Alcohol and injury and unnatural death in Covid-19 lockdown South Africa: Local and global lessons to be learned

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SAMRC HISTORY AND HEALTH STATEMENT, MAY 2023

The South African Medical Research Council
recognizes the catastrophic and persisting consequences of colonialism and apartheid,
including land dispossession and the intentional imposition of educational and health inequities

Acknowledging the SAMRC's historical role and silence during apartheid,
we commit our capacities and resources to the continued promotion of justice and dignity
in health research in South Africa

transformation
WORKING TOGETHER FOR EXCELLENCE

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Global status report on alcohol and health 2018

World Health Organization

Drinking context in South Africa & associated harms

	% current drinkers (adults)	Adult per capita consumption per drinker in g AA	Heavy episodic drinking among drinkers (≥5 drinks: 60g) in single occasion past 30 days - (%) of drinkers
World	43.0	32.8	50.2
AFR	32.2	40.0	39.5
South Africa Males Females	31.0 43.2 19.4	64.6	59.0 70.8 33.7

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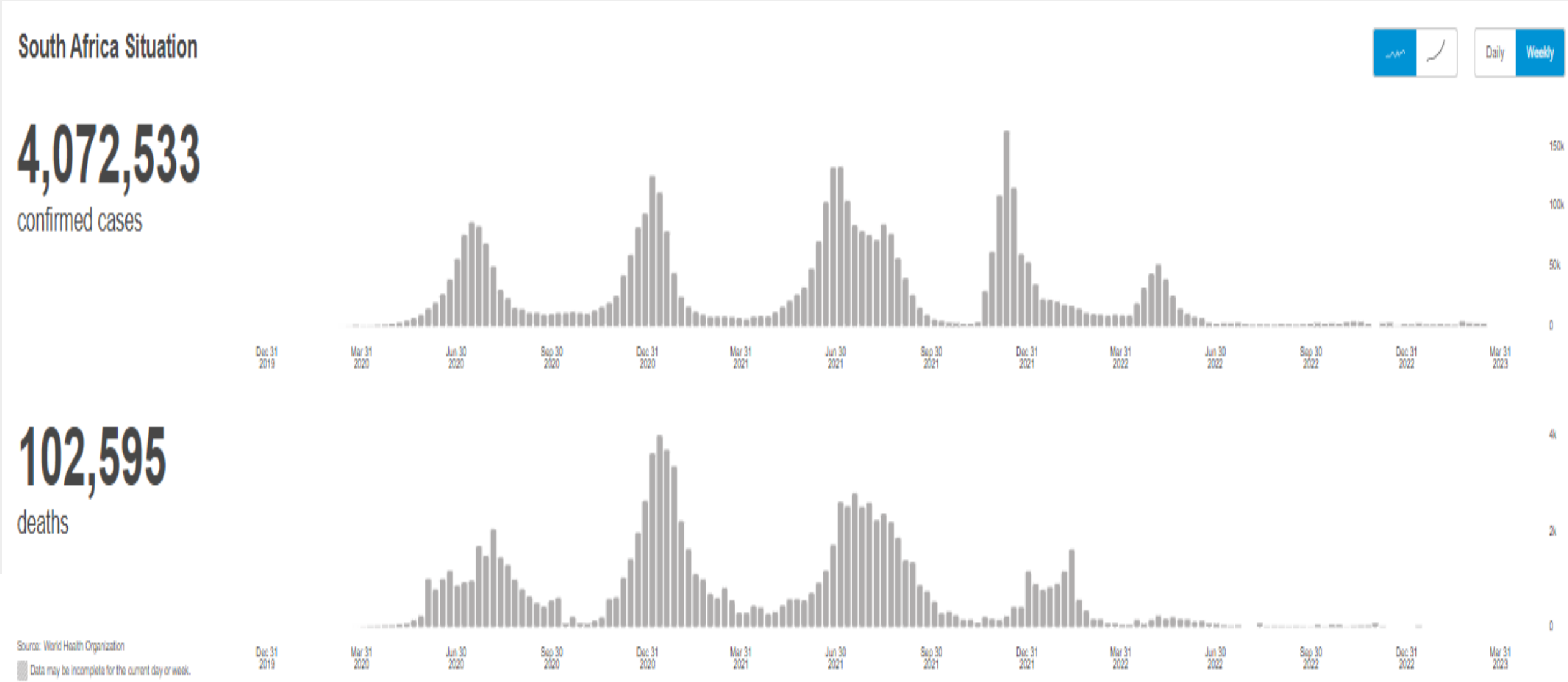
COVID19 IN SOUTH AFRICA (EARLY DAYS)

