Gram-negative agents (53.9 per cent) in terms of the percentage of change in PLTs ($p < 0.05$). Although there was an increase in MPV and PDW from baseline, there were no differences between groups. In the Guida, et al. study,$^2$ MPV displayed an increase in comparison to baseline values in patients with septic VLBW. However, changes specific to organism were not observed. O'Connor, et al.$^4$ established a higher MPV value in spite of normal PLT in patients with CONS sepsis. PDW increased in 71 per cent of their patients with Gram-positive sepsis and 75 per cent of patients with Gram-negative sepsis.

In this study it was demonstrated that there might be quantitative, if not statistical, differences in platelet response to infection with the two major groups of organisms causing sepsis in newborns. Sepsis was frequently associated with thrombocytopenia and an elevation in MPV and especially PDW. Further studies with a larger population are needed to determine the effects of different infectious agents on PLT and indices.

### References


### The Impact of HIV on the Profile of Paediatric Admissions and Deaths at Pelonomi Hospital, Bloemfontein, South Africa

In 1999 Zwi, et al.$^1$ reported the impact that paediatric HIV infection had on the profile of paediatric admissions, diagnoses, and in-hospital deaths in a large urban regional South African hospital from 1992 to 1997. Jeena, et al.$^2$ investigated admission and outcome patterns in a paediatric intensive care unit between 1971 and 1995, and found that HIV related syndromes, lower respiratory tract infection, metabolic disorders, septicaemia, and hyaline membrane disease replaced common childhood vaccine preventable infections. In our study we compared the profile of general paediatric admissions and deaths in Pelonomi Hospital, Bloemfontein, during two 1-year periods, namely 1991 and 2001. Monthly statistics compiled by the Department of Paediatrics and Child Health, University of the Free State (UFS) were analysed. For each year the five main admission diagnoses and causes of deaths were determined. The Ethics Committee of the Faculty of Health Sciences, UFS approved the protocol.

In 1991, 2251 children were admitted of whom 191 (8.5 per cent) died compared with 1836 admissions in 2001 of whom 227 (12.4 per cent) died. The decreased number of admissions is due to the decreased number...
of beds available in the general paediatric wards at Pelonomi Hospital (approximately 110 beds in 1991 and 60 in 2001). The increase in mortality could be due to more seriously ill children being admitted in 2001. Of the children admitted in 1991, 70.2 per cent had a normal nutritional status using the Wellcome classification, compared with only 55.5 per cent in 2001, the difference being mainly due to the percentage with marasmus increasing from 2.9 to 14.2 per cent.

Table 1 indicates the five main reasons for admission and causes of death for 1991 and 2001. There were significant increases in pneumonia, gastroenteritis, and anaemia as admission diagnoses, and significant decreases in neonatal jaundice, convulsions, and glomerulonephritis. Pneumonia increased significantly as the cause of death and septicaemia decreased significantly as the cause of death. Of the children who died of pneumonia and whose HIV status was known, 79.2 per cent were HIV positive.

It is clear that there have been some significant changes in the parameters studied in the pre- and post-HIV era. The admission diagnoses with significant increases in 2001 compared with 1991, could all be attributed to the effect of HIV disease in our hospital population. The significant decrease in neonatal jaundice admissions could reflect the improved primary health care services in our area, whereas the decrease in glomerulonephritis could be due to the seasonal changes known to occur with streptococcal infections.

It is not surprising that pneumonia has significantly increased as a cause of death in 2001 as 80 per cent of the pneumonia patients with known HIV status were positive. The reasons for septicaemia being diagnosed less is not clear, as the indications for doing blood culture investigations have not changed.

This small study clearly highlights the impact of HIV disease in our hospital. Not only does it increase the workload but, more importantly, it contributes to the suffering of the most vulnerable members of our society. It is imperative that antiretroviral management options for HIV disease are functional and in place.

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