

CHAPTER 3

Introduction

This chapter looks in more detail at some of the most significant health problems of adolescence and young adulthood among Aboriginal people, and attempts to provide insights into the social factors which bear upon them.

While epidemiologists and medical researchers frequently allude to “socio-cultural” factors having a profound impact on the health of Aboriginal people, their studies rarely analyse these factors. It has remained the task of the few social scientists in Australia with an interest in cross-cultural health or medical anthropology to provide such understanding. In this chapter I examine several major health issues affecting young Aborigines, presenting first an indication of the prevalence data (if any) and then going on to address the social factors that have an impact on each issue.

Perhaps the earliest consideration of socio-cultural factors in Aboriginal health was undertaken by Annette Hamilton, an anthropologist who, in 1971, wrote a paper on the health of Pitjantjatjara people in northern South Australia (Hamilton 1971). Her observations are still surprisingly pertinent 20 years later. Apart from noting that desert people had notions of the causation of disease and ill-health very different from those of European health professionals, she discussed the fear of hospitals, nutritional problems and environmental factors. With her first-hand experience of living in the communities, Hamilton also noted the day-to-day actions that can adversely influence health: the mother who delays taking her seriously ill child to the health centre until it is too late; patients who take the first few tablets of a course of antibiotics and then fail to collect the rest of their supplies. Only by understanding some of those cultural beliefs and practices of the people which are causing difficulty, she writes, can appropriate solutions be found:

Such improvement is unlikely to result from merely pouring more and more money into welfare services; such services must be designed in a way that the people as they are now, with their present practices and beliefs, can relate themselves successfully to them (Hamilton 1971, p.1).

Other writers have also observed that health care services alone do not prevent the major causes of morbidity (Reid 1979; Hall 1985; Bartlett & Scrimgeour 1989; Gray & Atkinson 1990). Probably immunisation is the only medical intervention which can prevent the major causes of childhood morbidity (Hall 1985, p.92). Bartlett and Scrimgeour, both actively involved in health care and research in Central Australia, observe:

the treatment of disease does not change the health status of communities. Focusing on disease entities encourages the illusion that doctors and clinical medicine will improve the health of Aboriginal people. There has not been a substantial improvement in Aboriginal health despite increased accessibility and acceptability of clinical health services to Aboriginal communities over the last 15 years. This is not to say that such services are redundant. It is a right of everyone to have these services...(Bartlett & Scrimgeour 1989, p.5).

Other professionals working in Aboriginal health stressed that the medical and the social models needed equal emphasis, an “ambidextrous” approach. Community development, and health and ancillary services are inextricably linked, influencing each other in numerous ways.

Bartlett and Scrimgeour’s approach, which they describe as a “non-disease focus” on preventive health strategies, deflects the focus from the individual to the community, on the grounds that the solutions are in the hands of the “community” (undefined) in the form of community development. Bartlett and Scrimgeour observe that most of the prevalent diseases in Aboriginal communities do not have a single cause, but can often be related to several causative factors, namely the physical environment, the social/mental environment, and practices related to diet and exercise. Certain diseases predominate in different age groups, so that a simplified relationship can be shown as in Table 5. This is a useful guide to what follows, although I also examine other health problems not strictly classified as diseases.

Table 5: Relationship of disease to causative factors and age groups

Main causative factor	Disease	Age group most affected
Physical environment	Diarrhoeal disease	0-20 yrs
	Respiratory infections	
	Eye & ear infections	
	Skin infections	
	Rheumatic Fever	
Social/mental environment	Alcohol/Substance Abuse	15-50 yrs
	STDs	
	Trauma	
	Mental illness	
Nutrition/exercise	Stress related problems	30 + yrs
	Diabetes	
	Hyperlipidaemia	
	Hypertension	
	Ischaemic heart disease	
	Renal disease	

(Bartlett & Scrimgeour 1989)

Sexually transmitted diseases

Sexually transmitted diseases (STDs) are prevalent among young Aborigines in the adolescent and young adult age group. While the prevalence of some STDs has declined dramatically, conditions such as chlamydia and herpes have increased. In South Australia, notifications for sexually transmitted disease among Aborigines show, not surprisingly, that young people are well represented. In 1989, for example, 54% of all such notifications (for gonorrhoea, syphilis and chlamydia) were for individuals aged between 15 and 24, with the older age group (20-24) showing the higher proportion of cases. Good regional data is not available, but 1989 Aboriginal STD notifications in South Australia show that the majority of notifications (118) were from a remote area health service and country general practitioners.

Several Aboriginal health services (for example, the Aboriginal Health Organisation in South Australia, and Broome Regional Aboriginal Medical Service in Western Australia) report that there has been a notable drop in STD notifications, which they believe is associated with condom use as a result of AIDS campaigns. For example, BRAMS started distributing condoms in conjunction with intensive education as part of its AIDS campaign in 1987, and in an attempt to assess the level of use of condoms has closely monitored gonorrhoea cases and the number of condoms distributed in a known population. The findings are startling. From a total of 240 cases of this STD in 1986, the number of notifications dropped to 112 in 1989 and

in 1990 was very low (Dr Ian Wronski, pers. comm.).

Two mobility factors can adversely affect the treatment of STDs (as well as a host of other ailments). The first of these is the mobility and short-term tenure of health staff; the second is the mobility of Aboriginal people themselves. Aboriginal communities, particularly in remote bush regions, often find it difficult to attract to their clinics health staff who are prepared to stay for the long term; many end up relying on agency staff who are not only short-term but often city based, and inexperienced in Aboriginal health. Nursing staff must contend with difficult working conditions, isolation, and the responsibility of dealing with serious injury and illness without a physician on hand, and they may experience difficult encounters with adults intoxicated with alcohol, and children high on petrol. To some extent these locational problems are diminished in rural towns, where there may be a base hospital, together with a wider social network and support system.

The constant turnover of staff at a local level makes it very difficult to maintain treatment and knowledgeable contact with STD patients. This is a social factor over which control is very difficult. There is a high level of mobility among Aboriginal people too, both within local clusterings of communities and further afield. This is certainly the case in the remote settlements, and frequently in rural and urban populations as well. Movement between settlements (in the bush) has received some research attention (Hamilton 1987; Young & Doohan 1989) which highlights the purposive nature of Aboriginal mobility. Such research is important because of the lingering suspicion among many European Australians that Aborigines "go walkabout" for no apparent reason. As Hamilton writes,

[this "nomadism"] fails to conform to non-Aboriginal expectations about work patterns and predictability of residence...expectations which link together stability of residence, "civilisation", productive labour, and a life-style focused on the maintenance of a certain kind of domestic environment (Hamilton 1987, p.47).

