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Australian Institute  
of Health



Australian Institute  
of Aboriginal Studies

# ABORIGINAL HEALTH

## information bulletin

Number 8, August 1987

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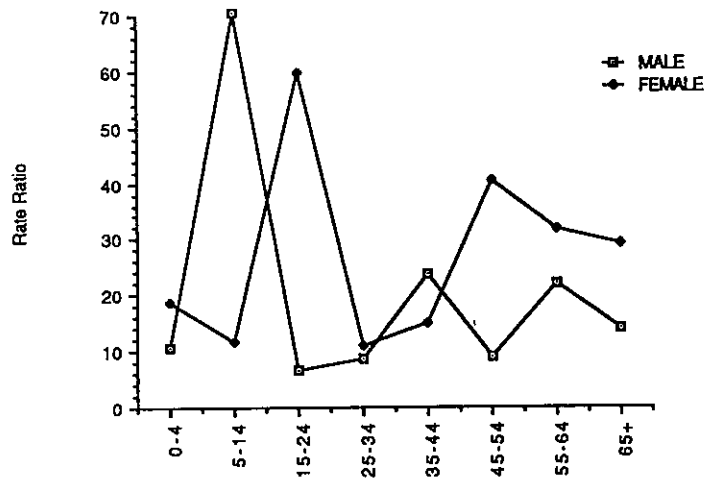
## ERRATA

### Corrections to Aboriginal Health Information Bulletin #8 August 1987

Page 17, line 3 : The sentence beginning "These rates, and the number. . ." should read " The rate ratios, and the number . . ."

Page 17, paragraph 2, last line: Replace "Table 1" with "Figure 1".  
(The graph depicted in Figure 1 was inadvertently omitted in the printed copy, but is included below, and should be inserted following conclusion of paragraph 2.)

Figure 1. Tuberculosis Notifications :  
Aboriginal : non-Aboriginal age-sex specific rate ratio



NOTICE OF MEETING

The Faculty of Medicine, University of Newcastle

will be conducting a meeting on

"TEN YEARS OF INNOVATIVE MEDICAL EDUCATION 1978-1988"

to be held in Newcastle, N.S.W.

30th August - 16 September 1988

Topics to be discussed include Aboriginal Health, Medical Information, Management Systems, Health Promotion and Health Education, Human Sexuality, Nutrition and Palliative Care.

A session on "Aboriginal Doctors and Aboriginal Health" will run from September 14-16, with the general theme of education in Aboriginal Health. Issues to be addressed include:

1. The selection and training of Aboriginal doctors.
2. Educating medical students in Aboriginal health.
3. Educating Aboriginal health workers.
4. New direction in Aboriginal health research.

Further details may be obtained by writing to:

The Information Officer, Faculty of Medicine, University of Newcastle, N.S.W. 2308.

The *Aboriginal Health Information Bulletin* is jointly published by the Australian Institute of Health and the Australian Institute of Aboriginal Studies and may be obtained, free of charge, by writing to:

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#### **Guidelines for contributors**

Articles which could be published in Brief Communications, Selected Reviews or Book Reviews are most welcome. Those suitable for Brief Communications or Book Reviews should not exceed 1000 to 1500 words, while those intended for Selected Reviews should not exceed 2500 words.

The editor would be grateful for any assistance in the compilation of the Bulletin, particularly with regard to Current Topics, Recently Published Research and Recent Publications, Reports and Theses.

Authors are urged to write in plain English so that their work can be easily understood. They should follow the style used in the August 1983 issue and all subsequent issues. In other cases the recommendations of Commonwealth *Style Manual* should be followed. The Harvard system of referencing should always be used.

The views of contributors are not necessarily those of the Australian Institute of Health and the Australian Institute of Aboriginal Studies.

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# EDITORIAL

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At last the *Bulletin* has resumed publication!

As you will see from the cover, the *Bulletin* is now being published jointly by the Australian Institute of Aboriginal Studies (AIAS) and the Australian Institute of Health (AIH), and its name has been changed slightly to reflect this.

Its production had been initiated as part of the AIAS Aboriginal Health Research Fellowship, which finished in September 1985. Fortunately, the AIAS had recognised the need to contribute to Aboriginal health after the completion of the Fellowship, and had initiated discussions with the Director of the AIH in the middle of 1985. From its establishment in early 1985 as a national agency to collect statistics and conduct research into the health and health services of the Australian population, the AIH had been given the Commonwealth responsibility for Aboriginal health statistics. Following the AIAS approach, the AIH expanded its initial focus to facilitate the promotion, coordination and conduct of Aboriginal health research. This expansion resulted in the creation of an Aboriginal Health Unit within AIH's Health Status Division.

AIH's Aboriginal Health Unit, of which I am head, recognises the need to foster the dissemination of information about Aboriginal health, and will edit the *Bulletin*, the printing and distribution of which will continue to be undertaken by AIAS. It is intended to resume the previous twice yearly publication schedule. Unfortunately, with the change in editing/production arrangements a long break in publication has occurred. I apologise for any inconvenience this may have caused to readers.

The feature article in this issue looks at primary health care in the Aboriginal-controlled Durri Medical Service at Kempsey, New South Wales. Unfortunately, since this article was written Durri was temporarily closed down. An independent review recommended its continued funding, but to this time (August 1987) it has not yet recommenced operations. This is most regrettable, as the article not only confirms the need for the service, but also highlights the potential achievements of such a service. Hopefully it will have recommenced operation by the time you received this *Bulletin*.

As part of the statistical work being undertaken within AIH, Marga Penny and I analysed the details of new cases of tuberculosis occurring in Australia in 1984 (collection and analysis of data for later years is proceeding). As pointed out in our article in the Selected Reviews section, the previously published figures suggested that the incidence of tuberculosis among Aborigines was about four times higher than that of non-Aborigines. However, these figures did not account for the high number of cases of tuberculosis occurring among recent arrivals to Australia, nor to the different age structures of the Aboriginal and non-Aboriginal populations. The article shows that the observed number of new cases among Aborigines is 19 times higher than expected from non-Aboriginal rates.

Again, I regret the interruption to the publication of the *Bulletin* but now anticipate its regular production.

Neil Thomson



# RECENTLY PUBLISHED RESEARCH

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## **BATESON, E.M.**

'Cerebral atrophy in the Aboriginal, child and man: a review of CT Brain scans in the Northern Territory'

*Australasian Radiology* 1984, 28:297-301

Over one thousand CT brain scans performed at Darwin Hospital between 1980 and 1983 were reviewed. The results demonstrated noticeable differences between Aborigines and non-Aborigines in that '... infectious and traumatic lesions were more common in the former, and cerebrovascular and neoplastic lesions in the latter group'. Cerebral atrophy was more common amongst Aborigines with a significant number of children affected, probably as a result of malnutrition. The possibility of neuropsychological impairment in Aboriginal children and adults is discussed.

