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**A Disgrace to our Australian Civilisation:
Mothers, Miners and the Commemoration of
Mortality in New South Wales**

H. Lee*

*University of Wollongong, henry@uow.edu.au

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Abstract

This article compares deaths and death rates for women giving birth with those for mine workers, mainly in coal, in New South Wales (NSW). It focuses on the period 1875–1914, and asks why maternal mortality, which far exceeded mining fatalities, was largely ignored by contemporary legislators and others in a position to reduce an unnecessarily high death toll. It also asks why Australian historians, particularly feminist ones, have ignored the subject just as comprehensively.

KEYWORDS: coal mining, new south wales, mortality, mining disasters, childbirth

A Disgrace to our Australian Civilisation: Mothers, Miners and the Commemoration of Mortality in New South Wales

Henry Lee

Wollongong University College

This article¹ compares deaths and death rates for women giving birth with those for mine workers, mainly in coal, in New South Wales (NSW). It focuses on the period 1875–1914, and asks why maternal mortality, which far exceeded mining fatalities, was largely ignored by contemporary legislators and others in a position to reduce an unnecessarily high death toll. It also asks why Australian historians, particularly feminist ones, have ignored the subject just as comprehensively.

Miners and women giving birth appear to have little in common, for in popular belief coal mining has been deified as the most hazardous of occupations. This reputation is maintained by periodic disasters, which claim multiple lives in single accidents. The most recent instance in NSW was the Gretley disaster, near Newcastle, on 14 November 1996, in which four coal miners died. It generated daily print and electronic media coverage, over a period of weeks. The scale, unexpectedness and seemingly arbitrary quality of disasters, whatever their causes, simultaneously confront and heighten our sense of the fragility of existence.

Coal mining, though, has been granted a unique status in this regard. This arises, in part, from its economic importance. After the Industrial Revolution, coal supplied much of the energy for the economic growth that delivered high living standards in developed countries. In addition, mining's long and continuous history evolved within well-established, tight-knit communities organised around individual mines. Despite the inroads of the car and other agents of social atomisation, one can still talk about mining communities. Such settings sustain as a living tradition

the record of disaster and death that has been the lot of colliery workers around the world. In 1947 two historians of Australian coal mining were struck by the high level of anxiety among mine workers and their families in Cessnock, a mining town in the Newcastle coalfield. 'Part of this fear,' they stated, 'is a legacy from the Bell-bird disaster of 1923 when 21 men lost their lives, for a mining community has a long memory'.²

They also noted, however, that the 'spectacular tragedy' of Bellbird 'only heightened and intensified an already existing feeling'.³ It is this 'existing feeling' that underlies coal mining's claim to a special tradition of occupational danger and death, and which rests on more than periodic disasters. The steady annual stream of individual mine deaths accentuates the risk confronting miners at every moment in the pit. A journalist noted of the Gretley tragedy that, while multiple mining deaths had always commanded public attention, 'less-noted individual deaths and serious injuries are frequent'.⁴ In the 20 months up to Gretley 10 men were killed in NSW mines.⁵ The wide publication of such statistics, when disaster strikes, strengthens mining's long tradition as a high-risk occupation.

Mining disasters also attract public attention, and anger, because of simple disbelief that they occur at all. They dent the view that humankind's mastery of nature, through technology and organisation, is ever expanding. There is an erroneous but widely-held assumption that each disaster teaches lessons that accumulate as improvements in theory and practice, and make recurrence ever less likely. In 1902, when 96 men and boys died in a gas explosion at the Mount Kembla mine on the Wollongong coalfield, Charles Lee, leader of the Liberal Party in the NSW Parliament, was stunned. 'It is simply terrible,' he said:

... to think that after the care of past legislatures, all the great precautions brought to bear by modern science; after we thought we had our collieries in something like a safe state for the men to work in . . . that a catastrophe such as this could occur.⁶

Ninety-four years later the *Sydney Morning Herald* expressed similar surprise at the Gretley tragedy, given the 'advances in mine safety over the past 150 years'.⁷ That Gretley did occur, though, moved one observer to declare that 'underground coal mining remains the most dangerous and demanding of jobs'.⁸

The hard, physical nature of underground mining, the disasters that punctuate its history and the steady annual accumulation of fatalities sustain the industry's deserved reputation as especially hazardous. In 1993 Tony Wilks, general

secretary of the United Mine Workers of Australia, summarised it this way in his foreword to a study of the Bulli colliery disaster of 1887, which took 81 lives on the Wollongong coalfield:

We coalminers earn our living in one of the most dangerous industries in the world. Our history is characterised by tragedy. The number of dead and crippled mineworkers is a reflection of the hostile environment in which we work.⁹

Special monuments have been erected in the two main NSW coalfields to commemorate the deaths of all victims of colliery accidents, whether in disasters or smaller incidents. In 1972 a miners' memorial music shell, supplemented some years later with a museum, was erected at Freeman's Waterhole in northern NSW. The opening ceremony was attended by the NSW Minister for Mines, officials of the Miners' Federation, leading State and Federal Labor politicians and other dignitaries.¹⁰ In November 1993 a similar gathering met at a restored miner's cottage in Bulli for the unveiling of a wall containing the names of men killed on the Wollongong coalfield in the nineteenth and twentieth centuries. On 10 February 1996, at Cessnock, the Jim Comerford Memorial Wall, containing the names of the 1,532 men killed on the Newcastle coalfield since the first recorded fatality in 1847, was unveiled by Labor Prime Minister Paul Keating. This was recognition at the highest national level of the very high and consistent fatality rate inflicted on a particular occupational group.

These monuments and ceremonies commemorated a long and deep tradition. Colliery disasters, though, had left their mark already, in contemporary memorials and monuments littered across Australia's coalfields. Historians, among others, have contributed significantly to the tradition. A consistent theme in Robin Gollan's 1963 history of the coalminers of NSW is the high price the industry exacted in lives.¹¹ The same was true of Edgar Ross' 1970 history of the Miners' Federation of Australia.¹² In 1983 Pete Thomas, like Ross a Miner's Federation official, extended the latter's account into the early 1980s and devoted a chapter, 'Mining's bitter toll', to the miners' health and health. Thomas stated that

Mining over the years and in all countries has been notoriously dangerous, notoriously costly in terms of men's lives, limbs and health. Modern science and technology . . . have failed to eliminate the cruel toll of fatal injuries . . . and . . . the terrible frequency of coalmining accidents.¹³

Australia's greatest mining tragedies, Bulli in 1887 and Mount

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Kembla in 1902, which took 177 lives between them on the Wollongong coalfield, have been the subject of scholarly studies: Stuart Piggin's and Henry Lee's 1992 book on the Mount Kembla disaster and Don Dingsdag's 1993 examination of the Bulli disaster.¹⁴

All of this reinforced the conclusion that coal mining was the most dangerous of all civilian undertakings. Edgar Ross quoted enthusiastically from a 1917 pamphlet, *The Miners' Next Move*, by H.R. Jones, that for every 1,000 NSW colliery workers in 1914:

