if they have comorbidities, that is no reason to do so," he said.

"Our challenge is that most of these beds are filled to capacity, especially those in high care and ICU, resulting in patients who are in great need of such beds being denied access and possibly condemning them to an early death in the process," he said.

Dr Khumalo said people should not panic. "One needs to adhere to regulations of self-quarantine and seek medical advice or care soon. It is important to call the hospital or your doctor before being admitted, so that arrangements can be made to properly isolate you on arrival.

"The following treatment is recommended for use, should you be diagnosed with the

virus. You can also take it to boost your immune system. Currently there is no scientific study or research to back this up, but this is what we give to COVID-19 patients. The dosage might differ from one doctor to another, but circumstances must be individualised.

"Vitamin C, 500 mg twice per day. One might need to reduce this to once per day or take it with food if one suffers from ulcers, as it might cause heartburn. Other people replace this with lemons or oranges.

"ACC [active substance acetylcysteine] tablets, one every 8 hours. This usually helps with breathing problems, which are common in symptomatic patients. Zinc tablets or Zimplex provide your body with much-needed zinc to help fight the virus.

"Aspirin, half a tablet or 150 mg. This helps your body against the formation of small blood clots, which are often responsible for difficulties in breathing. Please be careful with aspirin if you suffer from asthma or are troubled by ulcers or have bleeding disease.

"Paracetamol, one tablet every 8 hours, even if there is no pain. It helps reduce inflammation and speed up recovery. Selenium, 200 mg, once every day to help boost your immune system.



Dr Eric Khumalo

"Calcium and vitamin D – you can acquire these by basking in the sun for 10 - 15 minutes per day, and thiamine 100 mg once daily," he said.

"I hope the above will help. The good thing is that one can get all of this over the counter. There is no need for a doctor's prescription or letter.

"Together we can overcome and conquer COVID-19," Khumalo concluded.

Obituaries: Goldfields branch bid a sad farewell

Sadly, two doctors from the Goldfields area passed away in August 2020.

Dr Piet van Rensburg passed away on Sunday evening, 10 August 2020 in Mediclinic Welkom, due to COVID-19 related complications after weeks on a ventilator.

He had been in partnership with Dr Johan Spangenberg as a specialist surgeon since 1990. In 2016, he left the practice due to an eye problem, and began working as clinical manager at the Mediclinic in Welkom.

Dr Piet was the representative of the Employed Doctors' Relations Department on the branch council of the Goldfields Branch and had been a member of SAMA since 1975.

He will be remembered as a remarkable caring doctor and will be missed dearly by his family, friends, patients and all the members of the branch council where he played an important role in the wellbeing of his fellow medical professionals.

Dr Piet is survived by his wife, Christa, four children and seven grandchildren.

Dr Mohammed Bobat died on Sunday 16 August 2020 after 2 weeks in the ICU at Mediclinic. He succumbed to complications of COVID-19. Staff members of the Mediclinic Welkom honoured him with a guard of honour when his body was wheeled out of the hospital. The funeral, according to Muslim rites, took place later the same day.

Dr Bobat started practising as a medical practitioner in Welkom in 1993. He worked at the Bongani Regional Hospital and at the Mediclinic, mainly in anaesthetics.

He was well known in medical circles and played an active role as an office bearer of the Goldfields Muslim Association and the Welkom Islamic School.

Dr Bobat is survived by his wife Ayesha, his son Asad, daughters Anisa and Raeesa and five grandchildren.



Dr Piet van Rensburg



Dr Mohammed Bobat



CPD

For further information
please contact the
CPD Officer on

012 481 2000 

cpd@samedical.org 

WHAT ARE WE ABOUT

Assisting health professionals to maintain and acquire new and updated levels of knowledge, skills and ethical attitudes that will be of measurable benefit in professional practice and to enhance and promote professional integrity. The SA Medical Association is one of the institutions that have been appointed by the Medical and Dental Professions Board of the Health Professions Council of SA to review and approve CPD applications.

SERVICES AVAILABLE

- South African Medical Association Continued Professional Development Accreditation
- **Our Mission**
 - Empowering Doctors to bring health to the nation
 - Excellent Service
 - Quick Turnaround
 - Efficiency