

Doctors call for government action

Embedding environmental education sustainability in health professions education

PUBLISHED AS A SERVICE TO ALL MEMBERS OF THE SOUTH AFRICAN MEDICAL ASSOCIATION (SAMA)



SOUTH AFRICAN MEDICAL ASSOCIATION

SAMF 13th editon now available



The ESSENTIAL MEDICAL REFERENCE for every healthcare professional!

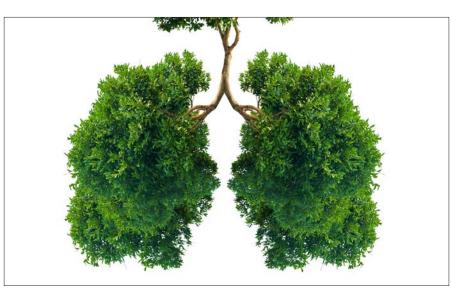
13th Edition

The convenient pocket-sized design enables you to fit it comfortably into your hospital bag or coat pocket, so it can always be at hand for ready reference. South African Medicines Formulary (SAMF), a joint initiative of the University of Cape Town's Division of Clinical Pharmacology and the South African Medical Association, provides easy access to the latest, scientifically accurate information, including full drug profiles, clinical notes and special prescriber's points. The thoroughly updated 13th edition of SAMF is your essential reference to the rational, cost-effective and safe use of medicines.

To order your copy of the new SAMF 13th edition: visit online at: www.samedical.org/products







EDITOR'S NOTE Clearing the lungs Diane de Kock

3

5

- 4 FROM THE PRESIDENT'S DESK Salary increases in the era of economic downturn Dr Sizeka Maweya
 - FEATURES Doctors call for government action SAMA Communications Department
- 6 Solid, altruistic global leadership is the only way to face future crises and win Martin Veller, Ames Dhai
- 7 SAMA continues to protect the interests of members Dr Vusumuzi Nhlapho
- 7 NBC webinar tackles corruption during COVID-19: A devastating paradox Prof. Safia Mahomed, Dr Gail Andrews, Glaudina Loots
- 9 Recent developments and reports reveal deep problems in healthcare – SAMA SAMA Communications Department
- 9 EST committee calls for volunteers SAMA Communications Department
- 10 Equality in mental health hampered by lack of access, lack of investment SAMA Communications Department
- 11 Making evidence-based decisions in a global pandemic Shelley McGee
- **12** Teaching the next generation Dr C J Henley-Smith

- 13 South Sudan: A mass casualty event during a COVID-19 crisis SAMA Communications Department
- 14 Water, sanitation and hygiene considerations in the context of managing the COVID-19 pandemic Dr Sershen Naidoo, Dr Suveshnee Munien
- 15 South Africans at increasing risk of vision loss SAMA Communications Department
- 15 CPD for professionals abroad new SAMA member benefit Lisa Reid
- 16 Embedding environmental sustainability in health professions education Prof. Bob Mash, Christine Groenewald, John De Wet
- 18 Understanding the basics of ICD-10 Rendani Tendane
- 19 Africa's low COVID-19 death rate has multiple causes, WHO says SAMA Communications Department
- 20 A doctor's monologue Dr Buang Lairi
- 20 SAMAREC welcomes newest clinical member: Dr Nasheen Naidoo Adri van der Walt

21 MEDICINE AND THE LAW Nitrofurantoin complication goes to trial Marshal Ahluwalia

23 MEMBER BENEFITS

The Unlimited offers up to R100 000 free personal accident cover to all SAMA members SAMA Communications Department

SAMAREC

The South African Medical Association Research Ethics Committee (SAMAREC) has been a wellestablished Research Ethics Committee (REC) in South Africa for the past 27 years.

As a registered REC with the National Health Research Ethics Council (NHREC), the Council reviews biomedical research proposals for research to be done in the private sector.

Ethics review is done on any type of biomedical research, including full-scale clinical trials, observational studies, device studies, surveys and registers.

If you are planning to publish your study or ensure that you comply with good clinical practice – SAMAREC is the way to go.

We offer a completely paperless system, and guarantee a quick turnaround time.

SAMAREC has a designated officer to keep you up to date with the progress of your application.

For more information, please contact the SAMAREC Officer **012 481 2046** or **samarec@samedical.org**



EDITOR'S NOTE

NOVEMBER 2020



Diane de Kock Editor: SAMA INSIDER

Clearing the lungs

ur ability and the world's to "breathe" has never more important – climate change is recognised as the most important public health challenge of our century, while water, sanitation and hygiene are critical to any community, both during and after a pandemic. Drs Naidoo and Munien (page 14) feel that "changes in personal sanitisation practices during a pandemic can lead to a rapid increase in waste generation, and if proper disposal routes are not in place, can lead to the potential accumulation of pathogens and organic chemicals." This has led them to make a number of recommendations to government and its partners.

"If the health sector were a country, it would be the fifth largest emitter of carbon on the planet," say Prof. Mash, Christine Groenewald and John de Wet in their article, "Embedding environmental sustainability in health professions education" (page 16). "We believe that all health science faculties, in SA and beyond, should be embedding environmental sustainability into how they behave as part of the health industry, and how they prepare their future health professionals."

Healthcare workers' safety is a major concern in SA (page 5), and has led to doctor groups calling on government to intervene, while recent reports and developments have revealed deep problems in healthcare (page 9). Authors in this issue call for solid, altruistic global leadership as the only way to face future crises and win (page 6), tackle corruption during COVID-19 (page 7) and advocate for evidence-based medicine and evidence-informed policy-making (page 11).

"Breathing" can be assisted by good communication. Your feedback and ideas are always welcome.

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

Published by the South African Medical Association Block F, Castle Walk Corporate Park, Nossob Street Erasmuskloof Ext. 3, Pretoria

Email: publishing@samedical.org | www.samainsider.org.za | Tel. 012 481 2069 Printed by Tandym Print (Pty) Ltd

Opinions and statements, of whatever nature, are published in *SAMA Insider* under the authority of the submitting author, and should not be taken to present the official policy of the South African Medical Association (SAMA) unless an express statement accompanies the item in question. The publication of advertisements promoting materials or services does not imply an endorsement by SAMA, unless such endorsement has been granted. SAMA does not guarantee any claims made for products by their manufacturers. SAMA accepts no responsibility for any advertisement or inserts that are published and inserted into *SAMA Insider*. All advertisements and inserts are published on behalf of and paid for by advertisers.

LEGAL ADVICE

The information contained in SAMA Insider is for informational purposes and does not constitute legal advice or give rise to any legal relationship between SAMA and the receiver of the information, and should not be acted upon until confirmed by a legal specialist.

Salary increases in the era of economic downturn



Dr Sizeka Maweya, SAMA President

The level of wages or salaries plays a crucial role in the economy. Not just a cost to business, wages and salaries give consumers the spending power needed to purchase goods and services. The Gini coefficient is a measure of the distribution of income across a population. It is often used as a gauge of economic inequality, measuring income distribution or, less commonly, wealth distribution among the population. SA is the most unequal country in the world, based on the World Bank's calculations, 26 years after democracy.

SA is struggling with inequality, poverty and unemployment. We experience the world's highest number of strikes, with a period each year even named the strike season for wages/salaries. COVID-19 has brought the economy of the country to its knees. The government has reneged on its promise to give public sector workers salary increases of between 4.3 and 5.4% from April 2020, because it is broke.

There is a continual threat of industrial unrest from government workers. During the lockdown, most services were not functional, and most government employees worked from home. But government workers, through their unions, are demanding salary increases even without economic growth. The inequality gap continues to widen because even those workers who earn higher wages stand to benefit from the increases. It would be logical to freeze the salaries of those who earn above a million rand, to allow the lowincome earners to catch up with the higherincome earners. Historically, it has been shown that better policy choices, made with low- and moderate-wage earners in mind, can lead to more widespread wage growth, and strengthen and expand the middle class.

Maybe it is time for SA to re-examine its policies around salary increments. There is a severe misalignment between salary increases and economic growth. The SA economy is dependent on the mining sector. However, the workers on the ground are the lowest paid in the country. Meanwhile, government workers are the people with the highest wage bill, even though they contribute less to the growth of the economy.

SA is slowly running out of mineral resources, which puts great strain on economic growth. It did not make sense that while government employees were at home during levels 5 - 2 of lockdown, on their return to work, they demanded salary increases.

Essential/critical workers are public or private sector employees who are considered to provide an essential service. According to the Labour Relations Act No. 66 of 1995, section 71(8), health workers are considered essential workers, and they continued to work during the lockdown. They were not even considered for the danger allowance, nor for compensation for the sacrifices to their health and that of their families. Those in the private sector did not perform elective operations, nor were they considered in terms of assisting the government to boost their lost income.

Government health workers, especially low-income earners such as nurses, porters, cleaners and general workers, must be treated as a different category, since they earn less. Even though other categories of health workers and government employees are not looked at for salary increases, these workers must be considered.

Forbes once said that the need to reward good employees does not change whether the economy is in a recession or an upturn. Health workers were good employees during lockdown in the COVID-19 response. Employers need to consider what would happen if their best employees leave; it is not easy to find the best workers in the market, whether in the public or private sector. During an economic downturn, employers must come up with cost-saving measures, but the government must invest in its healthcare workers so that they understand that they are part of the value chain. In that way, they will be motivated to work harder for less. Part of the investment could be to reduce their payas-you-earn (PAYE) tax, which would translate into money in their pockets. This incentive would go a long way when the economy bounces back in the future.

Asking for a raise when the economy is bad can make you look out of touch with reality and insensitive to your employer's business challenges. Government workers and other unions in the private sector are up in arms asking for salary hikes. They are out of touch; however, in reality, they observe that their bosses are earning more and more and getting bonuses. In the government sector, they wake up to news of corruption committed by the people in power.

Time for SA to re-examine its policies around salary increments?

But unless you are irreplaceable, asking for a salary hike during an economic downturn is counterproductive. Most low-income earners are replaceable. The government is not obliged to listen to their plight; hence they keep quiet and continue to work.

The culture in SA is such that government employment is seen as sheltered, since the laws are stringent when the government wants to retrench an employee. This would be a sensible action to take in order to hike the salaries of the remaining employees. The present economic climate is not conducive to increasing the salaries of government workers. Special consideration must be made for those workers who earn low salaries and still risked their lives during the surge in COVID-19. Inequality and poverty must be addressed, since the black tax takes its toll on those who work. Unfortunately, unemployment will continue to rise.

Doctors call for government action

SAMA Communications Department

A doctor groups, including SAMA, have called for government intervention to ensure the safety of healthcare workers, following the allegedly targeted recent murder of Johannesburg anaesthetist, Dr Abdulhay Munshi.

In a statement, they demanded action from the Ministries of Health and Justice, as well as the National Prosecuting Authority and the Presidency.