233 met with an accident; 64 persons were disabled for life . . . There are 211 coal miners permanently injured in New South Wales and living on relief at the present time. Twenty-seven coal miners paid the supreme sacrifice in 1914. Does that get you? Listen! These figures are much below the records for the preceding five years . . .¹⁵

As A.G.L. Shaw and G.R. Bruns succinctly stated in their 1947 survey of Australian coal mining, it was 'extremely dangerous'.¹⁶

In an editorial on the 1996 Gretley disaster the *Sydney Morning Herald* set the tragedy in the context of coal mining's long and publicly honoured tradition. It referred to the Cessnock Memorial Wall, which listed the 1,532 men killed on the Newcastle coalfield since 1847. 'To put that number in perspective,' said the *Herald*, 'it is about three times the number of Australians who lost their lives during the Vietnam War.'¹⁷ The comparison was particularly apt. The memorial walls at Bulli and Cessnock mirrored the commemoration of those who fell for their country in the First and Second World Wars, and whose names were inscribed on walls in the Australian War Memorial in Canberra, or indeed of those killed in the Vietnam War and who are listed on that War's memorial, also in Canberra. For mine workers to be similarly commemorated is an honour unique to a civilian peacetime activity.

This commemoration, the outward and visible remembrance of the grief, the dismay and the outrage at the number of men lost to their families and friends simply because they went to work is, of course, proper and necessary. Let us now, though, consider 'that number' from another perspective.

Childbirth also has a long and continuous history, stretching back to the origins of the human species. In Australia, however, women giving birth has no tradition even remotely approaching that of coal mining, which has granted men a significant niche in the national story. Yet, up to World War II women giving birth in NSW died in far greater numbers and at a significantly higher

rate than did NSW mine workers.

This paper centres on the period 1875 to 1914 for several reasons. First, official statistics of annual coal mining fatalities and employment, for the same years, are available for only three of the years before the creation of a NSW Department of Mines in 1874. Until then fatalities were listed in infrequent reports of government colliery inspectors, attached to the Department of Lands. From 1875 figures were published annually by the new Department. Annual maternal mortality figures are available from 1856, in reports of the Registrar General on the vital statistics of NSW. Until 1875, however, their reliability is suspect. Between 1856 and 1874, inclusive, the highest annual death rate per thousand mothers giving birth was 5.66, in 1859, and in one year, 1867, slumped to a negligible, and unbelievable, 0.17. The annual average for the period was 3.18. In 1875, however, the rate jumped to 6.85 and remained well above the 1856-1874 average through to the Great War. In the decade or so before 1914 childbirth and the general position of women in Australian society was a particular concern of male legislators and bureaucrats, who feared that a declining birth rate and any encouragement to women to seek a life beyond home, marriage and family, would endanger national development and the sacred White Australia Policy.

Until 1855 there was no statutory requirement in NSW to record deaths. In 1855 the government passed an Act requiring the registration of all deaths, births and marriages. The Act created registry districts and district registrars, who were responsible for collecting and transmitting the information to the office of the Registrar General in Sydney. Householders and others who did not comply with the Act were subject to a fine.¹⁸

As with any law imposing compulsion on all citizens to fulfil certain obligations, there was in the 1855 Act a kind of equality. All deaths had to be registered. Outside the 'virtual world' of statute law, however, the social order governed by class, ethnicity, gender and other factors, does not observe the neat and universal provisions of Acts of Parliament. In cases of maternal mortality and mining fatalities, all deaths were recorded. The state, however, recorded miners' deaths more often and at a level of detail vastly greater than that accorded mothers dying in childbirth. In colliery inspectors' reports before 1875, and after in the annual reports of the Department of Mines, each victim of a mining accident, whether it was fatal or resulted in serious injury, was recorded by name alongside the date of the accident, the mine and a description of the circumstances. Women dying in childbirth got no individual commemoration; they were recorded

as numbers in the Registrar General's annual report. In terms of the relative risk and the number of deaths imposed by birth, they deserved better.

This clear, sustained demarcation between miners and mothers, even in death, rested on their respective social and economic functions. The iron law of genetics ensured that all mothers were women. Tradition and social custom, enforced by the state, ensured that all NSW colliery workers were men. The Colony's miners and legislators allowed no scope for the Old World's exploitation and degradation of females in coal mines. Women were never employed in Australian coal mines,¹⁹ and to ensure that it stayed that way, the NSW Coal Mines Regulation Act of 1876 made it an offence for any female to be employed in any capacity in or about a coal or shale mine.²⁰ The legislation governing metalliferous mining contained no such specific provision,²¹ but there is no evidence of women being employed in metalliferous mines.

Women, especially married ones, were largely excluded from Australia's paid workforce. At the 1911 census, for instance, 92 per cent of working age males (15-64 years) were in paid work; the figure for working age females (15-59 years) was 26 per cent. Less than 6 per cent of married women were in the paid workforce.²² Beginning with Justice Higgins' Harvester judgment of 1907, Federal and State industrial tribunals institutionalised the prevailing notion that women ought not to be encouraged to take paid work. Men, whether single or married, with children or without, were paid a basic wage that included a component to support a wife and children. According to the tribunals, women worked only because the total demand for labour could not be met by men. It was expected, however, that once a working woman met 'Mr Right' she would retire to the domestic sphere, to bear and raise children and tend to the household tasks that allowed men to devote their energies to the public sphere. For that reason the female basic wage was set at 54 per cent of the male rate, with no consideration for dependents; women were neither expected nor encouraged to be heads of households. As Beverley Kingston concluded in her study of women and work in Australia, between the 1860s and the 1930s, 'The cult of marriage, children and home succeeded in levelling the majority of Australian women out of society altogether.'²³ The 'occupation' into which women were channelled was that of bearer and nurturer of the next generation of workers, consumers and mothers.

In 1887 and 1902 the coal mines of NSW experienced exceptionally high numbers of fatalities. On 23 March 1887 a methane explosion in the Bulli mine killed 81 workers. To that

time this was the greatest loss of life in a single day in Australian mining history. The deaths of another 13 men made a total of 94 colliery workers killed in the Colony's mines in 1887. The most exceptional year for such fatalities occurred 15 years later when for the first, and so far only time, the coal mines of NSW claimed over 100 lives. Ninety-six of the 105 dead were killed by a methane explosion at Mount Kembla, on 31 July 1902. Metalliferous mining never experienced disasters on the scale of Bulli or Mount Kembla but the annual fatality rate (deaths per thousand workers) in the period under study was similar (see Table 1).

Childbirth, of course, was not susceptible to such spectacular disasters but its annual death toll far outstripped that of coal and metalliferous mining combined. Coal's worst year for fatalities, 1902, was highly unexceptional for women giving birth. Coal mining claimed 105 men in 1902 and metalliferous mining another 19, a total of 124. Childbirth killed 263 women. In only one year between 1875 and 1914 did the number of women recorded as dying in childbirth in NSW fall below 100—in 1879, when the total was 92. In the same period the death toll in coal mining exceeded 50 in only two years, in 1887 and 1902.

