

## Self-prescription practices by Nigerian medical doctors

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** Self-prescription by physicians is a form of self-care that has generated considerable controversy in recent years. The prevalence of self-prescription practices by physicians has been widely studied in North America, Europe and Asia. Few studies on physician self-prescribing and prescribing for family members have been carried out in Nigeria. The primary aim of this study was to investigate the prevalence of self-prescription by medical doctors in Nigeria.

**Method:** The study was carried out on medical doctors working in two public sector tertiary healthcare facilities in Nigeria; the Federal Medical Centre, Ido-Ekiti, and the University of Ilorin Teaching Hospital, Ilorin. This was a questionnaire-based, cross-sectional survey of different categories of medical doctor working in two healthcare institutions. A semi-structured questionnaire was used to collect demographic data on the respondents, self-prescription practices, prescribing for family and friends, reasons for self-prescription and the type of medications usually prescribed.

**Results:** One hundred and thirty-two doctors were enrolled in the study, giving a response rate of 53.0%. One hundred and twenty-seven respondents (96.2%) usually prescribed medications for themselves, 87 (91.6%) prescribed for their spouses and 72 (80%) for their children. One hundred and seventeen (89.3%) of the medical doctors had prescribed by telephone, 92 (70.8%) had informally asked colleagues for a prescription, while 80.9% of them had refused to prescribe for family members mostly because of the need for a physical examination (68.2%). Seventy-six respondents (61.3%) were of the opinion that self-prescription and prescription for family members was unethical. Antimalaria drugs, analgesics and antibiotics were the most commonly prescribed drugs.

**Conclusion:** The findings from the two clinical centres in Nigeria demonstrated that self-prescription by medical doctors was highly prevalent. Appropriate strategies are necessary to curtail this potentially harmful practice. A larger study across all geopolitical regions is needed to fully assess the prevalence of this practice.

**Keywords:** drug prescription, health-seeking behaviour, medical doctors, Nigeria, self-prescribing, self-treatment

## An evaluation of stress in medical students at a South African university

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** Medical educational programmes strive to produce competent and skilled graduates. However, studies have shown that undergraduate medical students experience varying degrees of stress which impacts on their health, academic performance and social functioning. This study explored the prevalence and causes of stress, its impact on students and their coping strategies in a racially diverse cohort of final-year medical students exposed to a problem-based learning curriculum in South Africa.

**Method:** This descriptive cross-sectional study was undertaken by final-year medical students in 2008 at a South African medical faculty with a racially diverse student population. Semi-structured interviews were conducted. Data were thematically analysed.

**Results:** Ninety-four students, representing 47% of the final-year medical student cohort, participated in the study. Seventy-eight per cent of the participants ( $n = 73$ ) experienced stress during the programme, and the majority ( $n = 49$ ) were females. Ethnic and gender differences were observed for the variables studied. Academic and personal problems were the main sources of stress. Coping strategies included individual lifestyle adaptations, family support, religious structures and study groups.

**Conclusion:** Maladaptive stress impacts negatively at multiple levels on undergraduate medical students. Mentorship and educational support programmes should be integrated into the undergraduate medical curriculum and made available to all preclinical and clinical students. Students need to be taught and guided to identify and monitor their own well-being and to select positive strategies to overcome stress. These measures should assist students to manage their workload and time effectively.

**Keywords:** medical students, South Africa, stress

## The nutrient intake of children aged 12–36 months living in two communities in the Breede Valley, Western Cape province, South Africa

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**Objective:** The objective of this study was to describe the current macro-and micronutrient intake of children (both boys and girls) in two selected communities in the Breede Valley, Worcester.

**Design:** This was a quantitative cross-sectional study.

**Setting:** The study focused on two disadvantaged communities in Worcester (Avian Park and Zweletemba) in the Breede Valley, Western Cape province.