## **WALL, C.H.**

'Oral health status and tradition in Australia'

*International Dental Journal*, 1984, 34:271-277

In this article the oral health status of Australians is reviewed. The author notes that certain disadvantaged groups, including Aborigines, lag behind the Australian population with respect to improvements in dental health. It is argued that caries is virtually unknown amongst Aborigines living a 'traditional' life on a diet high in protein, fat and fibre but low in 'fermentable' carbohydrate. The enthusiastic consumption of refined carbohydrates by 'traditional' and urban Aborigines, and a distrust of services provided by Europeans has resulted in widespread caries and periodontal disease. The Australian Dental Association has 'proposed the establishment of a Joint Working Group with the Federal Department of Aboriginal Affairs, and the Commonwealth Department of Health, to study Aboriginal dental health, and to develop plans for its improvement'.

## **WATSON, D.S.**

'Fetal development in Arnhem Land' [letter]

*Australian and New Zealand Journal of Obstetrics and Gynaecology*, 1984, 24:227-228

The use of a real-time scanner (RTS) to assess foetal development amongst Aborigines shows that the Aboriginal foetus has a smaller biparietal diameter than the Caucasian, particularly after the 32nd week. The author notes that a number of maternal conditions associated with low birth-weights and prematurity are common amongst these people but he does not rule out the possibility that genetic factors are responsible.

## **ABORIGINAL HEALTH WORKER**

Volume 9, Number 1, 1985

This issue has a West Australian emphasis with articles on the role of health advisory committees and health liaison officers, a dental health survey at Gnowangerup; an environmental health survey at Broome, the work of the Milliya Rumurra alcohol rehabilitation centre, and health work in the Pilbara region. Margaret Smith summarises the differences between Aboriginal and white infants and pre-school children relating to health, and their differing emotional and intellectual environments.

**BIGGS, J.S.G.**

'Special admissions to a medical school' [editorial]  
*Medical Journal of Australia*, 1985, 142:384-385

In this article, the Dean of the Faculty of Medicine University of Queensland, discusses the admission of Aboriginal and Islander students to the Faculty of Medicine outside normal course quotas. Investigations have shown that of the 300 Aborigines and Islanders who finished high school in Queensland in 1984, some are eager and qualified for admission to the medical school. It is emphasised that '... the same requirements of standards of performance will apply to all students, regardless of entry methods. We are advised that the Aborigines and Islanders would want no other approach'. Every encouragement and assistance will be given to the students admitted to the course, to ensure that the program is a success.

**ABORIGINAL HEALTH WORKER**

Volume 9, Number 2, 1985

This issue focusses on religion and health. Sister Claire Ahern writes about Aboriginal spirituality, and the importance of the family in combating alcohol abuse is outlined in an article by Roger Sigston. Other articles discuss the importance of Aboriginal community workers to the success of community health programs.

**BANKS, J.R. & BRAUN, P.**

'Trachoma treatment in Aborigines' [letter]  
*Medical Journal of Australia*, 1985 142:576

The authors describe the success of a trachoma eradication program amongst children at Imanpa, an Aboriginal settlement 170km from Alice Springs. Daily showers, supervised by Aboriginal health workers, and the Northern Territory Health Department's one-week-a-month oily tetracycline eyedrop program have brought about a sustained reduction in the prevalence of active trachoma.

**BATESON, E.M.**

'Radiological appearances of primary lung cancer in Aborigines of the Northern Territory of Australia'  
*Australasian Radiology*, 1985, 29:126-129

A 10 year survey of all confirmed cases of primary lung cancer (n=41) examined radiologically at the Royal Darwin Hospital suggests that primary lung cancer is more prevalent in Aborigines than in non-Aborigines, is less likely to be diagnosed by routine chest X-ray and is more likely to present with haemoptysis. At first examination, radiological manifestations tended to be more advanced or extensive in Aborigines than in non-Aborigines.

**BRAND, J.C., DARNTON-HILL, I., GRACEY, M. & SPARGO, R.**

'Lactose malabsorption in Australian Aboriginal children'  
*American Journal of Clinical Nutrition*, 1985, 41:620-622

The authors report the results of a study to determine the prevalence of lactose malabsorption in 'full-blood' Aboriginal children in Western Australia. Seventy per cent of the Aboriginal children and 4% of control children (non-Aboriginal) were found to

be malabsorbers with most of the Aboriginal children already showing lactose malabsorption by 6-7 years of age. These findings are similar to the patterns in other non-Western populations.

**CAWTE, J.**

'Psychiatric sequelae of manganese exposure in the adult, foetal and neonatal nervous systems'

*Australian and New Zealand Journal of Psychiatry*, 1985, **19**:211-217

This article is a review of 'manganism' and its effects on humans. It touches briefly on a research project designed to determine whether or not high manganese intake has caused the children to be 'considerably educationally retarded' in a Groote Eylandt Aboriginal community with naturally elevated manganese levels in its water supply. The author points out that none of the illnesses observed at Groote Eylandt resemble adult manganism.

**PHILLIPS, M. & KUBISCH, D.**

'Lifestyle diseases in Aborigines' [letter]

*Medical Journal of Australia*, 1985, **143**:218

A survey was undertaken to document the prevalence of obesity, hypertension and diabetes ('lifestyle' diseases) at Ntaria, an Aboriginal community 130km west of Alice Springs. The results were compared with those of the National Heart Foundation (NHF) on urban Australian men and women. They showed consistently higher rates of obesity, hypertension and diabetes in this Aboriginal community compared to the NHF population. The authors are concerned that with the continued impact of acute conditions insufficient attention will be paid to the chronic morbidity due to lifestyle diseases.

**CHERIKOFF, V., BRAND, J.C. & TRUSWELL, A.A.**

'The nutritional composition of Australian Aboriginal bushfoods 2. Animal foods'

*Food Technology in Australia*, 1985, **37**(5)

The results of nutrient analysis of 31 animal foods of bush origin are presented. The majority of these bush foods have proximate compositions similar to those of equivalent domesticated foods, although levels of iron and calcium are often higher in the bushfoods. The flesh of the dragon lizard and sand goanna is higher in protein and lower in fat than domesticated animal meats, but is similar to most game meats. Foods such as the bogong moth, mangrove worm and cossid larvae ('witchetty grubs') have no Western equivalents.

**COOPER, T.**

'Aboriginal health services in WA' [letter]

*Medical Journal of Australia*, 1985, **143**:317

This is a complaint against the establishment of Aboriginal Medical Services, 'at great cost to the government', in towns which the author believes to be fully serviced as far as health services are concerned. He argues that a planned AMS for Carnarvon is unnecessary because the resident doctors are well versed in Aboriginal health problems. Further duplication in Perth, Geraldton and Broome, where AMSs are already established is also criticised.

DAWSON, V.M., COELEN, R.J., MURPHY, S., GRAHAM, D., DYER, H. & SUNDERMAN, J.

'Microbiology of chronic otitis media with effusion among Australian Aboriginal children: role of *Chlamydia trachomatis*'

*Australian Journal of Experimental Biology and Medical Science*, 1985, 63(1):99-107

The significance of the results of this micro-biological study of chronic otitis media in 131 Aboriginal children is that *Chlamydia trachomatis* was isolated from the middle-ear effusions (MEE) of 2 children. This is the first report of the presence of *C. trachomatis* in the middle ear in a trachoma endemic population. Furthermore, problems with specimen collection and transport, and the fact that *C. trachomatis* can cause clinical disease yet be in insufficient numbers to be detected by isolation methods, suggest that the observed isolation rate may underestimate the infection rate. Since *C. trachomatis* may be responsible for the initiation of MEE and be subsequently destroyed by antibody/anti-inflammatory responses, examination of the MEE for the presence of *C. trachomatis* antigens rather than the viable organism would be advantageous. An enzyme immunoassay is currently being developed.