The Federation of SA Surgeons, SAMA, the SA Private Practitioners Forum and the SA Society of Anaesthesiologists said that without immediate action and intervention to restore the confidence of healthcare workers, there soon may not be any of them left. "There is every reason to predict the destruction of any semblance of a functional health system – public and private. Soon there will be no health workers to blame or murder – and no health workers to heal the sick," the doctors said.

In December last year, Munshi became the co-accused in a case of culpable homicide, along with veteran paediatrician Dr Peter Beale, following the death of Zayyaan Sayed – a 10-year-old boy the pair had performed surgery on in October of the same year at Netcare's Park Lane Hospital. It was the immediate criminalisation of the matter – prior to the normal processes of inquiries and internal investigations by the hospital group as well as the HPCSA – that the doctors are concerned about.

"The treatment of SA healthcare professionals as common criminals prior to inquiry is untenable. The collective concerns for the national healthcare assets include a reticence among young South Africans to choose medicine as a career, avoidance of complex and high-risk interventions in providing medical care (which leaves high-risk patients without access to medical care) and an exodus of healthcare professionals from the country. These are all based on fear of arrest for recognised complications," the medical groups wrote.

City Press notes that while the doctors do not speculate on the reasons behind Munshi's killing, they have also called again on the authorities to "effectively and quickly" investigate his death and bring those responsible to book. The doctor groups added: "SA's healthcare workers are afraid to practise and are afraid for their lives. Yet their dedication to delivering quality healthcare remains firm. They encourage best practice and absolutely support investigations into patient harm. However, it's increasingly difficult to deliver healthcare to the nation while healthcare workers feel besieged."

Source: City Press (https://www.news24.com/ citypress/news/besieged-doctors-call-for-actionafter-munshi-killing-20200929).



n September, SAMA released the following statement:

To condemn the increase in violence against SA healthcare professionals, we stand in solidarity and respect for the life of Dr Abdulhay Munshi. SAMA calls on members to wear a black armband from 18 to 25 September to express their outrage at the senseless violence directed at healthcare workers.

SAMA chair Dr Angelique Coetzee said that she deplored the violence that resulted in Munshi's murder, and that it was a sad day when a country could not guarantee the safety of its healthcare workers.

Solid, altruistic global leadership is the only way to face future crises and win

Martin Veller, Ames Dhai, University of the Witwatersrand

OVID-19 has taught us that investing in health security research, preparedness and responsiveness, nationally, regionally and globally, is critical. For this to work and to beat similar crises in future, effective, credible, altruistic political leadership at all levels of society is needed.

The world as we know it has changed, forever. The COVID-19 pandemic has achieved what a few outspoken voices had predicted. The emergence of the SARS-CoV-2 virus has affected every person in a multitude of ways, from restricting movement and changing interaction with others, to many losing their livelihoods and large numbers becoming infected, and many of those infected, dying – more than 800 000 deaths have already been ascribed to the virus, and evidence suggests that this is a substantial underestimation (in SA, the current level of excess deaths is three times higher than the number of deaths that can be ascribed to COVID-19).

It is, therefore, obvious that this pandemic is not just like any influenza epidemic (the 2009-2010 swine flu pandemic caused 300 000 deaths). On the other hand, fortunately, the lethality of this virus is modest when compared with the Spanish influenza pandemic of a century ago that cost between 20 million and 50 million lives, and the more recent West African Ebola outbreak, where 11 000 deaths occurred among the 28 000 infected (a 40% case fatality rate).

What is patently clear is that such events, whether they are caused by natural evolution of an infective agent or are human-made, will recur. During this week's virtual symposium organised by the Africa Centres for Disease Control and Prevention, Columbia University and the University of the Witwatersrand, titled "Meeting the challenge of COVID-19 in Africa", the key messages were:

- The world can overcome such threats if all nations and societies work in solidarity.
- Tried-and-tested public health principles are effective. These methods primarily consist of using testing, tracing and isolation to reduce the rate of infections until vaccinebased prevention becomes available. Other methods to reduce the virus in circulation are also essential. In the case of droplet/ airborne viral spread, this means limiting the movement of people, wearing face

masks, interpersonal distancing, enhancing dispersion of the virus by good ventilation and reducing the rate of transmission from hand to face by promoting effective and regular hand-washing.

- The only manner in which the SARS-CoV-2 virus will be relegated to becoming a seasonal nuisance virus will be the development of effective population-wide immunity. To prevent undue mortality, this requires the development of effective, widely available vaccines.
- The world and every nation must be prepared and appropriately capacitated to prevent such threats from occurring, and if this fails, to thwart such events developing by rapidly implementing the public health interventions listed above.
- Threats of this nature have lasting effects not only on the wellbeing of people and the world's economy, but also on the world's sustainability. The consequences are longlasting, and cures, if they exist, take time and large amounts of money to develop. Furthermore, the focus on the acute problem invariably has other downstream costs in disrupted health systems and economies.

Mechanisms to prevent and manage pandemics are, therefore, essential. This requires that all countries have an effective public health system that is well run, and is adequately and consistently resourced. These entities must be in a position to rapidly deploy, using the most up-to-date, evidence-based health interventions and technologies. Their ability to advise the decision-makers and the populace must be unrestrained, and protected from political interference. Importantly, the most effective tool available to these agencies is their communication about preventive public health measures, the importance of societal solidarity and the value of vaccination. Such messaging must be trusted by everyone in society, and it is mandatory that this has political ownership in the highest office.

This requires that governance at all levels of society is ethical, strong, thoughtful and accountable. Such servant leadership is not only essential to ensure the level of international collaboration needed to allow for an effective global response, but more importantly, is the quintessential element in implementing local interventions, which at times may be harsh and unpopular. Trusted management based on transparent decision-making, using the best scientific evidence available at the time, and subsequent quality trustworthy communications, are much more likely to reduce the rate of spread of the virus. Without trust, no measure will be implementable, no matter how effective the local enforcement agencies are, particularly in societies that are deprived or under threat.

That trusted leadership works in reducing the number of SARS-CoV-2 infections and minimises COVID-19 mortality has been clearly demonstrated in a number of countries. On the other hand, where trust in leadership is patchy or does not exist, high infection rates occur. Similarly, when political leadership has been in solidarity with neighbouring nations, regional outcomes appear to be better. As the COVID-19 pandemic has again shown, the biosphere has no borders. This also means that with the possibility of COVID-19 vaccines being available in the near future, immunisation equity will be central to global health security. In contrast, vaccine "nationalism" will impede the development of global immunity and global distributive justice.

As we have seen, human tragedy from rapidly spreading infectious outbreaks is profound, with extensive health, economic and social consequences causing monumental human suffering. The painful statistic of lives lost is only the first measure of impact. COVID-19, like the 1918 Spanish flu, has underscored how vulnerable the world is. Therefore, investing in health security research, preparedness and responsiveness, nationally, regionally and globally, is critical, even when no imminent crisis is apparent. So what does this boil down to? That the management of any pandemic, which arguably is the biggest threat to the wellbeing and survival of humanity, requires effective, credible, altruistic political leadership at all levels of society. Above all, this leadership must be worthy of the trust placed in it. Anything less is paid for with lives, mostly by those who carry the burden of inequity and disadvantage.

Source: Daily Maverick 7 September 2020 (https://www.dailymaverick.co.za/article/2020-09-07-solid-altruistic-global-leadership-is-theonly-way-to-face-future-crises-and-win/).

SAMA continues to protect the interests of members

Dr Vusumuzi Nhlapho, SAMA CEO/Acting General Manager

AMA has a unique membership base; half our members are employed in the public service, the other half in private practice. Throughout our existence, SAMA has sought to provide relevant services to all our members. In order to comply with the requirements of the bargaining council, a trade union was established two decades ago to offer trade union services to SAMA employed members (public service doctors).

However, despite concerted efforts at establishing a functional trade union for these members, the union was unable to comply with its own constitution, and some aspects of the Labour Relations Act No. 66 of 1995. The non-compliance with these regulations in 2019 culminated in the trade union being placed under administration. In February this year, an administrator was appointed to look after the affairs of the trade union.

In our view, however, the administrator as well as the registrar of labour do not appreciate the history and context of SAMA and its diverse membership. It has also become evident that SAMA's vision of a united profession does not align with the objectives of the administrator, who is seeking to relaunch a separate trade union, even if this comes at the expense of SAMA and a united membership.

During this period of deliberate confusion, SAMA members in public service have been adversely affected by the actions of the administrator, who continues to make deductions from their salaries without their consent. These deductions are what these members would have paid to SAMA for a range of services and benefits. In some cases, these deductions amount to thousands of rands as the SAMA Trade Union (SAMATU) reinstates arrear amounts, all despite the fact that these members have indicated that they are not SAMATU members and, in some instances, have joined other unions. This was not the directive of the court order.

It must be noted that these and several other issues are currently before the courts, and we do not wish to air these until these processes are finalised. We have intervened in these matters on behalf of frustrated and angry members who are now deemed members of a separate trade union to which they never chose to belong.

SAMA will continue to work to protect the interests of these members who, we believe, are the victims of actions by an administrator who has not even consulted them.

NBC webinar tackles corruption during COVID-19: A devastating paradox

Prof. Safia Mahomed, Dr Gail Andrews, Glaudina Loots, SA National Bioethics Committee, UNESCO



Prof. Safia Mahomed

n 26 September 2020, the SA National Bioethics Committee (NBC) of the UN Educational, Scientific and Cultural Organization (UNESCO) hosted its first webinar entitled "Corruption during COVID-19: A devastating paradox". The NBC was established in 2019, and operates within the framework of UNESCO'S Universal Declaration on Bioethics and Human Rights of 2005. The establishment and operation of the NBC for SA is tailored to our country's needs, background, culture, history and tradition. It is a committee



Dr Gail Andrews

of the Social and Human Sciences Sector of the National Commission for UNESCO. The authority under which the NBC is established is the SA National Commission for UNESCO under the auspices of the national Minister of Basic Education. One of the responsibilities of the NBC includes responding to ethical and human rights bioethical challenges, with particular reference to matters of national interest. Corruption, which rears its ugly head in all facets of society, is a concept that we as a nation have grown accustomed to. However,



Glaudina Loots

the outrageous corruption occurring in the midst of a crisis, with officials dipping their hands into the COVID-19 cookie jar, speaks to the extent of the moral decay that SA faces. The webinar was co-ordinated by Dr Gail Andrews, Deputy Director-General of Health, from the National Department of Health, Ms Glaudina Loots, Director, Health Innovation, from the Department of Science and Technology and Prof. Safia Mahomed from UNISA's School of Law. All three are members of the NBC. The objectives of the webinar included

FEATURES

addressing the devastating role of corruption during pandemics, discussing the health and economic impact of corruption on societies where resources are scarce, discussing what ethical leadership should be and analysing how corruption has negatively impacted trust within communities. A synopsis of the webinar follows below.

