The Australian Longitudinal Study on Women's Health

Report 7

The University of Newcastle

10 December 1997

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DECEMBER 1997 REPORT

INTRODUCTION

This is the seventh report on the Australian Longitudinal Study on Women's Health, provided by the University of Newcastle and the University of Queensland, due 10 December 1997, as agreed in the contract between the Commonwealth Department of Health and Family Services and the University of Newcastle.

The contract states that the content of report seven is to include:

A   For the main cohort studies, a report on:

- the conduct of the pilot second survey for the mid-life cohort, including attrition rate and a comparison of the demographic characteristics of respondents and those lost to follow-up;
- a detailed protocol for the second survey of the mid-life cohort;
- project operation (management issues, staff, students, visitors, performance indicators);
- communications strategy;
- plans for the next three years.

B   For the special cohort studies, a report on:

- the special cohorts (including baseline data for the indigenous cohorts);
- project operation (management issues, staff, students, visitors, performance indicators and communications strategy);
- plans for the next three years.

C   For the study as a whole:

- the operations of the National Advisory Committee and reference groups.

This report is presented in three parts:

PART A -   Progress at the University of Newcastle

PART B -   Progress at the University of Queensland (included separately)

PART C -   The National Advisory Committee

PART A: UNIVERSITY OF NEWCASTLE

EXECUTIVE SUMMARY

1. A pilot survey (N=376) for the first follow-up of the mid-age cohort was developed and conducted during July – November 1997. The response rate to date is 86% Women who are separated from their partner were less likely to respond. The pilot survey included questions on nine issues which were not included in the baseline survey (health services, transport, depression, dieting, work/industry, income, caring, social support and social class), as well as 'repeated' questions on the SF-36, health problems, symptoms, medication, stress, life events, weight, occupation and demographics. New questions on smoking and physical activity (developed by the Australian Institute of Health and Welfare) were also included. Response frequencies are included in this report.

2. Comparison of SF-36 scores for participants in the baseline survey (N = 14,589 for the young cohort; N = 13,697 for the mid-age cohort; and N = 11,892 for the older cohort) with women of the same age who participated in the National Health Survey, found significantly lower scores for the young and mid-age participants for most of the SF-36 subscales. For mental health subscales, scores were also lower for WHA participants in the older cohort It is not clear whether this finding suggests that WHA participants are in general less healthy, or that participants in the NHS survey (N = 418-918) are more healthy, than the general population.

3. During 1997, WHA participants were requested to give consent for the researchers to have access to their HIC/Medicare data. To date, more than 20,000 WHA participants have given their consent. A higher proportion of the mid-age and older participants (59.1% and 55.1% respectively) gave consent than participants in the younger cohort (36.5%). HIC data on GP visits, Pap tests and specialist services will be available for consenting women in 1998.

4. Comparison of aggregated HIC data on GP visits, Pap tests and specialist visits for WHA participants and for women who declined to participate in the WHA project, indicate that patterns of health service utilisation are broadly similar among participants and non-respondents. One notable finding from this comparison was that a greater proportion of non-respondents (young 6%; mid-age 10%; older 10%) had made no claims for Medicare services in 1995/1996 than WHA participants (young 1%; mid-age 2%; older 1%). The proportion of non-respondents who made no claims was much higher in remote areas (young 23%; mid-age 22%; older 25%). Some of these women may use services which are not covered by Medicare. Other reasons for non-use of services may include good health, migration or death.

5. During 1997, significant progress was made on the nested cohort studies. Data collection for the two health service substudies (help seeking for psychological distress and health service use in NSW) is now completed. For each of the substudies on iron and tiredness, eating disorders and social support, initial data collection is now completed and follow-up data will be collected in 1998. Two new substudies, one on the health of widows, the other on eating disorders in the mid-age cohort, also completed data collection this year. The substudy on the effect of legal protection on the secondary prevention of violence will proceed in 1998.

6. During June-December 1997, the WHA researchers presented 38 papers at national and international conferences and meetings. These conferences focused on Nutrition, Aging, Body Image, Women's Health Promotion, Epidemiology, Public Health, Rural Health, Health Outcomes, Continence and Sociology. Three additional abstracts have been submitted for international conferences in 1998.

   Four papers previously submitted for publication have now been accepted and are 'in press'. A further nine papers have been submitted, bringing the total number of publications prepared to 31 (main cohorts) .

