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INTRODUCTION

In 1980 the Australian Institute of Aboriginal Studies decided to proceed with the appointment of a medical graduate to undertake a research project in Aboriginal health. This decision followed a recommendation from the Institute's Human Biology and Health Committee, which consists of a cross-section of people involved in Aboriginal health, including doctors, a nursing sister, an Aboriginal health worker, medical anthropologists and human biologists. The current membership comprises Dr Alan Thorne (Chairman), Dr Janice Reid (Deputy Chairman), Dr Trevor Cutter, Dr Tom Gavranic, Dr Michael Gracey, Dr David Horton, Professor Max Kamien, Ms Marion Kickett, Mr Phillip Mills, Dr Rod Morice, Dr Brian Reid, Sr Sandra Stacey, Mr John Taylor, Mr Alexander Thompson and Dr Neville White. Until his appointment as Minister of Aboriginal Affairs in 1980, Senator Peter Baume was also a member. I commenced a three year Visiting Research Fellowship in May, 1981.

My initial research confirmed the impression I had gained while working in the Kimberley region of Western Australia in 1978-79 that much relevant information fails to reach many of the people involved in Aboriginal health care. This failure is due to a number of factors. Firstly, much useful information is either not published or published in a form which is not readily available. Even the material published in more readily available forms, such as journals, is scattered throughout an incredible array of different journals. A glance at the journals represented in this edition's "Recently Published Research" will confirm this. Another problem is the fact that some of the material is, of necessity, presented in a very technical form, thus preventing many people involved in Aboriginal health care from benefiting from the information. After much consideration I decided that an "Information Bulletin" of this type was the appropriate vehicle to enable a more complete dissemination of relevant information.

Late in 1981 a "prototype" bulletin was produced and this current edition reflects the helpful comments of the recipients of that prototype. I am grateful to those people who have assisted in the initial moulding of the bulletin, and I apologise to them for the small amount of repetition to which they are being subjected. Even though the decision has been made to proceed with the bulletin, it should still be seen as both flexible and experimental. If evaluation suggests that the current form is not appropriate it will be modified. If evaluation indicates
the bulletin is not necessary, it will be discontinued. Distribution of the bulletin will be aimed at administrators, doctors, health workers, nursing staff, dentists, social workers, anthropologists, educators and others. As such it should complement the currently available "Aboriginal Health Worker" journal. My current intention is to produce three editions each year for the duration of the project. The next edition should be published around August.

If the bulletin is to be generally useful it will be essential to attain an appropriate balance and to have all viewpoints represented. I feel that this edition does not have the ideal balance, but for this imbalance to be corrected it is essential for YOU to provide me with feedback about this edition, as well as being prepared to make specific contributions to later editions. To fulfil its proposed function of informing people involved in the field of Aboriginal health, the "Information Bulletin" must be a joint effort.

The distribution of this edition has been a problem, mainly because of lack of details about appropriate recipients. There is no doubt that I have inadvertently omitted some people from the distribution list. Again, I will need your co-operation. If, in your area, there are people who you feel would be interested in the bulletin, please lend them your copy. If, on the other hand, you haven't received this edition but would like to receive later copies, contact me at the address given below.

I look forward to receiving your comments and possible contributions. All correspondence, including enquiries about distribution, should be directed to:-

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The National Trachoma and Eye Health Program. The detailed form of the continuation of the Program is still being determined. In the last quarter of 1981 Mrs Naomi Mayers, Administrator of the Aboriginal Medical Service, Redfern undertook a short-term appointment to advise the Royal Australian College of Ophthalmologists on the appropriate structure. After analysis of her report and the responses to it, the College is now proposing that each State creates a Trachoma Committee, made up of Aboriginal representatives, ophthalmologists and a State health representative. Aborigines, with a majority position on the committees, will be directly involved in policy making, as well as in the workplace. The National College would play a minor role with most of the administration being decentralised.

The August 1981 Budget Allocation for the Program in 1981-82 was $480,000.

The Northern Territory Department of Health has re-organised its key personnel with regard to Aboriginal health. Dr. John Hargrave, formerly Assistant Secretary - Leprosy Research has been appointed Assistant Secretary-Aboriginal Health. He is joined in the section by Dr. Ella Stack. Mr. Michael Mace, a Queensland Aborigine, is the section's Senior Liaison Officer.

The National Aboriginal and Islander Health Organisation held a National Conference in Alice Springs from 22-26 February, with representatives from most of the Aboriginal Medical Services attending. The National Executive now comprises:

Chairman - Mr. Bruce McGuinness
Convenor - Mrs. Alma Thorpe
Secretary - Mr. Gary Foley
Co-ordinator - Mr. Denis Walker,

and individual state representatives.

Mrs. Ethel Dallas Wharton a nursing sister on Palm Island Queensland has become a Member of the Order of the British Empire for services to Aboriginal welfare.
Mrs. Eileen Willis of the Institute of Aboriginal Development Alice Springs has been awarded a postgraduate research grant to evaluate functional literacy of Aboriginal Health Workers.

Victoria. Significant changes are taking place to the system of health care delivery to Aborigines in Victoria. These changes follow the reports of the Working Party into Aboriginal Health, established in 1980 by the Victorian Minister of Health.

An Aboriginal Health Resources Consultative Group has been established. The group consists of representatives of Aboriginal organisations involved in health care delivery, the National Aboriginal Conference, the Health Commission of Victoria and the Commonwealth Department of Aboriginal Affairs (D.A.A.). Its main function is to advise the Victorian Minister of Health on matters relating to Aboriginal health.

The second main recommendation was for the establishment of a network of Aboriginal community-based, community-controlled medical services to be funded by D.A.A. New doctor-based Aboriginal Medical Services have been established at Shepparton/Mooroopna, Robinvale, Morwell and Bairnsdale. D.A.A. is also funding Aboriginal Health Workers at Fitzroy, Dandenong, Morwell, Bairnsdale, Lake Tyers, Ballarat, Shepparton/Mooroopna, Echuca, Mildura, Robinvale and Swan Hill.

An Aboriginal Liaison Officer Scheme was also recommended and it is expected to commence functioning in April, 1982.

To ensure co-ordination with other parts of the total Victorian health care system an Aboriginal Liaison Unit has been established by the Health Commission of Victoria.

South Australia. On 1 March, 1982 Mr. Elliot McAdam, an Aborigine, took over as the Director of the Aboriginal Health Organisation of South Australia, succeeding Mr. Barry Powell. The organisation has a 10-person Board of Management, of whom 8 are Aboriginal. The Chairperson is Mrs. Audrey Kinnear, an Aborigine from the Port Augusta area.
RECENTLY PUBLISHED RESEARCH


The authors review the cases of 10 Aboriginal children admitted to Princess Margaret Hospital, Perth with urinary bladder stones, and also analyse the diets and urine characteristics of children at Balgo and Mullan (Lake Gregory) in the Kimberleys. They attribute the occurrence of such stones, which are exceedingly rare in non Aboriginal Australian children to the "feeding of cereals as a milk substitute in the very early months of life". In the Kimberley children they found low urinary volumes and note that dehydration would favour stone formation.

