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Risk factors associated with termination of pregnancy at a district hospital in Limpopo Province, South Africa

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Background. Termination of pregnancy (TOP) among young women is a public health issue, particularly in South Africa (SA) where a high prevalence of pregnancy terminations has lately been reported. It is estimated that 260 000 TOPs take place in SA every year. Studies in SA have reported that the risk factors most commonly associated with TOP were financial problems, being poorly educated, being young, unemployed and dependent on parents, being widowed or single and other relationship problems. Approximately 1 200 pregnancies were terminated in a district hospital in Limpopo Province between 2017 and 2018. There is also an increased rate of unintended pregnancy among HIV-positive women, which suggests that women with HIV may be more likely to want to terminate their pregnancy but choose not to owing to fear of being judged.

Objective. To investigate the risk factors associated with TOP at a district hospital in Limpopo Province.

Methods. A cross-sectional descriptive retrospective review study in which convenience sampling of the records of women who terminated pregnancies was used. A self-constructed data extraction tool was used to extract the data from patients' records. The tool covered variables such as the age of the women, educational status, marital status, year and month of TOP, gestational age, parity and gravidity, HIV status and circumstances leading to TOP. Data analysis was done using the Stata statistical software version 12 for Windows (Stata Corp., USA). The independent *t*-test was used for variables with two categories as it assesses whether the difference between means of two groups is statistically significant. This test was performed at the 95% confidence level. A *p*-value <0.05 was used for statistical significance in the difference in means between the categories investigated.

Results. The mean age was 27.9 years (standard error 0.37) and the majority of women who terminated pregnancies were in the age group 20 - 24 years, single and had a secondary educational level. There was a statistically significant difference between age groups and the gestational age, parity and gravidity at $p=0.004$ and $p<0.001$, respectively. The proportion of women who were at gestational age of 1 - 8 weeks decreased with increasing maternal age, from 22.4% in age group ≤ 20 years to 13% in age group 30 - 34 years. There was again a statistically significant difference ($p<0.001$) in relation to the number of pregnancies that had resulted in the birth of an infant capable of survival (parity) and similarly to

gravidity. The prevalence of HIV among women who terminated pregnancy was found to be 21.3%, and the risk of women who terminated pregnancies being HIV-positive increased significantly with age as older women (≥ 20 years) were 6.5 times more likely to be HIV-positive than younger ones ($p<0.001$). Low educational level, gestational age >13 weeks and parity of 1 - 2 were significantly associated with TOP. The association of gravidity of women who terminated pregnancies and HIV revealed that women who were in their second or third pregnancy (gravidity) while HIV-positive were 3.9 times more likely to terminate pregnancies than those who were in their first pregnancy ($p<0.001$). Marital status was not significantly associated with TOP.

Conclusion. TOP among adolescents and youth is a major public health issue, and the findings of this study highlight the need to address the structural socioeconomic drivers of family planning, which result in a high number of TOPs among the youth. Structural interventions, such as increasing contraceptive use, may be useful for reducing the burden of unplanned pregnancies. These findings suggest the need for targeted interventions for women of child-bearing age to access reproductive health interventions to prevent unintended pregnancies and the associated risk of termination.

Reflections on the concomitants of the restrictive visitation policy during the COVID-19 pandemic: An Ubuntu perspective

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Caregiving is a prominent concept in the *Ubuntu* philosophy, and caring and visitating of the sick is regarded as an example of *Ubuntu*. The restrictive visitation policy adopted in hospitals during the coronavirus disease 2019 (COVID-19) pandemic affected the exhibition of this concept among patients, nurses and families. Narrative inquiry was used to explore the reflections of participants on the impact caused by the non-visitation policy experienced during the first and second waves of the COVID-19 pandemic in South Africa. The narrative inquiry approach allowed participants to tell their stories, as they are unique to them. The study used a purposive sampling technique to select five participants for a webinar. Three themes emerged from the narrated stories: (i) moral anguish of the caregivers; (ii) mental health instability and (iii) erosion of trust in healthcare practitioners. The non-visitation hospital policy was intended to reduce the danger of

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spreading COVID-19 within and outside the hospital; however, the care provided was devoid of the values of *Ubuntu* such as mutual respect, responsibility, reciprocity and interconnectedness. In retrospect, a case-by-case application of the policy would reduce the non-desirable effect of the policy on patients, nurses and patients' family members.