- SA reported its first confirmed case of COVID-19 on March 5,
- # of infections grew slowly & concerns were expressed about readiness of health facilities to cope with infected persons needing intensive care and ventilators
- Initial steps instituted (19-26 March 2020) included (i) travel bans for visitors from certain countries, (ii) requests for citizens to refrain from international travel, (iii) screening of returning travelers, (iv) discouraging domestic travel, (v) prohibiting gatherings of 100+,(vi) contact tracing, (vii) increasing hospital capacity, (viii) some restrictions on hours of alcohol sales:
  - 50-person limit for on-site consumption premises selling liquor
  - a ban on the granting of special events liquor licenses
  - all on-site consumption premises selling liquor must be closed 18:00-09:00 the next morning on weekdays/Saturdays, and from 13:00 on Sundays/public holidays
  - all off-site consumption premises selling liquor must be closed 18:00-09:00 the next morning on weekdays/Saturdays, and from 13:00 on Sundays/public holidays

WHO statistics on Covid19 confirmed cases and deaths over time

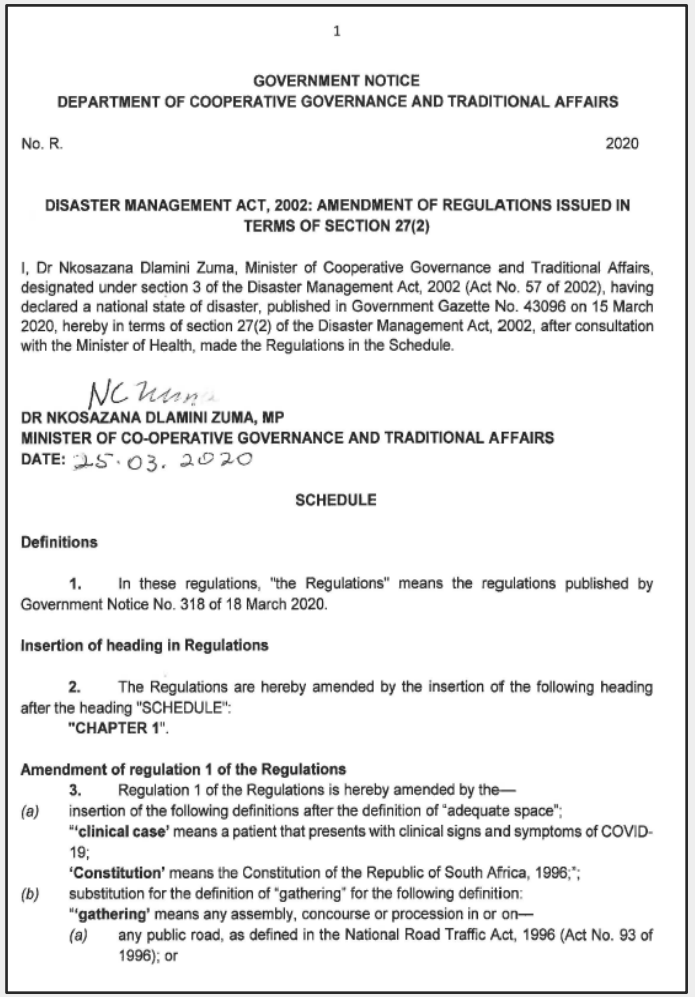


WHAT FOLLOWED ….

- From 00:00 on 26 March 2020 to control spread of Covid-19 more stringent controls on alcohol were imposed:
  - Alcohol not included in list of essential goods and services that could be purchased

"the sale of alcohol has proven links to an increase in violent crime, motor vehicle accidents, medical emergencies and results in full emergency rooms and hospitals. In the face of a pandemic such as Covid-19, the experience of the rest of the world has shown us that hospitals need to be prepared to receive and treat vast numbers of Covid-19 patients and to quarantine them from non-infected patients."