Prof. Ames Dhai, chair of the NBC, provided introductory remarks, setting the scene for the presentations that followed. She highlighted the patent betrayal of trust that occurs when access to social services is denied because of stealing by the powers that be, especially during a pandemic. She further detailed that massive resources mobilised to respond to health and economic crises, coupled with the suspension of many prevention and enforcement mechanisms, including procurement oversight, due to social distancing, have created fertile ground for opportunities for corruption or for the perpetuation of these immoral activities in already existing corrupt regimes. Types of ongoing corruption include contract and procurement fraud, price gouging and lucrative contracts being awarded without proper procurement processes, and funds aimed at addressing the economic crisis also falling prey to corruption, with allegations of fraud in the distribution of unemployment benefits. Trading off accountability for speedily procuring supplies needed during pandemics is morally offensive, and transparency during the processes is necessary so perpetrators can be held accountable.

A message from Mr Phinith Chanthalangsy of UNESCO's social and human sciences sector regional office for southern Africa then followed, wherein looting was described as an assault against justice. Currently, our duty bearers are not performing their duty of care. In addition, justice and solidarity are absent. Corruption disrupts the underlying threads of the fabric of society, especially when duty bearers drift away from the rights of others. All lives must be respected, protected and treated with dignity, and should not become an abstract concept. Duty is more compelling, accountability more urgent and solidarity more real especially during times of crisis. The role of ethics in infl uencing and transforming politics was emphasised.

Prof. Alex van den Heever, from the School of Governance, University of the Witwatersrand, provided a presentation on understanding the structural features of corruption and poor performance in the SA health sector. He highlighted the fact that corruption is a proxy indicator for performance. Where there are high levels of production, there are low levels of corruption. Our system is designed for a high trust context when it should in fact be designed for a low trust context. The structural features of the system must be addressed, which would then lead to change, as changing a few "bad apples" will not make a significant difference. Irregular expenditure is staggeringly high, and there is no reason why public institutions with secure revenue sources should not perform in their duties. If one cannot be held accountable for stealing another's money, it is very possible to get away with anything. He indicated that as we currently operate within a low trust environment, we need the regulator to be more vigilant, to ensure accountability. Supervision, performance requirements, transparency and consequences are key features of an accountability structure. Political appointees report to a separate accountability structure, which perpetuates corrupt practices and creates conflicts of interest.

Justice and solidarity are absent

There needs to be a restructure of all governance and accountability frameworks to separate political office-bearers from decisions that involve appointments, including decentralising delivery to the appropriate domain of authority. Regulators that are independent of political office-bearers need to be created. Where there is interference, those perpetrators must be criminalised. Political office-bearers must focus on policy and not operational decision-making. Senior managers in the public sector must have permanent appointments, with removal permitted in cases of proven misconduct and/ or failure to perform. Senior managers cannot resign and be paid out the remainder of their contracts. Delivery entities must have localised accountability structures, separate from political office-bearers, that tie them to the communities they serve. He emphasised that power must be distributed and not concentrated.

Ms Sibongile Tshabalala, the national chairperson of the Treatment Action Campaign, provided real, outrageous and heartbreaking examples of corruption that communities can no longer accept. Communities are placed on the back burner, bringing to light the abstract context in which they are viewed by officials. Communities have been negatively affected and the trust relationship completely eroded. People do not trust government entities, including public hospitals. Corruption has been normalised, nepotism runs rife and the correct procedures are not being followed. People on the ground suffer greatly as a result. Healthcare systems have collapsed, and officials deny system failures when they are blatantly clear. The relevant question that seems to have no appropriate answer is, who then protects communities, if the bodies with such authority dismally fail in their duties towards South Africans?

Dr Aslam Dasoo, co-convener of the Progressive Health Forum, described the nature and character of this fraught historical moment, defined the dimensions of ethical leadership and considered what the application of such leadership might mean for a country in the grip of a corruption nightmare. He indicated that perpetrators sedate the population into the notion that nothing can be done about corruption. SA finds itself moving in a direction not of its choosing. Very few South Africans are unaware of the slippery slope that we have been tricked into walking upon, and the message of hope that we will overcome corruption is perpetuated by the very same people who commit corrupt offences. Leadership reflects the nature and character of a leader, and is reflected in the manners of the leader. Level 5 leadership is a special galaxy of two stellar attributes: fierce resolve and great humility. The pandemic should bring out our best, but instead it brings out our worst. He stressed that corruption has become irresistible to some, and the business of uniting as a nation has been postponed. We are fed a diet of tired political clichés, while officials profit without adding value and steal without punishment. The narrative must now be that of a struggle for a new culture for a new moral life. The want of ethical leadership is not enough. It is only the people who can prevail against the theft of the common wealth. An ethical leader is called to leadership: they are not schooled in ethics, but rather possess these virtues.

An intense discussion followed the presentations, with attendees feeling strongly that there is a "don't care" attitude by authorities towards society in general. However, there was consensus that our communities can no longer stand by and watch. We need to lead by action. Corruption is a crime against humanity. Resonating throughout this session was the fact that South Africans' cries for ethical leadership can no longer fall on deaf ears. As Prof. Dhai had stressed in her opening remarks, the new normal should not just be masks, hand washing and surveillance by artificial intelligence, but most importantly, a corruption-free SA. This corruption has gone on for too long. We cannot allow it to continue being the unconscionable norm in our country any longer.

Recent developments and reports reveal deep problems in healthcare – SAMA

SAMA Communications Department

he resignation of Prof. Mkhululi Lukhele as the head of the Gauteng Department of Health, and revelations by *Daily Maverick*'s investigations team Scorpio of billions of rands of unlicensed personal protective equipment (PPE) procurement, have revealed several deep and serious problems in healthcare in the country.

SAMA says that the two issues bring into sharp focus political appointments in key healthcare positions, which it says ultimately damages healthcare provision to patients.

Daily Maverick on 2 October reported that the country's nine provincial departments of health sourced emergency PPE and related goods for the COVID-19 pandemic valued at ZAR2.5 billion from 550 companies, of which only 155 (28%) were licensed by the SA Health Products Regulatory Authority. The report noted that ZAR2 billion of the expenditure was paid to companies that are not subject to any regulatory oversight.

Commenting on the report, SAMA chairperson Dr Angelique Coetzee says, "Obviously we are thankful to Scorpio for these findings, and their detailed report that points to irregular spending in the healthcare sector during this time. If that is found to be the case, then it is naturally extremely concerning that this has occurred, and frustrating, because these funds could have been better used to treat patients, fund human and operational resources and to make much-needed improvements to healthcare infrastructure."

Of equal concern to SAMA, says Dr Coetzee, is the resignation of Prof. Lukhele. A statement announcing Prof. Lukhele's resignation noted that "Premier David Makhura had placed Prof. Lukhele under precautionary suspension following recommendations by the Special Investigating Unit."

While no direct link is drawn between the findings published by Scorpio and the resignation of Prof. Lukhele, it is instructive that the statement announcing Prof. Lukhele's resignation notes, "Premier Makhura reiterates that all those involved in COVID-19 corruption and malfeasance – whether they are public officials, public servants or business people – must be brought to justice."

"Prof. Lukhele did the right thing in resigning, and showed leadership and integrity in making this decision. He is a respected person in the medical fraternity, and it is undoubtedly because of his esteemed status in the profession that he was appointed in the first place," says Dr Coetzee.

Dr Coetzee says that the COVID-19 pandemic has highlighted many gaps in the



Dr Angelique Coetzee, SAMA chairperson

healthcare system that were easier to cover up before.

"Coronavirus has revealed many issues that could previously be concealed, but will now come into the public domain. We fear that this may not be the end of it though, and that many more shocking revelations may yet emerge in time," she concludes.

EST committee calls for volunteers

SAMA Communciations Department

he members of the Education, Science and Technology (EST) Committee, a SAMA standing committee, recognise the need for registrars to be assisted with research proposal development. We also recognise the contribution made by individual universities in ensuring that they support registrars for this task. However, there have been requests of assistance from SAMA.

The EST committee will endeavour to provide assistance to registrars who are having difficulties with research proposal development, or those who have completed their data collection and need to start writing their manuscript. During initial discussions, SAMA endeavoured to provide a venue where candidates and their supervisors would have protected time away from work and home to do write-ups for a couple of days. Candidates who wished to stay over for a complete breakaway could make use of accommodation nearby, at their own expense. This initiative will be considered again in the future.

In view of the current circumstances due to COVID-19, the committee considers that the writing initiative could continue on an online

platform, and wishes to make use of this opportunity to invite SAMA members who are academics or researchers to volunteer to assist with the facilitation of the writing workshop. It is estimated that each person would need to volunteer approximately 3 days in a 6-month period. However, this would depend on the number of volunteers.

Should you be interested in being part of this great initiative to assist the registrars, please forward your contact details to the EST committee co-ordinator Ms Karlien Pienaar at karlienp@samedical.org.

Equality in mental health hampered by lack of access, lack of investment

SAMA Communications Department

ne in three SA adults will experience mental illness in their lifetime, but the quest for equal access to better mental health for all is hampered by a severe lack of treatment facilities and mental health professionals, with only 1 000 psychiatrists to serve the country's almost 60 million people.

On World Mental Health Day (10 October 2020), the SA Society of Psychiatrists (SASOP) joins the global call by the WHO and partner organisations to scale up investment to improve access to mental health, as one of the most neglected areas of public health worldwide.

SASOP has called on the SA government and health authorities to increase training for mental healthcare workers and professionals, and improve geographic distribution of mental healthcare facilities to ensure better and more equitable access to treatment for mental health conditions.

SA is starting on the back foot, said President Elect of SASOP Dr Sebolelo Seape, with the availability of psychiatrists at 0.5 per 100 000 people, well below the global average of 1.3 per 100 000, a proportion that varies widely from 0.51 in low-income countries to 12 in high-income nations.

Dr Seape said the lack of professionals was worsened by structural barriers to achieving universal mental health coverage, including treatment costs and limited medical aid cover for mental illness, while a lack of public sector treatment facilities and professionals is felt in both high-density urban areas and SA's rural provinces.

"This indicates that from the get-go, SA is not in a position to deliver services adequately to its population.

"The 2020 World Mental Health Day theme is 'Mental health for all – greater investment, greater access. For everyone. Everywhere.' This is a noble principle that we should all strive hard to achieve and sustain but, sadly, there are serious barriers to achieving this in SA," Dr Seape said.

Mental disorders are a leading cause of ill health and disability worldwide, affecting 30.3% of SA adults at some point in their lifetimes, with significant effects on quality of life, relationships and earning ability, as well as costs to the economy in loss of productivity and treatment costs.

