COVID-19 and our crowning glory

The inaugural issue of *The South African General Practitioner (SAGP)* is published in an unprecedented time of uncertainty, fear and a 21-day nationwide lockdown. The country is rallying to limit the spread of the spiky, single stranded RNA, severe acute respiratory syndrome coronavirus, SARS-CoV-2. It is hoped that isolation, quarantine, social and physical distancing as well as stringent hygiene measures will flatten the curve to decrease the potentially overwhelming burden of coronavirus disease (COVID-19),[1] a burden that our country can ill-afford. Global figures of this closely watched pandemic that are being recorded in real time on various interactive web based case-tracker maps, reveal that there are 1.4 million confirmed cases of this infectious disease to date, a figure that is on the rise. Approximately 20% have a severe (15%) or critical (5%) illness, characterised by pneumonia with biochemical evidence of an exaggerated immune response,[2] and acute respiratory distress. Treatment is supportive. There is no vaccine (yet),[3] and no proven pharmacotherapy for COVID-19, although some drugs, notably intravenous remdesivir, chloroquine or hydroxychloroquine, and the protease inhibitor combination, lopinavir/ritonavir, with or without beta interferon, are being repurposed and assessed in he WHO's global SOLIDARITY clinical trial.[4] Convalescent plasma is also being tested. The majority of patients appear to seroconvert within 2–3 weeks of illness onset, and are theoretically able to donate a rich source of IgM and IgG antibodies to the seriously ill.[5]

In the meantime, many GPs and Family Physicians are in the unenviable position of attending to patients who may be infected with this highly transmissible (R_0=~1.4–3.0) droplet- and aerosol-spread coronavirus and who may be asymptomatic, pre-symptomatic or symptomatic.[6,7] The incubation period is estimated to be in the order of five days (range: approximately 2–14 days),[8] and asymptomatic carriers are able to transmit the virus. It appears that coronavirus particles produced by coughing, talking or breathing, may remain airborne and be inhaled into the lungs if they are < 5 microns in size.[9] SARS-CoV-2 viruses are also stable on an array of surfaces, and these provide an additional route of infection when touched and transferred to the eyes, nose or mouth.[7] Personal protective equipment is in short supply. We are starting to lose patients, with a very early and rough case fatality rate, from the small sample (*n* = 58 098), that has been tested for SARS-CoV-2, currently of 12 in 1 686 positive cases (0.71%), with an age range of 46–86 years. These are the ones we know about. Importantly, we do not know where we are on the curve. The planned vigorous testing of 30 000 nasopharyngeal swabs a day to detect SARS-Cov-2 genomic material by gold-standard reverse transcriptase polymerase chain reaction (RT PCR), will provide more reliable data. However, a PCR test does not detect prior infection and (presumed, short-term) immunity to future infection. Sensitive and specific rapid diagnostic tests as well as antibody testing are not yet available here. Threats, both visible and invisible, appear relentless. Yet South African doctors have been raised in hardship. We are a resilient people, forged in struggle, and eager to don our homemade *seshwe* fabric masks and take up the baton. We believe that we can transform the exponential to the linear. This "can do" approach is the crowning glory of South Africa's health care.

SAGP aims to support the day to day efforts of primary care. This peer reviewed journal publishes the contributions of local key opinion leaders and researchers, CPD articles, evidence-based review articles, pharmaceutical product updates and original research in order to address the information needs of primary care doctors. A variety of pertinent and common medical problems are addressed in this issue. Hormonal contraception, used by several million women worldwide, may cause side-effects that necessitate various countermeasures. In their practical guide, Wolmarans et al, discuss solutions to common problems encountered in combination oral contraceptive users including breast tenderness, spotting and breakthrough bleeding, headache and dysmenorrhoea that may be remedied without treatment cessation. Schellack and Combrinck provide a comprehensive overview of probiotics, prebiotics and synbiotics, and the utility of these in practice. Van Zyl discusses the management of cestode and trematode infections in South Africa. These flukes such as *S. mansoni* or *S. haematobium* that cause schistosomiasis (bilharzia), and tapeworms such as the pork, beef and dwarf, are amenable to pharmacological and non-pharmacological interventions. Marais and Osuch take a look at insomnia, an insidious disorder that can often be missed, and discuss where pharmacological management is appropriate. Vally examines the evidence for the cardiovascular benefits of anti-diabetic Glucagon-like peptide-1 (GLP-1) receptor analogues, including their potential beneficial effects on blood pressure, lipid levels and weight. These agents such as liraglutide may induce a paradigm shift in the way diabetes and established cardiovascular morbidities are managed. Finally, Brand et al remove the *sauer* from sauerkraut as they provide a rapid account of gastro-oesophageal reflux disease and its treatment.

Stay safe,
Kim Outhoff

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