Modern medicine depends to a large extent on compliant patients: people who take their tablets as ordered, and stay in hospital for the required period. Health professionals often feel a sense of frustration – which can potentially affect relationships with Aboriginal patients – when a patient who is being carefully monitored, or is on a course of treatment disappears without warning. While the Aboriginal-controlled health services usually encompass a cluster of related communities, and thus hold medical records on everyone in the region, keeping track of people always entails extra work and requires patience. Non-compliance with courses of medication is frequently mentioned as a factor in the continuing ill-health of some individuals.

Sexually transmitted diseases and other intensely personal ailments are often the source of acute

embarrassment on the part of Aboriginal people – as indeed they would be for most people. This embarrassment, and shyness, often inhibit an individual from seeking medical help. One Aboriginal health service operating a clinic at a remote Western Australian community reported that young women were more likely to present with STDs than young men, but that men are willing to attend for screening and treatment when specifically requested to do so. The sister in charge observed that while there are educational videos on AIDS, there is a need for culturally appropriate videos for men and women (separately) on the more common STDs (syphilis, gonorrhoea, donovanosis and chlamydia). In her experience, while young people find talking about sex (and pregnancy) “too embarrassing” they are willing to watch videos about these topics. Several staff of Aboriginal health services observed that it was common for adolescents to come to the clinic with vague or minor symptoms (such as a headache) when they have really come to talk about an STD problem. Some will wait around until everyone else has gone home before approaching the health professional on duty to discuss an STD.

Confidentiality is another social issue which has a particular bearing on the treatment and prevention of STDs, although it has ramifications for a variety of health matters which require answers to probing personal questions. Fears about confidentiality are particularly pronounced in the relatively “closed” environments of remote communities and rural towns. In these locations, it is local Aboriginal people who take up the positions of health workers at community clinics – indeed, it has been pointed out that the political rhetoric of community control insists that local Aborigines are the best people to work in Aboriginal communities (Sibthorpe 1988). In reality, the presence of locals can serve to dissuade certain individuals from using the health service, for fear that information about them would be disseminated by staff members. This factor has been documented by Sibthorpe, who worked in a northern New South Wales rural town, and was drawn to my attention frequently when I was compiling data for this study. In her New South Wales study, Sibthorpe notes that professional “distance” was made difficult, if not impossible, by reason of the social knowledge which linked, but also constrained, the provider in relation to his or her client. Furthermore, she adds,

it was “un-Aboriginal” to use probing personal questions of the type necessary to elicit information about health and personal habits. This caused both parties to feel “shame”...from this perspective Aborigines at times seemed to be the least qualified to provide services to people in their own communities, particularly where the service involves the exchange of information which was socially potentially damaging (Sibthorpe 1988, p.303).

Urban Aborigines have at their disposal a wider range of health services, services which employ staff outside patients’ friendship or kin networks. Urban Aboriginal

controlled health centres service much larger populations. Confidentiality fears are very real in close-knit communities; individuals may have to name sexual contacts which can reveal unsanctioned or extra-marital affairs and precipitate conflict and jealousy. Much violence in remote communities is associated with “jealous fights”, and the disputes can spread to involve family members on both sides. On a positive note, however, contacts are tracked down more easily within the Aboriginal population (in some regions at least) because of community-based health centres and the almost universal use of the public hospital system. European Australians, on the other hand, are greater users of private hospitals and GPs which makes follow-up much more difficult (Dr John Chuah, Royal Darwin Hospital, pers. comm.)

AIDS: prevalence and education

There is clear evidence of HIV infection in some Aboriginal and Islander communities – including remote, rural and urban ones – and there have been some deaths from AIDS (Department of Community Services & Health 1989). However prevalence data is patchy and many communities are concerned that revealing data will result in discrimination.

A national working panel on Aborigines, Torres Strait Islanders and AIDS reported that the use of condoms is the most realistic strategy for the prevention of HIV infection for the majority of young people not yet in stable relationships (ibid., p.26). The use of condoms in Aboriginal communities has been backed by extensive education. Condoms are available free from Aboriginal health services (several place free supplies out on their counters) and dispensing machines are also being installed where desired. The AIDS field worker in the SA Aboriginal Health Organisation gave out 3000 condoms at an Aboriginal football carnival in a country town, and boxes of condoms were left in the toilets for people to take. He is, however, the only AIDS worker with the Aboriginal Health Organisation who is working specifically with young people. He goes to functions such as concerts and football matches, but has found that kids are ashamed to be involved in formal “programs”. He is forced to take a low-key individual approach on issues such as sharing needles. Talks to schools involve gaining the approval of the principal and parents initially. He stressed the need for a female field officer to work with Aboriginal girls, saying that overall girls seemed to be more receptive to information about AIDS, and willingly take condoms.

This low-key and indirect approach appears to be essential, especially for Aboriginal people living in rural and remote communities. One man from a South Australian Aboriginal community took supplies of condoms from Adelaide back to his community, saying

that people were too shy to purchase them in the shops in country towns such as Murray Bridge and Meningie.

Aboriginal health services across the country have been crucial in the formulation of appropriate strategies. The Kimberley region Aboriginal health services in Western Australia were instrumental in turning the attention of Aboriginal people to AIDS, beginning their program in 1986. By 1987 they had made two videos on AIDS in different languages. Very early on they produced a Phantom comic strip pamphlet (“Why Wanda said ‘no’ in Broome”) on condom use, knowing that Phantom comics were very popular among young people in the surrounding communities. Other work in the region involved discussions with adult Law men on the nature of certain ceremonial practices. AIDS is discussed as a type of “infectious cancer”. The Phantom figure so popular among young people was also used in a poster produced by Aboriginal health workers in Townsville, featuring an Aboriginal “Condoman”, which has now been widely circulated. The Condoman figure holds a pack of condoms, saying: “Don’t be shame, be game. Use Frenchies.” Both the Broome and Townsville images work to undermine the shyness and “shame” (embarrassment) which is known to be a major barrier to educating and communicating with young Aboriginal people about sexual matters.