"Despite its high prevalence, mental illness remains largely unknown and unrecognised as a medical condition, leaving the afflicted undiagnosed and untreated, to the distress of family and community, and negative economic, cultural and social impacts. The reasons for this are many, and as diverse as the economic, cultural and social landscape of SA."

Culture and traditional beliefs also play a role in SA

While the Covid-19 pandemic has seen increased levels of stress, anxiety, fear, emotional distress, feelings of isolation and other mental health impacts due to lockdowns, physical distancing and precautions against infection, she said that the pandemic had also further reduced access to mental healthcare. For example, face-to-face meetings have been limited, people's mobility has been restricted and risks of infection put people off seeking help for non-emergency conditions, while some healthcare facilities have had to close temporarily.

Dr Seape said a lack of knowledge of mental health, social stigma and a belief that mental illness is a sign of weakness, as well as the risk of discrimination in the workplace by disclosing a mental disorder, were among the attitudinal barriers to achieving good mental health for all.

She said an SA study had shown that the large majority of people did not perceive that they needed treatment for mental health conditions, or else believed that they could manage without help, that the problem would "go away on its own" or that treatment was not effective.

"This is tied to a lack of knowledge and understanding of the causes of mental health conditions and the appropriate treatment for these conditions – what we call mental health literacy. Culture and traditional beliefs also play a role in SA, and solutions to addressing barriers to seeking treatment for mental health conditions need to take these into account.

"It is clear that all these barriers will need to be overcome to improve mental health service provision in SA," Dr Seape said.

Treatment dropout is a further concern, she said, due to negative interactions with mental healthcare providers, lack of personal or medical aid funding for maintenance or followup care and lack of support from employers in allowing employees the time to seek help and complete treatment.

Substance abuse and mental health conditions are closely linked, Dr Seape said, with either one often leading to the other, and substance abuse often leading to dropout from treatment for mental health conditions.

"Government should also be making a serious effort to increase the number and availability of substance abuse treatment facilities, because the lack of these has an enormous effect on the outcomes of mental health and other medical conditions, which together have a major cost to the economy."

Dr Seape said appropriate funding of mental health would lead to a multitude of positive outcomes for the health of individuals and communities, as well as positive economic impact through greater productivity and the reduction of healthcare costs in the long term.

SASOP's appeal to government is to make funding available to increase the number of professionals working in mental health, including nurses, occupational therapists, social workers, psychologists, psychiatrists and others involved in mental healthcare delivery.

Public mental healthcare facilities need to be increased, and distributed to ensure geographic accessibility across urban and rural areas, along with community education campaigns to grow understanding of mental health conditions and knowledge about accessing treatment.

Dr Seape said a system of universal mental healthcare coverage must be worked out to eliminate structural barriers such as financial accessibility, while employers should be encouraged and supported to enable employees to access help, which would in turn improve workplace productivity.

Making evidence-based decisions in a global pandemic

Shelley McGee, acting head, SAMA Knowledge Management, Research and Ethics Department



n a recent editorial in PLOS Medicine, Trisha Greenhalgh, professor of primary care health sciences at Oxford University, asked the question: "Will COVID-19 be evidencebased medicine's nemesis?"

She reflected on the current paradigm of evidence-based medicine and called for a more pragmatic approach to "evidencebased" decision-making with the lessons of the COVID-19 pandemic in mind.

As an advocate of evidence-based medicine and evidence-informed policymaking, SAMA has throughout the epidemic endeavoured to contribute to both of these processes, with representation on the ministerial advisory committee for COVID-19 and National Clinical Guideline Writing Committee.

Evidence-based medicine depends on a number of processes that involve a systematic and thorough evaluation of the existing evidence and information on a particular topic, with focused questions allowing us to develop answers to very specific questions.

However, COVID-19 has often presented an environment where there really is not a lot of evidence to work with to answer such questions. Additionally, the questions that we have seen during the pandemic have been broader than just treatment, and have revealed the limited knowledge available about some public health interventions too.

SAMA has recently engaged with the National Essential Medicines List Committee (NEMLC) in a series of rapid reviews of proposed medicine treatments for COVID-19. The process behind the efforts was published

in the *SA Medical Journal* in a special COVID-19 online edition in October.

In March 2020, a NEMLC COVID-19 subcommittee was formed to address the need for rapid appraisal and synthesis of evidence in order to inform COVID-19 treatment guidelines in the country.

The subcommittee has conducted accelerated evidence reviews and provided recommendations to the National COVID-19 Clinical Guideline Writing Committee, which has produced several versions of the National Guidelines for Clinical Management of Suspected or Confirmed COVID-19 Disease.

While many of the medicines reviews have been updated as the evidence has evolved in the short space of a few months, the pandemic has brought out broader questions on every related topic, including disease epidemiology, virology, immunology, effectiveness of personal protective equipment and social distancing measures, vaccination efficacy, testing accuracy and many more, which the available evidence base has struggled to address.

Certainly all indications are that, at least temporarily, many patients and health practitioners have fallen victim to fake news, exaggerated claims and unsubstantiated and unproven treatments. While research questions relating to drugs and vaccines are amenable to randomised controlled trials that can rapidly and accurately provide answers, a number of knowledge gaps cannot been easily addressed by a typical evidence-based approach.

A range of treatments were initially proposed, which have a reasonable theoretical basis, but many of which did not yet have proven treatment effect in clinical trials. Despite this, a number of reports from various countries have described large numbers of patients being prescribed early "compassionate use" medication for which there is biological plausibility, but little or no evidence of effectiveness in humans. Many of these prescriptions have unfortunately not taken place within the confines of clinical trials, and thus have contributed little to the evidence base for the treatments.

For clinicians, it is perhaps obvious why, in the middle of a life-threatening pandemic, it would be easy to lower a normal threshold to adopt a proposed treatment. If something has face validity, no clear evidence of harm and is readily available without significant investment, it is easy for the logic to be "what's the harm?"

However, this approach can also become an appeal to emotion through flawed reasoning, and is not without potential negative impacts.

Even where they are inexpensive and available, interventions that do not work carry opportunity costs, offer false hope, can distract clinicians from the pursuit of other beneficial therapies and can introduce new potential for workplace error and harm.

Similar "low-risk" therapeutic interventions have emerged for COVID-19 and received international endorsement, despite an absence of evidence.

Not all interventions can be easily tested in randomised controlled trials without significant potential for bias creeping in.

Awake prone positioning is an example of one of these. Initially reported in small case series without control groups, and purported to transiently improve oxygenation, many national organisations and guidelines have actively endorsed this approach. But, in terms of a strong evidence base, we remain unconvinced that it actually does work, and that observed effects are sustained. Early reports were observational, using inconsistent methodology and based on small uncontrolled case series data. Yet clinicians and policymakers were quick to adopt the method as a recommendation.

Additionally, while poorly researched misinformation seems to have spread like wildfire, addressing invalid claims with solid evidence is considerably more difficult and time-consuming, to the point that a solid evidence base is no longer meaningful to clinicians desperately trying to do something for their patients.

In particular, upstream preventive public health interventions aimed at supporting widespread and sustained behaviour change across an entire population (as opposed to testing the impact of a short-term behaviour change in a select sample) rarely lend themselves to the traditional trial designs.

Population-wide public health efforts are typically iterative, locally grown and pathdependent, and they have an established methodology for rapid evaluation and adaptation. But evidence-based medicine classifies such designs as of "low

FEATURES

methodological quality". This has been starkly evidenced as we have worked to address public health interventions to implement against COVID-19.

Off the back of this, many authors have called for a more fit-for-purpose scientific paradigm to address the combination of medical and public health interventions in particular

The logic of evidence-based medicine, in which scientists pursue the goals of certainty, predictability and linear causality, remains useful in some circumstances (for example, medicine and vaccine trials). But at a population and system level, much needs to be done in adopting additional methods concerning how best to manage the uncertainty, unpredictability and non-linear causality that abounds in these scenarios.

Indeed, multiple interventions might each contribute to an overall beneficial effect through varied effects throughout a causal pathway, even though none may have a statistically significant impact on any predefined variable on its own in a clinical trial.

The epidemic has highlighted the need to apply research designs that examine dynamic interactions and emergence. A combination of strict evidence-based medicine and complexsystems paradigms may be the answer going forward to a "practice-based evidence pathway".

References available on request.

Teaching the next generation

Dr C J Henley-Smith, FPD School of Education

ecently, a colleague recommended a Netflix series called "Explained" to me. I was astounded when I watched the episode entitled "The next pandemic", released in November 2019. The episode succinctly explains past pandemics and why we are at risk of future pandemics. Unwittingly, the episode warns of COVID-19. I can only describe my feelings as a sense of jamais vu (opposite of déjà vu) – as Bill Gates, featured in the episode, states, "We always look back and wish we'd invested more"

As the world reels from the current devastation of COVID-19 and braces for the unknowable future, I keep thinking of Bill Gates' words. What more should we do now for the next pandemic, so that we do not let history repeat itself? There are many solutions worth investing in, from reducing deforestation to increasing early virus detection. Aslam (2020) provides six solutions to prevent the next pandemic. These solutions comprise of strengthening the public health system, a global health monitoring service, e-healthcare systems (digital information shared between hospitals, medical aids and patients), bridging gaps between poverty and education, promoting safe hygiene practices, and research and development. Unfortunately, countries such as the UK and USA, which have these solutions in place, suffered some of the most severe repercussions of the current pandemic, but this may have been be due to a slow response.

Aslam emphasises that the first three solutions cannot be supported without the necessary education. While there is no denying the inequality in education, highlighted lately by the pandemic, COVID-19 has brought a focus on online education possibilities. Even surgical education has rapidly adapted due to safety restrictions put in place to prevent the spread of COVID. In a study by Chick et al., standard surgical face-to-face lectures were replaced by teleconferencing, online practice questions, high-quality surgical videos and simulations to supplement learning. Flipped classes were also implemented where students reviewed the necessary material ahead of time and then came together, virtually of course, to discuss and apply their knowledge.

The rapid shift to online learning ... has shown that is possible to adapt

If these online strategies can help the next generation of surgical doctors to combat the current learning restrictions in place, and perhaps contribute to the ease of digitisation solutions in a pandemic, maybe we can invest more now in online learning and making it more accessible. The rapid shift to online learning in the education sector has shown that is possible to adapt. For those who are unable to study due to travel expenses or lack of accommodation, and those individuals with

comorbidities, this may be their best option. Are you willing to share your expertise and teach the next generation online?

The Foundation for Professional Development (FPD) offers a postgraduate diploma in distance higher education, which focuses on the pedagogy (theory and practice of teaching), technology and assessment behind online teaching and learning. Electives such as curriculum and module design, leadership and management, service learning, quality enhancement in higher education, and educational research are offered. This 1-year fulltime (2-year part-time) programme is taught and assessed completely online - offering you the unique perspective of being an online student while learning to be an online facilitator.

