'Neither obscure nor mysterious' — infant mortality and the Kimberley Board of Health, 1898-1977

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Annual reports of the Kimberley Board of Health, established in 1883, provide rich insight into public health discourse on infant mortality. Commentaries on the determinants of infant mortality, especially prior to 1950, largely focus on poverty and interracial disparities, issues relevant to current health policy.

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The debate on restructuring South African health care has been accompanied by renewed interest in the history of local public health initiatives and their relevance to current issues.[1,2] Most of the recent documentation has focused on exemplary individuals and institutions and there is a paucity of historical information on the routine public health activities of local authorities. Although some of the larger towns and cities have been collecting health information since the turn of the century, health service fragmentation and the lack of an integrated national health information system have led to an inevitable decline in the quality of South African health statistics.[3] The utility of local authority health data was demonstrated by Phillips, who used the Reports of the Medical Officer of Health of Cape Town to demonstrate

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substantial inter-racial disparities in infant mortality.[4] More recently, Yach analysed local authority data to provide estimates of national infant mortality rates.[5] The review of innovative source material may provide important insights into health determinants as shown by a study of historical demographic data from Moravian Church records in Mamre.[6] This paper examines almost a century of public health discussion at a local authority level on infant mortality, in the hope that some of the discourse of the past will be relevant to the needs of today.

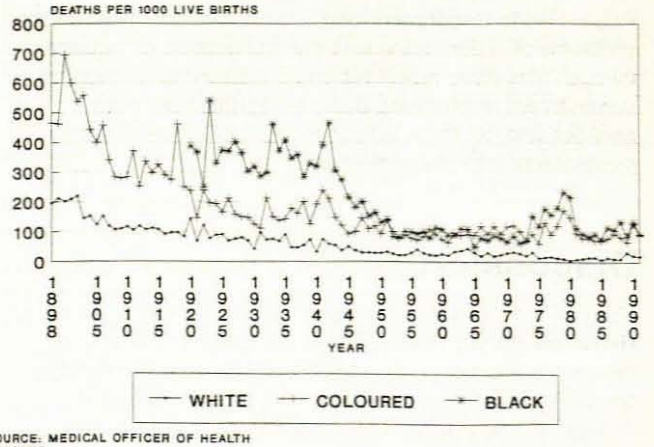
The Kimberley Board of Health

Established in 1883, the Kimberley Board of Health functioned for 94 years as a third local authority responsible for the provision of comprehensive health services. The Board was established by the Town Council, with permission from the secretary of the Medical Board in Cape Town, as an urgent response to an outbreak of smallpox. Despite substantial changes in health legislation at the beginning of this century, Kimberley remained the only city in South Africa with an independent health board. The Kimberley Board was disbanded in 1977, when the new Public Health Act made no further provision for its existence;[7] its functions were taken over by the Kimberley City Council. The demise of the Kimberley Board of Health was accompanied by increasing State involvement in the provision of district health services and the opening in 1978 of a regional office for the Northern Cape by the State Health Department.[8]

The first official report of the Medical Officer of Health appointed by the Kimberley Board was published in 1898.[9] This document heralded a long tradition of data, commentary and speculation on a variety of public health issues such as infectious disease, sanitation and maternal and child health. In his report, Dr W. W. Stoney, comments that 'it is our infants and young children who are most easily affected by circumstances which influence adversely the general health of a community. It is, therefore, to the sickness and mortality rates amongst our infants, that we look as being the most delicate index of general and local unhealthy conditions'. Stoney notes that, although an infant mortality rate of 304/1 000 white infants was unacceptable, this finding had to be viewed in the context of the siege conditions prevailing in Kimberley at the time. The high rate of infant death was attributed mainly to the quality and quantity of available milk and consequent diarrhoeal disease. While the report does not specifically mention black or coloured infants, Stoney comments on the 'unsatisfactory state of the native locations'. Furthermore, he observes that 'the huts themselves are frequently very dirty and are over-crowded, the average number of persons to each hut being over six'.

Stoney's speculation on the mechanisms of infant mortality continue in the 1899 report, where he observes that 'there is, undoubtedly, some relationship between the prevalence of this disease (fatal infant diarrhoea) and the temperature of the soil'. He states that public health intervention addressing improper feeding as a possible cause of diarrhoeal disease had been undertaken. This included the distribution of a leaflet on the feeding and care of infants. As to the issue of the high white infant mortality rate, Stoney mentions that an enquiry into each death was being conducted, with special attention to feeding. By 1901, it was recognised that at least some infant deaths were occurring in areas of black settlement. Referring to the 'native rooms in Boshof Road', the then Medical Officer of Health wrote that 'the wonder is that anyone can live at all in these places, so crowded and devoid of sanitary surroundings are they. No windows, in many cases no doors, mud floors and filth-covered walls go to make up the dwelling so called.' Perhaps the most poignant of 1901's observations relates to the 'appalling infant death amongst Coloureds; that 160 children out of 220 should die before reaching one completed year of life is a fact that needs attention, in fact it looks almost as if foul play was going on to do away with helpless infants'.