GILL, J.S. & JONES, I.H.

'Intestinal parasites and bacteria in Aboriginal children in South West Australia'

*Australian Paediatric Journal*, 1985, 21:45-49

In a study of intestinal parasites in 697 Aboriginal children from metropolitan Perth and the southwest of WA 26% were infected with *Giardia lamblia*, 13.9% with *Hymenolepis nana* and 3.3% with other organisms. *G. lamblia* infection occurred above 4 months of age and *H. nana* above 18 months of age. *G. lamblia* was more prevalent in country areas than in Perth and there were strong correlations between low weight (below the third percentile), a history of diarrhoea and discharging ears. The authors note that the acquisition of *G. lamblia* infections coincides with weaning and increased mobility, and that the low levels of bacterial infections isolated may reflect the impact of environmental sanitation on bacterial rather than parasitic diseases. Priority must therefore be given to increasing personal and domestic hygiene.

HOLLOWS, F.

'Community-based action for the control of trachoma'

*Reviews of Infectious Diseases*, 1985, 7(6):777-782

It is argued that the presence of trachoma in a community is a result of cultural dislocation and a lapse in traditional practices. Thus, behavioural modifications combined with the utilisation of certain 'health-related hardware' are essential for lasting benefits to be derived from single-aspect health programs such as trachoma eradication. In designing such programs the following factors are identified as important:

'(1) an understanding of the history and 'real time' situation of the trachomatous group; (2) a commitment to the group's welfare and general advancement; (3) an appreciation of other health-related efforts that may be required before, during, or after the development of the trachoma control program; and (4) support from and involvement of the client group at all times and at all levels'.

HOUGHTON, M.R., GRACEY, M., BURKE, V., BOTTRELL, C. & SPARGO, R.M.

'Breast milk lactoferrin levels in relation to maternal nutritional status'

*Journal of Pediatric Gastroenterology and Nutrition*, 1985 4(2):230-233

Lactoferrin was measured in breast milk from Aboriginal and non-Aboriginal Australian

women using an enzyme immunoassay. There was no diurnal variation in lactoferrin concentration or change in concentration between the beginning and end of a feed. Lactoferrin levels were significantly higher in the first 15 days postpartum than after the 15th day. In Aboriginal women less than 15 days postpartum, higher concentrations of lactoferrin were associated with weight for height greater than 90% and with increased parity. After 15 days postpartum lactoferrin concentrations were higher in women > 90% height for height but parity was not significant in the analysis.

**KAHN, M.W. & FUA, C.**

'Counsellor training as a therapy for alcohol abuse among Aboriginal people'  
*American Journal of Community Psychology*, 1985, 13(5):613-616

This report describes and evaluates an alcohol counsellor training scheme for Aboriginals which is based on two principles—(1) that indigenous peers are most readily acceptable to their clients and best able to understand their problems, and (2) that helping others is therapeutic for the therapist. A follow-up of 29 graduates of a 2-year counsellor training scheme showed that of the 25 individuals who had been problem drinkers, 21 remained sober over a two to four year period. The remaining 4 had had episodes of drinking for short periods but had remained sober for a minimum of one year. Furthermore, 15 of the group were currently employed in alcoholism programs and 12 others were working in some other health counselling capacity.

**LINGARD, R.**

'Return to paradise: T.I. revisited'  
*Queensland Nurse*, 1985, 4(6):18-19

This article draws attention to the appalling living conditions of Aboriginal and Islander nurses employed at the hospital on Thursday Island. While the white nursing staff have benefited from a one million dollar accommodation development, the Hospital Board (Thursday Island) bans Aboriginal nurses from living in white accommodation, and houses them in segregated quarters with '... no hot water, no cooking facilities, no power points in bedrooms, no screens, no sanitary disposals, cracked toilet bowls, leaking roofs and severe white ant destruction ...'. It is argued that the whole situation '... smacks of blatant racial discrimination' on the part of a '... supposedly enlightened public health care system ...'.

**MCCAFFERTY, G.J., LEWIS, A.N., COWMAN, W.B., & MILLS, C.**

'A nine-year study of ear disease in Australian Aboriginal children'  
*Journal of Laryngology and Otology*, 1985, 99:117-125

This report describes a longitudinal study of ear disorders in Aboriginal children in Cherbourg, Queensland. Over 75% of 6 year old children tested in 1982 were classified as abnormal as were 50% of 11 and 12 year olds. There was an exceptionally high perforation rate but a remarkably low rate of cholesteatoma. The authors note that Aboriginal children seem to have a low capacity to recover from ear disease once it is established and the 'specific factors impeding recovery have not yet been identified'.

**MURATA, Y., REFETTOFF, S., SARNE, D.H., DICK, M. & WATSON, F.**

'Variant thyroxine-binding globulin in serum of Australian Aborigines: its physical, chemical and biological properties'  
*Journal of Endocrinological Investigation*, 1985, 8:225-232

Low serum total thyroxine (TT4) and triiodothyronine (TT3) is found in approximately 40% of Australian Aborigines. Studies were carried out to characterise the properties of thyroxine-binding globulin (TBG) in these Aborigines to explain the observed reduction of thyroid hormone concentration in their serum. Results indicate that euthyroid Aborigines with low serum TT4 and TT3 concentrations have a variant TBG with reduced affinity for these hormones, and that this fully explains the reduced serum total thyroid hormone concentration in the presence of clinical euthyroidism with normal serum free T4 and thyrotropin levels.

**O'DEA, K. & SINCLAIR, A.J.**

'The effects of low-fat diets rich in arachidonic acid on the composition of plasma fatty acids and bleeding time in Australian Aborigines'

*Journal of Nutritional Science and Vitaminology*, 1985, 31:441-53

In this study the bleeding times of 10 diabetic and 4 non-diabetic Aborigines were measured before and after 2 weeks on a diet of tropical seafood (rich in both arachidonic acid and the  $\Omega$ -3 PUFA), followed by 3 weeks on a diet in which kangaroo and freshwater fish (linoleic and arachidonic acid-rich) were the major fat sources. Increases in bleeding times measured were highly significant. Measurements of the plasma fatty acid composition demonstrated a preferential incorporation of arachidonic acid into the plasma lipids at the expense of linoleic acid. The significance of these results is that they suggest '... the mechanism by which diet modulates haemostatic function may be more complex than currently assumed.'

**SMITH, R.M., KING, R.A., SPARGO, R.M., CHEEK, D.B., FIELD, J.B. & VEITCH, L.G.**

'Growth retarded Aboriginal children with low plasma zinc levels do not show a growth response to supplementary zinc' [letter]

*Lancet*, 1985, 1:923-924

Growth retarded school children (in five Aboriginal communities in the Kimberley region) who were previously found to have low plasma zinc levels underwent a zinc supplementation trial. The aim was to evaluate the effect of zinc supplements on growth. No significant increase in either height or weight due to zinc treatment was found and the authors conclude that dietary deficiencies other than zinc are probably responsible for growth retardation in this region.