Health professionals who wish to further develop their leadership, management and education knowledge and skills to lead health professional education in the 21st century may be interested in our postgraduate diploma in health professionals education and leadership programme. This programme was developed in partnership with the sub-Saharan Africa-FAIMER Regional Institute, which has over 10 years' experience in developing educational leaders in Africa. This programme is also designed and assessed completely online, and is offered as either full time or part time.

References available on request.

SAQA ID: 109941 (NQF 8) R29 900 CHOOL OF DUCATION

Postgraduate Diploma in Distance Higher Education

Intake closes 30 October 2020

Postgraduate Diploma in Health Professions Education & Leadership - SAQA ID: 102056 (NQF 8)

R29 900 Early bird registration: Apply before 30 November 2020 for the May 2021 intake and pay 2020's price!

For more information contact: FPD School of Education | 🖀 087 821 1109 | 🖂 education@foundation.co.za

South Sudan: A mass casualty event during a COVID-19 crisis

SAMA Communications Department

"Somehow, I only expected one disaster at a time," says Médecins Sans Frontières (MSF; Doctors Without Borders) doctor Jennifer Hulse, who found herself managing a mass casualty situation after an armed attack in a nearby village – a day after the first case of COVID-19 was confirmed in the hospital in South Sudan. She explains how they were able to get critical patients the lifesaving surgery they needed in spite of massive travel restrictions and not having a surgeon on staff.

In the early hours of Saturday 16 May 2020, shortly after the first coronavirus case was confirmed at the hospital, there was a largescale armed attack on the town of Pieri, home to a small satellite clinic around 50 km from the hospital at Lankien. The team there ran, hiding out in the bush to evade the heavily armed attackers.

The supervisor somehow had the presence of mind to grab the satellite phone and solar charger before escaping, meaning that they were able to maintain some contact. "There were rumours of hundreds dead or injured – many would need treatment at our hospital – but we only ha[d] 80 beds, mostly already full, plus a two-bed emergency room," explains Jennifer.

Lankien has a mass casualty plan. There were cupboards full of emergency supplies, checked and labelled and ready to go. Each member of staff had been assigned a role, each triage category an area. "Of course, a mass casualty situation is an ever-present possibility here, but we'd been so focused on COVID-19 planning I still couldn't believe it was happening."

Waves of patients

Although Pieri is close, the dirt tracks are in poor condition, so the first casualties did not reach the hospital until the evening – around 20 to start with. All through the weekend they continued to arrive in waves. "By Tuesday, when it finally stopped, we'd had 60 people admitted with gunshot wounds, all treated by three doctors, two very experienced clinical officers and several excellent nurses, including one who specialises in wound care.

Many of the gunshot wound patients required operations. Some of them needed urgent surgery within days or they would die. We have no surgeon here at Lankien. We



The hospital at Lankien (Gabriele François Casini/MSF)

can transfuse blood, insert chest drains to reinflate punctured lungs, clean wounds and cut away dead flesh to prevent infection, hold off overwhelming sepsis with medications, straighten broken bones and stop external bleeding ... we can do a lot for a small hospital with limited resources, but these patients needed more."

Only eight seats on the plane

Eventually, 6 days after the incident, following a lot of negotiation and advocacy from the team, they got permission to transfer a maximum of 8 patients to a surgical hospital in the capital, Juba.

"I considered the patients as I walked around the intensive care unit, my area of the hospital, where the sickest patients were located. Trying to make this choice was one of the most difficult situations I have ever faced. There was no right answer. There was also not a lot of time, as we only found out the night before that the plane was coming in the morning.

The next day, as we heard the plane's engines approaching in the distance, we gave each patient a shot of morphine and antinausea medication, then lined them up on stretchers just inside the hospital gates. The team carried the patients to the dirt airstrip, then lifted them up and manoeuvred them into the seats, some of them a dead weight with no strength to move themselves.

"It's only 90 minutes [to the hospital], we kept reassuring them, and ourselves. Somehow, they managed. It probably wasn't



Dr Jennifer Hulse (MSF)

the worst journey they had made. All of them had come to hospital via a whole day's ride in the back of a truck, packed together with other injured men, without the benefit of painkillers and wound dressings. Weeks later, as I write this, I now know that all of them are alive and recovering.

"I felt a huge sense of relief as the plane rumbled down the dirt airstrip and disappeared. Nobody was going to die on us for lack of surgery. The hospital was still full and there were at least 10 more patients that needed operations, but they were stable and we had time to figure out a plan for them."

Every year, around 100 fieldworkers from southern Africa work in MSF projects around the world. Find out more about joining Jennifer and other doctors and professionals like her. Visit www.msf.org.za.

Water, sanitation and hygiene considerations in the context of managing the COVID-19 pandemic

Dr Sershen Naidoo, Institute of Natural Resources, Dr Suveshnee Munien, University of KwaZulu-Natal



Dr Sershen Naidoo



Dr Suveshnee Munien

ater, sanitation and hygiene are critical aspects to any community, whether they are faced by a pandemic or not. The WHO has for some time now urged every country to develop and maintain a national influenza preparedness plan, and has provided guidance on the content of such a plan. These guidelines focus on a variety of areas ranging from surveillance and communications to prioritisation of vaccines, but do not deal explicitly with sanitation and water management. This may be related to the fact that even though several recent high profile outbreaks such as SARS-CoV-1, MERS, Ebola and avian influenzas point toward the risks of a deadly viral pandemic, enveloped viruses such as COVID-19 are not considered a major threat for the waste-water and water industries. This is because they are assumed to be present in low concentrations in municipal waste water, and exhibit high susceptibilities to degradation in aqueous environments. Furthermore, while the virus that causes COVID-19 has been found in anal swabs of some patients, it is unclear whether the virus found in faeces is capable of causing COVID-19.

To date, there are also no confirmed reports of the virus spreading from faeces to a person. It is unclear how much risk there is of this, but it is likely to be low based on data from previous outbreaks of diseases caused by related coronaviruses (for example, SARS-CoV-1 and MERS). Certain enveloped viruses are excreted in human faeces during infection, and many of these are capable of retaining infectivity for days to months in aqueous environments, and infective human viruses have been detected in waste water.

Irrespective of the biological nature of the virus, it is unclear how infection scenarios will play out in informal settlements (slums), which in SA exhibit a number of infrastructural, sociocultural and environmental peculiarities. The provision of water and sanitation facilities in informal settlements in SA has increased significantly over the last decade, but remains basic and largely shared. The high user:toilet and user:washbasin ratios, the frequent failures associated with these facilities and high levels of greywater production within community ablution blocks (CABs) installed in many of these settlements also place community members and the caretakers of these facilities at risk of exposure to potentially contaminated water. Furthermore, open defecation and the absence of infrastructure to direct stormwater and standing water are common features of informal settlements in the country. This, together with the lack of water safety practices, education in general health and wellbeing concepts and overall hygiene will exacerbate the risks posed by COVID-19. Greywater channels, streams of waste water that in some cases can include sewage waste, run through many low-income communities. Shared toilet facilities are poorly managed and unclean, creating an unsafe and unsanitary living environment. Government has made an effort to make water available to informal settlements (via tanks and trucks), but the irregular and inadequate availability of clean water and sanitising agents (for example, soap and alcohol-based hand sanitiser), particularly within CABs that have been installed in many of these settlements, is a serious concern in the face of COVID-19, or any pandemic. Changes in personal sanitisation practices during a pandemic can lead to a rapid increase in waste generation, and if proper disposal routes are not in

place, can lead to the potential accumulation of pathogens and organic chemicals.

The challenges associated with the installation of proper water and sanitation systems in many of these settlements arise from their location, with many being located on private land, wetlands and flood-prone areas, having a non-permanent status and/or not in close proximity to existing sewerage and wastewater networks. While at-source domestic waste water quality assessment methods and decentralised waste-water treatment technologies have been explored for some time now, their suitability to informal settlements, particularly in the context of pandemic prevention and management, remains underresearched. The use of waste water from a range of sources for domestic purposes in informal settlements has also been reported, but the life cycle of these waste-water streams and the risks they potentially expose to residents of these settlements are largely unknown.

Given the above, we would like to make the following recommendations to government and its partners:

- Establish the fate of infective viruses and sanitising agents in the urban water cycle and locations of potential human exposure, particularly within informal, non-traditional dwellings.
- Put in place proper/effective disposal routes for domestic/CAB waste water within informal settlements, to avoid the potential accumulation of pathogens and organic chemicals.
- Enable residents, local government and other stakeholders to identify and/or design drainage solutions within informal settlements that address bout physical and social challenges.
- Investigate the impacts of the widespread and increasing use of hand sanitisers, spray disinfectants and personal protective equipment manufactured from non-biodegradable materials on natural water sources.
- Encourage and fund research on adaptive infrastructure development, particularly in respect to decentralised waste-water treatment solutions.

This article is based on the position paper released by the SA Technology Network.

References are available on request.

South Africans at increasing risk of vision loss

SAMA Communications Department

WW south Africans diagnosed with diabetes, and an ageing population, loss of vision due to diabetic eye complications and age-related visual conditions is on the rise.

Diabetic retinopathy, a complication of diabetes that damages the blood vessels in the retina at the back of the eye, is the leading cause of vision loss globally, while the number of diabetics in SA has risen sharply, from 1.3 million in 2010 to 4.5 million in 2019, and is expected to reach 6 million in 2030 – 10% of the projected population.

As the number of people affected by vision loss due to disease, age and other causes, including overexposure to damaging light from digital devices, is increasing, Retina SA and the Ophthalmological Society of SA (OSSA) joined forces to create awareness of vision loss during World Retina Week from 21 to 27 September.

Dr Gerhard Kok, president of the SA Vitreoretinal Society, a sub-society of OSSA, said that about 1.7% of diabetic patients would develop diabetic retinopathy, while improved life expectancy globally meant that worldwide incidence of age-related macular degeneration (AMD) was expected to reach 288 million in 2040, from 196 million in 2020.

AMD is the leading cause of irreversible blindness in people aged over 50. It is also recognised as a prescribed minimum benefit condition, which compels SA medical schemes to fund its treatment.

Dr Kok said that the COVID-19 pandemic and lockdowns had been especially difficult for the blind and vision-impaired, particularly because access to eye care was limited because of limited mobility during lockdown or fears of visiting doctors and healthcare facilities.

"Many ageing patients with wet AMD need a regular injection into the eye to combat vision loss. Skipping these treatments could lead to serious and irreversible loss of vision. Missing medical treatments could also affect people with diabetes, which could lead to serious complications including damage to the retina.