**Subjects:** The study subjects were 248 children (Avian Park,  $n = 117$ ; Zweletemba,  $n = 131$ ) aged 12–36 months.

**Method:** The macro-and micronutrient intake of the children was determined using a validated, interviewer-administered quantitative food frequency questionnaire, and compared against the estimated average requirement (EAR) and adequate intake (AI) of nutrients. The nutrient adequacy ratio was calculated, as well as percentage deviation from the EAR and AI.

**Results:** More than 20% of the children had a calcium and folate intake that deviated by more than 50% below the EAR in both communities and for both genders. More participants in Zweletemba had an intake that deviated by more than 50% above the EAR and AI, compared to Avian Park, for carbohydrate, thiamine, niacin and iron.

**Conclusion:** With the exception of folate, calcium and selenium, the average reported nutrient intake of the children (boys and girls) in both the communities was adequate.

**Keywords:** food frequency questionnaire, macronutrients, micronutrients, nutrient intake

## Effectiveness of a Buddy intervention support programme for suicidal behaviour in a primary care setting

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** Suicidal behaviour is a major contributor to the health burden globally. Non-fatal suicidal behaviour may be 10–40 times more frequent than fatal suicidal behaviour. National responses to this crisis have been variable. This study was designed to evaluate and compare the effectiveness of a brief Buddy intervention support programme with the World Health Organization Multisite Intervention Study on Suicidal Behaviours (SUPRE-MISS) programme with regard to a cohort of suicide attempters.

**Method:** Six hundred and eighty-eight suicide attempters were recruited into this randomised control study following admission and stabilisation in two community-based hospitals. They were randomised into either the SUPRE-MISS intervention group (control) or the Buddy support intervention group (experimental), and followed up over 18 months. Data were analysed using SPSS<sup>®</sup> 19.

**Results:** Three suicides occurred in the control group and one in the Buddy group. Collectively, 171 further suicide attempts were recorded during the 18 months, with 103 in the control group and 68 in the buddy group. Differences between the two groups were statistically significant.

**Conclusion:** The Buddy intervention was found to be effective and relevant in reducing suicidal behaviour in the local community. These findings have practical implications for implementation at primary care level in all communities.

**Keywords:** Buddy support, prevention, suicidal behaviour

## Factors which predict interpersonal violence in South Africa

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** This paper responds to the call for an extensive research agenda to be developed and designed to identify, plan and then implement prevention programmes with respect to violent crime in South Africa. This study began that process by identifying the factors that predict violence, and then attempting to interpret the implications for violence prevention programmes. This research is grounded in literature on the built environment.

**Method:** The study was based on the responses of 2 399 South Africans, collected in 2011, during the Fifth Round Afro Barometer Survey. The study concentrated on 259 respondents who reported that either they or someone else in their family had been the victim of violence, defined as being physically attacked, in the last year.

**Results:** Logistical regression analysis identified six factors that predicted physical violence in South Africa. These were being a victim of property crime, poverty, gender, age, fear of crime in the home and the respondents' faith. Surprising findings relate to what may be called re-victimisation, whereby 60% of victims of violence were also victims of property crime. Fear of crime was another predictor of violence victimisation. Many of the respondents who reported having a fear of crime had been crime victims.

**Conclusion:** These findings suggest that victimisation could be the basis of crime prevention programmes in South Africa. Target hardening should be the mechanism used when implementing violence prevention programmes. Prevention and law enforcement personnel need to respond to reported incidents of property and/or violence victimisation, and then attempt to prepare victims to protect both their premises and their person.

**Keywords:** built environment, physical violence, property crime victim, re-victimisation, violent crime victim

## Acute poisoning in the provincial general hospital, Nakuru, Kenya: January to June 2012

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**Background:** Information on the patterns of acute poisoning in Kenyan hospitals is limited, and yet such information is crucial for the appropriate management of poisoning. This study attempted to address this knowledge gap by examining admissions in a regional hospital in Kenya.