Numerous approaches are being taken to AIDS prevention and education for Aboriginal people throughout the country, and it is not possible to discuss them all in detail. Many regions use posters as a means of raising awareness, and these are tailored for local relevance. In many cases, these reveal the differences between urban and rural preoccupations. For example, the Ceduna-Koonibba Aboriginal Health Service on the far west coast of South Australia produced a series of posters featuring local Aborigines playing football and basketball, together with the message “AIDS is a killer, there is no cure, so play it safe”; however, there was no indication of *how* to play it safe. The North Coast Aboriginal Health Team (NSW), on the other hand, produced a poster featuring an Aboriginal youth offering another a syringe. The offer is refused: “No way bud – that’s not Koorie culture. Sharing needles spreads AIDS.” In Central Australia, posters showing the spread of AIDS have been made from dot paintings (notably those by Andrew Spencer Japaljarri of the Healthy Aboriginal Life Team), using the symbolism familiar to desert Aborigines. This and other strategies are documented in a special edition of the National Aids Bulletin (1989). Other consciousness-raising approaches include the production of a cassette of Aboriginal singers and bands singing songs about AIDS (“AIDS! How could I know”), distributed by the Central Australian Aboriginal Media Association. These cassette tapes have found their way into many remote community stores, alongside other rock music. An Aboriginal band (Red Buck) toured South Australian communities in 1989, singing songs with lyrics promoting safe sex, and accompanied by other educational media materials such as videos. The Aboriginal

medical service in Redfern, Sydney, produced simple handbooks emphasising that protection against AIDS is a way of “protecting your RACE and your CULTURE”.

On the other hand, the Northern Territory’s communicable diseases centre has an Aboriginal program which explicitly avoids the use of posters and pamphlets. Its program is focused on direct contact with different target groups in each Aboriginal community. Using a simple memory device – the hand with five fingers – teams of educators share the AIDS story, which has five parts. The five key points in the program are: the way in which AIDS does not spread; the way AIDS can spread; prevention and protection using condoms; caring for someone who may be infected; and sharing the story with others (Hudson 1989; Hendy & Power n.d.). Asked about the specificity of the NT program, Bernadette Hudson, the Aboriginal coordinator of the program replied:

What we’ve found is that the program that we deliver when we go out to the remote communities, we can deliver the same program to people in town and we have done that. As we say, the program is a people’s program and that’s the way it’s done so when we’ve been out bush and even though it’s been in an Aboriginal community, you have a lot of non-Aboriginal people there... and we don’t say, this is for an Aboriginal would you please leave. No, they are included in it, as we say AIDS doesn’t discriminate, so we don’t either (Hudson 1989, p.15).

In April 1989 the National AIDS Bulletin featured the programs under way for Aborigines, and this special edition provides a good overview of what has been taking place across the country.

Social issues and AIDS

The use of alcohol and drugs is closely connected with sexual behaviour and practices, and is therefore implicated in the prevalence of sexually transmitted diseases and AIDS. Alcohol use is often an important aspect of those sexual liaisons which are unsanctioned within communities; in some regions petrol sniffing is also associated with particular sexual practices; and in urban areas Aboriginal people have access to the illegal drugs, some of which are administered intravenously. Sexual mores are constantly changing within Aboriginal groups, just as they are in the dominant society. While it would be foolish to suggest that sexuality in the past always conformed to the customary rules and ideals that were current in Aboriginal groups of the era, it is clear that there have been changes in the past few decades which do affect sexuality. Not the least of these is the extended period of unmarried “maidenhood” among traditionally-oriented people in Arnhem Land, NT. As Burbank observed, adolescence is perceived as the time of burgeoning sexuality for young girls:

According to the ideal of the past, by this time a girl should be securely ensconced in her marital household with a man she had been promised to from infancy if not before she was born. In 1981, however, this ideal was realised by no one (Burbank 1988, p.102).

Coeducational schooling for Aboriginal children has wrought major changes, for in the days before mission settlements and government schools the opportunities for the two sexes to interact were minimised. A painting and accompanying story by a Pitjantjatjara artist illustrates this:

Single women and young women lived separately as well, along with young girls. They never visited the young fella's camp. They lived separately with their mothers...Nowadays young fellas and young women mix together sniffing petrol and drinking grog. They were separate, and now they carry on together sniffing (HALT 1991, p.28).

Burbank also writes of the peer group, which probably did not exist in pre-mission times, and the pressures and support for dating which emanate from it. These changed, and still changing, elements have affected sexual behaviour, as have a host of other factors such as increased mobility, visits to urban areas, the prolonged absences of spouses attending courses or committee meetings and, undoubtedly the influence of television, magazines and videos.

Among other social factors which affect exposure to HIV and its transmission is the high imprisonment rate of Aborigines (especially in urban areas), which places them at risk of exposure in jail to unprotected homosexual practices or intravenous drug use. There are in addition certain cultural practices associated with male ceremonies that involve scarring and wounding which will not be discussed here.

Pelvic inflammatory disease

Pelvic Inflammatory Disease (PID) is a syndrome caused by a number of different organisms. PID is a major cause of infertility in the Aboriginal and non-Aboriginal populations. It is extremely common but very difficult to recognise, which makes it hard to collect prevalence figures. Women in the 15-24 years age group are at high risk of developing PID, and it appears that the incidence of PID among adolescents is rising in the general population (McCull n.d.). Aboriginal health services (for example Yalata Maralinga [remote] and Ceduna [rural] in South Australia) expressed concern that PID appears to be causing infertility among young women in their twenties. At Yalata (population c.350), medical files showed that while between 1980 and 1984 there were 41 births in the community, between 1985 and 1989 there were only 24. It is impossible to say what are the precise causes of this lower birthrate, but PID was causing concern among

health staff there. A study of Aboriginal fertility in Central Australia shows that the Aboriginal fertility rate has declined steadily since 1971, and that this decline is occurring in all states and territories and in both rural and urban areas (Khalidi 1989). This study, however, makes no reference to the possible association between PID and lowered fertility, the overall view being that fertility has declined as young women stay on at school longer, and with greater employment.