7. Three newsletters (one for each age group) have been designed to provide feedback to all study participants. These will be mailed before the end of 1997. Newsletters for the younger and older women will include a request for a contact address of a friend or relative, for use if the researchers lose track of any participants. For the mid-age cohort, this request will be sent with the first follow-up survey in March 1998.

8. During the six month period of this report, the researchers prepared a submission for continued funding of the project. This was presented to the Commonwealth Department of Health and Family Services in October. The submission (which is included in this report) includes plans for the next three years.

9. The National Advisory Group met in October 1997. The main focus of the meeting was a review of progress and discussion of future funding for the study. The minutes are included in this report.

1. ADMINISTRATIVE ARRANGEMENTS

1.1   PROJECT STAFF

The following staff are now working with the research team at the University of Newcastle. Unless otherwise stated, staff are based at the University of Newcastle.

Investigators

Professor Annette Dobson, BSc, MSc, PhD (Study Director; Professor, Biostatistics)

Dr Wendy Brown, BSc(Hons), DipEd, MSc, PhD (Project Manager & Senior Research Academic)

Professor Lois Bryson, BA, DipSocStud, DipEd, PhD (Professor, Sociology & Anthropology)

Dr Julie Byles, BMed, PhD (Senior Lecturer, Clinical Epidemiology & Biostatistics)

A/Professor Christina Lee, BA, PhD (Associate Professor, Psychology)

Dr Gita Mishra, BSc, MSc, PhD (Statistician & Research Academic, WHA)

A/Professor Margot Schofield, BA, DipSc, MClinPscych, PhD (Honorary Associate, WHA, now based at the University of New England)

Dr Deidre Wicks, BA, MA (Senior Lecturer, Sociology & Anthropology)

Associate Investigators

Ms Susan Feldman, BA, MA (Alma Unit on Women & Ageing, University of Melbourne)

Mr John Germov, MA, PhD Candidate (Department of Sociology & Anthropology)

Dr Helen Jonas, MSc, PhD (Department of Public Health, University of Melbourne)

Dr Julia Lowe, MBChB, FRCP (UK), MMedSci. (John Hunter Hospital)

Ms Sue Outram, BA, RN, MSc Candidate (University of New South Wales)

Dr Penny Warner-Smith, BA, PhD (Department of Sociology & Anthropology)

Ms Lauren Williams, BSc(Hons), Grad Dip Diet, Grad Dip Soc Sci, PhD Candidate (Department of Nutrition & Dietetics)

Adjunct Investigators

Dr Rhonda Reynolds, BA(Hons), PhD (University of Western Sydney Macarthur)

Post-graduate students

PhD candidates

Ms Kylie Ball, BA (Psych) (University of Newcastle)

Ms Julie Brookes, Dip App Sc (Nursing), BA (Hons) (University of Newcastle)

Ms Pauline Chiarelli, Dip Physio (University of Sydney), Grad Dip H Soc Sci (HProm), MMEdSc(HProm) (University of Newcastle)

Ms Amanda Patterson, BSc (University of Newcastle), MND (University of Sydney)

Ms Anne Young, BMath (HonsI), Dip Med Stat (University of Newcastle)

Ms Margrette Young, BA(HonsI) (University of Sydney), MSc (Keele University)

Mr Brendan Goodger, BSW(Hons), Grad Dip Hlth Soc Sci (Med Soc Sci) (University of New South Wales)

Honours candidates

Ms Stefani Strazzari, BA (Sociology & Anthropology, University of Newcastle)

Ms Gillian Bowes (Sociology & Anthropology, University of Newcastle)

Student placements

Ms Laura Weisman (Dept of Medicine, University of Massachusetts, USA)

Ms Jane Turley (Dept of Communications & Media Studies, University of Newcastle)

Office Staff

Mrs Lyn Adamson	Research Assistant/Publicity Officer
Mrs Jean Ball, B.Math, DipMedStat	Data Manager
Mrs Joy Goldsworthy, BA(Hons)	Research Assistant
Mrs Beverly Parker	Administrative Assistant
Vacant	Secretary

1.2   1997 BUDGET

Table 1.1:   ALSWH – Budget for 1997 (revised November 1997)