**Method:** This was a retrospective review of the hospital records of 96 acute poisoning patients in Rift Valley Provincial General Hospital, Nakuru, in the first six months of 2012. A pretested data collection form was used to obtain data on important variables.

**Results:** The prevalence of acute poisoning was 0.07% (96 of 141 769 cases). The average age of the patients was 22.6 years  $\pm$  11.2 years, the majority of whom were males [odds ratio (OR) 2.06]. The most prevalent toxic agent was pesticide (50, 52.08%). The majority of cases were intentional poisoning (48.96%) versus unintentional poisoning (43.75%), and involved mainly males (OR 3.06). Conversely, females were the majority with respect to accidental poisoning (25%) versus males (17.7%). However, accidental poisoning was most prevalent in patients aged 12 years and younger (23, 23.96%). Overall, acute poisoning was most prevalent in the age category of 20–30 years (40, 41.7%), in which intentional poisoning was predominant (26, 27.08%). The majority of cases of acute poisoning were incorrectly diagnosed (OR 1.79). The three patients who died were males (3.13%).

**Conclusion:** This study showed that the majority of acute poisoning cases affected males and were intentional. The study also showed that the most prevalent acute toxic agent was pesticide and that acute toxic agents were often misclassified and hence misdiagnosed. These observations should be included when designing focused hospital poison management protocols.

**Keywords:** accidental poisoning, acute poisoning, intentional poisoning, misdiagnosis, toxic agents

## An exploration of anaemia in low-birthweight infants exposed to perinatal zidovudine at the neonatal unit at a regional hospital in Durban

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Objective:** The objective of the study was to determine the prevalence and degree of anaemia in low-birthweight neonates exposed to intrauterine zidovudine (AZT) at a regional hospital neonatal unit in Durban.

**Design:** This was a descriptive, cross-sectional study.

**Background:** Perinatal exposure to AZT has been shown to cause anaemia in full-term babies. The effects of AZT in this group need to be established as there is a low-birthweight rate of 12.8% of anaemia in South Africa.

**Outcome measures:** Outcomes measures of the study were the neonatal haemoglobin (Hb) levels, gestational age and duration of AZT exposure.

**Results:** The total prevalence of anaemia was 47% in the 95 neonatal birth records analysed. The prevalence of anaemia was 16.7% and a mean Hb of 17 g/dl in the 26- to 28-week gestational age category; a prevalence of anaemia of 37% with a mean Hb of 16 g/dl in the 29- to 31-week category; and a prevalence of 54.8% of anaemia with a mean Hb of 17 g/dl in the > 31-week category. The mean Hb in the neonates exposed to more than 28 days of AZT was lower than that in neonates exposed to less than 28 days in the 29- to 31-week and > 31-week gestational age categories.

**Conclusion:** The haematological side-effects of neonatal anaemia resulting from intrauterine AZT exposure were mild and clinically insignificant in keeping with existing international and continental studies. The severity of anaemia in low-birthweight neonates appears to be the same as that in neonates with a normal birthweight. Current recommendations for the routine use of AZT for the PMTCT of HIV are adequate, but further research involving larger numbers is needed.

**Keywords:** anaemia, low birthweight, neonate, zidovudine

## Self-efficacy, medication beliefs and adherence to antiretroviral therapy by patients attending a health facility in Pretoria

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** Self-efficacy and medication beliefs are known factors that influence adherence to treatment in chronic medical conditions. We carried out a cross-sectional study on human immunodeficiency virus (HIV)-infected patients with the aim of determining the predictive relationship between these two variables and adherence to antiretroviral therapy (ART) at a health facility in Pretoria.

**Method:** Participants' medication beliefs were assessed using the Beliefs about Medicines Questionnaire. Self-efficacy was evaluated using the HIV Adherence Self-Efficacy Scale, and adherence to ART determined using the AIDS Clinical Trial Group questionnaire.