**STANTON, K.G., McVANN, V., KNUIMAN, M., CONSTABLE, I.J. & WELBORN, T.**

'Diabetes in part-Aborigines of Western Australia'

*Diabetologia*, 1985, 28:16-21

As part of a larger study of 1,218 diabetics living in and around country towns in Western Australia a detailed investigation of a sub-population of 134 subjects of Aboriginal descent was undertaken and the results compared to Caucasians in the study. In the Aboriginal group there was a greater proportion of Type 2 diabetics (non-insulin dependent), a relative preponderance of females and a tendency to present with earlier onset than in the non-Aboriginal group. Diabetic complications were at least as common in the Aboriginal as in the Caucasian groups, while retinopathy within 10 years of onset of diabetes was more common in Aborigines. Peripheral neuropathy was more prevalent in Aborigines treated by diet alone or oral hypoglycaemic agents than in Caucasians on the same treatment. A much greater prevalence of proteinuria was observed in the

Aboriginal group (29% compared to 4%). The significance of these results is that diabetes is not a 'benign disorder' in Aborigines who are at least as susceptible to complications as Caucasians.

**STUART, J.**

'Aboriginal child health'

*Australian Family Physician*, 1985, 14(7):677-680

This article discusses the presentation, diagnosis and management of diseases of the ear and gastrointestinal tract common in Aboriginal children. Otitis media, glue ear, intestinal parasitism and non-parasitic causes of diarrhoea are included.

**TAYLOR, J.G.**

'Essential job needs essential training' [letter]

*Australian Nurses Journal*, 1985, 14(11):7

This letter from a District Medical Officer in Western Australia addresses the problems that nurses face in Aboriginal communities in remote regions. Confronted by 'third world' health problems of 'tropical ulcers, scabies, parasitic infestation, syphilis, malnutrition, dysentery and occasionally even cases of leprosy', most have had little training to prepare them for the responsibility of caring for such patients. It is argued that a 'Diploma in Remote Area Nursing' needs to be created to train nursing staff in the special skills which this type of nursing requires.

**WILLIS, R.**

'Otitis media and the Australian Aboriginal'

*American Journal of Otology*, 1985, 6(4):316-22

While the prevalence of otitis media amongst Aborigines is widely recognised, debate continues as to why the disease has features which differ from the usual clinical course. Theories cover '...genetic factors, environment, protein-calorie malnutrition and immunity mechanisms, allergies, different microbiology and so on'. A study of the process of spontaneous healing of drum perforations may identify those factors which delay or prevent such healing.

**ABORIGINAL HEALTH WORKER**

Volume 9, Number 3, 1985

Subtitled Religion and Health, Part 2, this issue includes an article on Aborigines and alcohol abuse and various short papers which discuss the role of religion in Aboriginal health.

**HOLDING, C.**

'Aboriginal health issues' [editorial]

*Medical Journal of Australia*, 1985, 143:S42-S43

In this article the Federal Minister for Aboriginal Affairs recognises the discrimination and oppression which have characterised relations between Aborigines and non-Aborigines since first contact. He argues the need for special health services to improve the poor health status of Aborigines, which is a direct consequence of almost 200 years of dispossession. Since December 1984, the Department of Aboriginal Affairs (Commonwealth) has assumed total responsibility for the funding of special Aboriginal

health programs. In June 1985, 45 Aboriginal Medical Services or basic health care units were in existence, funded by DAA at an annual cost of over 3 million dollars. Forty-six Aboriginal controlled alcohol projects and nine dental projects were also funded. The government also supports the training of Aboriginal health professionals—doctors, nurses and health workers—while recognising the role of traditional medicine, which the author believes can be incorporated with modern medical practice to the benefit of Aboriginal communities.

**GRACEY, M.**

'Aborigines and health' [editorial]

*Medical Journal of Australia*, 1985, **143**:S43-S44

This review of Aboriginal health discusses high infant mortality, growth faltering in infants and young children, maternal malnutrition and the high rates of morbidity due to chronic infections of the ears and respiratory tract found in Aboriginal communities. Adult morbidity due to 'lifestyle' diseases such as diabetes, heart disease and hypertension and the problems of alcohol abuse, trauma due to violence and sexually transmitted diseases are also discussed. It is argued that in view of the current policy of increasing Aboriginal control over their health services, health initiatives must be closely monitored to assess their success. In times of restraint on government spending, 'good housekeeping' in the form of improved standardised reporting of morbidity and mortality, quality control and continual monitoring of health services is essential.

**HOUSTON, S.**

'Aboriginal health' [Editorial]

*Medical Journal of Australia*, 1985, **143**:S45

This article, from the National Coordinator of NAIHO argues the need for increased resources and greater Aboriginal involvement to improve the 'Third World' status of Aboriginal health.

**THOMSON, N.**

'Review of available Aboriginal mortality data, 1980-1982'

*Medical Journal of Australia*, 1985, **143**:S46-S49

This study provides estimates of the higher mortality of Aborigines in a number of regions in 1980-1982. Estimated mortality rates for Aborigines in specific regions ranged from twice (Kimberley region) to 4½ times (country NSW) the rate for the total Australian population. Aboriginal foetal and infant deaths were generally at least 2-4 times those of non-Aboriginal Australians and up to 7 times higher for deaths occurring after the neonatal period. While there has been a dramatic improvement in Aboriginal infant survival since the early 1970s, mortality for all age groups above 20 years of age appears to have almost doubled in the last 30 years. Observed regional differences in infant mortality rates and in overall mortality rates led the author to suggest that '...the most reasonable explanation for the increases in overall mortality appears to be the adverse social environment experienced by Aborigines in less remote parts of Australia'. He stresses the need for accurate enumeration of the Aboriginal population, and birth and death data to improve the assessment of Aboriginal mortality.

**THOMSON, N. & SMITH, L.**

'An analysis of Aboriginal mortality in NSW country regions, 1980-1981'

*Medical Journal of Australia*, 1985, **143**:S51-S54

Following analysis of Aboriginal deaths in selected NSW country regions in 1980 and



1981 the authors estimate that Aboriginal mortality was four times that of the total NSW population, with young and middle-aged adults having death rates 12 times higher. Life expectation at birth for an Aboriginal male was estimated at 48 years and for a female at 57 years. Diseases of the circulatory system and injuries were the principal causes of death, and alcohol intake appeared to have a substantial effect on mortality. Noting that the '... reasons for the very high level of mortality in NSW country Aborigines are not entirely clear...', the authors suggest that the extent to which an adverse social environment contributes to their higher mortality '... obviously needs to be investigated, together with a detailed assessment of the known physical cardiovascular risk factors...'.

**EASTWELL, H.D.**

'Elevated lead levels in petrol "sniffers"'

*Medical Journal of Australia*, 1985, 143:S63-S64

Lead levels in the blood and bones of 72 petrol 'sniffers' at Maningrida (Arnhem Land) were measured. Their ages ranged from 9-22 years and the ratio of boys to girls was 1:4-5. Compared to the control group lead levels were raised in both blood and bone and 30 individuals had blood lead levels sufficiently high to be considered in danger of lead toxicity.