COX, J.W.: "The ante-natal and peri-natal characteristics of socio-economically depressed caucasians"  

This paper analyses the details of 104 pregnancies in Cunnamulla, Queensland from 1974-76. The author has identified 25 caucasians and 40 Aborigines "living in similar social circumstances". These groups were found to be similar with regard to maternal age of first child, breast feeding status at hospital discharge, risk of post-partum haemorrhage and risk of pre-eclampsia. The Aboriginal group compared less well with regard to ante-natal visits (gestational age at first visit, if any, and number of visits), risk of hospitalisation, urinary tract infections and anaemia in pregnancy and birth weight of infants.

TAYLOR H.R. : "Climatic droplet keratopathy and pterygium"  

The author analyses various possible causative and associated factors with these two conditions. He confirms the higher prevalence of climatic droplet keratopathy in Aboriginal stockmen of greater than twenty years experience, but fails to uncover a single causal factor. There is "circumstantial evidence for the importance of ultra violet radiation". Pterygium was seen more commonly in
outside workers and prevalence "correlated with lower latitudes and high ultra violet levels".

CAWTE, J : "Australia"
World Studies in Psychiatry, 1981 : Volume 1
Number 2.

In this article about psychiatry in Australia, the author also considers "Psychiatry for Aboriginal Australians" and draws attention to the relative neglect of Aboriginal health problems by Australian psychiatrists: "Not one psychiatric specialist in Australia is assigned to study these problems or to help plan solutions". He comments on the problems of dispossession of land and lifestyle disruption, and sees the "essential secretiveness of Aboriginal metasystem and philosophy" as a further problem.

CAWTE, J : "Neighbours and Strangers - On Losing the Track".

This paper considers Australian psychiatry and Aboriginal mental health. The author draws attention to the cultural distance between the Aborigines and the colonising Europeans which created a "tracking failure", which he feels was compounded as the "secrecy blind" of the Aboriginal metasystem became maladaptive with significant culture contact. He reports the decision of the Warramirri clan to "remove the blind a little" and is encouraged by this "sign of improving communication" between Aborigines and Europeans. Despite a number of current problems he feels that progress can be made, as long as Australian psychiatry recognises that it is "not to impart our mental health through our metasystem, but to help restore something that we have been taking away".

DICK, M. & F. WATSON : "A possible variant of Thyroxine-Binding Globulin In Australian Aborigines"

This paper is a follow-up of two earlier papers (see note to "Thyroid Function Tests in Aborigines" in "Brief Communications"). The authors suggest that whereas the genetically determined low T.B.G. in caucasians is due to
altered synthesis rate the "low" T.B.G. of Aborigines is in fact "a variant form of T.B.G. which may have a structural difference at or near the binding side for T4".


The author, formerly Assistant Director of the National Trachoma and Eye Health Program, reviews, against a background of British colonialism, some of significant developments in Aboriginal Health since the 1950's. He sees a very important role for the National Aboriginal and Islander Health Organisation in tackling what he calls the "double standards" of the Government bureaucracies: "what ... is essential for whites (is) too costly and, in many cases, not essential for blacks".


The author, Assistant Secretary-Aboriginal Health in the Northern Territory Department of Health, outlines his Department's new Aboriginal Health policy. He emphasises the importance of "community involvement and participation", with Aborigines being employed "at all levels" of the health care system. He notes the importance of both traditional medicine and non-Government agencies, and seeks co-ordination of health care services. The Aboriginal Health Worker is seen as the "linchpin in the system". The statement concludes that "Aborigines will be increasingly responsible for their own destiny".


The authors report findings from the National Trachoma and Eye Health Program of "a positive correlation between the prevalence of senile cataract and levels of climatic ultraviolet radiation". They conclude that the prevention of cataract may be "another compelling reason for the provision of good housing".
Harding disagrees with Hollows and Moran (see previous entry), with regard to the cause of the particular type of cataract seen in Aborigines. He suggests that "severe and repeated diarrhoea might be a major factor in cataractogenesis". To assist prevention he recommends "better water supplies and sanitation.... where these are inadequate".

CHISHOLM, J.S. : "Prenatal Influences on Aboriginal-White Australian Differences in Neonatal Irritability"

This paper examines the theory that neonatal behavioural differences are due to gene-pool differences. The author concludes that the observed group differences are best accounted for by "individual differences in maternal age and maternal blood pressure during pregnancy" and not by simple gene-pool differences.

MOORHOUSE, E. : "Toxocariasis: a possible cause of the Palm Island mystery disease"
M.J.A., February 20, 1982 : 172-173

The author presents evidence to suggest that Toxocara pteropodis (not one of the usual species causing human toxocariasis) may have been the cause of a hepatitis-like illness at Palm Island, Queensland in 1979. He concedes that T. pteropodis is not proven as the cause. The reservoir of this species is seen as baby fruit bats which contaminate mangoes. "The infection could be prevented by washing the mangoes before eating them".

ABORIGINAL HEALTH WORKER.

This edition includes extracts from "Plants and People" (see "Book Review and Recent Publications" in this bulletin), notes on the Yirrkala Health Centre, "The Yolngu Headache", an article on Aboriginal Health Worker training in East Arnhem Land and "Water Decade" by Senator P. Baume, Minister of Aboriginal Affairs.
BRIEF COMMUNICATIONS

A STUDY OF PLANT MEDICINES IN CENTRAL AUSTRALIA
by T.S. Henshall (Department of Primary Production, Alice Springs, NT) and D. Devanesen. (Department of Health, Alice Springs, NT).

Summary: Plants had numerous uses in traditional Aboriginal medicine. This paper identifies a number of important plants and describes their characteristics and uses.

In 1973 the Department of Health in the Northern Territory commenced, in a limited way, the collection of information regarding Aboriginal use of plants for traditional medicine. The project was strengthened in 1979 with the involvement of the Department of Primary Production, in particular, its Botany Section.

After initial assessment it was decided that a limitation of the project to Yuendumu (Warlpiri) and Docker River (Pitjantjatjara) was desirable in the short term. Contact was made with the Settlement Councils and in a series of meetings details of the project were determined. Doctors of the Northern Territory Department of Health discussed the project with Health Workers on Settlement Health Centres and Outstations.