Acute PID can be treated with high doses of antibiotics for a minimum of two weeks, but for a variety of reasons treatment is difficult in some Aboriginal populations, particularly remote communities. There is a high rate of failure to complete the courses of treatment and chronic conditions are treated many times with unfinished courses of antibiotics. People do not stay in hospital long enough; they are discharged with antibiotics to finish off but fail to do so, and then are exposed to the same organisms. This "non compliance" (as it is referred to by health professionals) affects all medical complaints requiring consistent medication, not just PID. It is an issue that requires more research attention by medical anthropologists. Like most people, Aboriginal people are casual about finishing off courses of antibiotics once they begin to feel better. We need to know more about perceptions of medication, particularly among tradition-oriented people.

Childbirth among adolescent girls

Several states have compiled information on the the high incidence of youthful pregnancy among Aboriginal women. While there is still uncertainty and some disagreement among physicians about the relative risks or benefits of youthful childbearing, many researchers are concerned about it. Most are agreed that the height, weight and nutritional status of the mother are of significance to her health, as are weight gain during pregnancy, smoking and alcohol intake. While it is important not to impose different (or in this case, dominant) values on issues such as youthful childbirth, the fact remains that in any society pregnancy for a woman under 16, constitutes a high risk pregnancy, as the pelvis is not fully developed in such young women. However, Aboriginal mothers have been shown to be more at risk in virtually every age group (Gray & Khalidi 1990).

In 1986 the Annual Report of the Perinatal and Infant Mortality Committee of Western Australia noted that births to teenage mothers accounted for 35.4% of total births among Aboriginal women, compared with only 5.5% among non-Aboriginal women. Aboriginal babies were an average of 200g lighter than non-Aboriginal babies, and 13% (as opposed to 6% non-Aboriginal babies)

were less than 2500g in birthweight (Western Australia Department of Health 1986, p.23; see also Appendix 2).

In South Australia an analysis of Aboriginal births between 1981 and 1986 found that Aboriginal women have a fertility rate in the teenage years which is approximately five times the state average. Twenty-nine per cent of Aboriginal births occur among teenage women, compared with 6.4% for the state as a whole (SA Health Commission 1988). The South Australian Pregnancy Outcome Unit documents similar trends. In 1987, for example, 21.3% of all Aboriginal mothers were teenagers, while only 2.3% of all Aboriginal mothers were over 35. This is reversed, for example, in the Asian population where there were few teenage and a larger proportion (15.2%) of older mothers (Chan et al.1989). In 1988 there were 93 births to Aboriginal mothers aged between 15 and 19, which constituted 23% of all the state's Aboriginal births in that year. In contrast, only 5.6% of non-Aboriginal mothers were teenagers. The Indian Health Service in the US reports a similar situation: for the Indian population, 42% of mothers were under age 20 when they had their first child. This compared with 24% for the US all races population (US Department of Health and Human Services 1988, p.19).

In 1983 the SA Health Commission produced a report on teenage pregnancies in the state which, among other things, noted differences according to race and social status between mothers under 16 and mothers aged between 17 and 19. These differences are important because it is well documented that there is a variance between the outcome of pregnancy for teenagers aged 16 and younger, and for those who are 17 to 19 years old (Connon & Macharper 1986, p.6). The younger (under 16) age group includes high proportions of Aboriginal women; women who were unmarried and did not have a de facto relationship; and unsupported women (i.e. living alone without income support from partner or parents) (ibid., p.3).

This general trend is also reinforced by data compiled from one Adelaide hospital (Queen Elizabeth) over one year (1987). Examining the casenotes of 63 Aboriginal obstetric cases, it was found that 23% of the mothers were aged between 15 and 19 and that 56% of all the Aboriginal mothers were said to be single. Most of these women were residents in urban Adelaide, although 13% had come from country areas. Of the 63 women studied, a majority (79%) had had their first pregnancy between the ages of 15 and 19 (one mother was younger than 15). Twenty-four of the 63 women had no more than four antenatal visits, while 30 had more than seven. Of medical complications coming to light during antenatal visits, the most frequent was anaemia (although renal problems, diabetes and alcohol use were also noted). Less than half the Aboriginal women in this survey were breastfeeding on discharge (Pridmore 1989).

The files of the Yalata Maralinga Health Service (remote South Australia) showed that in the 10 years 1980 to 1989

there were 65 births: one mother was aged 14; 20 were aged between 15 and 19; 20 were aged between 20 and 24 and the remainder were over 25. Many of the teenage Aboriginal mothers seen by doctors in Ceduna (rural South Australia) are poorly nourished – some are anaemic, for example – and perinatal complications are common. These young women come mostly from a remote, tradition oriented community; some come from the town itself. A case in point was a 16-year-old young woman from the remote community, who had had a stillborn child nine months earlier. She had a past history of rheumatic fever and frequent infections, had received no antenatal care and experienced another stillbirth with her second pregnancy.

Aboriginal people themselves realise that pregnancy is problematic for very young women. Carter and colleagues spoke to Central Australian women who thought that teenage mothers were vulnerable, and consequently required all the services provided by European hospitals:

Nowadays these young ones with skinny hips have babies in the Alice Springs Hospital...When they have problems maybe fifteen to sixteen maybe they should have it the whitefella way (Carter et al. 1987, p.15).

These discussions were in the context of establishing an Aboriginal birthing centre in Alice Springs in order to avoid the alienation and awkwardness experienced by women from bush communities in European-style hospital deliveries.

Other complications in pregnancy seem to affect Aboriginal women in general. In South Australia, the Health Commission reports that more Aboriginal than non-Aboriginal women were found to have medical complications in pregnancy. These rates were higher in Adelaide city than in rural areas, but it was thought that major metropolitan hospitals had higher rates of detection of medical conditions than others (SA Health Commission 1988). Foetal Alcohol Syndrome (FAS), which is of grave concern in the US and Canada among native people (Dorris 1989), appears not to have had a major impact as yet among Aboriginal people. For example, the Aboriginal medical service Pika Wiya in Port Augusta (rural South Australia) has noted three cases of FAS out of 119 Aboriginal pregnancies on its books. Health service personnel reported that the message about not drinking alcohol during pregnancy has been made available, but there is no indication of the extent to which Aboriginal women believe and internalise this knowledge, and then act upon it.