INCOME		EXPENDITURE	
Item:	**$**	**Item:**	**$**
Carried forward (1995)	325,604	University of Queensland	187,000
Department of Health		**Salaries (inc on-costs)**	
& Family Services	900,000	Project Manager	65,000
		Statisticians	62,000
		Data Manager	48,000
		Research Fellow (0.4)	14,000
		Secretary/RA	32,000
		Research Assistants	65,000
		Casual research staff (eg interviewers)	29,500
		Scholarships	64,500
		on costs (inc superannuation)	64,000
		University Overheads	
		(eg library, info technology, power, cleaning etc)	
		Furniture and Computer upgrades	20,000
		Office running costs (eg consumables,	
		(eg photocopier, fax, phone, photocopier etc)	
		Sub-studies (inc PhD projects)	66,000
		Main Survey (inc pilot mid follow-up)	
		Printing	7,000
		Packing	7,000
		Post (inc HIC consent)	35,000
		Data entry (inc c/f from 96)	39,000
		1800 number	2,000
		Communications	
		publicity	2,000
		Newsletter/HIC consent (print/pack)	30,000
		Newsletter postage (including returns)	
		Travel	
		Project (meetings/visitors)	6,000
		Advisory Group	20,000
		Conference travel	6,500
		Sub-studies (inc PhD students)	70,000
		ABS data	3,000
		HIC data	10,000
TOTAL	**1,225,604**		**1,131,775**
		to be carried forward for 1998	93,829

2   MAIN COHORT SURVEYS

2.1   FIRST FOLLOW-UP SURVEY OF THE MID-AGE COHORT PILOT STUDY 1997

The first follow-up survey for the mid-age cohort was designed during July and August 1997. The aims were:

(1)   To repeat questions asked in the first survey, where relevant, so that changes over time could be monitored.

(2)   To delete questions from the survey for which responses were unlikely to have changed (eg country of birth).

(3)   To develop and trial new questions to explore issues not covered in the first (baseline) survey. New questions were asked in relation to:

> access to health services (Q17)
> transport (Q18, 19)
> reproductive history (Q25)
> depression (Q32)
> dieting and weight control practices (Q45-51)
> satisfaction and barriers to paid work (Q58-61)
> income (Q70)
> industry (Q66)
> caring (Q75-81)
> social support (Q82)

(4)   To trial new questions for smoking (Q34-39) and exercise (Q52-55) which have been developed by the AIHW as 'standard' questions for Australia.

(5)   To identify women who have experienced violence, and ask whether they would be   willing to answer questions about their experiences (Q73).

The protocol for the pilot survey was

- survey and letter sent to 376 women in the 'pilot' cohort (Illawarra and Bathurst areas of NSW);
- reminder/thank you card sent one week later;
- second reminder card sent three weeks after reminder 1;
- telephone contact with all non-respondents six weeks after initial mail out.

The pilot survey, with frequencies of responses to each item, is included in Appendix 2. (Reminder cards and other materials used in the pilot are included in Appendix 1). Between December 1998 and February 1998, we plan to review the 'new' questions, modify appropriately, and prepare the questionnaire for the follow-up survey on the mid cohort, which will take place in February-March 1998.

2.1.1 Response rate, attrition rate and demographic characteristics of women lost to follow up: mid pilot follow-up

The response rate to date is 85.6%, although surveys are still being returned. Another 20-30 surveys are expected based on responses to the reminder telephone call. There was one withdrawal and two return to senders are still being followed-up.

Demographic characteristics of the respondents and non-respondents are shown in Tables 2.2, 2.3 and 2.4. Because of the small number of non-respondents, it is not possible to carry out statistical comparisons of the two groups.

A slightly higher proportion of married women responded to the survey and a higher proportion of women who were separated did not respond. (Based on marital status ascertained from the first pilot survey, carried out in 1995). One explanation for this might be that the separated women are no longer at the same address.

Three of twenty four NESB women in the pilot cohort did not respond. There was very little difference between respondents and non-respondents in terms of education. Recent attendance for a Pap test and mammogram was very similar in the two groups.