**Results:** The mean age of the 232 participants was 40 years (standard deviation 15.6). Seventy per cent were females. Most had been on ART for over two years (87%), and 81.5% were adherent to at least 95% of the prescribed antiretroviral drugs. Nonadherence was highest in those on ART for more than three years (63%). The mean HIV Adherence Self-Efficacy score was 6.45 out of possible 10. Beliefs held by the participants about the importance of (necessity) and concerns about ART in the management of HIV infection were generally positive. There was a mean score of 4.05 out of 5, indicating a strong belief in the use of ART. There was a strong association between adherence self-efficacy and ART adherence ( $p < 0.001$ ) in the nonadherent participants. Regression analysis showed significance for adherence self-efficacy on ART nonadherence ( $p < 0.041$ ), with adherence self-efficacy explaining 9.8% of the variance.

**Conclusion:** Patients' adherence self-efficacy explained a significant portion of variation in the nonadherence to ART, which suggests that low adherence self-efficacy is influential in ART nonadherence. Interventions aimed at improving adherence to ART should address adherence self-efficacy.

**Keywords:** adherence self-efficacy, antiretroviral therapy adherence, beliefs about medicines

## The prevalence of multiple losses experienced by children from birth to 18 years of age in the National District Hospital in Bloemfontein

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** Multiple losses experienced by children is a topic on which little research has previously been completed. Therefore, a specific definition of multiple losses is unavailable. Multiple losses are traumatic for children and result in the need for intervention and support with respect to grief, loss and bereavement issues. The main goal of this study was to determine the prevalence of children who had experienced multiple losses from birth to 18 years of age in the National District Hospital in Bloemfontein.

**Method:** A literature search was carried out to define the concept of multiple losses experienced by children that was appropriate to the South African context. Thereafter, a descriptive study with an analytical component was used to gather information on multiple losses. Structured interviews with the parents or caretakers of the children at the National District Hospital were conducted by the researchers by means of a questionnaire. The interviews were conducted in English or Afrikaans.

**Results:** A total of 62 interviews were performed with the parents or caregivers. Multiple losses, defined here as the loss of three or more personal, interpersonal or environmental assets, were experienced by 69% of these children (95% confidence interval: 57–79%). The majority of losses experienced occurred in the interpersonal (87%) and environmental (82%) categories. The death of a family member took place in 61% of cases. Unemployment of a parent, with its consequences, was reported in 63% of cases.

**Conclusion:** The criteria used to define multiple losses in this study were adequate and appropriate for this study population. The prevalence of multiple losses in children in the National District Hospital in Bloemfontein was 69.4%. This figure warrants the need for support and bereavement counselling for children to prevent long-term problems with relationships and adaptation within society.

**Keywords:** bereavement, children, grief, multiple losses

## The management of latent tuberculosis infection in healthcare workers at hospitals in the Vhembe district

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**Abstract** (Full text available online at [www.tandfonline.com/ojfp](http://www.tandfonline.com/ojfp))

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**Background:** Tuberculosis is a major occupational hazard in low- and middle-income countries. Healthcare workers are frequently exposed to infectious tuberculosis patients and are likely to be infected themselves and to suffer from latent tuberculosis infection. This study investigated practices of managing latent tuberculosis infection in healthcare workers at hospitals.

**Method:** A qualitative approach, using a cross-sectional descriptive case study design, was adopted. Purposive sampling was used to select 57 focus group participants. The necessary approval, permission and clearance were obtained. Participants' rights were respected.

**Results:** The majority of practices with regard to managing latent tuberculosis infection in healthcare workers were incorrect and did not align with national and international tuberculosis infection control standards.

**Conclusion:** The development and implementation of a tuberculosis infection control plan, as well as a training programme at hospital level, would ensure that practices to manage latent tuberculosis infection in healthcare workers are able to reduce the chances of tuberculosis being acquired.

**Keywords:** latent tuberculosis infection, periodic examinations, prophylaxis treatment, tuberculin skin test