Collection of Plants: The Health Workers play a key role. The programme relies on their ability to communicate between their communities and the Health Centres. When the investigations are to be carried out, the Health Workers are advised, and they plan a programme which involves a group of people. Normally, the Health Worker will act as translator and driver. Also present will be the older people with the clearest memories of the times when bush medicines were more commonly used.

Most bush medicinal plants grow in moist areas, frequently at the base of rocky hills where a small stream, in times of rain, reaches the plain. The collecting site is nearly always the country of a male Aboriginal present, and he alone will point out the plants and enumerate their uses. When women are collecting without men being present, the site, apparently, is of less importance. When questioned, a man will say that plants from his own country are stronger, and work more quickly. Often it is pointed out that plants belong to various skin groups or subsection systems.
The Variety of Medicinal Plants  Many medicinal plants are strongly aromatic. Frequently these will be used as decongestants by placing a fresh twig through the pierced nasal septum. They may also be dried, ground, and inhaled. Mixed with fat or grease, many aromatic plants are rubbed on the chest like "Vicks". Pterigeron, Pterocaulon, Cleome and Stemodia come into this category.

Several Euphorbias and Sarcostemma have milky sap. The stems are broken so that the latex can be dabbed on sores, cuts and wounds. The sap flows more freely after rain. Indeed, in dry seasons the sap of some plants can barely be made to flow.

Drinking medicines are prepared by placing leaves in a billycan (formerly coolamons were used) and covering them with water. Generally, drinking is not considered as efficacious as washing or rubbing. Cymbopogon ambiguus, Eremophila latrobei, Acacia estrophiolata and the gum from Eucalyptus camaldulensis, Eucalyptus terminalis and Eucalyptus papuana are highly regarded for these purposes as they are considered to cause cuts and sores to heal quickly.

Supple stems of Tinospora and the bark of Acacia cuthbertsoni are used as ligatures. The juice of Melothria is good for earache, and in hot weather has a cooling effect when applied to the skin.

Smoking Smoke is an important medicine. A hole is dug, and partly filled with leafy twigs. These are set alight, and, when burning fiercely, the flames are doused. The patient may lie on the branches or squat above the hole. The smoke is believed to quickly dry blood, and is therefore an an important ritual after childbirth. The husband is smoked also, at a distance from, and in sympathy with his wife. 'Smoking' is also effective for general sickness as the 'sickness' comes out with the sweat, and soon one feels better.

Text on Aboriginal Plant Medicines A big success of the project has been a re-awakening of interest in plant medicine among the Aboriginal people. The Warlpiri medicines were printed in a bilingual publication at Yuendumu. This booklet is now a text book at Yuendumu School, and, according to the teachers, the students show a great interest in it. The community is proud of their publication, and other communities are anxious that their medicines be recorded and published.
THYROID FUNCTION TESTS IN ABORIGINES
by Matt Dick (Clinical Biochemistry, Queen Elizabeth II Medical Centre, Perth).

Introduction Thyroid hormones (e.g. thyroxine or T4) are transported in blood mainly bound to a carrier protein called thyroxine binding globulin (TBG). Such bound hormone is inactive, the much lesser unbound or 'free' hormone being the active form. Until very recently it has not been possible to measure the 'free' or active form of the hormone in blood, so that assays have included both active and inactive forms of thyroxine (total T4). In people of European ancestry a rare and relatively unimportant genetic variant results in low levels of TBG and hence in low levels of total T4. These subjects however have normal levels of the active (or free) T4 and thus do not suffer from thyroid disease.

Many Aborigines (perhaps 40%) also have low levels of total T4 and at first this appeared also to be due to low levels of the carrier protein TBG. However we now suspect that this is in fact due to a variant genetic form of TBG which results in lower levels of total T4 than those usually found. It should be emphasised that this is not a 'defect' in Aboriginal TBG but rather a variation, just as different people may have different blood groups, for example. The Aboriginal people who have this genetic variant do not in fact suffer from any associated disease.

Incorrectly Diagnosed Hypothyroidism Unfortunately, in the recent past, before this genetic variant was recognised, the low levels of thyroid hormone found in these Aboriginal patients were (understandably) taken to indicate lack of thyroxine, or hypothyroidism, and some patients were treated with oral thyroxine in order to replace this supposed deficit. We now think that all Aboriginal patients previously diagnosed as hypothyroid, and on thyroxine replacement therapy, should now be reviewed in the light of our present knowledge.

There is no easy way of testing thyroid function during thyroid therapy and the simplest course is to discontinue the oral thyroxine for one month and then test for thyroid function. The thyroid stimulating hormone (TSH) test is particularly valuable in these circumstances, and if this is within normal limits one month after withdrawal of thyroid supplement the patient is not likely to be hypothyroid.
Hyperthyroidism The opposite condition to hypothyroidism, namely hyperthyroidism or excess of thyroid hormone, is also likely to give considerable diagnostic problems in Aborigines with the variant form of TBG. The diagnosis may here be missed as the patient's blood thyroid levels can be in the normal range for subjects of European origin. For this diagnosis the laboratory should be aware of the special problems of thyroid function testing in Aborigines. Relatively sophisticated laboratory tests such as free T4 assay and TRH stimulation tests may be required to establish the diagnosis of hyperthyroidism beyond doubt.

Genetic Aspects Apart from causing problems with laboratory tests of thyroid function, the variant TBG of Aborigines is of scientific, and especially anthropological interest. The variant form appears to be quite unique to Australian Aborigines and is not present for example even in the indigenous peoples of Papua and New Guinea. The variant appears to be transmitted in an autosomal dominant form, which means that it is also found in part-Aborigines and these patients are also likely to have problems with laboratory tests of thyroid function. In the long term however, laboratory tests (such as free T4) which are not affected by the variant TBG are likely to become widespread, and this should overcome the diagnostic problems which are now present.

Note Further details about this variation in TBG which leads to difficulties in the interpretation of thyroid function is provided in three previously published papers:

ABORIGINAL HEALTH AND ABORIGINAL HEALTH STATISTICS
by Len Smith(1)

Health for All
In 1977, the World Health Assembly, the General Assembly of all member countries of the World Health Organization (W.H.O.) adopted a target of

the attainment by all the citizens of the world by the year 2000 of a level of health that will permit them to lead a socially and economically productive life. (Resolution WHA30.43)

This was embodied in the Declaration of Alma-Ata, adopted by the International Conference on Primary Health Care held in Alma-Ata in the Soviet Union in 1978, which emphasized that

primary health care is the key to attaining this target as part of general development, in the spirit of social justice.(2)

The World Health Assembly in 1979 (Resolution WHA32.30) urged member states to define and implement strategies for attaining the goal of 'Health for All by the Year 2000' (HFA/2000) through primary health care. More recently, the integration of primary health care with environmental health measures, as embodied in the objectives of the International Drinking Water Supply and Sanitation Decade 1981-1990, has also been stressed.(3) In addition, a substantial effort has been devoted to developing methods for monitoring progress towards HFA/2000.(4) Despite what some cynics have suggested, HFA/2000 represents a major commitment on the part of the international health community to achieving real improvements in the health of the world's population, especially in developing countries, by the end of the century. Whether that gets translated into national commitments depends on individual countries establishing and funding their own national policies and programs.