Social and cultural issues in youthful childbirth

According to an analysis of perinatal survival (that is, the avoidance of stillbirth and death in the period immediately

after birth) in the Northern Territory, the most crucial variable affecting at risk births was found to be the level of antenatal care (Gray & Khalidi 1990). The authors examined a number of variables for both Aboriginal and non-Aboriginal mothers (such as age, marital status, birth intervals, and previous pregnancies) and concluded:

Easily the most striking result of the modelling is the massively significant role that is played by antenatal attendances in determining the risk for the infant. For women who have fewer than six antenatal attendances...about 50% of them will have at-risk births...All the other effects are very small by comparison (ibid., p.53).

This was the case whether the babies were Aboriginal or non-Aboriginal, and the authors thus conclude that the higher risk was not associated with ethnicity per se. Other research reports mention antenatal care as being of great importance, while also pointing out that Aboriginal mothers either underuse existing facilities, or are less well serviced in this area. The author of the Queen Elizabeth Hospital survey (provided at the request of the Aboriginal Medical Service in Adelaide) draws attention to the social milieu which influences the health of both mother and baby, and points out that poor attendance at antenatal and postnatal clinics reduces the opportunity to discuss contraception and health care.

All the Aboriginal health services (urban, rural and remote) that I visited in South Australia were concerned about difficulties in providing timely antenatal care for Aboriginal women, particularly for very young women. Whereas a normal general practitioner prefers to begin antenatal contact with a woman before 20 weeks, many Aboriginal women are first seen only eight to 12 weeks before term. Good antenatal care is undoubtedly associated with an improved outcome of pregnancy, as indicated by low rates of perinatal mortality, low birthweight and congenital abnormalities (Connon & Macharper 1986, p.11). Between 1981 and 1986 in South Australia, approximately 40% of Aboriginal mothers reported fewer than seven visits during their present pregnancy. Although the low number of antenatal visits was more notable among rural Aboriginal women, the SA Health Commission reported that "it should be of concern that even in the metropolitan area nearly 40% of Aboriginal mothers were reported as poor attenders" (SA Health Commission 1988, p.5). Between 1981 and 1983 in South Australia, 88% of younger Aboriginal teenage mothers were deemed to have received inadequate antenatal care, as were 47% of older teenage mothers. Connon and Macharper observe that

although the number of Aboriginal teenagers in each group is small, there is a clear indication that a review of the access to and understanding of obstetric services for Aboriginal teenagers is necessary (1986, p.21).

Gray and Khalidi (1990, p.56) urge that efforts to obtain adequate antenatal care for all Aboriginal women be redoubled. Once this much is recognised, they write, it will be possible to come to grips with the real issues of reticence about women's business that hinder Aboriginal women from seeking the assistance in health matters that they want.

Others, though, observe that it is not just adequate, but appropriate antenatal care which is needed. A physician from the Aboriginal Health Program in Queensland noted with dismay that Aboriginal women were being flown into Cairns from Cape York communities for ultrasound scans, when estimates of foetal growth can be achieved simply with a tape measure (quoted in Gray 1990a, p.60). He thought that Aboriginal women could be taught to conduct antenatal and under-fives clinics themselves using simple charts. The provision of appropriate antenatal care has become the focus of the Congress Alukura centre in Alice Springs (originally intended as a birthing centre for Aboriginal women). The preponderance of male physicians can also be an alienating factor, particularly when young pregnant Aboriginal women present at clinics. It is perhaps more difficult to attract women physicians to positions in isolated rural towns, and several Aboriginal health services in country areas made this observation. Urban Aborigines thus have a better chance of being able to see a female doctor.

If, as it appears, the poor level of antenatal care is strongly associated with social factors, rather than being solely a matter of service delivery, what are these social factors?

First, in remote areas in particular, Aboriginal mobility makes it difficult to maintain consistent antenatal consultations. Second, young mothers were said to be poor attenders at community health centres, in part because many wish to deny that they are pregnant at all. This may, in turn, be partly because their pregnancy has taken place in the context of an un sanctioned relationship, or because the mother-to-be is still a schoolgirl. Associated with this low-key approach to being pregnant, is the fact that many young women in remote communities know that they can pass the responsibility for care of the child to a grandmother or other older female relative. Third, pregnancy and all its associated issues are extremely sensitive matters for many Aboriginal women, particularly those from remote and rural areas. Many of these young women simply do not discuss their pregnancies openly with non-Aboriginal (and even Aboriginal) clinic staff. An Aboriginal health worker from a remote community observed:

They don't usually tell me if they're pregnant. I see them if they are fat. I tell them to see sister so that they can have check-up and tablets...because she might have early baby like X...They get shame, and they don't tell us. Others tell their mothers. That's all. They don't tell me (Carter et al. 1987, p.15).

For Central Australian women from remote communities as well as from Alice Springs, “being found” (conception) and “coming up” (antenatal care) are regarded as private matters. However we do know that pregnancy was and is acknowledged and recognised among the immediate family, for in many regions of the country food prohibitions are applied to pregnant women (Carter et al. 1987, p.8). While these may not always, or ever, be adhered to today, the food taboos are nevertheless held up as ideals of behaviour. As a general rule, large or spikey animals are prohibited for pregnant women as they are deemed to make birth difficult; precise prohibitions on species exist in different regions.

Young mothers

Having established that youthful pregnancies (especially those under the age of 16) are often associated with complications such as prematurity and infant mortality, we must address the question of why it is that teenage motherhood is so common among Aboriginal women. Pridmore (1989) in South Australia comments that his research findings suggest that many of the pregnancies “just happen” rather than being planned; but it is not clear how he came to this conclusion. In contrast, interviews with very young Aboriginal mothers in Bourke (rural New South Wales) found that “their pregnancies were not due to lack of contraceptive knowledge, but were closely associated with premature school leaving and poor life opportunities and expectations” (Harris 1988, p.185). These factors are probably particularly important in remote and rural populations. There is simply no point staying on at school beyond the age of 15 if there is no impetus, reason, or social pressure to do so, and if job opportunities are minimal. Khalidi’s study of fertility among Aborigines in Central Australia concluded that age at leaving school was a determinant of fertility:

...mothers who did not go to school or spent less time in school have more children than those who left school at later ages, who delayed having children or started working outside the home because of their qualifications related to their length of schooling (Khalidi 1989, p.16).