"Limited access to eye care during lockdown, combined with economic hardship in the aftermath of the lockdown, means that many patients who require routine follow-up and chronic treatments for retinal conditions have not been able to get the necessary regular care. This will most likely pose challenges in the coming weeks and months for optimising and maintaining visual outcomes in these patients," he said.

In addition, social distancing is almost impossible for partially sighted and blind people, who rely mainly on the sense of touch to compensate for the loss of up to 80% of sensory input that comes from the eyes.

"They hold the elbow of a sighted guide, or use touch for orientation, security and balance. The loss of this tactile sensory input leads to confusion and isolation.

"We hope that World Retina Week 2020 will contribute to raising awareness for this vulnerable part of our population, and that citizens will join hands to help ease their plight. Small acts of kindness go a long way in helping partially sighted or blind people to cope during these challenging times," Dr Kok said.

During the COVID-19 pandemic, Retina SA has conducted an outreach programme to give assistance and advice to the thousands of South Africans losing vision to retinal conditions.

The programme has highlighted major problems such as avoidance of doctor visits, as well as the negative impact on health of lockdowns, not only causing stress but also making people less mobile, causing poor dietary choices and the added risk of increased screen time, resulting in overexposure to damaging light from computers, phones, devices and TV screens.

Retina SA fears that the negative impact of this pandemic could have long-term and serious effects on both vision and health in the future.

The organisation also found that the bans on alcohol sales "led to the serious and unexpected consequence of desperate individuals drinking hand sanitiser." The poisonous alcohols in hand sanitiser, such as methanol or isopropyl alcohol, can cause serious damage to the optic nerve, blindness or even death.

Retinal conditions such as AMD, retinitis pigmentosa, Stargardt disease and Usher syndrome affect thousands of South Africans, and are presently incurable. Retina SA is appealing to people with vision to assist in the search for treatments for these blinding conditions.

For more information go to www.retinasa. org.za.

CPD for professionals abroad – new SAMA member benefit

Lisa Reid, SAMA CPD officer

he ethical practice of the health professions requires consistent and ongoing commitment to lifelong learning by all health practitioners, through a process of continuous professional development (CPD). CPD assists health professionals to update and develop the knowledge, skills and ethical attitudes that underpin competent practice. This perspective protects the public interest and promotes the health of all people in SA.

Any health practitioner who registers for the first time as a healthcare professional after 1 January of a particular year will commence with his or her CPD programme immediately.

When health practitioners who are actively practising in SA attend a professional or

academic activity abroad, it will be recognised for CPD purposes. An accreditor in SA should accredit/convert the activity attended internationally.

The SAMA CPD office will convert all CPDrelevant activities attended by our members internationally free of charge. For further information please contact lisar@samedical.org.

Embedding environmental sustainability in health professions education

Prof. Bob Mash, Christine Groenewald, John De Wet, Stellenbosch University

he consequences for health of exceeding our planetary environmental limits are becoming clear, as well as the contribution of the health sector to the problem. Climate change is seen as the most important public health challenge of our century. If the health sector were a country, it would be the fifth-largest emitter of carbon on the planet. Although Africa has not contributed much to the problem, the consequences will be felt in populations and health systems that are less resilient. SA has the largest environmental footprint in sub-Saharan Africa. Faculties of medicine and health sciences therefore need to be addressing these issues. The Faculty of Medicine and Health Sciences (FMHS) at Stellenbosch University has taken a holistic approach that includes environmental sustainability in its strategic goals. The approach goes beyond including the issues in teaching and research, to transforming the organisational environment in a way that embodies the changes needed in the health sector. Attention is given to the living, working and learning spaces on campus. A 10-point agenda has been adopted that focuses on leadership, energy, water, waste, food, travel, biodiversity, procurement, buildings and chemicals. Goals have been set for the next 5 years. This article reports on how these goals have been addressed in practice. We hope that the article will stimulate similar activities at other health science faculties, and a dialogue on how to take this integrated approach forward.

In 2019, the city of Beira in Mozambigue was devastated by climate change effects, including deforestation and sea-level rise as a result of Cyclone Idai. In 2018, Cape Town, in SA, was on the verge of running out of water for its 4 million inhabitants. On the highveld of SA, the air pollution from coal-fired power stations is among the worst in the world, and responsible for substantial morbidity and mortality from respiratory and cardiovascular disease. In 2020, in SA, we are struggling to tackle the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, which the UN has called a zoonotic disease that is driven by climate change and other environmental factors. In low- and middle-



income country settings such as these, how do we prepare the next generation of health professionals to tackle environmental crises?

The health consequences of exceeding the environmental limits of our planetary ecosystem are substantial, and well documented in *The Lancet Planetary Health*. The health sector itself is contributing to the problem. The health industry is responsible for procurement on a global scale, extensive infrastructure and large-scale transport of patients, which adds up to a massive carbon footprint.

Africa has made relatively little contribution to the environmental crises compared with other regions such as North America, Europe and China. African health systems are already among the most fragile, and will be further strained by the health consequences of these environmental issues. In this context it becomes important to prepare our future health professionals to understand the links between the environment and health, as well as between the health sector and the environment. Our faculties of medicine and health sciences should be embedding these issues into their curricula and preparing a future workforce that ensures the environmental sustainability of the health system, and advocates for appropriate public health measures.

At Stellenbosch University in SA, the FMHS has been working on these issues for the last 10 years, and has adopted a holistic approach that creates a working, learning and living environment consistent with environmental sustainability. The goal is not just to teach about the issues, but to create an organisational and campus culture that embodies the changes we want to see in the health system and broader society. This commentary shares our practice and what we have learnt over the last decade.

The FMHS, along with the Western Cape government's Department of Health, joined the Global Green and Healthy Hospitals movement in 2014. This global network helps hospitals, health centres and health systems to become more environmentally sustainable. They have outlined a 10-point agenda for change that was adapted by the FMHS as a template:

- 1. leadership
- 2. energy
- 3. water
- 4. waste
- 5. food
- 6. biodiversity
- 7. buildings
- 8. procurement
- 9. chemicals
- 10. transport.

The FMHS has set goals within each of these 10 points for the next 5 years (see figure), and monitors progress through an annual scorecard.

Building collaborative leadership between students, staff and support services has been a critical factor, as these groups often work in silos. An automatic levy of air travel has been instrumental in creating funds for partially offsetting carbon emissions, and supporting dedicated co-ordinators of our activities.

Students are more focused on behaviour change in living and social life on campus. Behaviour change can be supported by well-planned media and communication campaigns and innovative events conceptualised by the students. It is important to recognise the intersectionality of issues such as race, gender, poverty and the environment. For example, our food garden provides physical activity and social opportunities, completes a full cycle of foodwaste-compost-food and improves food security on campus.

We hope [to] stimulate a dialogue between health science faculties on how to be environmentally accountable

Staff are more focused on teaching and research, although behaviour change in faculty buildings is also important in terms of managing waste, procurement of supplies and use of energy. Academic staff have created the concept of environmental stewardship as a new graduate attribute for all undergraduate programmes. Environmental health has long been a recognised component of public health teaching, but the concept of planetary health expands the curriculum to look at broader issues. Academic capacity in these areas is very limited in our regional health science faculties. The ability of health sciences to contribute to interdisciplinary research on climate and other issues relies on building this capacity.

Support services have a major role to play in changing infrastructure that drives energy efficiency, saves and reuses water and reduces waste to landfill. Many services are contracted out, and food vendors, for example, need to be actively engaged in order to look at issues such as takeaway food packaging, single-use plastic and sustainable food. Campus grounds provide an opportunity to offset carbon emissions, while improving the biodiversity and indigenous nature of the environment, and improving staff and student wellbeing through, for example, eco-walks and outdoor gyms. Environmental sustainability needs to be integrated into the planning of all new buildings, as well as procurement and supply chain processes. Another key issue for staff and students is travel. The SARS-CoV-2 epidemic has led to dramatic reductions in air and road travel through use of video

conferencing, and this may well be a more permanent behaviour change.

Engaging local and national nongovernment organisations that are involved, for example, in urban greening and reforestation, urban food gardening or reduction of ocean plastic has also been critical to inspiring students and staff to imagine the campus in alternative ways.

Environmental sustainability is starting to become part of the FMHS organisational and campus culture. Many of the initiatives are also aligned with saving money and resources, improving the natural environment and wellbeing. In SA, issues such as the new carbon tax, regular electrical loadshedding, drought and limited landfill capacity have all acted as catalysts to change. Areas that require further attention include the ability to teach and research on health and the environment, and to affect procurement and chemicals.

Globally, there is interest in including climate change and environmental issues in curricula for health professionals, and many institutions have already done so. Networks such as the Global Green and Healthy Hospitals focus more on changing health services than higher education institutions. However, the Association for the Advancement of Sustainability in Higher Education (https://www.aashe.org/) offers support and resources. The need to teach health science students about environmental and planetary health, and embody that teaching in institutional behaviour and practice, has not received much attention in sub-Saharan Africa.

The commitment of the local Western Cape Department of Health to a similar agenda has meant that there is some synergy between what is happening in the educational and health systems. This can only reinforce the importance of the issues for future health professionals.

We believe that all health science faculties, in SA and beyond, should be embedding environmental sustainability into how they behave as part of the health industry, and how they prepare their future health professionals. We hope that this commentary will enable others to learn from our experience, and stimulate a dialogue between health science faculties on how to be environmentally accountable. In the words of Nelson Mandela, "It is in your hands to create a better world for all that live in it".

References available on request.

Understanding the basics of ICD-10

Rendani Tendane, medical coding consultant, SAMA Coding Division

CD is an abbreviation of International Statistical Classification of Disease and Related Health Problems, and is therefore the diagnostic coding structure, which is used together with the procedural coding structure.

Definition

The ICD code is a translation of a medical diagnosis into coding form. The codes are in alphanumeric format, e.g. A09.9 refers to gastroenteritis and colitis of unspecified origin. The ICD-10 codes consist of 3 - 5 characters. It is important to remember that a dot is not a character, and should be coded to full specificity.

Background

ICD-10 was endorsed by 43rd World Health Assembly 30 years ago (in 1990). It came into use by the WHO in 1994. The WHO inherited the ICD on its 6th revision. There are approximately 42 000 ICD-10 codes, and the WHO is responsible for updating and maintaining ICD-10, since they are the owners of the ICD. All countries should comply with their rules and norms.

The ICD-10 licence for SA was issued by the WHO to the National Department of Health (NDoH) in 1996, and was implemented in July 2005 under the auspices of the National ICD-10 Implementation Task Team of the NDoH.

The benefits of ICD-10

The codes are used for data collection, providing statistics globally. The ICD helps to improve quality healthcare (by verifying the need for care and treatment) and clinical management.

The correct use of ICD-10 codes enables accurate or proper reimbursement of accounts by medical schemes, and identification of medical trends.