Table 2.1:   Response to the mid follow-up pilot survey

Packages sent September 1997	376
Surveys returned as at 28/11/97	325
Surveys entered	320
Withdrawal	1
Ineligible	2
Return to sender	2
RESPONSE RATE	85.6%

Table 2.2:   Respondent vs non-respondent comparison for marital status

	Respondent		Non-respondent		Total
	n	%	n	%	n
Married	250	78.4	38	73.1	288
De Facto	17	5.3	3	5.8	20
Separated	9	2.8	7	13.5	16
Divorced	31	9.7	3	5.8	34
Widowed	2	0.6	0	0.0	2
Never married	10	3.1	1	1.9	11
Total	319		52		371

Frequency Missing = 1

Table 2.3:   Respondent vs non-respondent comparison for country of birth

	Respondent		Non-respondent		Total
	n	%	n	%	n
Australia	244	79.5	40	78.4	284
UK	36	11.7	8	15.7	44
New Zealand	3	1.0	0	0.0	3
Italy	1	0.3	0	0.0	1
Germany	4	1.3	0	0.0	4
Netherlands	4	1.3	2	3.9	6
Philippines	1	0.3	0	0.0	1
Other	14	4.6	1	2.0	15
Total	307		51		358

Frequency Missing = 14

Table 2.4:   Respondent vs non-respondent comparison for level of education

	Respondent		Non-respondent		Total
	n	%	n	%	n
Post-graduate	25	7.8	5	9.4	30
Uni degree	25	7.8	5	9.4	30
Certif/diploma	75	23.5	10	18.9	85
Trade/appr.	15	4.7	4	7.6	19
None	179	56.1	29	54.7	208
Total	319		53		372

Table 2.5:   Respondent vs non-respondent comparison for Pap smear test

| | Respondent | | Non-respondent | | Total |
	n	%	n	%	n
Never had test	4	1.4	0	0.0	4
<2 yrs ago	187	63.4	29	63.0	216
2-5 yrs ago	49	16.6	10	21.7	59
>5 yrs ago	45	15.3	4	8.7	49
Not sure	10	3.4	3	6.5	13
Total	295		46		341

Frequency Missing = 31

Table 2.6:   Respondent vs non-respondent comparison for mammogram screening

| | Respondent | | Non-respondent | | Total |
	n	%	n	%	n
Never had test	108	36.5	14	29.8	122
<2 yrs ago	136	46.0	25	53.2	161
2-5 yrs ago	36	12.2	5	10.6	41
>5 yrs ago	15	5.1	3	6.4	18
Not sure	1	0.3	0	0.0	1
Total	296		47		343

Frequency Missing = 29

2.1.2 *Proposed protocol for the first mid follow-up survey*

JANUARY – FEBRUARY 1998	Finalise questions for inclusion in the survey. Prepare reminder materials/envelopes, etc. Prepare tender documents. Select successful tenderers for printing, packing, mailing and data entry.
WEEK BEGINNING 2 MARCH	Mail survey with letter to all women in the mid cohort. Include change of address/contact card.
WEEK BEGINNING 9 MARCH *(10 days after first mail-out)*	Mail thank you/reminder card to all participants.
WEEK BEGINNING 30 MARCH *(4 weeks after first mail out)*	Mail second reminder card to all non-respondents.
WEEK BEGINNING 13 APRIL *(6 weeks after first mail out)*	Telephone all non-respondents to check they have received the survey, encourage participation and follow-up any change of address. Track all women who have left previous address through electronic white pages or known contacts.
WEEK BEGINNING 4 MAY	Prepare frequency tables and report on response rate, attrition and demographic characteristics of women lost to follow up.

2.2 COMPARISON OF SF-36 SCORES FOR WHA AND NHS PARTICIPANTS, AGE AND GENDER-MATCHED NORMS

Means and 95% confidence intervals for each of the 8 dimensions of the SF-36 are shown in Figures 1 - 3 for each of the three age groups. For comparison, the 8 dimension mean scores from age and gender relevant Australian norms, derived from the 1995 National Health Survey (NHS) (Chris Gordon, personal communication), are also shown in the figures.

For both the 18-23 and 45-50 age groups, most of the dimension means were significantly lower in the WHA baseline study compared with the Australian norms except for the mean scores of *physical functioning* (PF) and *role physical* (RP) in the young cohort, and for PF, RP and general health (GH) in the mid-age cohort.

For the 70-75 years age group, there were no significant differences between most of the dimension means obtained from the WHA baseline study and the Australian norms. The exception was RP, for which the WHA mean score was significantly lower than that for the NHS participants.