Having a child during these youthful years provides young women with interest, someone to care for, and a new social position and network within their communities. Childbearing to some extent protects young women from over-involvement in drug and alcohol use. In a Northern Territory remote community, I found that of 21 young women who had been petrol sniffers before the birth of a child, 18 ceased the practice once they had had a child. A 19-year-old woman from the rural town of Walgett, New South Wales described her desire to have children:

Walgett is a boring place. There’s nothing to do but drink and steal...I have a baby now. I live with my boyfriend. I

planned to have a baby. Richard asked me would I have a baby to him...When I told Richard that I was pregnant he jumped with joy and he kissed me. When he got drunk he started to cry, he was really happy...I plan to have a girl and boy but if I have another girl I’m going to try till I get a boy so I’d probably have five or six children. I am not on the pill because I love children and I don’t care if I fall pregnant or not because I know that the man I got will always love me and my children...My boyfriend is too busy to help me look after Tiffany so I look after her all by myself. I don’t mind. You make babies, you’ve got to look after them yourself. Me and Richard get about \$300.00 a week because he’s a good worker...I spend the money on food, baby clothes and cards. If I got any money over after doing the shopping I buy dog food for my dog and pay the rent and light bill (Muriel, in Zagar 1990, pp.27-9).

Although under considerable strain in many cases, the so-called “extended family”, particularly grandmothers, may take over the burden of the responsibility of caring for the new children, particularly if the mother is a teenager. In some remote communities I have seen grandmothers take over full control of their grandchildren, while their daughters indulge in whatever activities they choose. Supporting mothers receive some financial benefits and the promise of this additional income, together with the knowledge that older female relatives will care for a child, make childbearing an attractive proposition. But, taken with the existing responsibilities often borne by older women (for example, caring for elderly spouses, disabled relatives, and alcohol-abusing sons, or fostering problem children), the additional burden of responsibility for grandchildren may lead to what can be termed the “stressed-out granny syndrome”. Anthropologists working in the field have noted that large numbers of small children sometimes place inordinate burdens on caregivers, and on the communities as a whole (Reid 1979; McKnight 1986). Reid comments:

Although Aboriginal children are loved and indulged, Aboriginal women rarely have the financial, material or physical resources to care for a large number of young children. If they are alone or unsupported their task is doubly burdensome...As members of a large family, children may not receive the attention and discipline which would have been an integral part of traditional life, and turn to vandalism, theft, drinking or petrol sniffing (Reid 1979, pp.8-9).

McKnight, writing of a remote island community in Queensland, adds further observations:

Many young people had produced children without getting married. In itself this was no bad thing, but they were not all taking responsibility for their offspring. A heavy burden was falling on grandmothers who not only had to care for their own children but also their grandchildren...Sometimes there were quarrels between grandparents and parents over care of the children (McKnight 1986, p.153).

A variety of other social and cultural factors have a bearing on pregnancy, childbirth and the health prospects of young children, and while firm data is hard to find, it appears that in many cases young mothers are particularly vulnerable to the negative outcomes of such factors. In his survey of an Adelaide hospital, Pridmore comments:

The high incidence of "life style" antenatal problems i.e. anaemia (probably nutritional), heavy alcohol use, syphilis, diabetes...all suggest a need for health education, probably at an early age. The high incidence of "large for dates" babies suggests that diabetes may be more common than the recorded 3/61. Routine screening for diabetes is now undertaken, but it is not certain how many Aborigines attend for this...The low incidence of breastfeeding and postnatal attendance again suggests the need for more education (Pridmore 1989, p.5).

While the infant mortality rate has improved in the Aboriginal population, there has been no change over a period of 20 or 30 years in the percentage of low birthweight infants (Dugdale et al.1990, p.21). Epidemiological and clinical studies emphasise that the birthweight of an infant is a major determinant of its survival, and the aggregated figures are indicators of the general health of the community (ibid.). These authors point out that low birthweight is more common among Aboriginal infants in remote regions, and that weights move closer to general Australian levels among Aborigines living in urban and near-urban communities. Low birthweight is associated with short gestation, the poor physical development of the foetus and the poor physical condition of the mother, or a combination of these factors (Gray & Khalidi 1990, p.66). Social factors associated with low birthweight include unemployment and disordered family functioning, and these in turn are associated with Aboriginal social and economic disadvantage (Harris 1988, p.185). Several lifestyle factors appear to influence low birthweight in infants, and these include the mother's diet, alcohol consumption and cigarette smoking. To a large extent, these lifestyle behaviours are a matter of personal choice and of priorities. Dugdale and colleagues comment:

It is unlikely that women of childbearing age are ignorant of the effects of cigarettes and alcohol on their health and the well-being of their foetus. Yet even those who have been exposed repeatedly to this information may still smoke and drink during pregnancy. These women use tobacco and alcohol to meet social goals or to satisfy desires which have greater immediacy for them than do potential risks to them or to their infants...By their behaviour these young women demonstrate in the most practical way that they have different priorities to the health professionals. Some may justify smoking as a way of reducing the birthweight of the infant to make labour and delivery easier (Dugdale et al. 1990, p.22).

If, as they suggest, low birthweights among Aboriginal

infants are less prevalent in urban and semi-urban areas, it is possible that Aboriginal women in these populations are taking more heed of health promotion messages, and perhaps make better use of antenatal clinics which emphasise the need for adequate nutrition and the dangers of smoking and drinking during pregnancy. We could hypothesise that extremely young pregnant women (because they are still, in a sense, "children" themselves) are less likely to heed such advice. As with everyone else, the decision not to smoke or drink during pregnancy must finally come from the individual herself.

Maternal education

Recent work undertaken in several developing countries stresses the role of the mother in the health care of children. Specifically, this research shows that maternal education has a strong influence on the survival of children. Research findings from South America and from countries such as Kenya, Ghana, and India are discussed by Cleland and Van Ginneken (1989), who write:

There are numerous obvious reasons why educated mothers should make more use of modern health facilities, both for preventive and curative purposes. Education is likely to impart a greater responsiveness to novel ideas and services, a greater identification with the outside world, more social confidence in handling officials and perhaps an enhanced ability and willingness to travel outside the home community in search of services (Cleland & Van Ginneken 1989, p.86).