Australia does not have an explicit national health policy. However, Australia is a party to these W.H.O. decisions and to the Alma-Ata declaration, and in this country, the commitment to Health for All has been interpreted as meaning concentration on at-risk groups such as Aborigines, who are arguably the most at-risk group in the Australian community, and the elimination of preventable risk.(5) What I want to discuss here are some
of the implications of Health for All, and the turn-of-century deadline that comes with it, for Aboriginal health policy in Australia, and for the related statistical and other information requirements in particular.

Aboriginal health policy.
Aboriginal health is one area where the Federal Government does have an unequivocal responsibility, and Australia has a National Policy on Aboriginal Health. Australian Government policy and programs on Aboriginal health in fact predate Alma-Ata, but embody virtually identical principles. In the House of Representatives on 26 May 1981, the then Minister for Health made the most recent statement of the Federal Government's Aboriginal Health Policy. The Minister began by citing recent reports which:

...show that the health of Aboriginal Australians is unacceptably low. The Government agrees with this assessment and reaffirms its objective of raising the health status of Aboriginals to that of the rest of the community.

The need for improvements in environmental conditions, for the development of appropriate health care systems, for training of Aboriginal health workers and for evaluation of existing programs were stressed as being essential to the attainment of this objective.

Aboriginal health statistics.
In his statement, the Minister went on to refer to the lack of national statistics on Aboriginal health as a deficiency which cannot be allowed to continue, saying that he proposed, as a matter of urgency:

to implement a uniform system of national Aboriginal health statistics through the Department of Health. Such a system is absolutely essential for monitoring and evaluation of effectiveness.

That decision was based in part on a report I had written in 1978,(7) and I was naturally pleased to learn that the Government had decided to implement my plan. However, similar statements of intent have been made since the 1950s. The problem has always been in having them translated into action. Today, almost a year after the Ministerial statement, this 'urgent' task still has not been undertaken.
You simply cannot do public health without public health statistics. We need statistics to identify problem areas and assess the extent of excess risk, to plan for the reduction and elimination of that excess and to monitor progress towards that goal. Every other developed country with an indigenous minority keeps routine national statistics to document their health. But in Australia we are still at the stage of endorsing the idea in principle. We do not even have national Aboriginal birth and death statistics, the most basic public health data of all.

There has been a long history of resistance to the idea of keeping official statistics about Aborigines. What Aboriginal health statistics reveal is invariably embarrassing, and most administrations have preferred to avoid this embarrassment. The existence of a section in the Constitution excluding Aborigines from population counts made it easy to justify not keeping 'separate' statistics, and there is still some opposition to the idea, which seems to be a residue of the old assimilation policies, with their commitment to the eventual disappearance of Aborigines as an identifiable group.

Let us take as given the need for national Aboriginal health statistics. How do we go about getting them, and what are some of the uses to which they will be put? Aboriginal statistics come in two ways: by distinguishing Aborigines in general population statistics; or by collecting statistics specifically about Aborigines. Obviously, where statistics for the general population are available, by far the most cost-effective way of getting Aboriginal statistics is to do whatever is necessary to have the race of the individual recorded on the source documents and included in the tabulations.

A major problem is that health statistics in general are poorly developed in Australia. However, our basic vital (birth and death) statistics are excellent, in terms of coverage if not in terms of the range of data collected. Virtually all births and deaths are reported, including Aboriginal births and deaths. The problem is simply that Aboriginal events are not distinguished on the forms. We could obtain Aboriginal vital statistics overnight, simply by putting a question on the notification forms, or on the associated medical documents, asking the race of the mother or of the deceased. Since 1965 a number of bodies, including the N.H. & M.R.C., the Commonwealth Department of Health, the National Committee on Health and Vital Statistics (N.C.H.V.S.) and the Department of Aboriginal Affairs been trying to have this simple change made. Little progress has been made. Questions have been
added to only the national perinatal death certificate, the Western Australian midwives notification form and death certificate, and the New South Wales death notification form. The reasons for lack of progress range from seemingly endless delays in drafting legislation in the States and Territories, to rejection of the principle of collecting Aboriginal statistics in Queensland, which continues to espouse assimilation as a policy.

Sometimes battles have to be fought on more than one front. In the case of hospital inpatient statistics, a minimum dataset has been agreed upon by N.C.H.V.S. which does identify Aborigines, and this has been adopted in principle by all States except Queensland. However, the system has not yet begun to yield usable national statistics on Aborigines, and unfortunately may never do so because the whole hospital statistics system has been put in jeopardy by the recent withdrawal of the Federal Government from the hospital cost-sharing arrangements with the States.

In the field of communicable diseases, Australian statistics vary from very good to very poor. For some diseases, where there are nationally co-ordinated collections (tuberculosis, leprosy, malaria), statistics are good for the general population, and for Aborigines as well. Most other collections are in the hands of the individual States and Territories, and notification rates are of unknown completeness, probably differ between Aborigines and others, and often Aborigines are not distinguished. Although useful for discerning trends, calculation of absolute or relative risks is not possible. In cases like this where statistics are not adequate even for the general population, then we have to push for the needed developments in the general statistical system, and in the meantime institute special collections to obtain Aboriginal statistics only. This has been done for instance by the Federally funded Aboriginal Health Programs run by some State Health Departments. It has also recently been suggested that special health surveys could be conducted of the Aboriginal population, and the Government has recently decided to conduct a special survey of disability in Aboriginal communities.

Statistics and planning
If we had adequate statistics, we could certainly identify and assess the magnitude of the excess risk that Aboriginal people face. Even with the decidedly limited statistics that we do have, it is possible to make some sort of attempt at this.(9) In order to eliminate that risk, we obviously need to understand the factors
responsible, and know how to alter them to achieve an improved outcome. But to develop a plan for the reduction and elimination of excess risk, we have to have a deadline as well. If we know what the current situation is, what the desired situation is, and the time by which we are to move from the former to the latter, the setting of annual targets is almost childishly simple. And once we have annual targets, we can make annual judgements about whether our programs are on course or not. That is what evaluation means. Of course, if the statistics show an unchanged or worsening situation, we know we are not on course. But even if there is some improvement, without annual targets we still don't know if what is being done is effective enough.