  - Among list of premises closed to the public during lockdown were on- & off-site alcohol consumption premises



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GOVERNMENT NOTICE
DEPARTMENT OF COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

No. R. 2020

DISASTER MANAGEMENT ACT, 2002: AMENDMENT OF REGULATIONS ISSUED IN TERMS OF SECTION 27(2)

I, Dr Nkosazana Dlamini Zuma, Minister of Cooperative Governance and Traditional Affairs, designated under section 3 of the Disaster Management Act, 2002 (Act No. 57 of 2002), having declared a national state of disaster, published in Government Gazette No. 43096 on 15 March 2020, hereby in terms of section 27(2) of the Disaster Management Act, 2002, after consultation with the Minister of Health, made the Regulations in the Schedule.

NC Nkuna

DR NKOSAZANA DLAMINI ZUMA, MP
MINISTER OF CO-OPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS
DATE: 25.03.2020

SCHEDULE

Definitions

1. In these regulations, "the Regulations" means the regulations published by Government Notice No. 318 of 18 March 2020.

Insertion of heading in Regulations

2. The Regulations are hereby amended by the insertion of the following heading after the heading "SCHEDULE":
"CHAPTER 1".

Amendment of regulation 1 of the Regulations

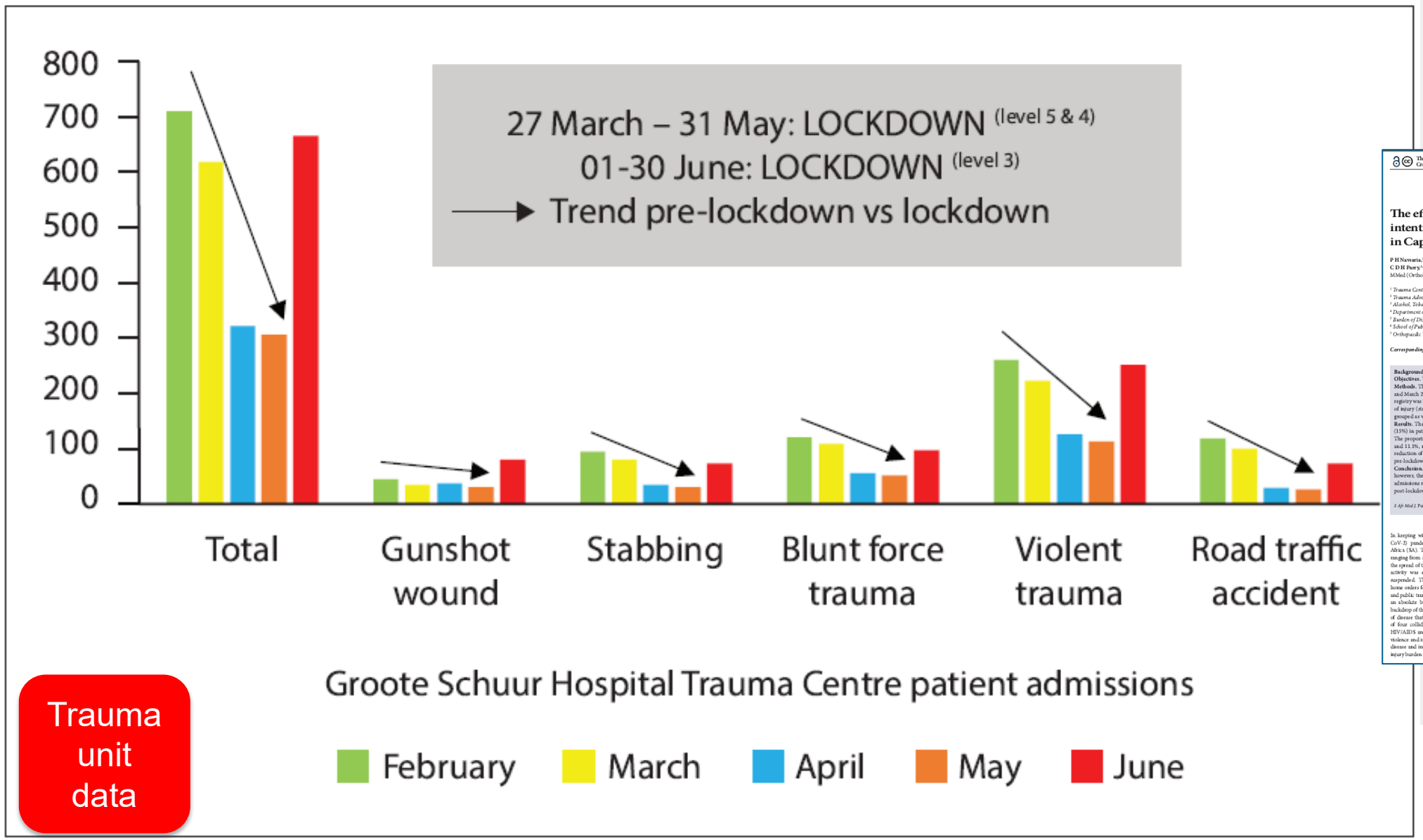
3. Regulation 1 of the Regulations is hereby amended by the—
(a) insertion of the following definitions after the definition of "adequate space";
"'**clinical case**' means a patient that presents with clinical signs and symptoms of COVID-19;
'**Constitution**' means the Constitution of the Republic of South Africa, 1996;";
(b) substitution for the definition of "gathering" for the following definition:
"'**gathering**' means any assembly, concourse or procession in or on—
(a) any public road, as defined in the National Road Traffic Act, 1996 (Act No. 93 of 1996); or