H R Jones, whose anger at the number of colliery deaths in 1914 was quoted earlier, raged that, in that year "Twenty-seven coal miners paid the supreme sacrifice . . . Does that get you?" He got the total wrong; 17 colliery workers were killed in that year. Even if it had been 27 it was far behind the 296 women who died giving birth in NSW in 1914, casualties of the occupational role that nature, social custom and the law compelled them to fill.

Absolute numbers are a crude index for comparing the risks involved in different activities. A standard measure or rate is needed, and the measure used here is the number killed per 1,000 individuals involved in mining and in childbirth, respectively. On this basis, a single act of giving birth in NSW carried a far higher risk of death than a year spent working in a mine. Between 1875 and 1914, inclusive, annual aggregate employment in NSW coal mines totalled 433,947 men, of whom 789 were killed. For every 1,000 employees, then, 1.82 died in accidents. Between 1888, the first year in which total employment figures for metalliferous mining are available, and 1914 an aggregate of 631,278 men worked in metalliferous mines in NSW, of whom 762 were killed—1.21 for every 1,000 workers. Between 1875 and 1914, 8,640 women died in childbirth, of an aggregate of 1,501,244—5.76 per thousand giving birth. Thus, the average maternal mortality rate exceeded the coal mining fatality rate by a factor of more than three, and the metalliferous mining

**Table 1
Mining Fatalities and Maternal Mortality,
NSW, 1875–1914**

	Coal Mining			Metalliferous Mining			Childbirth		
	Fatalities			Fatalities			Fatalities		
	Employ-ees	No	Per '000	Employ-ees	No	Per '000	Mothers	No	Per '000
1875	3 348	8	2.39	na	na	na	22 327	153	6.85
1876	4 167	4	0.96	na	na	na	23 111	191	8.26
1877	4 657	7	1.50	na	na	na	23 645	116	4.91
1878	4 792	8	1.67	na	na	na	25 130	104	4.14
1879	5 035	5	0.99	na	na	na	26 728	92	3.44
1880	4 676	8	1.71	na	na	na	27 938	131	4.69
1881	4 098	2	0.49	na	na	na	28 763	117	4.07
1882	4 387	12	2.74	na	na	na	29 490	121	4.10
1883	5 481	15	2.74	na	na	na	30 990	115	3.71
1884	6 227	14	2.25	na	7	na	33 654	143	4.25
1885	7 097	11	1.18	na	8	na	34 733	128	3.69
1886	9 348	29	3.10	na	11	na	35 955	191	5.31
1887	7 998	94	11.75	na	11	na	36 925	173	4.69
1888	9 341	15	1.61	17 271	12	0.69	38 157	151	3.96
1889	10 277	41	3.99	18 769	15	0.80	36 966	172	4.65
1890	10 315	13	1.26	22 151	16	0.72	38 560	183	4.75
1891	10 820	21	1.94	21 428	20	0.93	39 066	165	4.22
1892	10 514	8	0.76	17 332	18	1.04	39 702	153	3.85
1893	9 971	13	1.30	19 709	19	0.96	39 923	221	5.54
1894	10 794	7	0.65	24 088	28	1.16	38 582	267	6.92
1895	9 017	10	1.11	28 923	36	1.24	38 364	278	7.25
1896	9 233	24	2.60	30 478	35	1.15	36 168	249	6.88

(continued)

Table 1 (continued)

	Coal Mining			Metalliferous Mining			Childbirth		
		Fatalities			Fatalities			Fatalities	
	Employ- ees	No	Per '000	Employ- ees	No	Per '000	Mothers	No	Per '000
1897	9 979	16	1.60	31 229	35	1.12	36 827	321	8.72
1898	10 519	25	2.38	30 311	35	1.15	35 850	256	7.14
1899	10 523	10	0.95	32 297	39	1.21	36 069	278	7.71
1900	11 491	24	2.09	32 254	42	1.30	36 758	268	7.29
1901	12 415	17	1.37	24 200	38	1.57	37 436	251	6.70
1902	13 114	105	8.01	20 601	19	0.92	37 469	263	7.02
1903	14 117	13	0.92	23 442	23	0.98	35 622	239	6.71
1904	14 156	12	0.85	23 591	29	1.23	38 243	305	7.98
1905	14 137	24	1.70	24 795	32	1.29	39 081	279	7.14
1906	15 199	21	1.38	27 347	29	1.06	40 539	277	6.83
1907	17 356	17	0.98	26 402	24	0.91	41 789	263	6.29
1908	18 084	21	1.16	20 881	32	1.53	42 091	304	7.22
1909	18 569	14	0.75	17 836	20	1.12	43 303	252	5.82
1910	18 044	21	1.16	19 369	29	1.50	45 037	261	5.80
1911	17 657	15	0.85	19 360	35	1.81	47 181	279	5.91
1912	18 051	30	1.66	19 807	31	1.57	51 443	305	5.93
1913	18 966	18	0.95	19 914	45	2.26	51 587	329	6.38
1914	19 977	17	0.85	17 493	26	1.49	53 042	296	5.58

Source: Calculated from figures in *Annual Report of the Department of Mines, New South Wales, 1875–1914*, and *New South Wales Statistical Register, 1899, 1907 & 1915–16 (mining)*, *Vital Statistics. Twenty-Seventh Annual Report from the Registrar General, on Vital Statistics, Vital Statistics for 1902 and Previous Years, Vital Statistics for 1912*, and *Report on Vital Statistics. Tables, 1913 and 1914*. Mothers giving birth derived by adjusting birth figures for multiple births.

fatality rate by a factor of almost five. In many individual years the difference was greater. Only in 1887 and 1902, because of the Bulli and Mount Kembla disasters, did the mining mortality rate exceed the maternal mortality rate (see Table 1).

If the mining fatality rate had equalled that for maternal mortality, mining's reputation as a hazardous occupation would have been strengthened considerably. At the maternal mortality rate of 5.76 deaths per thousand mothers giving birth, 2,500 colliery workers would have perished between 1875 and 1914, rather than the 789 who actually did (see Table 2). Conversely, if women giving birth in the same period had experienced the fatality rate of 1.82 per thousand for colliery workers, then 2,732 rather than 8,640 mothers would have died.