In the context of Aboriginal health, our ultimate objective is readily specified: we are aiming at Aboriginal health being at least as good as that of the rest of the population. Of course, we are really aiming at a moving target, because the health of the general population is changing as well, but that is a minor issue. The question that remains is the deadline by which this should be achieved.

The first National Plan for Aboriginal Health was adopted in 1973, and called for the elimination of differentials within ten years. That time-scale was probably unrealistic, but at least it did provide a series of goals against which progress (or lack of it) could be assessed. The problem about the Ministerial statements of policy quoted at the beginning is that as they stand they lack a time frame of any kind. This is where the Government's commitment to Health for All by the Year 2000 comes in. However, that is a maximum time-scale. It may be that the desired objectives, or at least some of them, can be attained before the end of the century. The Department of Aboriginal Affairs has recently been attempting to write shorter-term targets and deadlines into the health programs that it funds, using as a model the approach used in health planning in the United States. In the U.S., a ten-year plan has been established, which sets targets for reducing a wide range of preventable risks to the health of the entire population by 1990. This is spelt out in a series of detailed targets in 'Tracking future progress in reducing risks', Section IV of Health United States 1980. Although there may seem to be an element of arbitrariness in these targets, they are in fact based on a consensus assessment by experts of what is desirable and possible within the next ten years. The report comments that
To the extent that necessary data become available during the years to come, a far greater number of prevention objectives can be measured, and progress towards them tracked.

The problem with the attempts that have been made to write deadlines into Aboriginal health programs is that both the targets and the deadlines have been essentially arbitrary. The only way to avoid this would be to go through the sort of consensus process that was used for Health U.S. 1980 — that is, having identified the areas of excess risk, to get the best expert opinion on how much reduction can be achieved, by when.

However, it is doubtful if there are in fact major prospects of eliminating the excess risks to Aborigines before the turn of the century. More effort has been devoted to reducing excess Aboriginal infant mortality than to any other area. Yet in an analysis of trends in perinatal and infant mortality (9: Smith L.R., 1980) where I tried to see how long it would take at current rates of improvement for the differentials to be eliminated, it emerged that if anything, 2000 was an optimistic deadline. While Aboriginal infant mortality could probably be reduced to that of the general population by 2000, there was slightly less prospect of this in the post-neonatal than in the neonatal period, and there was certainly no indication that it was likely to be achieved much before then. In the case of stillbirths there has been no improvement at all to 1978 (12); there was no prospect on that trend of the excess being eliminated by the year 2000. The most reasonable approach to setting short-term targets in Aboriginal health would seem to be one based on tracking the path to zero excess risk by the turn of the century.

**Monitoring progress.**

What aspects of health should be monitored, in order to establish whether programs are on target? As part of developing HFA/2000 strategies, a number of indicators have been suggested for assessing progress.(13) In this context, 'indicators' are regarded as measures of a particular aspect of health which in some sense 'represent' a wider range of concerns. This approach is obviously necessary and justified in developing countries where it is not realistic to hope to collect more comprehensive data. However, it is also the approach used by the Organization for Economic Cooperation and Development(O.E.C.D.) in its social indicators program for the most developed countries,(14) but there are some dangers in doing so. As is recognized in the W.H.O.
documentation, it is necessary to be aware of the risk of 'indicators' coming to be regarded simply as targets in their own right. This has already emerged as a real problem in the Aboriginal context, because in an extremely wealthy country like Australia, the general health system has the capacity to bring enormous resources to bear on the particular aspect of health which is being used as an indicator of health in general. The prime example is the way in which concentrated efforts have been made to reduce Aboriginal infant mortality, because it is regarded as an indicator of the overall health of the population. At the same time as it has been reduced, other less 'representative' or 'indicative' aspects of health - adult male health in particular - have been allowed to get much worse. Moreover, because adult mortality has not been regarded as indicative, little data has been collected about it, with the consequence that it has taken much longer than it should have for the serious current situation to become widely recognized.

The solution to this, in a country like Australia, is to try to avoid focussing on particular indicators, and instead to try to obtain comprehensive measurement of health. That is why we need a national system of health statistics for Aborigines (and for others). On the basis of comprehensive statistics, comprehensive strategies for monitoring and surveillance can be built.

Health surveillance.
A national health statistics system is only one component of a national health information or intelligence system. The other major requirement is for data for surveillance purposes. Monitoring and surveillance are terms whose meaning is often confused. Both involve the use of reporting systems to provide information to assess whether action is required. The essential difference is in the length of the feedback loop. We need long-term monitoring of health in order to make judgements about the adequacy of existing plans and programs, and to take appropriate policy and planning action.

Typically, this is done periodically (usually annually), using annual statistics which are often not available for a year or more after the end of the period to which they refer. Clearly this is of little use for day-to-day management purposes, and this is why we also need a very rapid surveillance or health alert system to identify health problems which require immediate public health action. (15) The influenza surveillance system of the U.S. Centers for Disease Control (C.D.C.) is a well-known example, although it is only one of a large number of
surveillance activities undertaken by that agency. (16) Here, the feedback cycle has a period of days or weeks. On the basis of either past statistics or policy-derived targets, a threshold level of acceptability is established. Then, on the basis of timely reports of events, a level above the threshold can trigger action to intervene and hopefully contain the problem. The statistical output is essentially a byproduct of a reporting system oriented to action, but also provides the basis for establishing whether action is required. Unfortunately, this sort of system does not exist at the national level in Australia, except for exotic (usually imported) diseases.

One proposed component of a monitoring strategy for Health for All in the United States has been a 'health gaps surveillance system' which spans both health statistics and surveillance reporting. A health gap is a discrepancy between where we are with respect to a given health problem and where we could be. Or, more specifically, the discrepancy between where one subset of the population is and where another subset is, the latter taken to be a goal or standard. The discrepancies in health indicators among blacks, whites (sic), and Japanese are illustrative. (17)

Gaps may be in health status, in risk factors, or in access to health services. The most important measures of health status gaps proposed were Sentinel diseases. The concept of a 'sentinel health event' has been extensively developed by Rutstein and his co-workers in the Working Group on Preventable and Manageable Diseases. It is a quantitative negative index of health, involving 'unnecessary disease, unnecessary disability, and unnecessary untimely death'. (18) These may be single events, such as a maternal death, or they may be a rise in rates above a certain acceptable level. The basic idea is that given the present state of knowledge, there are many health events which should never occur. Rutstein calls them 'airplane crashes in health'. If they do occur, something must have gone wrong, and so the next step becomes a 'carefully controlled scientific search for remediable underlying causes' which may be social or organizational as well as medical. Surveillance of gaps in sentinel health events is a concept readily adaptable to monitoring and surveillance of Aboriginal health. The problem is that it would require not only an adequate national statistical and surveillance system, but also an effective national capacity to take action to identify
causes and undertake remedial measures. Unfortunately at the present time we have none of these.