PERIODS OF SOUTH AFRICAN LIQUOR SALES BANS

164 days full ban

Level	Date	Alcohol - on	Alcohol off	Evening Curfew
0	1/1/20-18/3/20	normal	normal	none
0	19/3/20-26/3/20	Mo-Fr 09:00-18:00 Sa-Su 09:00-13:00	Mo-Fr 09:00-18:00 Sa-Su 09:00-13:00	none
4&5	27/3/20–31/5/20 (66)	BAN	BAN	Hard lockdown
3	1/6/20-12/7/20	BAN	Mo-Th 09:00-17:00	20:00/21:00*-04:00
3b	13/7/20–17/8 (36)	BAN	BAN	21/22:00-04:00
2/1	18/8/20–28/12/20	normal	Mo-Th 09:00/10:00 – 17:00/18:00	22:00/00:00-04:00
3	29/12/20–1/2/21 (34)	BAN	BAN	21:00-05:00/06:00
3	2/2/21 – 28/2/21	normal	M-Th 10:00-19:00	23:00-04:00
1	1/3/21-1/4/21	normal	normal	24:00-04:00
1	2/4/21-5/4/21	Normal	BAN	24:00-04:00
1	1/3/21-30/5/21	Normal	normal	24:00-04:00
2	31/5/21-15/6/21	Restr/bars 22:00	Normal	23:00-04:00
3	16/6/21	Restr/bars 21:00	M-Th 10:00-18:00	22:-00-04:00
4a	28/6/21-25/7/21 (28)	BAN	BAN	21:00-04:00
3a	26/7/21	Mon-Sun till 20:00	Mon-Thur 10:00-18:00	22:00-04:00
2a	13/9/21	Mon-Sun till 22:00	Mon-Fri 10:00-18:00	23:00-04:00
1a	1/10/21	normal	normal	24:00-04:00`
1	31/12/21	normal	normal	None

WHAT HAPPENED: EFFECTS OF ALCOHOL SALES BANS & OTHER LOCKDOWN PROVISIONS ON TRAUMA PRESENTATION & UNNATURAL DEATHS IN SA



Trauma unit data

This open-access article is distributed under Creative Commons licence CC-BY-NC 4.0. SAMJ RESEARCH

The effect of lockdown on intentional and non-intentional injury during the COVID-19 pandemic in Cape Town, South Africa: A preliminary report