The findings raise the question of whether the WHA participants have lower levels of physical and mental health than the population as a whole, or whether the larger sample size in the WHA project means that the WHA means are a better reflection of the general population and that participants in the NHS survey have better physical and mental health than the general population.

Figure 2.1: **Mean SF-36 scores and 95% confidence intervals for WHA (N=14589) and NHS (N=918) participants aged 18-23**
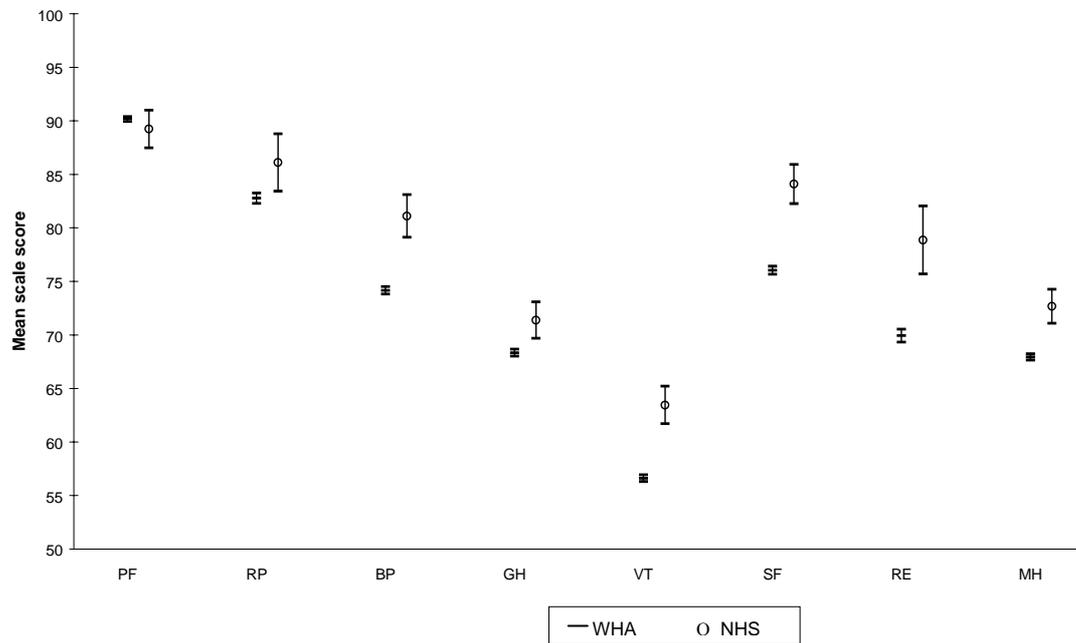
Figure 2.2: **Mean SF-36 scores and 95% confidence intervals for WHA (N=13697) and NHS (N=899) participants aged 45-50**
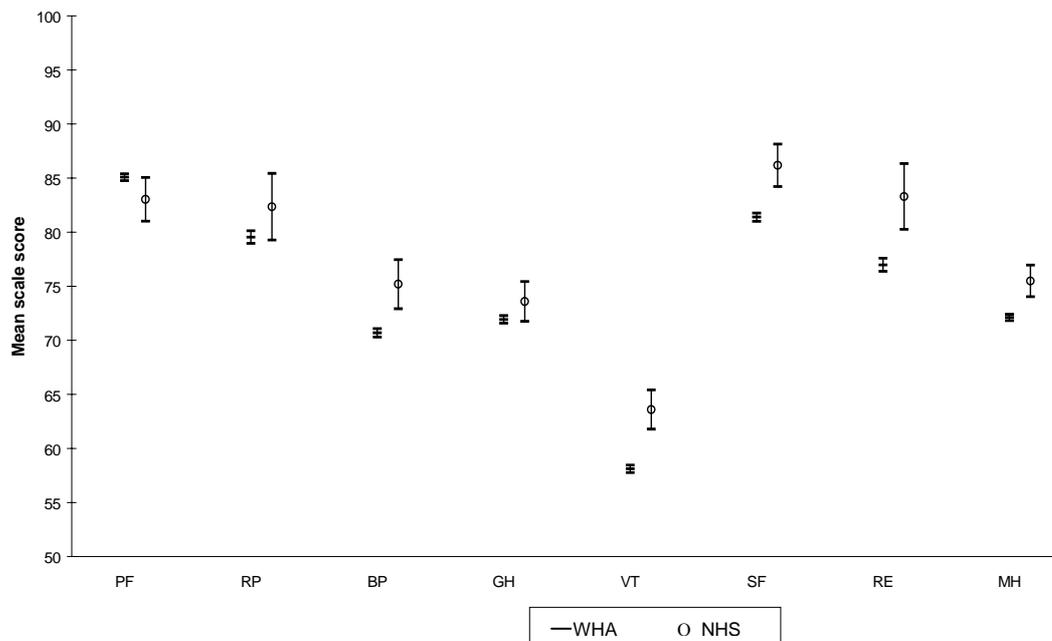
Figure 2.3:   **Mean SF-36 scores and 95% confidence intervals for WHA (N=11892) and NHS (N=418) participants aged 70-75**
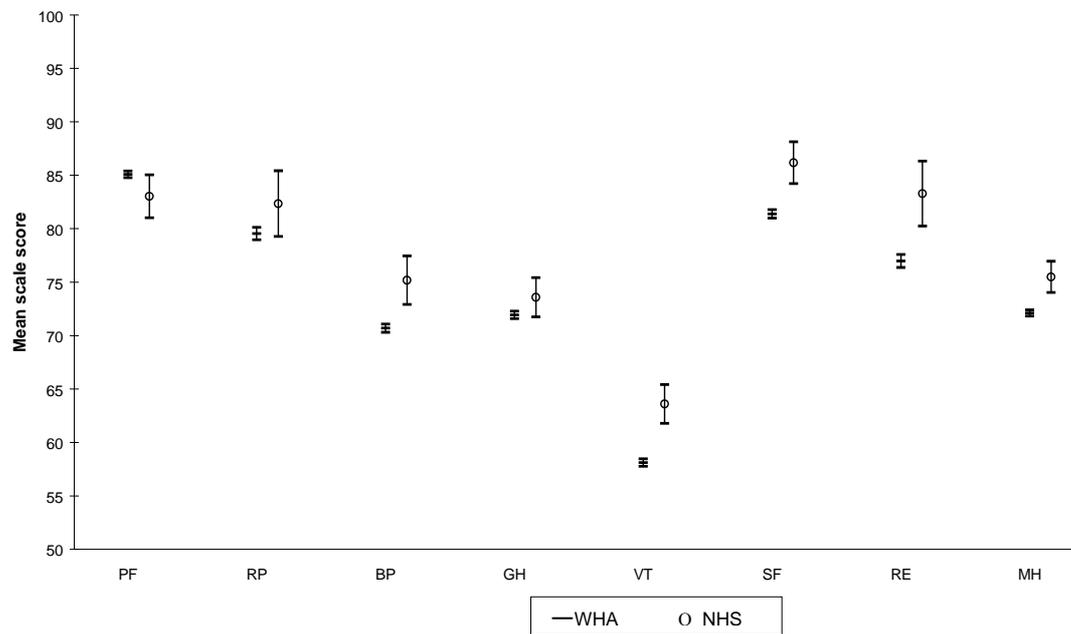
3   MEDICARE CONSENT – UPDATE