**HART, G., MacHARPER, T., MOORE, D. & RODER, D.**

'Aboriginal pregnancies with births in South Australia, 1981-1982'

*Medical Journal of Australia*, 1985, 143:S54-S56

The authors report the findings of a study of 555 Aboriginal births in South Australia during 1981-1982. They show that compared to all mothers, Aboriginal mothers were very young, had a high parity, received little ante-natal care and were more likely to have pregnancies complicated by medical conditions such as anaemia, urinary tract infections, cardiac disorders and diabetes. Post-partum haemorrhages and placental retention were relatively common in Aboriginal women, as were genital tract infections after delivery. Aboriginal babies were characterised by low birthweight, low apgar scores and prematurity and there are indications that perinatal mortality is high in country areas of South Australia. It is proposed that these data will form the basis of an ongoing evaluation of trends in Aboriginal health.

**HANNA, J.N. & KASS, R.B.**

'Immunization status of Aboriginal children in Central Australia'

*Medical Journal of Australia*, 1985, 143:S56

In an assessment of the immunisation status of Aboriginal infants born in Central Australia in 1982, 73% were found to be fully immunised (BCG, triple antigen, oral sabin, measles, diphtheria-tetanus), 23% were partially immunised and only 4% were either not immunised or untraceable. The authors note that these proportions indicate a satisfactory level of overall immunisation cover, but the time at which measles vaccine was received is cause for concern. While the recommended age was 12 months, only 52.9% had received it by 15 months and 82.4% by 24 months. Subsequently the recommended age has been reduced to 9 months in the hope that the majority will be protected by 12 months of age.

**HARPER, C. & SHELL, R.**

'CPC—focal neurological signs and black magic'

*Medical Journal of Australia*, 1985, 143:S57-S61

This article is a discussion of the case history of an Aboriginal male who died as the result of a cerebral abscess. It was reported by members of his tribe that he had been 'sung'. The authors provide an ethnographic account of traditional medicine men, their powers and the possible outcome of their rituals. They were unable to ascertain whether the 'singing' had preceded the patient's illness, or whether the elders had concluded the man had been 'sung' when he failed to respond to traditional medicines.

#### **WATSON, D.S.**

'The use of ultrasound scanning by Aboriginal health workers in antenatal care in a remote area of Australia'

*Medical Journal of Australia*, 1985, 143:S61-S63

In this article the author describes the benefits of routine real-time scanning by Aboriginal health workers at antenatal clinics in Arnhem Land. After training in various clinic procedures, health workers correctly diagnosed multiple birth, foetal death, breech presentation and 'phantom' pregnancies and measured the biparietal diameter. The health workers enjoyed the work and this, combined with a number of other factors, led to an improvement in antenatal attendance. Furthermore, the number of women requesting delivery outside hospital increased, 'possibly on account of the confidence displayed by the health workers using the scanner'.

#### **ABORIGINAL HEALTH WORKER**

Volume 9, Number 4, 1985

This Tasmanian edition looks at the Cape Barren Island community, muttonbirding, the work of the Tasmanian Aboriginal Centre, the Health and Alcohol Program and the Tasmanian Aboriginal Child Care Association. Ida West describes a variety of bush foods and traditional medicines. A longer article on Tasmanian health by Heather Sculthorpe is described more fully below.

#### **SCULTHORPE, H.**

'Tasmanian Aboriginal health: a perspective for the 1980s'

*Aboriginal Health Worker*, 1985, 9(4):25-38

This is a summary of a report produced for the Tasmanian Aboriginal Centre following a 1980 survey aimed at gathering information about the health of the Aboriginal community, alcohol consumption and community views on future directions in health care services. Major causes of morbidity amongst children were 'running' ears, respiratory diseases and diarrhoea. Respiratory infections were the most common diseases amongst adults. Adults appear to have experienced high levels of physical discomfort and psychological stress. Under reporting was thought to account for relatively low levels of alcohol intake which were not consistent with a high level of community interest in the establishment of an alcohol rehabilitation program. A fairly low level of satisfaction with existing medical facilities was documented.

# SELECTED REVIEWS

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## Primary health care at an Aboriginal Medical Service

**Beverley Anderson**

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While public health facilities appear on the surface to cater for the needs of Aborigines, a number of factors which relate to cultural differences and racist attitudes mean in fact that Aboriginal people are excluded from many services which are necessary for the improvement and maintenance of their health. The creation of Aboriginal Medical Services is therefore a necessary step in affording Aborigines access to a range of health services which other Australians take for granted. While the aim of an Aboriginal Medical Service (AMS) is to provide primary health care and preventive medicine, any commitment to total health in an Aboriginal community means that the AMS will often become involved in matters critical to furthering Aboriginal well-being but outside a narrow definition of health clinic work (see for example Fagan, 1984).

This broad definition of health needs also to encompass aspects of actual patient care which traditionally have not been seen as the domain of health care professionals but are nevertheless important for successful patient management. The following is a discussion of the strengths and weaknesses of diabetes management and education at Durri AMS (Kempsey, NSW) which highlights this point.

It is generally recognised that diabetes is widespread in Aboriginal communities, with the reported prevalence from various studies ranging from 8 to 19% (Thomson, 1984). Recent evidence suggests furthermore that diabetes is not a 'benign disorder' in Aborigines, who are at least as likely to suffer from complications as Caucasian diabetics (Stanton et al, 1985). The prevalence of diabetes (Type 2) in Kempsey in 1985 is estimated at 6.9%. This estimate is derived from a 1984 checklist of known diabetics at Durri (Beard n.d.) which was adjusted for deaths and migration and compared to 1985 census data on persons aged 15 years and over (Aboriginal Development Commission). This is likely to be an underestimate since no screening has been done and only diagnosed cases are included in this figure.

Durri AMS at Kempsey plays an important role in the regular supervision and education of diabetics in the community. While some patients test their urine at home (few have glucometers which are expensive and difficult to obtain), most come daily or less frequently to the clinic for glucometer ('sugar') checks. The results are recorded in an annual diary which allows individual trends in blood sugar levels to be evaluated. For most patients blood sugar fluctuates around rather high levels (seldom below 10 mmol/L by glucometer) but unusual rises or falls are readily detected and the patient is able to see a doctor immediately. Since diabetes is strongly associated with obesity in this community, weight may also be checked. As important as this physical monitoring however, is the education and reinforcement that takes place at the 'sugar' check, in a setting that is comfortable for Aborigines and thus encourages dialogue.

In general, patients demonstrate a good understanding of the relationship between diet and their disease. This appears to be the result of two health education initiatives—one a short program and the second an on-going aspect of clinic work. The program,

conducted in 1983-84, was funded by the NSW Hospital Health Education Fund and co-ordinated by a medical officer from Durri AMS. Its aims with respect to the diabetics in the Aboriginal community included improved nutritional awareness and the introduction of suitable dietary substitutions (e.g. wholemeal instead of white bread, skim instead of full cream milk powder) (Beard n.d.). Although attendance at the fortnightly meetings was reportedly sporadic, a good deal of useful workable knowledge about foodstuffs seems to have been disseminated through the community, as revealed during interviews conducted as part of a dietary survey in 1985. At this time many informants expressed regret that the program had not been continued and were anxious to get something similar developed at Durri again.