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Background. In response to the coronavirus pandemic, lockdown restrictions and a ban on alcohol sales were introduced in South Africa.
Objectives. To investigate the impact of lockdown measures on the number of patients who visited a tertiary urban trauma centre.
Methods. The period of investigation was from 1 February to 30 June 2020 and was segmented into three intervals: pre-lockdown (February and March 2020), hard lockdown (April and May 2020) and immediately post lockdown (June 2020). The electronic HECTIS health record registry was interrogated for the total number of patients that were seen per month. These were further categorised according to mechanism of injury (stab, gunshot, blunt assault and road traffic injuries). Penetrating (stab and gunshot) and blunt assault victims were collectively grouped as violent trauma.
Results. The mean total number of patients seen decreased by 53% during the hard lockdown period. There was a moderate reduction (15%) in patients with gunshot injuries seen during the hard lockdown phase, but there was an 80% increase in the post-lockdown period. The proportion of patients injured in road traffic collisions pre lockdown, hard lockdown and immediate post lockdown was 16.4%, 8.9% and 11.1%, respectively. Patients injured in road traffic collisions decreased by 74% during the hard lockdown period and maintained a reduction of 32% during the immediate post-lockdown period. The mean total number of patients who visited the trauma unit returned to pre-lockdown levels in June.
Conclusion. There was an overall trend of reduced number of patients who visited the trauma unit during the hard lockdown period; however, these numbers returned to pre-lockdown levels during the immediate post-lockdown period. The number of road traffic injury admissions remained reduced during all three phases of lockdown, while the number of gunshot victims increased substantially during the post-lockdown period.

S Afr Med J. Published online 14 December 2020. https://doi.org/10.7196/SAMJ.2021.v111i2.15318

In keeping with the universal response to the coronavirus (SARS-CoV-2) pandemic, lockdown measures were introduced in South Africa (SA). The SA government decreed five lockdown alert levels ranging from alert level 5, which entailed drastic measures to contain the spread of the virus to alert level 1, where reintroduction of normal activity was envisioned (Fig. 1). All non-essential activities were suspended. The lockdown included curfews, stay and work from home orders for non-essential workers, and restrictions on gatherings and public transport. Furthermore, the gazetted regulations stipulated an absolute ban on sales of alcohol and tobacco products. In the backdrop of this pandemic, there is the pre-existing quadruple burden of disease that plagues the SA people, aptly referred to as a cocktail of four colliding epidemics: maternal, newborn and child health; HIV/AIDS and tuberculosis (TB); non-communicable diseases; and violence and injury. Injuries are a major contributor to the burden of disease and interpersonal violence accounts for a greater share of the injury burden in SA than most other countries.[1,2] The homicide rate is among the highest in the world, while road injuries are the third and fourth leading cause of deaths among men and women, respectively.[3,4]

There was a substantial decrease in trauma admissions countrywide and when the police minister, Mr Bheki Cele, was releasing the quarterly crime statistics covering the lockdown period (April - June), he remarked that 'a never-seen-before rosy picture of a peaceful South Africa experiencing a crime holiday'.[5] Over the period which coincided with lockdown, murder was down 35.8%, attempted murder by 39.7%, rape by 40.4% and assault with intent to cause grievous bodily harm by 41%.[5] The number of drunk driving convictions went down by 85.5% and drug-related crime also dropped by 53% nationwide.[5] Patients with preventable major trauma divert critical resources required to manage the COVID-19 crisis. We investigated the impact of lockdown measures on the number of patients with intentional and non-intentional injuries who visited a tertiary urban trauma centre in the Western Cape Province, SA.