3.1   LIAISON WITH THE HEALTH INSURANCE COMMISSION (HIC)

Individual data
During 1997 almost 20,000 participants gave written consent for the researchers to access their Medicare data held by the HIC. In July 1997 discussions were held with staff from the Legislation and Data Access Branch of the HIC to establish a protocol for batching and conveying the consent forms. (Forms were copied and sent to HIC by courier). All consent forms were individually checked upon receipt by staff at the HIC. In October 1997 the first test file of data from the HIC was received for evaluation. Minor modifications were made to the file specification and the complete file of individual claims data is expected to be ready at the end of November 1997. In accordance with privacy issues associated with the release of Medicare data to the researchers, the Medicare item number will only be supplied for Pap smear services and GP visits. A classification of the broad type of service will be provided for all services, and provider derived major specialty code will be restricted to four categories, namely vocationally registered GP, non vocationally registered GP, specialist and other provider.

Aggregated data: respondents and non-respondents
For comparative purposes, aggregated tables of anonymous data on three groups of women have been provided by the HIC. The three groups are defined as:

Women in the study who have given written Medicare consent (around 20,000 women);
Women in the study who have not given written Medicare consent (around 20,000 women);
Women drawn in the original sample and who did not participate (around 65,000 women).

The researchers commissioned staff in the Government Programs Statistics section of the HIC to produce a table of all services provided by Medicare and the Department of Veterans' Affairs during 1995 and 1996 to women selected in the sample, grouped according to the following variables:

Age group (young, mid, older);
State/Territory of residence at time of selection;
Urban/rural/remote classification;
Study status (Consent (1); Non-consent (2); non-participant (3));
Consultation with a specialist in the two year period 1995 and 1996 (yes/no);
Screening Pap test in the two year period 1995 and 1996 (yes/no);
Number of GP attendances in two year period 1995 and 1996.

This task required staff at the HIC to extract the Medicare and DVA services for 106,000 women for a two year period and link them by each woman's PIN number prior to reporting the de-identified frequencies. This is the first instance where this has been done on such a large scale. The amalgamation of the HIC and DVA data sets is particularly important when investigating service use, as there are many women in the older age group who are entitled to have their medical services paid for by DVA. The aggregated data were received in November 1997 and some preliminary comparisons of the respondents and non-respondents are included here.

Table 3.1:   Summary of responses to access Medicare/HIC

	Young	Middle	Older
Total number of requests sent	14,192	13,712	12,042
Number returned to sender	644	210	83
- new address found & resent	323	100	44
- location currently unknown	321	110	39
Number of participants NSW	4,116	3,820	4,094
Number consenting NSW	1,465	2,719	2,560
Response rate NSW	35.6	71.2	62.5
Number of participants Other states	10,076	9,898	7,948
Number consenting Other states	3,709	5,385	4,077
Response rate Other states	36.8	54.4	51.3
OVERALL			
% indicating non-consent	3.6	3.5	1.5
% from whom no response received	59.9	37.4	43.4
Final response rate (December, 1997)	36.5	59.1	55.1

3.2   COMPARISON OF RESPONDENTS AND NON-RESPONDENTS IN THE BASELINE SURVEY

Please note that throughout this document "Medicare services" refers to both Medicare and DVA services. The table below shows the number of women with valid and invalid birthdays in the original sample of 106,000 women selected by the HIC. Women with invalid birthdays have been excluded from all subsequent analyses.

	18-22 years	45-49 years	70-74 years	Total
Non-respondents	24,726	14,549	26,479	65,754
Respondents				
no HIC consent	9,079	5,493	5,788	20,360
HIC consent	5,149	7,846	6,529	19,524
Invalid birthdays	46	112	204	362
Total	39,000	28,000	39,000	106,000

3.2.1 Young cohort (18 – 23 years)

The following table shows the number of young respondents and non-respondents living in each geographic area, who did not make any Medicare claims in the last two years.

	Respondents		Non-respondents	
	Claims	No claims*	Claims	No claims*
Urban	6405	68	10790	659
Rural	6978	110	11043	566
Remote	643	24	1290	378
Total	14026	202	23123	1603

* women who had no Medicare service (including GP visit, Pap test and specialist visit)

The proportion of women in each group who made a Medicare claim is shown below.

	Respondents	Non-respondents
Urban	99	94
Rural	98	95
Remote	96	77
Total	99	94

In urban and rural areas, about 5% of non-respondents had not made any Medicare claims compared with 2% of respondents. These differences may be due to the non-respondents being healthier. However the differences may also be due to the use of outpatients or alternative health practitioners instead of Medicare services, or because the young women may be living overseas. In remote areas, over 20% of non-respondents made no Medicare claims compared to 4% of respondents. Most of these women lived in the Northern Territory, Western Australia and Queensland, where Medicare services are not routinely available unless the woman travels to a major town to see a doctor.

The figure below compares the number of GP visits made by all young women selected in the sample, according to their response status.