Safety in the NSW coal industry has been regulated since 1862 by Acts of Parliament. Administered by a Minister of the Crown and an inspectorate, these required every fatality or

Table 2
Maternal Mortality Rate Applied to Mine Workers,
NSW 1875–1914

	Actual Fatalities			If Maternal Mortality Rate Applied		
	Coal	Metalliferous	Total	Coal Mining	Metalliferous	Total
1875–79	32	na	na	117	na	na
1880–84	51	na	na	103	na	na
1885–89	190	na	na	198	na	na
1890–94	62	101	163	265	538	803
1895–99	85	180	265	372	1 157	1 529
1900–04	171	151	322	466	887	1 353
1905–09	97	137	234	532	784	1 316
1910–14	101	166	267	548	568	1 116

Note: Calculated on annual basis by multiplying number of coal/metalliferous workers by maternal mortality rate (mothers who died per 1,000 giving birth) and dividing result by 1,000.

serious injury in or about a mine to be reported to a district inspector within 24 hours. The inspector then submitted a report to the Minister for Mines, who would decide whether further investigation, and/or prosecutions were warranted.²⁴ The 1896 Act, a response to the 1887 Bulli disaster and delayed by the coal proprietors in the upper house of the NSW Parliament, widened the power of inspectors and the Minister to order inquiries into accidents or unsafe practices in mines. Company directors could be imprisoned if an inquiry or inquest found that their decisions had endangered lives.²⁵ Throughout the nineteenth and twentieth centuries, coal mining in NSW was the most thoroughly investigated of any industry or occupation. Royal commissions, special boards of inquiry, judicial inquiries, and Parliamentary select committees and debates probed every aspect of the industry and its work practices, with disasters, accidents and safety legislation dominating.

Not every mining fatality was the subject of a major inquiry but each victim got an inquest, at which the local colliery inspector was obliged by the Act, if not the coroner, to be present. The coalfields' local newspapers invariably reported the inquest proceedings, frequently amounting to transcripts.

Before the Great War, however, no official inquiry examined maternal mortality in NSW, and inquests, which dealt with 'sudden or unnatural' death,²⁶ investigated a tiny percentage of maternal deaths (see Table 3). A greater proportion of total male than female deaths were investigated by coroners, reflecting men's greater involvement in the public sphere. In 1912, for example, industrial and other accidents were the largest category of cases dealt with by coroners (over half the total of 1,519), and over 80 per cent of those involved males.²⁷

Even so, the proportion of maternal mortality cases that went to inquests was below those for all male and female deaths. The rise in the proportions for 1907 and 1912 (see Table 3) did not indicate a concern by coroners to reduce maternal mortality. Rather, it reflected a determination to stamp out abortion, which the 1904 NSW royal commission into the birth rate had attacked as a check on population growth. In both years 13 of the cases investigated by inquests dealt with abortion; in 1902 possibly only one such case went to an inquest—it was listed under 'Abortion, Miscarriage'. Minus abortion, the proportions for 1907 and 1912 fall to 2.7 per cent and 3 per cent, below those for inquests into all female deaths.

Although the annual death and injury toll, and periodic disasters demonstrated the defective nature of safety regulation in mining, mine workers had an Act of Parliament, and a Minister

Table 3
Inquests into Male and Female Deaths, and Deaths in
Childbirth, NSW, 1897–1912

	Male Deaths			Female Deaths			Deaths in Childbirth		
	Inquests			Inquests			Inquests		
	No	No	% Deaths	No	No	% Deaths	No	No	% Deaths
1897	8 134	982	11.8	5 950	251	4.2	321	4	1.2
1902	9 535	1 041	10.9	7 111	303	4.3	263	5	1.9
1907	9 429	941	10.0	6 981	267	3.8	263	20	7.6
1912	11 102	1 189	10.7	7 784	330	4.2	305	22	7.2

Source: Calculated from figures in *New South Wales Statistical Register*, 1897, 1902, 1907 and 1912.

and inspectors charged with its enforcement. Miners disabled in accidents and unable to earn an income also had recourse to the Employers' Liability Act, first passed in 1886, and to the Miners' Accident Relief Fund, established by Act of Parliament in 1900.

Maternal mortality attracted no such response. Women died in childbirth singly and privately, in homes and hospitals. Despite the importance of child bearing for society and the economy, its mortality rate drew little public comment from legislators or bureaucrats. Like unpaid household labour, child bearing was considered woman's fate and duty. The risk involved was part of the natural order, and a private matter. It was not, therefore, a proper area for state intervention. Unlike industrial fatalities, maternal deaths occurred, notionally at least, in a setting of professional care and support, in the presence of doctors, nurses, or midwives. With no disasters to command official and public attention, with no trade union or other organisation to press their case, mothers in NSW continued to die silently in large numbers and at a high rate.

They did, though, have advocates in the medical profession. Dr James Jamieson had long taken an interest in maternal death. In a paper to the 1887 Intercolonial Medical Congress he lamented the sloppy recording of the details of maternal deaths,

and argued that the official statistics understated the maternal mortality rate. Jamieson was also definite that most deaths in childbirth were preventable:

a high rate of mortality among lying-in women always indicates an insufficient average measure of care or skill on the part of those who have the management of cases of labour.²⁸

He blamed a lack of trained medical men like himself. This, he said, forced pregnant women, particularly in rural areas, to place themselves in the care of unqualified midwives, whom he dismissed as 'ignorant old women.' Nonetheless, Jamieson laid most blame on the 'neglect' among all concerned 'of those antiseptic precautions, whose value has been established by the saving of life which has followed their careful adoption in most of the lying-in hospitals of Europe.'²⁹ Simply protecting the mother from infection at or following birth, he asserted, would reduce significantly the incidence and rate of maternal mortality.

Infection after birth was the biggest killer of new mothers. Official figures specifying detailed causes of maternal death in NSW were not published until 1886. From 1856 to 1874 they were listed under a single heading, and from 1875 to 1885 were split unhelpfully between 'Childbirth', 'Metria' and 'Paramenia'. From 1886 to 1914, deaths due to infection were variously ascribed to 'Puerperal Convulsions', 'Puerperal Fever', 'Puerperal Mania' and 'Puerperal Septicæmia'. Whatever the name, they killed over 40 per cent of all women who died in childbirth between 1890 and 1914 (see Table 4).

According to Jamieson, almost all of these deaths were avoidable:

If anything in the field of practical medicine can be taken as proved, it is that puerperal fever is a preventible disease, and the means of prevention at our disposal are both more reliable and more easily accessible than in the case of almost any other of the infectious diseases.