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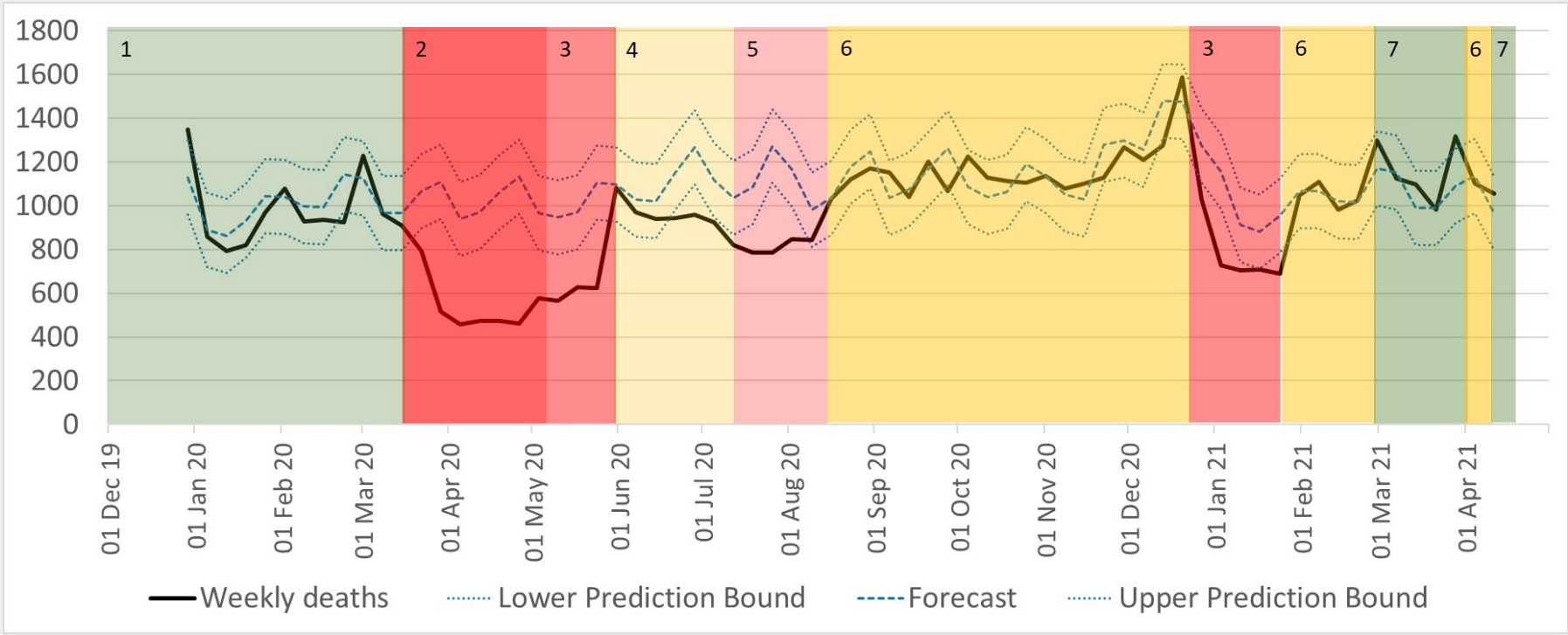
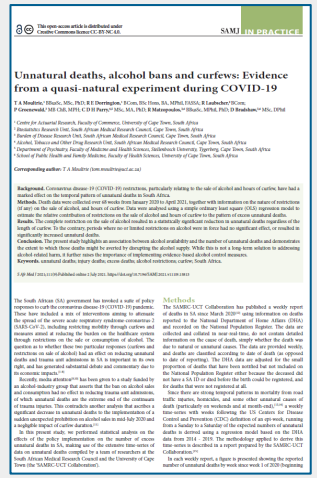
Death data

Moultrie et al (2021). Unnatural deaths, alcohol bans and curfews: Evidence from a quasi-natural experiment during COVID-19. *SAMJ*





Unnatural deaths, alcohol bans and curfews: Evidence from a quasi-natural experiment during COVID-19