Association between compassion satisfaction, burnout and compassion fatigue in foster parents from Ga-Mamabolo and Ga-Mothapo villages in Limpopo Province

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Foster care placement refers to alternative care arranged for vulnerable children lacking a family environment. Many children are left in need of care and protection due to circumstances such as parental death, exposure to harm and child abuse. There is a growing need throughout South Africa for such children to be placed in alternative care, such as foster care or institutionalisation. Foster parents have reported many challenges in previous studies. Many foster parents hesitate to continue with foster care placement owing to challenges such as foster child behavioural problems, financial problems and the low number of quality services that are designed to support foster parents and foster children. Compassion fatigue, compassion satisfaction and burnout are mostly visible in professionals working with adults and children after traumatic events, such as nurses and doctors. A key gap in the literature remains on the association between compassion fatigue, compassion satisfaction and burnout among foster parents. The study was conducted to determine the association between compassion satisfaction, compassion fatigue and burnout in specific sociodemographics of foster parents from Ga-Mamabolo and Ga-Mothapo villages. A quantitative and cross-sectional study was conducted with questionnaires used to collect data from 180 foster parents. Stata statistical software version 12 for Windows was used for data analysis and the significance level was set at 0.05. Results indicated that male foster parents had a higher risk of burnout. The study also found a statistically significant difference in the prevalence of compassion satisfaction at different risk levels among foster parents stratified by the number of children cared for. Foster parents who cared for one child had a high prevalence of compassion fatigue at low risk and moderate risk. Compassion fatigue fluctuated among females as it increased at ages 40 - 44 and decreased at ≥ 55 years. Foster parents with educated backgrounds and caring for one child had the highest compassion fatigue prevalence. Employed and unmarried foster parents were found to have lower burnout levels and more compassion fatigue. In conclusion, consistent with other helping professions, compassion fatigue, compassion satisfaction and burnout could be addressed through adequate support systems.

Integrated interventions by stakeholders to reduce substance abuse in the Dikgale Health and Demographic Surveillance System, South Africa

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Background. Substance abuse is one of the most pervasive problems facing our nation. However, the abuse of substances can be hard to combat, especially in rural areas, owing to limited resources for prevention, treatment, and recovery.

Objective. To explore the underlying risk factors contributing to substance abuse, the nature of the substance used and strategies that have been used to reduce substance abuse in the Dikgale community.

Methods. A qualitative narrative design was adopted to explore the possible strategies that integrated stakeholders can use to embark on substance abuse alleviation. The population consisted of stakeholders such as the South African (SA) Police Services of the local area, the SA National Council on Alcoholism and Drug Dependence at a provincial level, a social worker and professional nurse from Dikgale Clinic, a ward counsellor representing the political structure, the community advisory team within Dikgale area, a substance abuse ambassador and the youth desk from the Limpopo provincial office. Data were collected using a triangulation method (interviews and field notes during presentations). Purposive sampling was used to select all the stakeholders who were available during the campaign. Data were analysed using open content analysis, and themes emerged.

Results. The prevalence of substance abuse in the Dikgale community is considered to be high, mostly among the youth. Substances used include crystal meth, alcohol, nyaope and cannabis. Challenges associated with substance abuse are family violence, conflicts, divorce, rape, peer pressure, school drop-out and increased unemployment for those young people who have completed a course of rehabilitation.

Conclusion. The stakeholders' involvement in substance abuse awareness and in combating substance abuse within Dikgale demonstrated a need to enforce and sustain collaborations. This follows from the common primary activities and roles of the stakeholders in reducing substance abuse.

Identification and uptake of cervical cancer screening during active surveillance in HIV-positive women attending a primary healthcare facility in Tshwane District, Pretoria

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Background. Cervical cancer is preventable with adequate screening, management and follow-up. However, in South Africa (SA), it is still a leading cause of death, with a high incidence rate.

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Papanicolaou (Pap) smears remain the gold standard for screening of cervical cancer in SA.

Objective. To assess cervical cancer screening uptake among the HIV-infected female population at a district clinic in Tshwane.

Methods. This was a prospective study design in which HIV-infected women who were eligible for Pap smears were contacted telephonically and given appointments. Subsequently a semi-structured questionnaire was administered to women who agreed to come in for Pap smears to understand their knowledge about and barriers for Pap smears.