The on-going educational opportunities which the clinic does provide are during regular check-ups with the medical officer and at the 'sugar' checks conducted by the nursing sister. During the 'sugar' checks informal discussions occur between the sister, the patient and various bystanders (often also diabetics or their families) concerning possible explanations for the observed blood sugar levels (I had damper last night—that's why my sugar's up, or, I didn't feel like breakfast so it'll be down). A wealth of information is passed both ways (patient to sister and sister to patient) at these discussions and this plays a vital role, both in allowing the sister to assess the patient's behaviour in relation to his or her disease and in extending and reinforcing the patients understanding of it.

The emphasis of both the medical and nursing educational efforts is to foster a moderated and balanced diet rather than to promote adherence to a strict diabetic diet. This approach reflects a good understanding of the practicalities and limitations of nutrition education in this setting. Easy-to-follow dietary advice sheets have been prepared, listing 'foods allowed', 'foods not allowed' and foods allowed 'in small amounts', and showing equivalent (energy) volumes of a few popular foods from the 'small amounts' category (e.g. *sao* crackers and bread). In this way the patient can acquire a practical knowledge of their dietary needs and restrictions without the complex and time-consuming method of portions and substitutions which characterise the formal diabetic diet. On the negative side however it is clear that in spite of the fact that the majority of diabetics are on daily insulin injections or oral hypoglycaemic agents high blood sugar levels are common so diabetic control is relatively poor. This highlights a dilemma in management and education in this group—a moderate approach with respect to dietary restriction implies an acceptance of a clinical response that is less than optimal, but a more rigid approach would be much less likely to meet with compliance. A compromise position of reasonable dietary restriction and relative control of blood sugar seems to be the only one viable.

Many members of the Kempsey community, particularly the diabetics and their families, have expressed keen interest in some sort of diet/cooking program being established at Durri. The success of the previous diabetes project suggests that such a project would be well received and supported. While some outside expertise may need to be sought in the initial stages there is a pool of expertise and interest within the Aboriginal community which could be drawn on to ensure both that the teaching was culturally appropriate and that the program expressed the needs of the community. In my view Durri AMS is uniquely situated to act as a facilitator of, and venue for, such a program. While diet and exercise with or without chemotherapy are accepted as the bases for diabetic management, the exercise component of this equation is often sorely neglected except that the patient may be advised to 'get some exercise'. For the most part life for the Aboriginal community in Kempsey is sedentary, in line with the lifestyle prevalent in many sectors of Australian urban society. Women commonly begin the day with domestic tasks which are completed by mid-morning and the remainder of the day is taken up with watching television, visiting family and friends or joining a card

game. Very few women continue to play sport after leaving school. Men on the other hand are more likely to play sport into their twenties, and some are employed in physically active occupations such as building labourer apprenticeships, but the majority spend their time visiting friends and family and watching T.V. Some families are keen fishers and they spend a good deal of time 'up the river', but fishing spots are chosen for ease of vehicular access so this activity does not usually involve a lot of exercise.

Some of the younger Aboriginal women have taken part in exercise classes in the town but in general this has been for weight control alone and the classes have been designed and predominantly attended by whites. They involve styles of dress which few Aboriginal women would deem to be appropriate and often involve exercises which would transcend Aboriginal codes of decorous behaviour—and all in front of a white 'audience', so it is not surprising that they are not well patronised by Aboriginal women, even those who are very keen to lose weight. There is therefore a need for an exercise program better suited to the needs of the community and it could make a significant contribution to the improved management of diabetic patients.

While 'exercise classes' would not normally be viewed as part of mainstream health intervention, they are clearly embraced by a broader definition of health care and relate directly to the management of diabetes and obesity (not to mention hypertension and other cardiovascular conditions) which affect a significant proportion of the adult population. A walking program would probably be the most reasonable activity to promote for the diabetics in this community. However this would likely meet, at least initially, with strong resistance since walking tends to be viewed as something one does when all other possible modes of transport have been exhausted. Indeed there is sometimes criticism of people who choose to walk (they are too mean to pay for a taxi) and there appears to be some 'shame' associated with being seen on the streets, except in the shopping district. (I interpret this 'shame' as embarrassment in response to historically based but currently pervasive negative attitudes held by whites towards Aborigines and not as some unique expression of Aboriginality). Clearly these attitudes would need to be evaluated and addressed in close consultation with the diabetics concerned before a walking program would have any chance of success.

While the Board of Directors at Durri are concerned about the health of their community they lack the medical expertise necessary to develop an holistic approach to health care. They therefore must rely to some extent on the interest, enthusiasm and initiative of medical and nursing personnel employed by them to suggest priorities in patient management and ways in which major problems could be addressed. Then, in close consultation with community members, appropriate programs can be designed to provide much needed education and reinforcement in health matters.

Only by adopting the broadest definition of health and health care can professional staff hope to take advantage of the unique opportunities in this regard that an AMS provides. Durri is a community centre where people feel relaxed and at ease, to which they come for many reasons other than simply to see a doctor, and to which they look for help in alleviating the awful burden of morbidity which the community has to bear. Since many of the diseases which currently contribute to the mortality of Aborigines are influenced by diet and exercise it seems reasonable that programs such as those outlined above should be an integral part of the functioning of an AMS.

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# A preliminary analysis of Aboriginal tuberculosis, 1984

Marga Penny and Neil Thomson  
Australian Institute of Health

## Introduction

Tuberculosis among Aboriginal communities is not a recent phenomenon. While it is most unlikely that tuberculosis existed in Australia before the arrival of Europeans in the south, and South East Asian traders and migrants in the north, its impact among Aborigines since that time has been substantial. For example, 'from 1864 to 1899, 13 per cent of all deaths at the Port McLeay Aboriginal Settlement in South Australia were attributed to pulmonary tuberculosis, and from 1880 to 1899, 28 per cent of all deaths at Point Pearce settlement in the same state were attributed to the same cause' (Moodie, 1973:145).

Even in the first half of the twentieth century, when its incidence and impact continued to decline steadily among non-Aborigines, tuberculosis remained a major cause of Aboriginal morbidity and mortality, mainly because of poor living conditions and malnutrition, compounded by other chronic chest diseases and alcohol abuse (Joseph 1970, Moodie 1973, Abrahams 1975).

Recently published figures suggest that over the last seven years the average incidence of tuberculosis for Aborigines has been about four times that of non-Aboriginal Australians (Australian Department of Health 1985). However, these figures are likely to underestimate the actual differences because they do not take into account the different age structures of the Aboriginal and non-Aboriginal populations, nor recognise that an increasing proportion of non-Aboriginal tuberculosis is occurring among recent overseas arrivals, mainly from south-east Asia.

In comparing the incidence of Aboriginal and non-Aboriginal tuberculosis, this paper takes into account these potential sources of error.

## Methods

The details of new cases of tuberculosis are provided annually to the Commonwealth Department of Health by the State and Territory health authorities. The information provided, broken down by sex, age, racial group and type, permits an age-adjusted comparison of tuberculosis excluding atypical cases, but gives insufficient detail to take account of recent arrivals to Australia.

Following internationally-endorsed practice, for this analysis it was decided (a) to exclude all cases of tuberculosis occurring within 5 years of a person's arrival in Australia, on the assumption that these cases were most likely acquired outside Australia. The additional information necessary to eliminate those cases was obtained from the State and Territory health authorities in response to specific requests, and in two cases by reference to the original notification details.