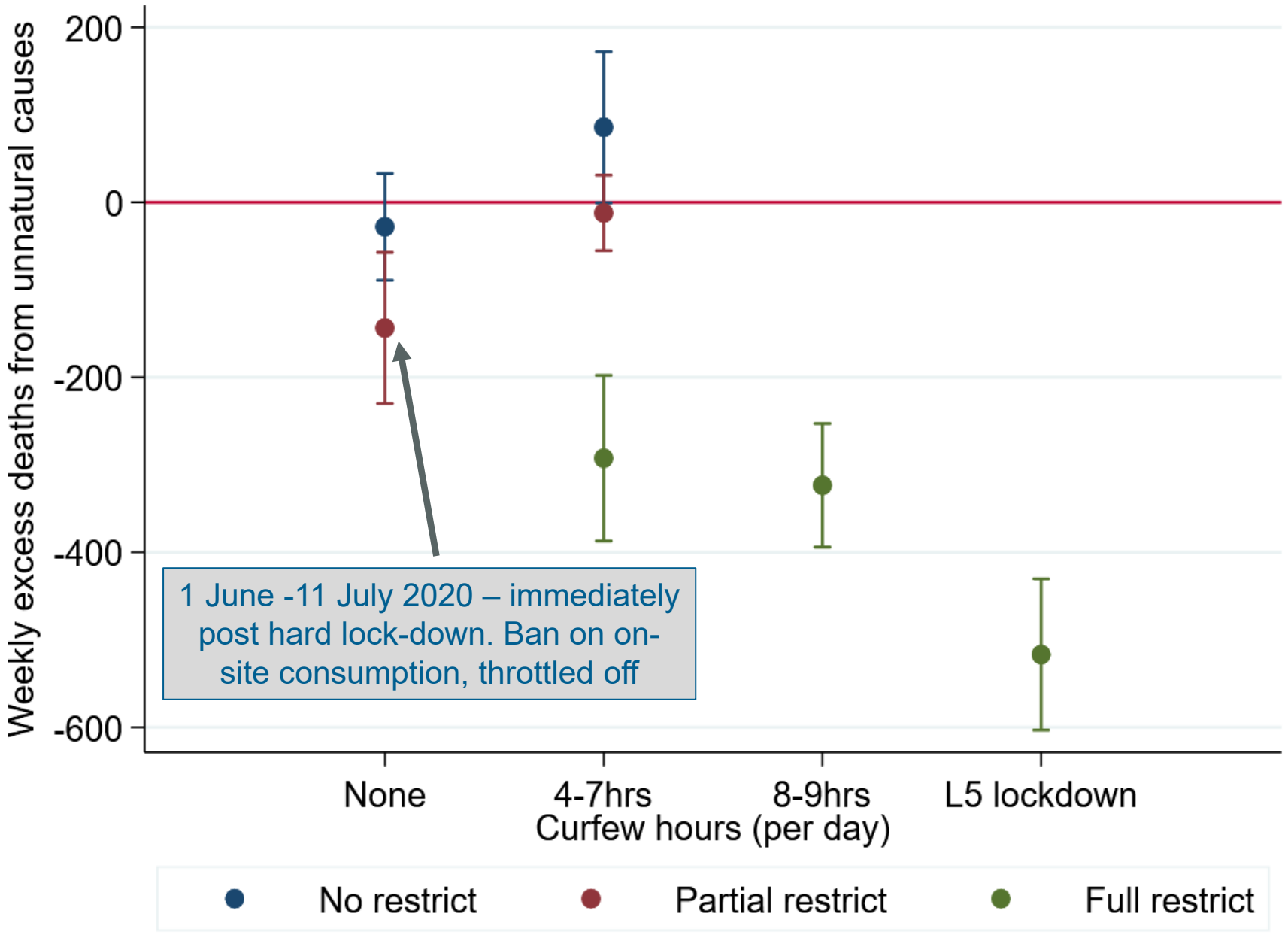
SAMJ IN PRACTICE

Weekly unnatural deaths in South Africa

Week 1(2020)-Week 15(2021)

The more intense the colour the greater the restrictions on alcohol sales

- Full restrictions on alcohol resulted in significant reductions in unnatural deaths, increasing with duration of curfew
- Partial restrictions had less significant effects on unnatural deaths, but still an effect



04 10 lessons learned from South Africa's liquor sales bans

1. Exposed culture of heavy drinking in SA and dependence of many drinkers on alcohol and also the dependence of large parts of the alcohol industry/trade on heavy drinking
2. Raised attention on the burden of heavy use of alcohol use in SA ito trauma and non-natural deaths
3. Got the President to acknowledge that alcohol is not an essential product and to highlight the close links between alcohol use and GBV
4. Showed that change is possible by revealing the effectiveness of a single regulatory measure in dramatically reducing trauma presentations and non-natural deaths and raised questions about the impact of a basket of less restrictive regulatory interventions
5. Raised questions about the kind of society in which we wish to live -- free from weight of alcohol-related death and disability and on how we could create a new normal

6. It exposed the lengths the industry would go to in order to get their business back, including use of the media and raising the specter of disrupting international trade agreements
7. It is possible to disrupt the cozy relationship that the alcohol industry has had with government for so long
8. Exposed weaknesses in our alcohol regulatory environment and our dependence on industry self-regulation and focused attention on the need for the state to strengthen regulatory measures and their enforcement & to take a tougher stance on the commercial determinants of alcohol-related harm
9. We were in this together. While the impacts are not the same, we are all affected by government policies to lessen heavy use of alcohol and reduce the negative impacts. It is in most people's interests to try to create a new normal
10. Highlighted gaps in way we collect and report on death and trauma data. Re latter, it raised the imperative of ongoing surveillance of *alcohol-related* trauma, at least at sentinel hospitals around the country, as a thermometer of the burden of alcohol in health services and how well our regulatory measures are doing in addressing the burden experienced from alcohol use heavy drinking more broadly*