Results. A total of 256 women were eligible for Pap smears. Of 26 patients who agreed to come in to have a Pap smear, 15 (57.7%) presented to the clinic. Twenty-one patients (80.8%) were successfully contacted for the questionnaire. Knowledge on frequency of Pap smears showed that 9 (45%) thought Pap smears should be undertaken yearly, 4 (20%) 3-yearly and 2 (10%) 5-yearly. Just over one-third of respondents (35%) believed that poor Pap smear uptake was due to lack of education, and that better patient education would improve uptake. Other barriers to uptake included: poor staff attitude ($n=3$, 15%) and long waiting times ($n=3$, 15%). Regarding telephonic communication, the majority 18 (90%) were happy about being contacted. Ten (50%) opted for future appointment reminders, and 5 (25%) for health prevention and promotion.

Conclusion. Pap smear uptake remains a challenge. Systemic factors such as staffing attitude and waiting times will have to be addressed for better uptake. Implementation of novel communication between the clinic and its patients such as telephonic contact or SMS reminders must be considered.

A rapid review of the experiences and expectations of public sector healthcare services on integrating COVID-19 vaccination into existing services in the Ekurhuleni Health District, 2021

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Background. Since rolling out COVID-19 vaccines in Ekurhuleni began, a vertical model has been used to rapidly vaccinate a large number of people. This approach has been resource-intensive, inefficient and unsustainable. An integrated approach may address these challenges.

Objective. To look at the experiences and perceptions of healthcare workers on the provision of COVID-19 vaccine services, and the integration process.

Methods. This descriptive study identified experiences, challenges and facilitators of providing COVID-19 vaccine services, and perceptions on integration. In-depth interviews using standardised interview guides were conducted with 19 public sector healthcare workers in Ekurhuleni. These included staff from facilities where COVID-19 vaccine services were being provided, and those where they were not. Qualitative analysis was performed through thematic analysis.

Results. Themes identified included the complexity of the vaccine processes requiring clear planning and guidance; space, staff and other resource constraints that clinics overcame through rearranging current resources; low vaccine uptake and suggestions to increase the availability of patient-centred services; and the negative impacts of the COVID-19 vaccine on other primary healthcare (PHC) services. Benefits of an integrated system included the opportunity to increase skills, develop more streamlined processes and reduce resource requirements. Clinics were happy for facilities to benchmark services on their work. Perceptions of providing COVID-19 vaccine services included the concerns of limited space, staff and cold-chain resources; difficulty maintaining stock control; and poor community uptake. Three models to integrate COVID-19 vaccine services into PHC services were described. These models suggested that all facilities provide vaccine services through (i) a dedicated vaccination site or room at the facility; (ii) integration into the expanded programme for immunisation; or (iii) providing vaccines in all consulting rooms.

Conclusion. Clear guidance should be developed to ensure an easy transition towards a more integrated model, training, benchmarking and monitoring of performance should be performed continuously, and integration should take place towards strengthening the functions of the healthcare system as a whole.

Assessing the cervical precancer treatment rate among women utilising the Johannesburg public health sector through record linkage of laboratory data

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Background. Despite being preventable, cervical cancer incidence and mortality remains high in South Africa. Without follow-up and treatment of precancerous lesions, screening cannot reduce cervical cancer incidence. Routine information systems do not enable adequate monitoring of the screening programme.

Methods. A retrospective cohort analysis was performed using 67 208 laboratory records of women who were screened in Johannesburg in 2017. Using probabilistic record linkage, cytology records for women with high-grade squamous intraepithelial lesions (HSIL) were matched with histology records to determine if women with HSIL had follow-up procedures within 2 years of screening. The outcome variables HSIL prevalence, follow-up and precancer treatment rates, and time intervals were compared across age groups, screening facility type, subdistrict and HIV status using Kruskal-Wallis and Wilcoxon rank-sum tests. Logistic regression was performed to assess for factors associated with outcome variables.