FOOTNOTES
(1) National Health and Medical Research Council (N.H.&M.R.C.) Fellow in Applied Health Science at the Australian National University.


(3) See Health and Development. WHO Western Pacific Region, No7, July-Aug, 1981:8


(6) See Hansard: 2546 and following.


(8) Assuming we could get complete and correct answers to the question. The form of question used, the person to whom it is addressed and the diligence of officials in ensuring it is answered, all affect the validity of the data obtained. In the first few years of use, particular attention needs to be given to checking the adequacy of response, and taking the necessary action to remedy deficiencies.


Infant mortality is to be reduced by 35%, deaths of children aged 1-14, and adolescents and young adults 15-24 are to be reduced by 20%, deaths at ages 25-64 are to be reduced by 25%, and the health, mobility and independence of old people is to be improved by a 20% reduction in restricted activity days due to acute or chronic conditions. See 'Prevention profile'. Part 2 of United States Department of Health and Human Services. Public Health Service. Office of Health Research, Statistics and Technology. National Center for Health Statistics and National Center for Health Services Research. Health United States 1980. D.H.H.S. Publication (PHS)81-123.

There may have been some since. See Seward, J.F., and Stanley F.J. (1981) Comparison of births to Aboriginal and Caucasian mothers in Western Australia. Medical Journal of Australia 2: 80-84.

Some of the indicators relate to the state of policy development, to social and economic conditions, and to the provision of care. Those related to health status are: percent low birthweight; height and weight of children; percent small upper arm circumference; infant, child and under-five mortality; life expectancy; maternal mortality; crude birth rate; disease specific mortality; morbidity prevalence; and the prevalence of long-term disability. (See Indicators for monitoring progress towards Health for All by the Year 2000 cited previously.)


WHAT IS MEDICAL ANTHROPOLOGY?
(Adapted from an article by the United States' Society of Medical Anthropology)

Historical Aspects Contemporary medical anthropology is an outgrowth of several lines of research and application in the health sciences and anthropology which began to converge in the immediate post-World War II period. When the technology of Western medicine was introduced into the non-Western societies usually studied by anthropologists, health teams turned to cultural and social anthropologists for advice on how to overcome perceived cultural barriers to the planned technological transfers. Studies of indigenous health beliefs and practices, nutritional patterns, reproductive beliefs and behaviour, the dynamics of sick role behaviour and the legitimization of curing roles, all became critical to the development of public health and clinical care delivery systems designed to meet the needs of specific populations.

As anthropologists developed expertise in advising on the design of health delivery systems for non-Western peoples, it became evident that anthropological skills and approaches could be applied to the delivery of health care in modern, heterogeneous societies. Anthropologists thus began to join their colleagues in physical anthropology who had preceded them in medical school settings.

Anthropology and Medical Schools Medical school receptivity to anthropology did not derive solely from an interest in health care delivery across cultures. Medical
researchers were concerned increasingly with diseases which no longer fitted the earlier model of disease causation which stressed simple exposure to a particular micro-organism. Factors implicated in the etiology and prevention of heart disease for example, such as diet, exercise, smoking, and stress, were related to the lifestyle and social interaction of the individual. These were research domains more familiar to the social researcher than to the medical researcher. It was recognized that by joining forces, social and medical researchers could contribute to a better understanding of disease etiology and prevention.

Medicine's increasing sensitivity to social and cultural variables also extends to problems in health care delivery. The growth of consumer and self-help movements directed towards changing some of the ways health care was being delivered, and the advances of medical technology into areas for which there were no cultural or social precedents have also contributed to this trend.

Anthropology and Medical Management When anthropologists first became involved with medical programs, they rarely questioned the efficacy or appropriateness of the medical procedures being introduced. But, over time, anthropologists began to collaborate with medical professionals in evaluating the suitability and impact of various established procedures. Thus, for example, basic and applied research has been carried out on the justification for, and effects of, separating the mother from her infant in newborn intensive care nurseries and in normal full-term deliveries. Research on birth control and family planning has been extended from how to get a given population to adopt a particular birth control technique, to the development of social or cultural specifications for the design of new birth control techniques which would be suitable and acceptable to a given population.

The Range of Medical Anthropology Medical anthropologists concern themselves with the entire domain of health and medicine throughout the life-cycle. In the area of aging, for example, they are concerned with how the aged are treated in various societies; the reason for the differential status they are often accorded; questions about the relationships among physical functioning of the aged and their roles and functions in different societies; and with ways in which their health can be promoted and their care facilitated in our own and other societies. In the area of mental health, medical anthropologists are concerned with how various societies defined "mental
illness; the extent to which a stigma is attached to that label; the testing of various etiological hypotheses; the nature of the curing process in our own and other societies; and how the treatment and social setting may help or hinder readjustment or cure.

Medical anthropology has both applied and basic research interests. The applied interests are self-evident in the area of designing optimal care and public health programs, and measuring interests overlap those of many disciplines.

How are biological processes mediated and modified by the culture? What are the dynamics of maintenance and change common to all curing systems? How are people recruited as practitioners and patients in curing systems, and how are roles learned, carried out and changed? What is the relationship between health beliefs and health behaviour? How does the curing system relate to other systems in a culture? What is the relationship between the pattern of life and the pattern of disease?

Medical Anthropology and other Disciplines

Medical anthropology draws upon social, cultural and physical anthropology as well as related social science disciplines. Like many medical sociologists, for example, medical anthropologists have come to study the social organization of medicine, but they also have focused, more than the sociologists, upon an ethnographic understanding of the perceptions held and shared by those within it. Medical anthropologists also have learned to build biological variables into their studies, along with more familiar cultural and social variables. Like physical anthropologists, medical anthropologists are concerned with adaptation and biological-cultural interactions, but the time frame is shorter than that used by physical anthropologists, who are more concerned with evolutionary processes.

Publications in Medical Anthropology

The literature of medical anthropology is extensive and varied. Medical anthropologists publish their research in books, monographs and articles. The articles appear in specialized medical journals as well as in several journals specifically serving medical anthropology (e.g., Medical Anthropology; Social Science and Medicine; and Culture, Medicine and Psychiatry). In addition, there are a number of textbooks and volumes of collected articles available for teaching purposes, some directed to social science students and others designed more to meet the needs of health professionals.
MEDICAL ANTHROPOLOGY IN AUSTRALIA
(Based on "Medical Anthropology: Tracks and Boundaries" by Janice Reid, Commonwealth Institute of Health, Sydney)

History For many years various researchers have performed studies which would now be seen as falling in the field of "medical anthropology". These workers include not only anthropologists, such as Stanner, the Berndts and Elkin but also medical researchers, such as Basedow, Cleland and Abbie. A more general awareness of the need for the application of anthropology to health arose in the early 1960's. For example, in 1963 Professor R. Black of the School of Public Health and Tropical Medicine in Sydney (now the Commonwealth Institute of Health) delivered a paper entitled, "The training of Anthropologists for Work in Health Fields". In 1964 that School appointed R.G. Hausfeld as a visiting lecturer in medical anthropology, a position which was made full-time in 1966.