He urged the governments of the Australian Colonies to enforce higher standards of hygiene in childbirth, particularly through compulsory registration and professional training for midwives. 'Unless these steps are taken', he stated, 'I can see no prospect of any great or early improvement in the death-rate after delivery, which is now so high as to be a discredit, if not a disgrace, to our Australian civilisation.'³⁰

If so, the politicians and bureaucrats of NSW were prepared to live with it. They were more concerned with encouraging women

Table 4
Maternal Deaths Caused by Infection,
NSW 1890–1914

	Maternal Deaths	Maternal Deaths Due to Infection	
		Number	% of Deaths
1890–94	989	430	43.5
1895–99	1 382	640	46.3
1900–04	1 326	606	45.7
1905–09	1 375	422	30.7
1910–14	1 470	586	39.9
Total	6 542	2 684	41.0

Source: *New South Wales Statistical Register, 1890-1894; New South Wales. Annual Report on Vital Statistics, 1895-1898; Statistician's Report on the Vital Statistics of New South Wales, 1899-1900; New South Wales. Vital Statistics, 1901-1912; Report on Vital Statistics. Tables, 1913 and 1914.*

to breed. The NSW birth rate had declined consistently since the 1860s. In the 1860–64 quinquennium the crude birth rate (births per thousand mean population) was 42.5; it slipped in every succeeding quinquennium to stand at 27 by 1900–04.³¹ In 1903 the government appointed a royal commission, to identify causes and remedies. The issue had been pushed to the fore in a booklet entitled *The Decline in the Birth-rate of New South Wales*, by Timothy Coghlan, the NSW Government Statistician. Coghlan likened Australia to a kind of Garden of Eden, whose people were disobeying God's injunction in Genesis to breed and to exercise dominion over the earth:

Australia, with its large and sparsely-populated territory, and with its industries in process of rapid development, might reasonably be pictured as an ideal land, wherein the people would prove fruitful and multiply. Such, indeed, was the promise of the early years of settlement. Present indications, however, give no hope of a teeming population springing from Australasian parents, for the birth-rate in all the states has declined very greatly, especially in the last fifteen years.³²

Especially alarming to Coghlan was the fact that Australia's birth rate had fallen below that of every European nation bar

France. The widespread poverty and the recurrent wars that scarred the Old World led Coghlan to see 'nothing incongruous in a declining birth-rate' in such countries. On the other hand, he found the 'extension of the phenomenon to new countries, where population is so much desired, novel and astonishing, and claims the deepest attention.'³³

Coghlan devoted his final chapter to maternal mortality. In it he supported Dr Jamieson's accusation that doctors and others were guilty of 'great negligence' in not recording the precise causes of such deaths. So much so, said Coghlan, that the scale of the problem had been understated. From 1893, he noted, the NSW authorities had enforced more rigorously the recording of such details, and he was satisfied that since then the figures were as accurate as could be expected. He recognised that the maternal mortality rate had risen over the previous 20 years, but without once raising the problem of infection and its prevention. Rather, he made the odd comment that:

This result is a curious satire on the efforts of science to ameliorate the condition of the mothers of our race. So curious, indeed, is the result that the question at once arises—is there not some cause for the increase in the death-rate of parturient women tending to neutralize all that science and skill can do on their behalf.

Coghlan's answer was that the increase did not arise from infection. Science and the doctors were combating that. Rather, he asserted, the disinclination of well-to-do women to bear children with any frequency had left the field to poorer women, who could not afford hygienic attention or surroundings. Consequently, deaths of poor women in childbirth pushed up the average mortality rate. Coghlan also targeted contraception and other forms of birth restriction, which he thought were rising in popularity and were damaging women's reproductive systems. On this point, he concluded, women themselves were responsible for the rising maternal mortality rate. Artificial methods of birth control were making them susceptible to complications when they did fall pregnant.³⁴

As the Government Statistician and a firm advocate of White Australia and national development, Coghlan looked at maternal mortality only in relation to the birth rate. He concluded his study by urging Australian women to effect 'a radical change' in their 'mental and moral attitude . . . towards child-bearing.'³⁵ Regardless of the risk, women had to breed frequently, as a national duty.

In August 1903 the government appointed a royal commission

to inquire into 'the causes which have contributed to the decline in the birth-rate of New South Wales, and the effects of the restriction of child-bearing upon the well-being of the community.'³⁶ In October the government extended the scope of the commission, by asking it to:

make a general investigation of the mortality of infants in Our said State; whether it is to any extent preventable; whether it is increasing; and its relation to the prosperity of Our said State.³⁷

In February 1904 the commissioners were empowered further to recommend 'remedies for the various evils which are indicated by the evidence as to the causes of the decline in the birth-rate and of the high infantile mortality rate.'³⁸

Though not among its specific terms of reference, the commission, composed entirely of men drawn from medicine, business and government,³⁹ did not ignore maternal mortality. Their report repeated the points made some 20 years earlier by Dr Jamieson. They also noted that in 3,981 deliveries at the Women's Hospital in Sydney, established in 1895, no mother had succumbed to infection. The Hospital's commitment to strict standards of hygiene, during and after delivery, produced what the commission called 'an extremely low general mortality' among mothers.⁴⁰ The report recommended higher government expenditure on and regulation of all aspects of maternal care.

The commissioners' true perspective on maternal mortality, though, may be gauged from their inclusion of these recommendations among a multitude of others, under the heading, 'Suggestions by the Commission in Regard to the Birth-Rate'. In their conclusion they accused women, in particular, and the people generally, of committing racial suicide. The commissioners' aim was the rapid increase of Australia's population, to preserve the continent for the 'British race'; the rising birth rate in Asian countries, especially Japan, was a matter of grave concern. The commissioners stressed the importance of an increasing Australian birth rate, for national development and security, and they attacked women for preferring ease of living over children. The report urged the removal of every hindrance to women fulfilling their national duty to reproduce, be it abortion, contraception or employment outside the home.⁴¹

The desire to people Australia and exploit its natural resources marginalised any lingering official concern about maternal deaths. In 1906 the NSW government published a guide to the State, to entice immigrants from Britain, North America and Europe. It included a chapter on 'Health and Allied Matters', by Professor T

P Anderson Stuart of Sydney's Royal Prince Alfred Hospital. After regaling his readers with an account of the salubrious climate, assuring them that domestic servants were readily found, that the land was fertile, that work was plentiful and that family and social life were carefree and relaxed, Stuart concluded with two paragraphs on the death rate and hospitals. NSW, he asserted, 'is a healthy country' and nowhere was this truer than in the rural areas. He assured women that:

Medical men are accessible now in even the remotest parts, and trained nurses are everywhere available. Women generally have no insuperable obstacles in getting obstetrical assistance even in the remotest parts. They often, at that time, come into the nearest settlement, where there is usually provision for such cases.⁴²

So effective was that provision that, in 1906, 277 women died in childbirth in NSW—6.83 per thousand mothers giving birth. Stuart's assertion that medical care was available throughout the State contradicted Dr Philip Muskett's 1903 observation that 'constantly' in rural Australia, because of distance, women delivered their babies without medical assistance.⁴³ Ironically, the guidebook in which Stuart's chapter appeared was entitled *New South Wales. The Mother State of Australia*.