## Population data

In the absence of officially published annual estimates of the Aboriginal population, an extrapolation from the 1981 Census figures was used (Gray 1986). These figures are likely to underestimate the actual Aboriginal population, and hence slightly exaggerate the difference between Aboriginal and non-Aboriginal rates.

The non-Aboriginal population was estimated by subtracting the Aboriginal

population figures from those for the total population (Australian Bureau of Statistics 1985). Since cases of tuberculosis occurring among recent arrivals of less than 5 years duration were eliminated from this comparison, it was also necessary to provide some adjustment to eliminate such persons from the non-Aboriginal population base. It was decided that the appropriate adjustment involved the subtraction of the figures for net permanent and long-term movements for the five years from 1 July 1979 until 30 June 1984. Again, this may cause some slight inaccuracy in the calculated rates.

### Age Standardisation

Table 1 shows the number of notifications of tuberculosis in 1984 for Aborigines and other Australians. Notifications of infections with atypical mycobacteria are excluded, as are reactivations. More than 7 per cent of all tuberculosis notifications for 1984 were for Aborigines. After excluding notifications for recent arrivals, 12 per cent of those cases reasonably expected to have been contracted in Australia occurred among Aborigines. This reflects the fact that almost 40 per cent of all new cases of tuberculosis in Australia in 1984 occurred among recent arrivals with less than 5 years residence in Australia. The crude rate for Aborigines was 43.5 new cases per 100,000 population compared with the rate for non-Aborigines excluding recent arrivals of 3.8 per 100,000.

*Table 1*  
**NOTIFICATIONS OF TUBERCULOSIS, 1984**

	<i>Persons</i>	<i>Males</i>	<i>Females</i>
Australia	1083	667	416
Aborigines	79	44	35
Recent arrivals	428	247	181
Other non-Aborigines	576	376	200

*Notes:*

1. Notifications do not include atypical mycobacteria or reactivations.
2. Recent arrivals include migrants and refugees who had been in Australia less than or equal to 5 years.

*Table 2*  
**NOTIFICATIONS OF TUBERCULOSIS IN ABORIGINES, BY STATE AND TERRITORY, 1984**

	<i>Persons</i>	<i>Males</i>	<i>Females</i>
Australia	79	44	35
New South Wales	2	1	1
Victoria	1	0	1
Queensland	18	10	8
Western Australia	7	5	2
South Australia	7	7	0
Tasmania	0	0	0
Australian Capital Territory	0	0	0
Northern Territory	44	21	23

*Note:*

Notifications do not include atypical mycobacteria or reactivations.

After adjusting for the different age structures of the Aboriginal and non-Aboriginal populations, the Aboriginal rate was 18.7 times that of non-Aborigines, with the male rate being 16.6 times higher and the female rate 22.8 times. These rates, and the number of observed and expected cases from which they are derived, are shown in Table 3.

*Table 3*

**TOTAL AUSTRALIAN OBSERVED AND EXPECTED  
ABORIGINAL TUBERCULOSIS NOTIFICATIONS, AND RATE  
RATIOS**

	<i>Observed cases</i>	<i>Expected cases</i>	<i>Ratio</i>
Persons	79	4.19	18.9
Males	44	2.65	16.6
Females	35	1.54	22.8

The age-specific Aboriginal rates were almost universally very much higher than the non-Aboriginal rates, particularly for females, as shown in Table 1.

### **Discussion**

This analysis has shown that the 1984 incidence of tuberculosis, excluding atypical forms, remained very much higher for Aborigines than for non-Aboriginal Australians. However, it should be noted that for 1984 the actual number of notifications of Aboriginal tuberculosis, particularly for the Northern Territory, was higher than in previous years. For the years 1978 to 1984 the average annual number of Aboriginal notifications for Australia was about 60 cases per year, compared with 79 for 1984. Comparing this lower number of observed cases with the expected number calculated in this analysis suggests that the Aboriginal rate was around 14 times that for non-Aborigines. While somewhat lower than the 1984 figures, this ratio is still very much higher than that indicated from the raw data, which does not exclude cases occurring among recent arrivals to Australia or adjust for the different age structures of the Aboriginal and non-Aboriginal populations.

While the overall data on tuberculosis are fairly reliable, the identification of Aborigines is uncertain. Most documents for the recording of new cases do not specifically provide for Aboriginal identification, which is often determined by local knowledge. Even then, the recording often simply involves the addition of some identifying mark, such as a cross, and is open to potentially serious under-reporting. As with other health statistics, there is clearly a need to modify the recording forms to include a question of Aboriginality.

With regard to the overall figures, there does not appear to be any consistent attempt to exclude previously known cases of tuberculosis from other States in reporting notifications. For example, an established case of tuberculosis in one State/Territory may be reported as a new case when it first comes to the attention of another State/Territory as a result of moving to that State/Territory. This introduces the potential for some overestimation of the actual incidence of tuberculosis.

Other differences in reporting practices also preclude direct comparability of data, and suggest that there is a need for some national standardisation of reporting, probably involving the development of a national tuberculosis register.

While it was beyond the scope of this analysis to examine the factors responsible for the higher rate of tuberculosis among Aborigines, it is almost certainly related to poor housing, malnutrition, other chronic chest disease and alcohol abuse. As such, it is yet another indication of the persisting social inequality experienced by Aborigines.



### **Acknowledgements**

We are grateful to officers of the various tuberculosis clinics and health statistical units throughout Australia for supplying the supplementary data which permitted this analysis, and to officers of the Australian Bureau of Statistics for the details of net permanent and long-term movements.

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# BOOK REVIEW

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## The enigma of Aboriginal health

**Eduard J. Beck**

1985, Australian Institute of Aboriginal Studies, Canberra. (150pp.; available from AIAS; HC A\$24.95, PB A\$16.95). Reviewed by Dr John Stuart, Paediatrician, Manning River District Hospital, Taree, New South Wales.

Any addition to the small number of books on Aboriginal health is always welcome. Dr Beck presents the results of a survey of 208 Aboriginal children living in camps around Alice Springs which he organised as a medical student. He also provides a detailed review of most aspects of Aboriginal health and a detailed analysis of social and economic conditions in a selected group of three of the camps.

The book consists of 150 pages and includes five chapters, four appendices, extensive references (16 pages) and an index. After an initial chapter explaining the rationale of the study and providing a historical background to Aboriginal health in the area, the results of the survey are presented and analysed. As expected, the 208 children looked at are poorly nourished, as evidenced by their height and weight percentiles, and have a high incidence of gastrointestinal, respiratory, ear, eye, skin and dental problems. Dr Beck then develops a morbidity ('morb') score which is found to be inversely related to age and also inversely related to nutritional indices. Thus, the younger the child the greater the likelihood of malnutrition and associated illnesses.

One disappointing feature of the study is that the actual survey methods are not clearly set out. The author resorts to footnotes in small print to describe the details (pages 40, 41, 45). The reader may find it a little disconcerting to discover that the 'gastrointestinal disturbances' which occurred in twelve of the children were diagnosed by 'asking the mother in vernacular whether the child had any bowel disturbances'. It does seem a little presumptuous to compare such figures with other well researched surveys without any hard data. No stool specimens were examined, so the causes of the 'diarrhoea' could not be surmised.