It was not until 1978 that the first formal meetings in medical anthropology were held in Australia, in conjunction with the Australian Anthropological Society's annual conference. Since then each conference has included sessions devoted to medical anthropology. During these sessions papers have been presented on a wide range of topics, including indigenous healing systems, food and nutrition, Aboriginal health and health worker training, family planning, fertility and bush medicines.

Current Situation Interest has increased to such an extent that at the 1981 conference it was decided to form the Australian Society for Medical Anthropology, which is aiming to encourage and support anthropological studies in health, illness, health care and related topics. The 1981-82 Convenor is Dr. Janice Reid of the Commonwealth Institute of Health in Sydney, while her successor for 1982-83 is Ms. Ann Hale of the Cumberland College of Health Sciences, also in Sydney.

This growing interest in medical anthropology is also reflected in the number of departments teaching in this area. A survey in 1980 revealed that 5 anthropology departments offer course-work in medical anthropology. Anthropologists are increasingly being employed in medical schools and health science colleges in Australia.
ABORIGINAL HEALTH RESOURCE LIST

(all sections listed alphabetically)

GENERAL

(1) REPORTS


CENTRAL AUSTRALIAN ABORIGINAL CONGRESS.


NEW SOUTH WALES.

THE NATIONAL TRACHOMA AND EYE HEALTH PROGRAM REPORT

1980, Royal Australian College of Ophthalmologists, Sydney.

WORLD COUNCIL OF CHURCHES.

Report of the team visit to the Aborigines, June 15 to July 3, 1981.
Justice for Aboriginal Australians.

(II) BOOKS

Cawte, J.

Medicine is the Law

Hetzel, B.S. et al (Eds)

Better Health for Aborigines.
1974, University of Queensland Press, St. Lucia.

Kalokerinos, A.

Every Second Child.
1974, Nelson, Melbourne.

Kamien, M.

The Dark People of Bourke: A Study of Planned Social Change.
1978, Australian Institute of Aboriginal Studies, Canberra.

Moodie, P.M.

Aboriginal Health.

Moodie, P.M. and E.P. Pederson

The Health of Australian Aborigines: An Annotated Bibliography.
JOURNALS

Aboriginal Health Worker.
Medical Journal of Australia
- special supplements on Aboriginal health,
- other medical material intermittently.

STATISTICAL SOURCES

Commonwealth Department of Health.

Aboriginal Health Bulletin, No. 1.

Health Commission of New South Wales.

Aboriginal Hospital Morbidity in N.S.W., 1979.
1979, Health Commission of N.S.W., Sydney.

Health Commission of New South Wales.

1979, Health Commission of N.S.W., Sydney.

Northern Territory Department of Health.

Annual Reports.
Bulletins - published quarterly.

Western Australia. Department of Health and Medical Services.

Annual Reports. 1980 Report contains statistical information under both Community and Child Health Services and Kimberley Health Region.

MISCELLANEOUS

Goldstein G., H. Hunt and B. Sharkey

Aboriginal Health Workers in N.S.W., 1971-1979: An Evaluation.
Hetzel, B.S. and H.J. Frith


Morice, R.D., H. Swift and M. Brady


Smith, L.R.

BOOK REVIEW

NATURE AND NURTURE - ABORIGINAL CHILD REARING IN NORTH CENTRAL ARNHEM LAND by Annette Hamilton
1981, Australian Institute of Aboriginal Studies, Canberra
Reviewed by Ferry Grunseit, Director of Casualty and Outpatients, Royal Alexandra Hospital for Children, Sydney.

The customs and practices related to bringing up children of the Anbarra people, who live at Maningrida in Arnhemland, are described in this book by Dr. Annette Hamilton, an anthropologist, who spent some time there in 1968. The work she did was part of an MA Thesis in Anthropology, and she revised the manuscript much later, preparing it for publication in 1979.

In that sense the information may not be current. Much must have changed for this group of people living at the "top" since her visit there over a decade ago. Nevertheless, it is a valid document, since it describes a community and its practices at a particular time.

None of the traditional Aboriginal groups have survived intact since the intrusion of white people into their civilization. However, though fragmented as tribes, the relationship between individuals has remained virtually unchanged. Ritual life continues. Many of these groups, as Dr. Hamilton found, and the Anbarra in particular, had at the time of her visit a very rich ritual life.

As part of her thesis she asked a number of questions relating to child rearing, such as who cared for the children? Did fathers talk more and differently to girls than boys? What was the status of tribal women? Were they very oppressed? Some of the questions have remained unanswered and perhaps are unanswerable.

Dr. Hamilton gives an account of what she saw at Maningrida and of what people told her about their lives and customs. She traces the child's development from the fantasy or dreamtime ideas of conception, through actual conception, pregnancy and birth, and then to early marriage, at the age of eleven, for girls, and initiation for boys.

The Anbarra concept of child development relates to what the child does and not to how old the child is. Developmentally, however, it corresponds roughly at least to some of our ideas of milestones and growth and development. Sexual experience for girls is expected to
occur before puberty and they are separated from boys at an early age. Boys are usually initiated starting from the age of about eleven, while girls at that time, if breast development has started, are marriageable.

Changes, however, in social customs have resulted in many cases of opposition to tradition, eg. to traditional marriage to older men, and have been replaced by promiscuous behaviour amongst young girls and early single motherhood.

In the chapters which follow and there are twelve in all, Dr. Hamilton looks at "Begetting and Bearing", the stages of childhood, behaviour and belief, identity and many other aspects of Anbarra culture and of beliefs about pregnancy, fertility, sterility, birth control, and so on.

Having read Dr. Hamilton's observations about the Pitjantjatjara (October, 1971) and her comments on "Changes in Traditional Society", I found this well set-out and elegant volume very instructive and interesting reading.

It is a valuable contribution to our limited knowledge of the relationships between the children and adults and between adults in a traditional Aboriginal group. It also shows that while contact with white Australia has had a profound influence on many aspects of tribal life, eg. diet (white flour, sugar, tea, and bread and jam are staple foods for children), other behaviour such as child care, hygiene, social training etc., have remained relatively unchanged.

The Anbarra child certainly has vastly different experiences in the first three to five years of life and then comes into contact with the Western type of child rearing related to school, conformity and restriction of liberty. This sharp contrast must create some major problems in these children and perhaps some of these problems are never resolved.