In some parts of NSW the maternal mortality rate was well above the State average. Unfortunately, the published official statistics do not permit regional analysis, except within the Sydney metropolitan area and the Newcastle district in some years. In 1893, when the NSW maternal mortality rate was 5.54 deaths per thousand mothers giving birth, Dr Arthur Andrews, the Government Medical Officer for the Albury region, published the results of 800 midwifery cases he had attended in that year. The 800 deliveries resulted in the deaths of nine mothers—a rate of 11.25 per thousand.⁴⁴

The NSW government did little to stem the tide. In 1882 some of the larger Sydney established their own nurse training schools, partly to counter maternal mortality. In 1895 a Midwifery Nurses Bill was introduced into the Parliament, to provide for compulsory training and registration of nurses. Despite vigorous support from Dr James Graham, a medical superintendent at Royal Prince Alfred Hospital who was appalled by the maternal mortality rate, and had been elected to the Legislative Assembly, the Bill failed to pass. Other futile attempts followed, until 1924, when Parliament passed the Nurses Registration Act, which established a Nurses Registration Board to regulate training. The Board was concerned about midwifery standards, and in the 1930s sought greater

power to remove incompetent midwives from the profession, but its requests were not granted until after World War II.⁴⁵

The Private Hospitals Act of 1908 had provided for the registration and training of maternity and other nurses in NSW, but its provisions were not compulsory and, as a 1917 Federal government report on maternal mortality noted, the legislation 'cannot be considered as effective.'⁴⁶ Infection remained the greatest killer and the report re-emphasised the ease with which it could be eliminated: 'Puerperal septicæmia is probably the gravest reproach which any civilised nation can by its own negligence offer to itself. It can be prevented by a degree of care which is not excessive or meticulous, requiring only ordinary intelligence and some careful training.'⁴⁷ By 1914, however, NSW had the highest rate of maternal deaths from infection of all the States.⁴⁸

The dominant view of women as breeding machines geared to the requirements of national development was confirmed by the Fisher Federal Labor Government's Maternity Allowance Act of 1912. This gave £5, about two-and-a-half weeks of the male basic wage, to white mothers only, on the birth of what the Act deemed a 'viable child'. The allowance was an attack on infant mortality and had no bearing on maternal mortality. It allocated the mother a sum sufficient to supplement her child's diet and/or to pay for medical treatment if required in the child's first 12 months, identified as the period of greatest danger. The point was to reduce the cost of peopling Australia, by giving its white babies a better chance of becoming workers, consumers, mothers, and, if required, soldiers.

This noble vision was implicit in the romantic and semi-mystical nonsense about motherhood in which the giant Australian Workers' Union couched its support for the Labor Government's proposal. In its Sydney journal, *The Worker*, the union devoted its leading article to 'Mother and the State':

On motherhood the entire edifice of society is raised. On motherhood the future of the race depends, and the realisation of the dreams of men. The Mother is all. She is ruler and ruled; she is soldier, priest, and judge; she is thinker and laborer; she is poet and philosopher; she is mind, and muscle, and spirit. The Labor movement recognises that in the order of nature all is contained in motherhood; that without it the hopes of and aspirations of humanity would be less than a bubble that is blown on the wind. And thus honoring motherhood, it will allow no stigma of pauperism to attach to the Mother *in the time of her perilous service* to the country. In this course, it will go much further than is at present intended. Labor

Governments will establish maternity hospitals, amply and generously equipped, to supplement the Commonwealth grant, and nothing that science and enlightened humanitarianism can do will be left undone to strengthen the frail bridge that Mother must cross to bring the children to us.⁴⁹

Unfortunately, war and other issues prevented Labor and anti-Labor Governments from honouring and protecting 'Mother'. In March 1935 Dr Constance D'Arcy, an obstetrician, delivered a lecture at the Australian Institute of Anatomy in Canberra. Her topic was 'The problem of maternal welfare' and her lecture indicted a system that failed women:

notwithstanding improved education of doctors, medical students, midwives and the public generally, of greatly improved hospital systems and sanitation, women are still dying in lamentably large numbers of the complications of childbirth in this country.⁵⁰

D'Arcy felt that only if the 'public conscience' was touched by the unnecessary suffering inflicted by childbirth, would the system change. Her plea resembled that of coal miners, who protested not only about the constant risk of death but about crippling disabilities in mining accidents. The position, though, was worse for women. Of childbirth, D'Arcy noted that the official statistics recorded only women who actually died as a result of delivery:

and exclude the large groups of women who recover from the ailments and accidents associated with childbirth only to carry on the rest of their lives crippled and more or less useless, unless restored by painful surgical operations.⁵¹

Not for them even the small payments meted out by the NSW Miners' Accident Relief Fund or the opportunity, with the support of a union, to obtain financial redress in the courts under the Employers' Liability Act. If she was without a working husband, a disabled mother might qualify for the small invalidity pension introduced in NSW in 1900 and administered by the Federal government from 1909. This provided 10 shillings a week, compared to the minimum adult male wage of 42 shillings a week established by Justice Higgins in 1907. If mother and baby survived the delivery, the Federal government rewarded her with the £5 maternity allowance for delivering to the nation a viable white child.

In the mid 1930s NSW remained the most dangerous State in which to have a baby. Constance D'Arcy stated that the national

maternal mortality rate was one death for every 200 women 'confined'; in NSW it was one in every 160.⁵² Not until after World War II did the incidence and rate of maternal mortality fall substantially throughout Australia, to the point where Dr Frances Hayden of St Vincent's Maternity Hospital in Melbourne could report in 1969 that, 'The death rate among young mothers has now been surpassed as a problem by the death rate among young men as the result of automobile accidents.' In the 16 years to 1969, she observed, there were only 391 maternal deaths—an average of less than one a week⁵³ and a result that could have been achieved much, much earlier.

The essentially private nature of maternal mortality and the obsession with keeping women out of the public sphere, particularly before World War II, meant the marginalisation of this aspect of women's experience in Australia, to the point of near invisibility. Women themselves were the subjects and the agents of this marginalisation. In 1913 Jessie Ackermann, a conservative middle class Englishwoman, paid her fourth visit to Australia as an organiser for the Women's Christian Temperance Union. She wrote a book about this unique nation which had 'pioneered' its women 'into citizenship', by granting them the vote ahead of women in other democracies. Ackermann complained that all previous books about Australia had been written by and for men. Her book would examine the nation from a women's perspective.