Results. Of the 4 182 women who screened positive for HSIL, 26.6% underwent follow-up. Treatment on first follow-up was received by 475 (62.0%) women who had histology-confirmed HSIL. The remaining 291 (38.0%) had confirmatory tests, of whom 144 (49.5%) received treatment. Overall, the precancer treatment rate

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was 16.1% of women with histology-confirmed HSIL. The highest odds of treatment were found in women screening at community health clinics or hospitals, and subdistrict B. Median time from screening to any follow-up procedure was 131 days (interquartile range (IQR) 80 - 189); to confirmatory test, 123 days (IQR 51 - 175); to precancer treatment, 151 days (IQR 101 - 246). Times to follow-up and treatment were significantly associated with the number of management steps, screening facility type and subdistrict.

Conclusion. This study demonstrates using record linkage of laboratory data to estimate follow-up of cervical cancer screening. Major findings included low follow-up and precancer treatment rates. These gaps in the screening programme preclude achieving World Health Organization elimination targets and reducing cervical cancer incidence. Less complex screening cascades and fewer facility visits may reduce loss-to-follow-up; benchmarking service delivery models of high-performing subdistricts may improve treatment rate; and improving information systems to generate necessary indicators will enable monitoring the programme towards building a healthcare system responsive to the health needs of women.

The psychosocial impact of COVID-19 on communities in informal settlements in the southern region of the City of Ekurhuleni

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Social workers are confronted with endemic social challenges, particularly among people from marginalised communities. People from informal settlements experience a myriad of social injustices such as poverty, unemployment and lack of decent housing. The COVID-19 pandemic exacerbated problems and put more strain on communities already burdened by poverty. A qualitative study was conducted to gain a holistic view of how the lives of people in informal settlements have been affected by the novel coronavirus. A purposive sampling method assisted the researchers to get the required sample for participation. Participants were co-ordinated into three focus groups discussion interviews, using a semi-structured interview guide for data collection. Creswell steps of data analysis were utilised. The findings of the study were that the majority of families in informal settlements survived on social grants even prior to the pandemic. The predominant employment in such communities is in the informal sector. Therefore, most families were thrust into total deprivation during the hard lockdown, as there is no social security buffer in the informal sector of employment. Children's education was grossly affected, from early childhood development through to high schools owing to lack of resources, which prohibited continued remote learning. The needs of people with disabilities (PWDs) are generally neglected. The pandemic subjected PWDs to worse conditions that were not catered for by the government, yet they are a group categorised as most at risk for contracting the virus. The conclusion is that poor living conditions in informal settlements subjected people to more risk of infection. Those conditions further seem to incubate and sustain poverty,

contributing to generational poverty. Government programmes have so far focused on infrastructural development in informal settlements. However, the study recommends that the focus should also be on the development of human capacity, with both hard and soft skills. Skilling of people improves self-reliance and increases their capacity, which is required in adverse conditions such as in the time of the pandemic, instead of perpetually relying on the government.

Where to from here? Assessment in the post-pandemic era

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Background. The transition to online assessment necessitated by the COVID-19 pandemic, in the absence of robust monitoring of tests and examinations, coupled with the removal of negative marking for an incorrect option choice in multiple-choice question (MCQ) assessments, at the Nelson R Mandela School of Medicine, South Africa, may have compromised assessment integrity. Specific core competencies have been identified for medical graduates, namely, advocacy, professionalism, lifelong learning and ethical behaviour, and require ongoing innovation in the way we teach and assess to ensure these are achieved. Assessment is of vital importance. Any means of assessment that distracts from these core competencies can therefore be considered to be poor quality, 'failing' both students as well as the populations they are training to serve, despite adequate pass marks. MCQs are the main format of didactic testing, and formula scoring, such as negative marking of an incorrect choice, is applied to reduce the risk of obtaining a correct answer through guesswork. Since no penalty is applied for incorrect answers, resulting in a 25% probability of guessing the correct answer, students may demonstrate increased risk-taking behaviour.

Objectives. To determine the effect that the removal of negative marking during online assessments has on assessment scores. To determine the direction and magnitude of differences in assessment scores with and without negative marking, and how it affects students' approaches to learning.

Methods. In this prospective study, the 2019 term 3 summative assessment of first-year medical students will be administered as a formative test to the 2022 incoming cohort. Students will be randomly divided into two equal groups, with one informed that negative marking will be imposed, and the other, no negative marking. Differences in test performance between the 2019, 2020 and 2021 summative and 2022 formative assessments will be analysed using parametric *t*-tests and analysis of variance, and nonparametric Kruskal-Wallis tests where applicable, to determine an association between overall student performance on these items across the different tests.