By 1907, some decrease in infant mortality had been recorded (Fig. 1) and increasing attention was being paid to possible interventions whereby infant death due to diarrhoeal disease could be reduced further. Infant death was often preceded by episodes of diarrhoeal disease which 'wrecked the constitution of infants attacked by it, so that although they may recover from it, they are more liable to contract and succumb to other ailments shortly after, or suffer from its after-effects for long periods'. The 1909 report embraced the 'sanitary theory', emphatically stating that 'the higher standard of sanitation aimed at and attained in a town, the lower the infantile mortality'. In the 1911 report, a plea is made for better maternal education, breast-feeding and attention to infant cleanliness, and issues such as ground temperature, vapours and the virulent properties of germs are also explored. As to the role of mothers, it is noted that 'if a child is to have a healthy life, it is necessary that its condition be satisfactory before being born and for some years after, consequently the health and habits of the mother are of first importance to the coming child'. Copious quotations from both British and French public health sources of the time are included, *inter alia* the report of Newsholme from the London Local Government Board.[10] With regard to the role of infant mortality as a public health indicator, the report states that 'the importance of the subject cannot be overestimated as it constitutes the master key of all public health work'.



SOURCE: MEDICAL OFFICER OF HEALTH REPORTS

Fig. 1. Infant mortality rates, Kimberley, 1898 - 1991.

By 1920, increasing attention was being paid to the mortality rates of under-5-year-olds. This was also the first year that black infant mortality was recorded by the Board of Health. The provision of housing, including the erection of 'a new township where there would be less public and private uncleanliness, and the mortality among infants would be less' is proposed. As to the mechanisms of infant mortality caused by diarrhoeal disease, the report postulates that 'after six months the child is placed on the floor to amuse itself while the mother gossips or gets busy with her housework. The child has a glorious opportunity to get itself thoroughly dirty in whatever domestic uncleanliness or private filth that is to be found. The child contracts summer diarrhoea and dies of it. The mother attributes it to anything but her ignorance or negligence'. A special 'infant bureau' was established in 1922 to institute interventions to reduce infant mortality. Volunteers were called for and the report notes that 'there is plenty of scope for extension of child welfare work, especially among the Natives'. The 1923 report notes that black mothers were 'very reluctant to bring their newly born infants (to the clinic). They were more inclined to bring those of 18 months and older, and probably even then came merely for curiosity'.

In 1928, it was recorded that 'the infantile mortality rate among the Coloureds and Natives is still appallingly high'. This was, to some extent, attributed to the economic conditions of the depression. In his 1943 report, the Medical Officer of Health was clear as to the reasons for the inter-racial disparities in infant mortality rates (black and coloured rates were 8 and 4 times higher respectively than that of whites). He writes that 'the reason for this increase is neither obscure nor mysterious. The high Native infantile mortality rate is unquestionably due to social and economic conditions. There must be a radical improvement in their housing, nutrition, prevention of over-crowding, hygiene and sanitation in the location'. The local authority responded to the problem with the construction of a special clinic.[11] By the middle of the century, the Board reports had become extremely sparse in terms of social comment and interest in infant mortality. The closure of the Kimberley Board of Health in 1977 resulted in the City Council's producing a standardised annual report, not very different from that of a number of South African cities.

In the late 1980s, the annual reports of the Kimberley Public Health Department begin to contain comment on the problems of urbanisation and the proliferation of 'squatter camps'. The more recent reports document an increasing commitment to providing basic environmental health services and, to some extent, recognition of the *de facto* existence of informal settlements.

Discussion

Many of the themes in the reports of the Kimberley Board of Health are relevant today. These include the relationship between socio-economic status and health, unacceptable disparities in infant mortality and the role of diarrhoeal disease in infant death. The suspicion of 'foul play' as a cause of infant death, contained in the 1901 report, has a modern analogue in the work of Nancy Scheper-Hughes which explores 'passive infanticide' or 'benign euthanogenic neglect' in poverty stricken north-east Brazil.[12,13] The role of volunteer organisations and special programmes in reducing infant mortality is discussed in a number of the reports. The lack of community interest was not an uncommon response to the interventionist approach and the complaints of the Medical Officer of Health on this particular issue were echoed by colonial medical officers throughout Africa.[14]

The recognition, in the 1943 report, that the determinants of infant mortality are mostly outside the biomedical realm is congruent with the work of the Gluckman Commission which, just over a year later, reported that 'unless there were drastic reforms in the sphere of nutrition, housing, health education and recreation, the mere provision of more doctoring would not bring health to the country'.[15] The history of public health interest in disparities in infant mortality rates between various groups should lead us to concur with Alfred Yankauer who concluded that:

'The spirit of public health lives in this conviction that a future society will authorise the major investment change required to produce an equity reflected in the mortality rates of its infants'.[16]

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