Examples of ICD-10 coding

Example 1: A 4-year-old boy slipped and fell while playing soccer at home. An X-ray was done, and the report showed that he had a fracture of the shaft of the femur.

The ICD-10 code for fracture of shaft of femur is S72.30 (the 5th character must be coded). 0 represents a closed fracture, and 1 indicates an open fracture. A fracture not indicated as closed or open should be classified as closed.

Together with the fracture code, an external cause code must be added: patient slipped and fell while playing soccer uses code W01.00. The



last two digits are for place of occurrence and activity code.

Example 2: Postoperative complications are conditions arising from a surgical or medical procedure, such as T80-T88 and Y83-Y84. A patient admitted with a postoperative wound infection might be classified as T81.4 and Y83.9.

The challenges of coding

One challenge that coders come across is lack of clinical information from healthcare providers. For example, scans, tests and scopes are done, but no feedback or report is provided. This leads to short payment of accounts due to misusing codes or over-coding the patient.

We are aware that doctors are not allowed to disclose certain diagnoses without patient consent, as per the Protection of Personal Information Act No. 4 of 2013.

The different versions of ICD-10

Please note that not all references to ICD-10 on the internet refer to the WHO edition of ICD-10. In SA, we use the WHO "vanilla" version of ICD-10, with a few local code additions. The SA ICD-10 Master Industry Table (MIT) of January 2014 (containing all WHO corrigenda updates until January 2014), is the only official reference list for ICD-10 codes appropriate for use in SA.

SAMA products

An electronic ICD-10 browser has been developed by SAMA. It includes the latest 2014 MIT ICD-10 codes, which comprise the official version of ICD-10 used in SA. Due to need in the industry, SAMA obtained a licence to produce this ICD-10 diagnostic code browser from the WHO.

This SAMA stand-alone ICD-10 browser is for those practices and industry role-players that do not wish to buy the SAMA eCCSA (electronic Complete CPT for SA) or the SAMA eMDCM (electronic Medical Doctors' Coding Manual, which now also includes the ICD-10 codes). This is SAMA's first release version of the browser.

SAMA members can visit the SAMA website (www.samedical.co.za) and log in at the top right-hand corner. Once logged in, select "SAMA products", then "ICD-10 electronic browser".

For non-SAMA members, on the SAMA website select "SAMA products", then select "ICD-10 electronic browser developed by SAMA".

Pricing list: For the 2020 edition of the electronic ICD-10 (browser, based on the 2014 ICD-10 MIT), price per unit 2020:

1st licence for SAMA members: ZAR200.00 (VAT included); 1st licence for non-SAMA members: ZAR250.00 (VAT included); 2nd to unlimited licences: ZAR250.00 each (VAT included).

When payment is received, a link and activation key will be emailed to download onto your PC.

Licence period: The ICD-10 browser program has a 1-year licence period valid from 1 January 2020 to 31 December 2020. Should you purchase the product within this allocated time period, the licence will only remain valid for the remainder of the abovementioned 1-year period. A grace period of 2 months will apply, thus the programme will remain functional for January and February 2021.

Kindly note that the eMDCM first licence is free for SAMA members.

Please direct any coding queries to our Coding Division on 012 481 2073 or email coding@samedical.org and we will gladly assist you.

Africa's low COVID-19 death rate has multiple causes, WHO says

SAMA Communications Department

fricans may be twice as likely to experience COVID-19 without any illness compared with people in the rest of the world, according to preliminary analysis by the African branch of the WHO.

The results from several blood-sample studies in Africa could help to explain the low death rate that has confounded the early predictions of devastation on the continent.

More than 80% of Africans who were infected with the virus were asymptomatic, the preliminary analysis found, based on testing in several African countries. This compares with an estimated 40 - 50% who were asymptomatic in the rest of the world. "This is reinforced by the fact that we have not seen health systems overwhelmed by very large numbers of cases, and we're also not seeing evidence of excess mortality due to COVID-19," said Matshidiso Moeti, the WHO regional director for Africa, in a media briefing in September.

Africa, with a population of 1.2 billion, has recorded about 1.4 million cases, and fewer than 35 000 deaths from the virus – far lower, proportionally, than other regions of the world. The USA, with slightly more than a quarter of Africa's population, has recorded 7.1 million cases and more than 206 000 deaths.

Some of the difference is explained by lower testing rates in Africa, where only 1% of the population has been tested for the virus. But this fails to explain all of it. "The missed COVID-19 cases are largely a result of their being asymptomatic," the WHO Africa branch said in a statement. "In addition, there is no evidence of miscalculation of death figures, which are more difficult to miss statistically." The case fatality rate in Africa has been 2.4% so far, significantly lower than the rate in most European and North American countries.

Even when estimates include thousands of excess deaths, likely to be caused by COVID-19 but not officially recorded as such, the death rate in Africa has been lower than many experts had expected. And the pandemic is now diminishing here: the number of new African cases has been dropping for the past 2 months.

At the WHO briefing, experts cited several possible factors to explain the lower rates of death and illness in Africa, although they emphasised that more study is needed.

The most widely accepted factor is Africa's youthful population. Only about 3% of Africans are over the age of 65, the age group in which illness and death from the coronavirus are most common. (By comparison, about 18% of Canada's population is over the age of 65).

More than 90% of African coronavirus cases have occurred among people under the age of 60, who are better able to shrug off the virus.

Death rates have been higher in Algeria and SA, where a larger percentage of the population is over the age of 65, Dr Moeti said.

Another factor could be Africa's lower population density and the fact that many people live in rural areas, spending more time outdoors, analysts say. There is growing evidence that outdoor spaces, because of their greater ventilation, tend to reduce exposure to the virus, making it less dangerous.

"It doesn't transmit very well outdoors, and Africa has a significant population that is rural and spends a lot of time outdoors," Francisca Mutapi, professor of global health infection and immunity at the University of Edinburgh, said at the WHO Africa briefing.

Sam Agatre Okuonzi, a Ugandan health researcher and hospital administrator, told the briefing that he agreed that Africa's risk of coronavirus infection may have been reduced by its larger rural population.

A third factor was the imposition of early strict lockdowns in many African countries, at a time when case numbers were relatively small. This postponed the worst of the pandemic, allowing hospitals and health workers to be better prepared with the latest treatment methods.

A study this month by Discovery Health concluded that the lockdown in SA will have averted 16 000 deaths by the end of the year. The lockdown, now largely lifted, was one of the strictest in the world, contributing to a sharp economic decline this year.

"Governments took early, quite drastic action through the lockdowns, at great cost to their economies clearly, and this has bought us some time," Dr Moeti said.

"It needs to be acknowledged because it made a difference. And it made a difference at a high cost. They were tough, courageous, very costly. We need to sustain this, so that the cost is justified."

A fourth factor, she said, was Africa's relatively poor road network and access to international flights, which slowed the arrival of the virus and its transmission to rural areas.

"Africa is less internationally connected than other regions," Dr Moeti said. "So we had some protection when the virus first arrived."

Letters to the Editor

he *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.



A doctor's monologue

Dr Buang Lairi

Sometimes I get puffed up, not unlike a hooding venomous snake, more like a boastful peacock beaming with pride.

Other times I shyly crawl into my shell in a shameful withdrawal.

The powers bestowed upon me make me feel so high or crushingly so low.

Should I play the hero or the villain? Power is razor-sharp and brittle at the same time. Talk about a double-edged sword.

I raised somebody's blood glucose this morning; he came to and a hero I became. That passing 10 minutes' fame is a mind-boggling high that can be relived forever. But when I have a mishap a recurring nightmare is like a picnic outing. Power misused or knowledge slipping my mind because of information overload or my ego getting the better of me. Should I only give and not receive orders? Who orders the doctor around? Can I only take but not give, or should I only give and not take?

Do I give or only assist one to get life? Maybe I just get carried away in the process. Maybe this vocation is a lot bigger than me, or am I bigger than it?

When a voice calls "Doctor," I look around. Am I alone, or is there somebody else? I walk as if I have comfort springs under the soles of my shoes, or am I really flat-footed? Maybe I should walk like my next-door neighbour, a nobody who tries very hard to make everybody feel like somebody. Maybe not, what about being like that little professor with an encyclopaedic knowledge but who is a social outcast, or that thoughtful teacher who has empathy and the human touch in everything they do?

Who am I, who should I be, who am I supposed to be? Is this an out-of-body experience? Me watching me, or watching others with an unforgiving and critical eye? Who am I to judge, or should I be the one to be judged? Knowledge is limited, imagination stretches forever but my capabilities cannot be infallible. I really need a helping hand to lift me up when I fall, to wipe my tears when I become vulnerable. Sometimes the doctor becomes the patient and the hunter becomes the hunted. I am human after all; who isn't?

Dr Lairi wrote this poem on 11 December 2019, the morning after he was on call in a small Eastern Cape district hospital. He is a private practice doctor who has enjoyed writing since his primary school days.

SAMAREC welcomes newest clinical member: Dr Nasheen Naidoo

Adri van der Walt, SAMAREC officer

nsuring that they comply with the National Health Research Ethics Council (NHREC) requirements, SAMAREC appointed a new clinical member on the committee in the form of the esteemed Dr Nasheen Naidoo.

Dr Naidoo joins the committee following a career spanning over 15 years.

Starting with a BSc in physiology, followed by a BMedSc with majors in anatomy and pharmacology, the groundwork was set for his Bachelor's of medicine and surgery (MB BCh) degree obtained at the University of the Witwatersrand.

He completed two Master's degrees, in public health and in clinical pathology, and has several research publications in both fields.

Starting his career as a researcher and tutor at the Department of Anatomy at the University of KwaZulu-Natal, he moved on to become a medical officer and senior scientist at the Medical Research Council of SA, and research associate in public health and epidemiology at the National University of Singapore. He is currently pursuing a medical specialisation in Laboratory Medicine (FC Pathology (Clinical)), with focus areas in haematology, chemical pathology, medical microbiology and virology at the National Health Laboratory Services Tygerberg Hospital/Stellenbosch University in Cape Town, to be completed in 2021.

In his spare time he is an avid tennis player and fan.



SAMAREC is truly grateful for the fantastic find who is Dr Naidoo, and welcomes his wide experience and knowledge base that will surely be of great benefit to the clinical research community.

Nitrofurantoin complication goes to trial

Marshal Ahluwalia, claims manager, Medical Protection Society

rs S was 64 years old and had a significant medical history that included rheumatoid arthritis, frequent urinary tract infections and giant cell arteritis. For a period of time she took methotrexate for her rheumatoid arthritis; the disease limited her mobility and she was morbidly obese, requiring the use of a wheelchair and care from her daughter and adult granddaughter, both of whom lived locally to her. Methotrexate had eventually been discontinued.