NATURE AND NURTURE is available from the Australian Institute of Aboriginal Studies, Canberra, $9.95 soft cover, $13.95 hard cover.
RECENT PUBLICATIONS

* "Aboriginal Health Workers in N.S.W.1971-1979: An Evaluation".
  G. Goldstein, H. Hunt and B. Sharkey

  This evaluation includes an analysis of the stated and actual roles of AHW's in NSW and makes recommendations for the future role of AHW's within the health care system.

* "Tribal Communities in Rural Areas"
  E. Young.
  1981, Development Studies Centre, A.N.U., Canberra

  This analysis of three Northern Territory Aboriginal communities - Yuendumu, Willowra and Numbulwar - includes brief summaries of health status and the existing services.

* "Plants and People: Aboriginal uses of Plants on Groote Eylandt"
  D. Levitt
  1981, Australian Institute of Aboriginal Studies, Canberra.

  This book looks mainly at the general uses of plants but includes an interesting chapter on "Sickness: causes and treatments". Fairly comprehensive botanical information is provided and the book is beautifully illustrated.

* "Mum Shirl: An Autobiography with the Assistance of Bobbi Sykes"

  The story of Shirley Smith (Perry) who has been described as a "legend in her own time". As well as being one of the founders of both the Aboriginal Medical Service and the Aboriginal Legal Service in Sydney, she has devoted her life to assisting others and was honoured for her efforts with an M.B.E. in 1977. She was a N.S.W. "Mother of the Year" in 1979.

* "The Aboriginal Tasmanians"
  L. Ryan
  1981, University of Queensland Press, St. Lucia.

  A well researched book which analyses the
Aboriginal-European interaction in Tasmania. The main emphasis is on the interaction until about the middle of the 19th century but she also considers the situation of present-day Tasmanian Aborigines. Although not examining health explicitly, she provides circumstantial evidence about health status in the 1800's.

"Aboriginal Man Adapting"
R.L. Kirk,

This book, subtitled "the human biology of Australian Aborigines", examines the adaptation of Aborigines to the Australian environment. The author also "seeks to explore the biological consequences" of the European colonisation of Australia and in so doing considers the changes in Aboriginal health resulting from colonisation.

"Petrol Sniffing Among Aboriginal Australians : A Resource Manual"
R. Morice, H. Swift and M. Brady

Petrol sniffing has been documented as a widespread problem in Aboriginal communities. This manual provides much useful information about sniffing and sniffers, the physical and psychological effects of sniffing, medical treatments, and social and psychological dimensions of intervention. It is essential reading for people concerned with this problem.

"Aboriginal Quarterly"
December, 1981. Volume 4, Number 2
(produced by the Commonwealth Department of Aboriginal Affairs' Regional office in North Sydney)

This edition includes a number of articles on Aboriginal Health in N.S.W. As well as articles on specific programs, there are summaries of the various health programs and services.
CURRENT RESEARCH UNDERTAKINGS

The information in this section is undoubtedly incomplete and, in some instances, probably out of date. The only way by which a reasonably complete coverage can be achieved is for individual researchers to provide details of their current undertakings.

The funding source, if known, is indicated in parentheses.

NH & MRC  National Health & Medical Research Council
HSR&DG  Health Services Research & Development Grants Scheme of the Commonwealth Department of Health
AIAS  Australian Institute of Aboriginal Studies
ARGS  Australian Research Grants Scheme
PMCMRC  Princess Margaret Children's Medical Research Council

* A clinical and immunological study of trachoma in Aborigines in Northern Territory.
  Dr. D.M. Graham, Microbiology, University of Melbourne. (NH & MRC)

* Arbovirus Ecology in North Australian Encephalitis.
  Prof. N. Stanley and Mr. P. Liehne, Microbiology, University of W.A. (NH & MRC)

* Evaluation of Pilot Health Services and Health Status of people of Papunya, Utopia and Pitjantjatjara homelands.
  Prof. A. Radford, Flinders University (HSR & DG)

* The Impact of Pneumococcal Vaccine on Acute Respiratory Infection in Early Childhood.
  Dr. R. Douglas, University of Adelaide (HSR & DG)

* A Community and Action Oriented Health Service Evaluation.
  Dr. T. Cutter, Central Australian Aboriginal Congress. (HSR & DG)
An Evaluation of the Effectiveness and Efficiency of the Royal Flying Doctor Service.
Dr. K. Gollan, Dr. B. Catchlove and Prof. L. Davidson, R.F.D.S. of Australia. (HSR and DG)
Feasibility study completed.

Social Change and Medical Belief Among the Yolngu, North East Arnhem Land.
Dr. J. Reid, Commonwealth Institute of Health, Sydney. (AIAS)

Perceptions of Body Health.
Ms. R. Mobbs, University of Queensland (AIAS)

Urbanisation and Diabetes in Australian Aborigines.
Dr. K. O'Dea (NH and MRC and AIAS)

Aboriginal Fertility Decline.
Mr. A. Gray, A.N.U. (HSR and DG and AIAS)

Nutritional Composition of Aboriginal Bush Foods.
Dr. J. Brand, University of Sydney (AIAS)

Women's Food Production and Preparation Techniques.
Ms. J. Devitt, (AIAS)

Removal of Toxic and Unpalatable Substances from Vegetable Foods.
Ms. W. Beck, (AIAS)

Health and Ethnobiological Studies
Fr. A. Peile, Balgo Hill Mission, W.A. (AIAS)

Study of Epidemic Disease Among Australian Aborigines, 1788-1870.
Mrs. J. Campbell, (ARGS)

A W.A. State-wide Anthropometric Survey of Aboriginal Children up to 30 months of Age.
Dr. M. Gracey, Ms. E. Owles and Mrs. N. Hitchcock. (PMCMRC)

A Retrospective Analysis of Mortality and Morbidity of Aboriginal Children up to Age 10 Years, with particular reference to infectious diseases affecting the gastro intestinal and respiratory tracts.
Dr. M. Gracey. (PMCMRC)
FOOTNOTE

Future editions of the "Information Bulletin" will include a section for "Correspondence", which will enable more complete exchange of ideas and viewpoints.

As well, I would greatly appreciate your assistance by providing feedback about this edition to allow its proper evaluation.

The type of questions for which I need answers are:-

* Is the Bulletin very useful? If not, in what way could it be made more useful?

* Do you like the current structure of the Bulletin? Are there sections which should be omitted? Are there other sections which should be included?

* How do you like the actual content? Is included material relevant? Are there other viewpoints or disciplines you would like to see represented?

* What do you feel about the level of the material? Any changes needed?

* Are you satisfied with the quality of the Bulletin? In what ways could it be improved?

Please provide me with the answers to these questions and add any further advice you feel is appropriate.

Neil Thomson