The classification of abnormal ear drums (page 45) also deserves comment. A 'pussey ear' is described as 'mucopurulent fluid behind an intact ear drum'. The examiner would certainly need very keen eyes to pick this up, which perhaps explains why only two children were given this diagnosis. The description is really that of 'glue ear' which usually requires sophisticated audiometric tests to confirm. The term 'pussey ear' usually refers to a discharging ear, which, in an Aboriginal child, is usually secondary to chronic otitis media. Drum perforations are recorded, but no mention is made of the presence or absence of ear discharge which is a useful indicator of active disease. Sixty-eight children were described as having drums scarred from a previous perforation. I do not think that it is often possible to say that a scarred drum is due to a perforation.

The third chapter describes the social and economic conditions in the camps, derived from a questionnaire developed by the author. This section analyses the results from 51 respondents and compares three of the camps. The camps with the more favourable nutritional patterns in the earlier survey were those which were found to be more effective in making use of the economic avenues open to them.

In a fourth chapter on 'Historical and economic development' the author concludes

that 'the persistence of bad health among the town camp children is a direct consequence of the continuation of the conflict between different sectarian interests and the general process of colonisation'. He feels that resolution of this conflict would provide an opportunity to improve the social and economic conditions prevalent in the area.

The final chapter is entitled 'Conclusions and Future Prospects' and the author suggests that 'only when Europeans allow Aboriginal people to find their own solutions, providing aid but not direction, can long lasting improvements in their health patterns be expected'.

I did not find this book an easy one to read. It is not always easy to follow the author's line of thought and I feel that at times the discussion is unnecessarily complicated. I have already indicated that the clinical component is not well documented and there are some weaknesses in this part of the study. I noted a few typographical errors, mainly in the quoting of references. I think the book could have been written with fewer references as too many tend to interrupt the flow. Perhaps Dr Beck has tried to do too much, in providing an extensive review of the literature as well as his detailed survey findings and analyses. This would be more appropriate in a thesis than in a book that people should enjoy reading.

Who will find this book most useful to read? I think that most professionals involved in Aboriginal health will get something out of it, and those involved in research areas will get most benefit, particularly those interested in an up to date literature review. I cannot see Aboriginal health workers finding it very useful.

# RECENT PUBLICATIONS, REPORTS AND THESES

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**HOLMAN, C.D.J. & O'NEILL, D.F.**

*Premature adult mortality and short-stay hospitalisation attributable to Aboriginal ill-health in Western Australia 1983*

Health Department of Western Australia, Perth, 1985

The purpose of this study was to estimate the levels of premature adult mortality and short-stay hospitalisation attributable to Aboriginal ill-health in Western Australia. In this context 'Aboriginal ill-health' means the excess morbidity and mortality experienced by this sub-population over and above that expected if Aborigines had the same health profile as non-Aborigines. In 1983 there was an excess of 211.4 Aboriginal deaths (323 observed, 111.6 expected) and 96,876 Aboriginal bed days (148,782 observed, 51,906 expected). Person-years of life lost (15-69 years) due to premature mortality were estimated to be 2,085 for males and 1,369 for females. These results were compared with earlier data on tobacco and alcohol related premature death and hospitalisation in the total population. Premature adult mortality due to Aboriginal ill-health was around two thirds of that due to tobacco smoking and half that due to alcohol. Bed days caused by Aboriginal ill-health were slightly more than the number attributable to tobacco and about three quarters of the number due to alcohol. The authors note the overall magnitude of Aboriginal ill-health in Western Australia and its significant health service cost.

**HICKS, D.B.**

*Aboriginal mortality rates in Western Australia 1983*

Master of Public Health Thesis, Commonwealth Institute of Health, Sydney University, 1985

(Also published as a monograph by the Health Department of Western Australia, Perth, 1985)

This report is a comparative analysis of Aboriginal mortality rates in Western Australia in 1983 and other mortality data. Aboriginal to Western Australian age standardised mortality ratios were 2.43 for males and 2.92 for females. The leading cause of death in Western Australian Aborigines was disease of the circulatory system (principally ischaemic heart disease) which was twice as common as the next most frequent cause of death. Deaths due to accidents, poisonings and violence (ranked second for males and females), respiratory diseases (ranked third for males and fourth for females), neoplasms (ranked third for females and fifth for males) and respiratory diseases (ranked third for males and fourth for females) were the next most common causes.

It was estimated that diabetes contributed to only 5% of male and 13.8% of female deaths, and alcohol to 10.5% of male and 4.1% of female deaths. This was lower than expected on the basis of the reported prevalence of diabetes and heavy alcohol consumption amongst Aborigines. The author notes that it is possible that diabetes was under reported on death certificates.

**NATIONAL ABORIGINAL AND ISLANDER HEALTH ORGANISATION**

*Trachoma and Eye Health Report*

This report was produced by a committee convened to examine the current ocular health status of Aborigines and the effectiveness of existing anti-trachoma and eye-health programs and to provide plans for future directions in Aboriginal eye health. A review of the ocular status of 2000 Aborigines in 20 communities was carried out, and the results compared to the original National Trachoma and Eye Health Program (NTEHP) screenings in 1976-77. It was estimated that there has been a relative decline in the prevalence of various indices of trachoma in people aged below 19 years. The authors note that some of the communities visited showed little improvement in housing and environmental conditions while others had improved a great deal over the past few years.

The effectiveness of the existent State/Territory Trachoma Eye Health Committees (Northern Territory, Queensland and South Australia) was evaluated. Recommendations for ongoing eye-health initiatives identify the need for standardised recording of eye disease and trachoma, increased community level responsibility in all aspects of screening, treatment, recording and referral and the establishment by NAIHO of a permanent National Eye Health, Blindness Prevention and Trachoma Eradication Program Committee and Secretariat.

**O'NEILL, D.F. (Editor)**

*Aboriginal morbidity and mortality in Western Australia*  
Health Department of Australia, Perth, 1985

This monograph, presenting a comparative analysis of mortality, morbidity and perinatal and infant mortality in Aborigines and non-Aborigines in Western Australia in 1983, it is intended as the first of a series of annual reports. In summary, the authors report higher rates of mortality for Aborigines than for non-Aborigines (2.86 times higher overall), although there appears to have been considerable improvement in Aboriginal childhood mortality rates in recent years. Aborigines had approximately three times the hospital discharge rate of non-Aborigines in 1983, while age-specific fertility rates in Aboriginal women over the age of fifteen years were 2.11 times those of non-Aboriginal women in the same year. The birth rate per 1,000 person-years was 32.32 live births for Aborigines compared with 16.45 live births for non-Aborigines (1.92 times greater). Perinatal and infant mortality rates were higher for Aborigines in all parameters measured. The report notes that while improvements in Aboriginal health have been made in some areas, in this a deterioration has occurred. Lifestyle and acculturation are suggested as contributing factors in this deterioration and it is argued that resources need to be channelled into projects aimed at discovering methods of arresting this downward trend.

**RUSHBROOK, P. & RADFORD, A.**

*An annotated bibliography related to Aboriginal health in South Australia from 1965 to 1984*

Monograph 8, Unit of Primary Care and Community Medicine, The Flinders University of South Australia, 1985.

The purpose of this monograph is to provide a ready reference to available information concerned with health, illness and health services of Aborigines in South Australia. There are 140 annotated articles listed by topic and by first author.