Sadly, in over 300 pages, Ackermann wrote not a word about the dangers of childbirth. Her chapter entitled 'Mothers, Children, and the Birth-rate' spoke passionately of the drudgery and overwork experienced by many women in the home. In the end, however, it celebrated the sterling manner in which Australia's women did their duty for Australia and the Empire, by breeding sons and daughters numerous and fit enough to occupy, develop and hold its vast expanses.⁵⁴

Beatrice Webb, another Englishwoman of breeding, though of more radical leanings, visited Australia in 1898 with her husband Sidney. She spent an afternoon with Dr Constance Stone, 'the leading woman doctor in Melbourne' who, before becoming Victoria's first woman doctor, had to train in Britain and North America because no Australian university would enrol her. If they discussed maternal mortality, Beatrice did not record it. She did record, though, their discussion of the 'passions' of Australian, American and English women, of illegitimacy and of contraception as it affected the birth rate in Australia.⁵⁵

If the full Australian story is to be told and if the sufferings and sacrifices of all who have contributed to it, willingly or not,

are to have their due, then maternal mortality and disability are yet to be accorded their rightful place. That generations of male historians, who wrote mainly about the public institutions and processes in which they participated and excelled, often at the expense of women, should have neglected such themes is neither surprising nor shocking. That decades of feminist scholarship has also done so is surprising. Elspeth Browne's 1979 history of fertility control in Australia avoided mention of the high maternal death toll, and even claimed that the rate began to fall in the late nineteenth century.⁵⁶ A slightly more satisfactory account is Diana Siedlecky's and Diana Wyndham's 1990 study of the fight by Australian women to assert control over their fertility. Even here, though, maternal death is treated less in its own right than as a thread sporadically woven into a larger story of women's resistance to being treated as breeders for a White Australia.⁵⁷

The muted treatment of this aspect of women's experience in Australia which, before the availability of antibiotics in the 1940s produced a sharp decline in maternal mortality, killed probably tens of thousands of women and disabled many others, was continued in the first attempt at a general history of Australia from a feminist perspective. *Creating a Nation*, published in 1994 by four of Australia's leading feminist historians, makes one mention of maternal deaths, only to note that it remained a problem in the 1920s.⁵⁸ Two years before *Creating a Nation*, Kay Saunders and Raymond Evans edited a substantial and comprehensive historical survey of women's experience, *Gender Relations in Australia*. Again, maternal mortality rated barely passing reference.⁵⁹

It is unlikely that this indicates a conscious choice on the part of such historians. Nonetheless, other countries have a substantial literature on the subject.⁶⁰ The histories written by Australian feminist scholars appear to reflect their own experience of participation in the public sphere of life, focussing on women's long struggle to win from men the right to participate in institutions and processes from which they were for so long excluded.

To this extent they entered the same trap as the male historians who preceded them. Australia's middle class feminist scholars seem to have been entranced by the historical exclusion of women from the public sphere, in the same way that male scholars celebrated men's domination of it. The feminist drive was toward removing barriers to participation and advancement in a public sphere created and run largely by men. Historically, women were compelled to invest their talents in home and family. Perhaps, that arrangement was delineated more sharply

and maintained more rigidly in Australia, than in comparable countries, leading its feminist scholars to treat domestic matters less in their own right, as women's experience, than in the light of their capacity to hinder participation in public life.

The obsession of Australia's male leaders to establish an advanced and expanding industrial society placed national development and nation building at the heart of the national story. That story, as feminists properly note, has not been the story of all Australians. It has, by definition, been a record of the achievements of white men; or, in Marilyn Lake's neat formulation in the introduction to *Creating a Nation*, an account in which men 'have for so long been able to disguise themselves in history books as sexless, neutral, historical subjects—as squatters, convicts, workers, politicians, Australians.'⁶¹ In respect of maternal mortality, it is unfortunate that books like *Creating a Nation* did not challenge that reality.

There is also a more mundane explanation for this. In 1975 Beverley Kingston wrote that the 'detailed research has not yet been done that will tell us about mortality rates among mothers and children at the various levels of Australian society during the nineteenth century.'⁶² The same was true of maternal mortality in the period up to World War II. That there is no published study of maternal mortality, let alone of its regional and class dimensions, is due to the highly labour intensive nature of such a project. To reconstitute the bare framework of this aspect of women's experience would involve trawling through a mountain of regional death registers, and manually extracting the relevant cases. It would be a formidable undertaking, but an essential one, if the full national story is to be told, and for mothers to take their place alongside coal miners, soldiers and others who, of necessity or choice, died for great causes.

That it has not been done reflects both the obsession with explaining the public sphere, and the difficulty of reconstituting the private sphere of Australian life. In 1994 Beverley Kingston surveyed the state of historical scholarship on women in the nineteenth century. She noted the progress made since her pioneering 1975 study, *My Wife, My Daughter, and Poor Mary Ann*, in building a fuller understanding of women's experience and incorporating it into the national picture. She identified many gaps where important work remained to be done. Maternal mortality, though, was not one of them.⁶³

It is a major omission, not only because mothers died in great numbers or at a high rate, but also because it is an area of study that breaks the artificial divide between a (female) domestic and a (male) public sphere of life. Occupational health and safety

focuses on workplaces, which, historically, men have dominated. But birth is an essential social and economic function, just as much as it is a private medical condition or a source of joy to parents. For too long, activities like coal mining have been viewed as involving hazards which, because they are faced by men in paid employment, occur in a universe outside that of childbirth, because it is an unpaid function performed by women as part of a private, domestic role. Historical studies of childbirth and its hazards offer an opportunity to remove part of the wall between the public and private spheres. That would mean seeing maternal death as a human risk created by a socially necessary activity, rather than portraying mothers as legislators did—as a renewable resource.

Mothers killed by childbirth are among Australian history's forgotten people, largely ignored by historical scholarship, feminist or otherwise. Their sacrifices and sufferings entitle them to the kinds of monuments erected in memory of others who ensured the nation's survival and well-being. They deserve at least a book.

The final word goes to a survivor of childbirth in NSW. Women who bore children for the Australian state and for a White Australia, and who survived, occasionally had to relieve the stress that such duty imposed. On 17 March 1908, a woman was brought before the magistrate in the NSW coal mining town of Wollongong. Charged with a most unfeminine offence, drunkenness in a public place, she 'greatly amazed' the court by explaining that she had come into town, alone, to celebrate her birthday by having a few drinks. When the laughter subsided, the magistrate declared her guilty and offered her the option of a five shilling fine or imprisonment to the rising of the court. Upon being convicted, the woman broke down and was led weeping from the court. As she left the room she revealed what had led her to seek solace, alone, on her birthday, in a bottle. She had, she cried out, 'been a slave all her life, having reared twelve children.'⁶⁴

Notes

- 1 Written originally for the Health, Ethics, Law & Policy Conference, Health, Ethics, Law & Policy Research Group, University of Wollongong, University Centre, Sydney, 29 November 1996.
- 2 A.G.L. Shaw & G.R. Bruns, *The Australian Coal Mining Industry*, Melbourne University Press, Carlton 1947, p. 119.
- 3 *ibid.*
- 4 B. Norington, 'Long history of death underground', *Sydney Morning*