Mrs S was a frequent attender at her GP surgery for treatment of her medical conditions, and was under the care of urologists for her frequent urinary tract infections. She had been taking 50 mg of prophylactic nitrofurantoin each evening for a number of years, as prescribed.

Mrs S attended Dr B with a complaint of being a bit breathless when walking, and swelling to her ankles. Dr B performed auscultation of the chest and bilateral crackles were noted, but no rhonchi. Superficial phlebitis in the right lower leg was diagnosed. Dr B prescribed a short course of furosemide for 14 days, and codeine for pain. She requested that Mrs S return for further examination at the end of the course.

A few days later Mrs S telephoned the surgery and spoke with Dr X, who was the GP on call that day. She informed Dr X that she was experiencing breathing problems and thought she could be suffering from cystic fibrosis. He noted she informed him that she had a cough, was breathless, felt cold and shivery and was tired. Dr X asked Mrs S to come to the surgery for a face-to-face consultation, and she came in later that day.

On auscultation of the chest, Dr X found adequate air entry in all areas, with unilateral crackles in the left lower zone. Mrs S had had a productive cough since the previous consultation with Dr B. She was breathless and felt shivery, but was apyrexial.

Dr X diagnosed a chest infection, and prescribed cefalaxin 500 mg. Mrs S returned to see her GP on other occasions over the next couple of months, but the notes did not suggest any symptoms of chest infection, until one consultation with Dr X where the



presenting symptoms were the same as 2 months previously. Dr X considered this to be a new presentation of a chest infection, and a further course of cefalaxin was prescribed.

A few days later, Mrs S contacted an outof-hours service with a complaint of shivering with a raised temperature and shortness of breath. A diagnosis of chest infection was made. Her steroid prescription was increased to 30 mg daily, and she was prescribed clarithromycin.

Five days later, Mrs S reattended the surgery, and was advised by Dr P to continue to take the prescribed antibiotics and continue with steroid inhalers. She was to be reviewed again the next day. Later that day, Mrs S underwent a chest X-ray (CXR).

The next day, Mrs S reattended with Dr P. The CXR report was not available. The claimant was noted to "feel slightly better than last week, had CXR yesterday but no report available". Her chest was examined, and no wheeze or creps were found. Dr P requested that the claimant have her full blood count checked, a D-dimer and her urea and electrolytes checked.

Later that day, Mrs S attended an out-of-hours clinic and was examined by another GP. She gave a history of having had a D-dimer test that afternoon, and said she was tired, had a bad chest and her ankles were "always swollen". She was noted to have had a "bad chest over last couple of weeks nil pleurisy – retrosternal pain nil haemoptysis". Mrs S was subsequently examined by another doctor, and upon examination gave a history of having three recent courses of antibiotics for a chest infection, but that she was noted to be "well perfused and hydrated SOB no cyanosis no recession good bilateral air entry - no dullness no chest pain". A diagnosis of dyspnoea was made and the plan, in view of Mrs S's worsening symptoms of shortness of breath and tachycardia, was of investigation for a pulmonary embolism and possible chest infection. She was subsequently admitted to hospital.

Following discharge from her local hospital, Mrs S attended the emergency department at a different hospital later that day. The working diagnosis was a lower respiratory tract infection with abnormal liver function test results, and Mrs S was to have an ultrasound scan of her abdomen, her liver function tests were to be repeated and the nitrofurantoin was continued.

Three days later, the diagnosis of pulmonary fibrosis secondary to rheumatoid arthritis and methotrexate therapy was considered. Mrs S was sent for respiratory referral. Nitrofurantoin was continued.

A CT scan was undertaken 2 days later. The scan was reported as showing widespread fibrosis in the chest. The appearance was consistent with acute nitrofurantoin lung. Nitrofurantoin was stopped by the respiratory team as it was felt to be the causative agent for the fibrosis.

Mrs S was discharged from hospital a week later, but remained under the care of the respiratory team.

Three months later, concern was raised about the aetiology of the fibrosis. Radiology was reviewed at an MDT meeting, and it was agreed that the clinical and radiological picture would fit with sub-acute nitrofurantoin pulmonary toxicity.

After the nitrofurantoin was stopped, the claimant's condition improved, and she was discharged home on trimethoprim, with care from family members.

The claim

Mrs S instructed solicitors to bring a negligence claim, alleging that her nitrofurantoin should have been stopped by the GPs when she originally presented and, had that occurred, she would not have experienced breathlessness necessitating hospital admission. She claimed that she developed dysfunctional breathing and/or hyperventilation syndrome as a result of the alleged negligence of the two GPs, Dr X and Dr B, which had adversely affected her mobility, weight, quality of life and ability to work.

Mrs S claimed that her GPs should have been aware of the link between nitrofurantoin and pulmonary fibrosis, and their failure to consider this link when assessing her was a breach of their duty of care. She claimed that based upon her presenting symptoms, she should have been referred for an urgent CXR. That CXR, Mrs S claimed, would have shown worrying signs, and the reasonable GP would have stopped the nitrofurantoin prescription immediately. She claimed this would have avoided the impact on her weight, quality of life, mobility and income.

How MPS helped

Dr X was a member of the Medical Protection Society (MPS), and we assembled a legal team to assist him, along with an external solicitor firm. Proceedings were also brought against Dr B, who was separately represented.

Evidence from a GP expert was supportive of Dr X's initial care of Mrs S, but questioned his care later on. The expert suggested that more effort should have been made to find out the results of the CXR, which would have shown evidence of fibrosis.

Evidence was also obtained from a consultant respiratory physician to comment upon Mrs S's likely treatment and the impact of that treatment had it been provided earlier, and from a radiologist on what an urgent CXR, had it been performed, would have shown. Additional expert evidence was obtained from a rheumatologist.

The claim was strongly defended on behalf of Dr X. It was also defended by Dr B.

The experts for the defendants and Mrs S met to discuss the case and the radiologists agreed that it was impossible to say what an urgent X-ray after the first consultation would have shown. They agreed that any X-ray taken following the later consultation would have shown similar but less worrying signs than those revealed in the CT scan conducted in the hospital.

The GP experts agreed that the reasonable GP may not be aware of the link between nitrofurantoin and pulmonary fibrosis. However, they disagreed on Mrs S's likely presenting symptoms during her initial GP consultations, and on what signs and symptoms would be present if she had presented with a chest infection or a reaction to nitrofurantoin adversely affecting the lungs.

Despite pulmonary fibrosis being diagnosed by her treating clinicians, the parties' experts agreed that on the balance of probabilities, Mrs S did suffer from nitrofurantoin-induced lung toxicity, but did not have pulmonary fibrosis; she had suffered from pneumonitis, which had resolved after discontinuance of the nitrofurantoin. Any residual breathing problems after resolution of the pneumonitis was due to the pre-existing rheumatoid arthritis. The claim proceeded to trial.

The outcome

The day before the trial commenced, Mrs S sought to amend her pleaded claim against

Dr B, claiming that Dr B should have investigated Mrs S for heart failure based upon her initial presentation. While this had been alluded to in Mrs S's evidence from her GP expert, she had chosen not to make the claim until the day before the trial.

Due to the way the proposed amendment to the pleading was drafted, it would also have had an impact on the case against our member, Dr X. The proposed amendment was opposed, as it was considered prejudicial to the defendants because they had not been able to provide witness or expert evidence in response to the new allegations, and it came extremely late and could affect the trial.

On the second day of trial, Mrs S asked the trial judge to give specific reasons why their application to amend her pleaded case was not granted. The trial judge gave his reasons, and he was particularly critical of Mrs S's legal team and the way in which they had conducted the case.

Mrs S then sought permission to appeal the decision to refuse the proposed amendment. Permission for appeal was refused by the trial judge. The trial was then adjourned for a short period and, during that time, instructions were obtained by Mrs S's legal team from the insurers funding her claim. It became clear that her funding for the claim had been withdrawn.

The claimant discontinued her claim against both defendants on the afternoon of the second day of trial.

On behalf of Dr X, an order for indemnity costs was sought and successfully obtained in respect of a proportion of the costs incurred on his behalf. In essence, indemnity costs were ordered in this case to penalise Mrs S for the poor way her claim had been handled and conducted.

Learning points

While GPs should be aware of the potential link between nitrofurantoin and breathing problems, there is a reasonable body of GPs who would not have known of that link back when this case occurred. Any such diagnosis is unlikely to be made by a GP, and is most likely to be made by respiratory physicians in a hospital setting.

The Unlimited offers up to R100 000 free personal accident cover to all SAMA members



SAMA Communications Department

SAMA, together with The Unlimited, is giving all members, as essential services workers, free personal accident cover. Since the lockdown began, medical professionals have proven how selfless they are by reporting to work even when the risk is bigger than the reward.

The Unlimited acknowledges this and, as a token of appreciation for all the heroes risking their lives and going above and beyond the call of duty, has generously offered this cover free for 12 months. SAMA appreciates and has accepted this gesture of kindness on behalf of our members.

The Unlimited recognises that these heroes are often the ones who need that extra bit of help the most. Moreover, they understand that selflessness deserves to be rewarded. "We as The Unlimited pride ourselves in providing our customers – who are our family – with remarkable value by making them feel like their lives are unlimited. We're guided by the belief that business has a responsibility to do better for the society in which it operates. This is why we decided on an offering specially made to protect essential workers while they take care of us," says Andrew Wood, chief executive officer.

Thank you, our heroes – what can't be expressed in words is shown in action

As an essential services worker, you receive personal accident cover that pays out up to ZAR100 000 towards accidental hospital cover: should you be injured in a motor vehicle accident on your way to or from work, The Unlimited will pay out ZAR1 000 for every 24 hours that you are in hospital, for a maximum of 100 days. We also know that you need to use your phone more than normal during these extraordinary times, to stay connected to your loved ones as you take care of our nation. You will receive a free SIM card on which you will get double the airtime and data that you load to it. There is no waiting period for this benefit from the time that you receive the confirmation SMS.

As a SAMA member, you can activate your free cover at https://lp.theunlimited. co.za/heroes/ as well as learn more about this opportunity. The activation is incredibly simple. The Unlimited pays the premium, you get the cover, at no obligation to you.

In a time of increasing poverty and financial limitations, businesses should play their part to solve societal problems. The Unlimited urges businesses to put people before profit by coming together and assisting those in need – "protecting the heroes that protect us".

For more information, visit www. theunlimited.co.za.

Thank you SAMA members.

CLICK HERE to get your FREE Personal Accident Cover of up to R100 000

It's totally FREE - no obligation to you - we pay the premium!

Santam *underwritten by Santam Structured Life Limited

QUERIES

 Ratalie Young

 065 031 3782

 myoung@theunlimited.co.za





CPD

For further information please contact the **CPD** Officer on

OF OPERATIVE SURGERY

ANATOMY and PHYSIOLOGY: V

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