These researchers believe that educated mothers not only seek out medical care for themselves and their children, they do so with greater timeliness (crucially important in many childhood illnesses), and adhere to advice with greater persistence. Poor and uneducated people in third-world countries often receive "little consideration from government officials"; a study in Ibadan found that literate patients received better treatment in government hospitals than did illiterate people, and received more specific diagnoses (ibid.). Apart from actually making use of health services, in good time, mothers with some schooling have a better comprehension of health requirements and messages than uneducated mothers, and this affects the nature of beliefs about disease causation and treatment. It is not known whether this greater flexibility arises as a direct consequence of the school curricula (that is, whether people receive specific health education), or whether it comes about indirectly, because schooling raises awareness of health education along with many other issues.

The most interesting aspect of this research is that the maternal education factor was by far the strongest influence on child survival, irrespective of the proximity or effectiveness of health care provision. The researchers

analysed countries with huge regional disparities in the provision of health care services, and found that the effect of maternal education on the survival of children was independent of these differences. To my knowledge, no similar research has been done in Australia, but we can hypothesise that these findings would be applicable in this country, particularly in remote, traditionally oriented communities. The level of education does not have to be high; even the completion of primary education is likely to impart "sufficient understanding of health matters to guide maternal behaviour later in life" (*ibid.*, p.90). An outline of these research findings is reported in NCEPH (1991).

We can conclude from these findings that education is by no means irrelevant to health status. We know that the longer girls stay at school the fewer children they have and that this also influences the age at which a young woman has her first child. We know that childbirth below the age of 16 years is risky for both mother and child, and may have long-term effects on the health of the child. The evidence from developing countries highlights the influence of the mother's education on the alacrity with which she seeks medical help, her confidence in dealing with health professionals, and the degree to which she accepts natural, rather than supernatural, notions of disease causation.

Ear disease: prevalence and social influences

Chronic ear disease is a major problem among Aboriginal children, with otitis media, deafness and perforated eardrums occurring with alarming frequency (Sunderman & Dyer 1984; Thomson & Merrifield 1988, pp.195-204). Ear disease of this kind is a form of respiratory disease (along with chronic nasal discharge, colds, bronchitis and pneumonia). While some researchers associate the inflammation of the middle ear known as otitis media with poor socioeconomic status and living in a desert environment (Sunderman & Dyer 1984), others admit that the aetiology of the disease is unknown and that no specific treatment has yet provided long-term effectiveness (Dr Terry Nienhuys, pers. comm.). The peak incidence of the disease is in young children aged from two or three onwards in both sexes; the National Trachoma and Eye Health Program in the 1970s found that the prevalence fell slowly in all age groups until the 18 and 19 age group (Royal Australian College of Ophthalmologists 1980). By this age, the ears have usually dried, and healed. The relevance of ear disease for this study, then, is the impact of earlier ear disease and subsequent hearing loss on adolescents and young adults. For example, out of 100 adult Aboriginal students at Batchelor College in the Northern Territory (an adult education and teacher training institution), at least 20 show hearing loss (Dr

Terry Nienhuys, pers. comm.). In brief, middle ear infections occur usually in young children; treatment is not easy, although access to the services of clinics diminishes the prevalence of the disease and antibiotics have some impact. Aboriginal medical services attempt to teach mothers to swab out their children's ears; in Broome they are taught to syringe the ears. But it is not known whether there is a lowered hearing deficit as a result of these interventions. A "glue ear" in which the eardrum has not burst, but is infected, is more common among urban populations; a "runny ear" shows that the eardrum has perforated, and is more common in remote, traditionally oriented communities (Dr Ian Wronski, pers. comm.). Both cause hearing deficits. Recurrent infections permanently damage the ear.

Hearing loss has multiple ramifications for young Aborigines, including its most significant effect which is on education, both in the classroom and in the otherwise rich informal and formal out-of-school environment in which learning occurs. The children with the most severe hearing loss may not attend school at all, so negative has been their experience. Children do not like to admit that they cannot hear properly, and it is likely that many teachers (particularly inexperienced teachers who are in an Aboriginal school for the first time) erroneously conclude that certain children are slow learners when in fact they have hearing loss. Hearing aids are strongly disliked by Aboriginal children (Dr Terry Nienhuys; Dr Ian Wronski pers. comm.). Aids are associated with acute embarrassment and shame; they brand the wearer as an invalid. Like children everywhere, Aboriginal children can tease mercilessly any child who is different. Smaller, smarter hearing aids are badly needed for these children.

Hearing loss has a compounding effect on the existing difficulties associated with schooling for Aboriginal children, particularly in remote areas where schools struggle to keep consistent attendance. For teenagers, especially boys, resisting school (in various covert and overt ways) is a way of life (as indeed it is in non-Aboriginal contexts too). The disabilities associated with poor hearing exacerbate school refusal and truancy. In addition, formal schooling relies on learning by listening and verbalisation rather than by doing and observation (Harris, 1984). Harris writes, "formal schooling uses language as the major means of transmitting knowledge, and...teaching and learning occur out-of-context" (Harris 1984, p.20). In contrast, while there may be a verbal component in informal "traditional" learning, it relies heavily on demonstration, observation and imitation. It takes place in context, and often over a long period of time, rather than being "programmed" in specific blocks of time. Hearing loss has an impact on both types of learning. Its effects may be particularly acute among traditionally oriented people when the time comes for young people to learn songs and myths associated with their country. These are learned by constant exposure and repetition, attendance at ceremony, and in structured

encounters with mature adults. Harris observed in north-east Arnhem Land that songs associated with ceremonies are learned by rote and as a result of constant repetition (ibid., p.83). These songs can be composed of 60 or more verses which must be learned by heart, often in an Aboriginal language unknown to the learner. The novice may also have to learn the correct rhythms to beat with hands or clap-sticks. In a booklet produced by the Northern Territory Aboriginal Hearing Program, an Aboriginal health worker alerts Aboriginal teachers to the problem:

The kid with pus in his ears can't listen to his mum. He can't listen to what the teacher is saying and he can't learn properly. He maybe can't hear corroboree, law, meetings. He maybe can't hear the old men talk. If he can't hear the culture he won't be able to teach his kids and the other kids might tease him. These kids need to have their ears cleaned every day when their ears are full of pus. They need to be taken to the clinic when they have sore ears. The clinic can look into the ears and see what is wrong...The clinic can then tell the teacher if the child will have trouble in the classroom (Friday, n.d.).