- Herald*, 15 November 1996.
- 5 *Sydney Morning Herald*, 18 November 1996.
 - 6 *New South Wales Parliamentary Debates*, Second Series, Session 1902, Volume 6, p. 1607.
 - 7 *Sydney Morning Herald*, 18 November 1996 (editorial).
 - 8 Norington, 'Long history of death underground'.
 - 9 T. Wilks, 'Foreword' to D.P. Dingsdag, *The Bulli Mining Disaster 1887: Lessons from the Past*, St Louis Press, Sydney 1993, p. i.
 - 10 P. Thomas, *Miners in the 1970s: A Narrative History of the Miners Federation*, Miners Federation, Sydney 1983, pp. 122–5.
 - 11 R. Gollan, *The Coalminers of New South Wales: A History of the Union, 1860-1960*, Melbourne University Press/Australian National University, Parkville 1963, pp. 35, 96, 106–7 & 203.
 - 12 E. Ross, *A History of the Miners' Federation of Australia*, Australasian Coal & Shale Employees' Federation, Sydney 1970 (see in index under 'Accidents').
 - 13 Thomas, *Miners in the 1970s*, p. 93.
 - 14 S. Piggin & H. Lee, *The Mt Kembla Disaster*, Oxford University Press, Melbourne 1992, and Dingsdag, *The Bulli Mining Disaster 1887*.
 - 15 Quoted by Ross, *A History of the Miners' Federation*, p. 268.
 - 16 Shaw & Bruns, *The Australian Coal Mining Industry*, p. 135.
 - 17 *Sydney Morning Herald*, 18 November 1996.
 - 18 An Act for registering Births Deaths and Marriages, 19 Vic. No. 34 (Assented to 3 December 1855).
 - 19 Gollan, *The Coalminers of New South Wales*, p. 34.
 - 20 Coal Mines Regulation Act of 1876, 39 Vic No 31, Ss 8 & 39.
 - 21 Miner's Rights required for mining and issued under the Mining Act of 1874, which established a separate Department of Mines in NSW under its own Minister, were not subject to any test of gender.
 - 22 Calculated from figures in Commonwealth Census 1911, Volume I, pp. 377 & 378 (male and female occupations by age), pp. 242 & 379 (married women and their occupations) and Volume II, p. 34 (ages of males and females).
 - 23 B. Kingston, *My Wife, My Daughter, and Poor Mary Ann: Women and Work in Australia*, Nelson, Melbourne 1975, p. 138.
 - 24 This provision was common to all the Acts, from 1862 onward.
 - 25 See Piggin & Lee, *The Mt Kembla Disaster*, pp 123 & 124.
 - 26 *Official Year Book of New South Wales*, 1912, p. 415.
 - 27 Calculated from table in *New South Wales Statistical Register*, 1912, pp. 98–9.
 - 28 J. Jamieson, 'Childbirth mortality in the Australian Colonies', *Australian Medical Journal*, 15 October 1887, p. 446.
 - 29 *ibid.*
 - 30 *ibid.*, p. 448.
 - 31 Calculated from tables in *Demography. 1949. Bulletin No. 67*, Commonwealth Bureau of Census & Statistics, Canberra 1949, p. 168.
 - 32 T.A. Coghlan, *The Decline in the Birth-Rate of New South Wales and Other Phenomena of Child-Birth. An Essay in Statistics*, Government Printer, Sydney, p. 3.

- 33 *ibid*, p. 4.
- 34 *ibid*, pp. 66–7.
- 35 *ibid*, p. 69.
- 36 *Royal Commission on the Decline of the Birth-Rate and on the Mortality of Infants in New South Wales. Volume I. Report, together with Copies of Commissions, Diagrams, Statistical Evidence, and Statistical Exhibits*, &c, Government Printer, Sydney 1904, p. iii.
- 37 *ibid*, p. v.
- 38 *ibid*, p. vi.
- 39 Commissioners listed in *ibid*, p. 1.
- 40 *ibid*, p. 31.
- 41 *ibid*, pp. 52–4.
- 42 T.P.A. Stuart, ‘Health and allied matters’, in *New South Wales. The Mother State of Australia. A Guide for Immigrants and Settlers*, Intelligence Department, Sydney 1906, p. 386.
- 43 P.E. Muskett, *The Illustrated Australian Medical Guide*, Volume 1, William Brooks, Sydney 1903, p. 33 (year of publication from National Library of Australia’s *Australian National Bibliography*).
- 44 A. Andrews, ‘Notes of 800 consecutive midwifery cases’, *Australasian Medical Gazette*, 15 November 1893, p. 361.
- 45 *History of the New South Wales Nurses Registration Board*, Nurses Registration Board, Sydney 1989. To date, this is the only historical study that contains any sustained account of the maternal maternity problem in NSW before World War II (see Chapters 1-4, *inter alia*).
- 46 *Committee Concerning Causes of Death and Invalidity in the Commonwealth. Report on Maternal Mortality in Childbirth*, Government Printer, Melbourne 1917, p. 12.
- 47 *ibid*, p. 9.
- 48 *ibid*, p. 7.
- 49 *Worker* (Sydney), 27 June 1912.
- 50 C.E. D’Arcy, ‘The problems of maternal welfare’, *Medical Journal of Australia*, 1 (13), 30 March 1935, p. 384.
- 51 *ibid*, p. 386.
- 52 *ibid*.
- 53 F.J. Hayden, ‘Maternal mortality in history and today’, *Medical Journal of Australia*, 1 (3), 17 January 1970.
- 54 J. Ackermann, *Australia from a Woman’s Point of View*, Cassell & Company, London 1913, especially Chapter IX as referred to in the text.
- 55 A.G. Austin (ed.), *The Webbs’ Australian Diary 1898*, Sir Isaac Pitman & Sons, Melbourne 1965, pp. 75–6 & 131.
- 56 E. Browne, *The Empty Cradle: Fertility Control in Australia*, University of NSW Press, Sydney 1979, pp. 15–16.
- 57 D. Siedlecky & D. Wyndham, *Populate and Perish: Australian Women’s Fight for Birth Control*, Allen & Unwin, Sydney 1990 (see index, under ‘maternal mortality’).
- 58 P. Grimshaw, M. Lake, A. McGrath & M. Quartly, *Creating a Nation*, McPhee Gribble, Ringwood 1994, pp. 235–6.
- 59 The only substantial reference of the three indexed under ‘Mortality, maternal’, is in R. Howe & S. Swain, ‘Fertile grounds for divorce:

- sexuality and reproductive imperatives', in K. Saunders & R. Evans (Eds), *Gender Relations in Australia: Domination and Negotiation*, Harcourt Brace Jovanovich, Marrickville 1992, p. 163 (notes that maternal mortality was the third greatest killer of women aged 15–44).
- 60 To mention a few: R.W. & D.C. Wertz, *Lying-in: A History of Childbirth in America*, Free Press, New York 1977; A. Oakley, *The Captured Womb: A History of the Medical Care of Pregnant Women*, Basil Blackwell, Oxford 1984, and I Loudon, *Death in Childbirth: An International Study of Maternal Care and Maternal Mortality 1800–1950*, Clarendon Press, Oxford 1992 (includes a short survey chapter on Australia and New Zealand).
- 61 In Grimshaw, Lake, McGrath & Quartly, *Creating a Nation*, p. 4.
- 62 Kingston, *My Wife, My Daughter, and Poor Mary Ann*, p. 7.
- 63 B. Kingston, 'Women in nineteenth century Australian history', *Labour History*, 67, November 1994.
- 64 *Illawarra Mercury*, 18 March 1908.