Conclusion. Dissemination of the results will enable a comprehensive review of current practice and inform future policy. Ideally, tests should be iterative, so as to determine competencies.

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The unintended but desirable consequences of the COVID-19 response in South Africa

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Background. In response to the COVID-19 pandemic, the South African government imposed strict measures to protect the population from the virus. Lockdown or stay-at-home directives, wearing of face masks in public spaces, regular washing of hands with water and soap or use of hand sanitisers, and social distancing were implemented. During the lockdown, movement of people was restricted, where only a few people were allowed to gather indoors and outdoors. People were ordered to stay at home and only leave their houses to access essentials such as food and healthcare. The selling and buying of tobacco and liquor were prohibited. Exercising and participation in sports were also prohibited. Some people complained about the restrictions imposed, while others welcomed them. The combination of these response measures with vaccination, hospitalisation and outpatient treatment saved many lives. The intended benefits were therefore achieved. There is a need to assess how measures adopted during the pandemic benefit the population post the pandemic.

Method. The study used observation and review of literature as methods of data collection. Grey literature, mostly media reports, were collected by creating a Google alert. Further collection of media reports was done through Google search using a keyword search. A qualitative analysis was conducted, and themes emerged. Findings are discussed using literature.

Results. COVID-19 control measures resulted in both positive and negative consequences for people's lives. This study focuses on consequences that were not intended but benefited the population positively. Findings show that, currently, people seem to have an increased awareness of how infections are transmitted, there is adoption of preventive measures such as hand hygiene, avoidance of crowds, wearing of face masks and adoption of healthy lifestyles such as smoking cessation and regular exercise. While the lockdown or stay-at-home directive was lifted and wearing of face masks is no longer a mandatory practice, some people continue to wear face masks in public places, while others continue to avoid crowds. When the first strict lockdown was lifted, some people left their homes for exercise in the form of walking, jogging and running for the first time in their lives. Some of these people are now exercising on a regular basis. Some people continue to use hand sanitisers that they carry regularly with them, while others use those still available at entrances to some buildings. Due to restricted access to tobacco and liquor during the lockdown, some people learned to enjoy life without them. Some have reduced their consumption of alcohol, while others now use it within the requirements of the

law. The law restricts the sale of tobacco and liquor to minors, and some people now comply with this requirement, as they became aware of it during the lockdown. These unintended benefits have resulted in a reduction in the number of respiratory infections and road accidents.

Conclusion. The population continues to reap benefits that were not intended but are desirable. It is important for the health system to build on these unintended benefits in order to improve population health.

Mental health of healthcare professionals

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Background. Mental health problems affect one-third of all South Africans, including the healthcare workforce who have been on the frontline of the COVID-19 response. The mental health of healthcare workers, however, remains overlooked and underprioritised as they find themselves without adequate support. They are often vulnerable owing to their first exposure to an environment with a limited support system. We have noted that mental health problems are prevalent among healthcare workers. Their participation as frontline workers in this pandemic has involved an increase in demand for healthcare services, an overload of work, the risk of infection, the possibility of transmission to their families, deaths of colleagues and relatives, and confinement. As a result, health professionals may be exposed to a number of psychological symptoms such as fear, insecurity and anxiety, compassion fatigue and burnout, involving emotional exhaustion, depersonalisation and lack of personal fulfilment at work as a result of continued exposure to job stressors.

Method. An informal survey was conducted anonymously at the hospital among the first- and second-year medical interns using a Google form that was distributed through a shared WhatsApp group of these staff members.

Results. Of the total medical interns who were employed at the hospital ($n=95$), 53 interns (56%) completed the survey. Of these, 39.2% ($n=20$) reported poor/terrible mental health, 19.6% ($n=10$) reported having average mental health, only 15.7% ($n=8$) reported having good mental health and 25.5% ($n=13$) reported being diagnosed with a new mental health condition since starting their internship. Mental health problems are prevalent among healthcare workers. Their involvement as frontline workers during the pandemic, working in an overburdened and understaffed system, with increased risk of infection and possibility of transmission to their families and deaths of colleges and relatives has perpetuated the poor mental health seen among our healthcare professionals.