Apart from the cultural and educational deficits which may be the result of difficulties in acquiring knowledge through verbal instruction, the social impact of hearing loss can be devastating. Young people who want to be like their peers can suffer from social ostracism if they are "different"; their participation in the social world is affected by an inability to catch jokes, or pick up the latest terminology. These subtle and not-so-subtle experiences can mean that self-image is low and confidence is lacking (Dr Terry Nienhuys, pers. comm.).

Given that the aetiology of the disease is still unclear, it is hard to pinpoint with any certainty the social or environmental factors associated with it. In support of the suggestion that chronic otitis media is associated with poor socioeconomic circumstances and desert habitat (Sunderman & Dyer 1984, p.710), it has been found that prevalence rates for otitis are lower among Torres Strait Islander children than they are among desert Aborigines (Anderson 1988, p.80).

Significantly though, a study of Aboriginal children in Redfern, Sydney by Nienhuys, Sherwood and Bush (in press) found that there were *similarities* between the prevalence of ear disease among urban Aboriginal children living in Sydney, and Aboriginal children living in the Kimberleys, Western Australia. The prevalence of perforated eardrums was also similar in the two populations, who are living in very different environmental and social circumstances. Data from Victoria shows that 19.8% of Koorie children showed otitis in one or both ears (Anderson 1988, p.80). While details are not provided, it is likely that these children are living in more clement rural or semi-urban environments than children from the bush. In a study of urban Aboriginal children (probably in Darwin), Evans and

Powers (1989, p.72) note that no children in the 10 to 16 year age group were recorded with otitis media, but that 34% of the children in this age group had at least one perforated ear drum.

In Northern Canada, different prevalence rates among Cree (Indian) and Inuit ("Eskimo") people sharing the same physical environment appear to point to lifestyle factors as having an influence (Nienhuys et al. in press). Despite uncertainty about the causal factors in otitis media, measures such as improvements in housing, hygiene and nutrition would undoubtedly help. Socioeconomic status, living conditions and the presence of swimming facilities were all found to be significant factors influencing the prevalence of otitis media by Hudson and Rockett (1984). These researchers found that the prevalence of otitis was reduced by 40% where there was a swimming hole, pool or access to the ocean. They caution that the exact nature of the swimming facilities could be important, with the possibility that ear disease could be more likely in areas where there was a water hole (because of the smaller body of water and perhaps greater crowding) rather than, say, the sea. On occasions, a remote community will provide a formal swimming pool, heavily chlorinated. This has occurred at Warburton, Western Australia, where profits from the store were instrumental in providing funds for a full-size, carefully supervised pool in a desert region.

At the moment, it appears that much ear disease remains undiagnosed until it is too late. Chronic suppurative otitis media probably arises from untreated acute otitis media (which in turn commonly complicates upper respiratory tract infection). The acute infection is underdiagnosed by doctors, sisters and health workers and often remains untreated (Peter Tait, pers. comm.). Thus both social and medical factors have a bearing on ear disease: the acceptance by community members that pussy ears are "normal" (because they are so common), and the underdiagnosis of the acute infection by health professionals.

Significant numbers of Aboriginal children in both remote and urban areas are in need of medical assistance and special educational interventions because of ear disease. In the Kimberley, more than 30% of children had some deafness (Sunderman & Dyer 1984, p.711).

Eye disease: prevalence and some solutions

Eye disease, primarily trachoma, has been endemic in Australia from at least the late eighteenth century, but among European Australians the disease has declined along with improvements in living conditions (Royal College of Ophthalmologists 1980). Among Aboriginal people, however, trachoma has continued to be a major cause of blindness. Trachoma results from infection with

Chlamydia trachomatis; repeated infection with this organism induces scarring, which in turn over many years leads eventually to blindness. The prevalence of the disease varies markedly between communities sharing similar climatic conditions, and between, for example, Top End Northern Territory coastal communities and arid Central Australian communities (Meredith et al. 1989). A review of the prevalence of the disease suggests that interventions should now be focused on communities in Central Australia, as they have not shown the same decline in the rate of trachoma as have northern coastal populations (ibid.). The southern mainland regions of Australia including Victoria, showed some of the lowest rates of trachoma (Anderson 1988, p.59).

With respect to the improvement in living conditions, further moves by remote groups to decentralise their communities may have unwanted consequences as far as trachoma is concerned. While decentralisation into smaller homeland or outstation groups is generally believed to provide Aboriginal people with access to bush foods, more control over daily life, and close contact with particular tracts of land, such moves may also deprive people of access to good water supplies, showers and fresh vegetables, and mean harsher overall living conditions. Professor Fred Hollows takes the view that the improvements in living conditions which would influence trachoma probably cannot take place in isolated and poorly resourced outstations (Fred Hollows, pers. comm.). Improvements in living conditions that would influence eye disease include housing with cement floors, the regular washing and shaking of dusty blankets, and the

control of dogs, flies and dust loadings. Hollows states baldly that "when a family is affected by trachoma, the home hygiene certainly is bad. Home hygiene requires the use of certain health 'hardware' " (Hollows 1989 p.183). However, the provision of European-style housing is not necessarily associated with improved personal hygiene. Hollows found that the structurally sound but grossly overcrowded European-type houses in Wilcannia (rural NSW) housed children with higher rates of follicular trachoma than did the ramshackle, spread-out humpies in the Aboriginal reserve of the same town (ibid.). As he says, communicating the effective use of home health "hardware" is a "hearts and minds task", already successfully accomplished in some areas by workers for "Homemakers" in remote NT and WA communities, and by other health workers and organisations such as Tangentyere Council in Alice Springs.

While blindness usually takes many years to occur as a result of repeated eye infections, the actions of the young are important in that their personal hygiene practices and living conditions can influence whether or not they will suffer blindness in years to come. An ophthalmologist in Adelaide, for example, suggests that daily washing of the face with half a cup of water would be sufficient to control trachoma (*Adelaide Advertiser*, 14/7/88, p.5). He notes that this preventive measure should be proposed to Aboriginal health workers and the mothers of young children. This is a change in personal behaviour that is deceptively simple; in some traditionally oriented communities, personal cleanliness and hygiene measures of this kind are viewed as "trying to be like white people", and thus dismissed.