Figure 3.1: Percentage of all young respondents and non-respondents who made between 0 and 52(+) GP visits during 1995/1996.
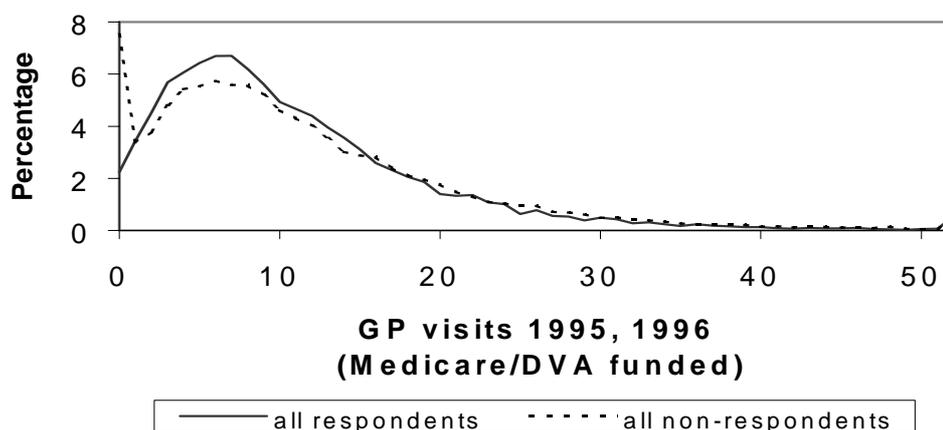
The high percentage of non-respondents having no GP visits is mainly due to the number of women in this group who made no claims through Medicare.

In the figure below, only those young women who made a claim through Medicare in the two year period are included.

Figure 3.2:   Percentage of young respondents and non-respondents with a claim who made between 0 and 52(+) GP visits during 1995/1996.
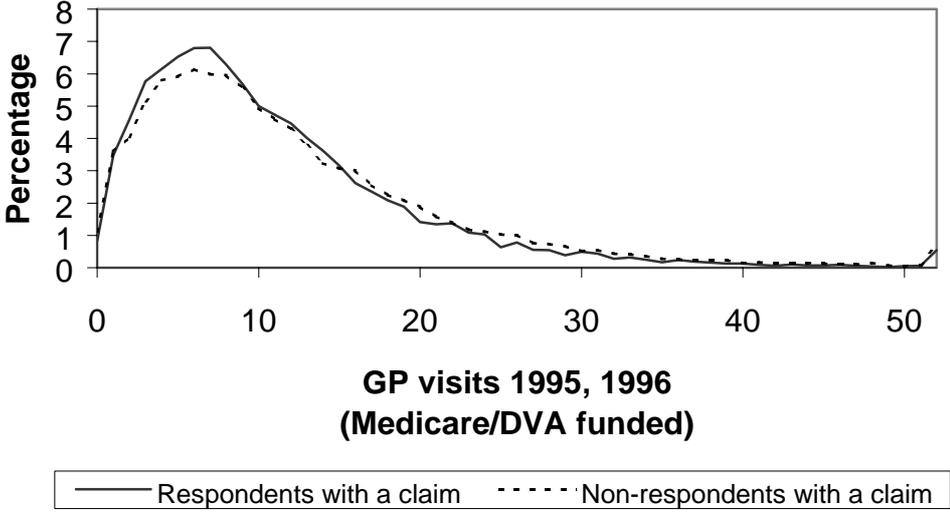
During 1995 and 1996, 50% of these young women visited a GP between 5 and 16 times, with a median of 9 GP visits for the two year period. There was very little difference in the overall pattern of GP visits for respondents and non-respondents, but a slightly higher proportion of respondents made between 5 and 10 visits to a GP in the last two years.

The following tables include only women who made at least one Medicare claim. There was very little difference between respondents and non-respondents in the proportion of young women who had a Pap test or a specialist visit in the last two years.

Percentages of respondents and non-respondents who had a Pap test.

	Respondents	Non-respondents
Urban	29	29
Rural	33	32
Remote	33	28
Total	31	30

Percentages of respondents and non-respondents who made a specialist visit.

	Respondents	Non-respondents
Urban	40	40
Rural	38	39
Remote	37	38
Total	39	40

3.2.2 Mid-age cohort (44-50 year olds)

The following table shows the number of mid-age respondents and non-respondents living in each geographic area, who did not make any Medicare claims in the last two years.

	Respondents		Non-respondents	
	Claims	No claims*	Claims	No claims*
Urban	4819	59	5557	718
Rural	7668	132	6683	577
Remote	634	27	794	220
Total	13121	218	13034	1515

* women who had no Medicare service (including GP visit, Pap test and specialist visit)

The proportion of women in each age group who made a Medicare claim is shown below.

	Respondents	Non-respondents
Urban	99	89
Rural	98	92
Remote	96	78
Total	98	90

In urban and rural areas, about 10% of non-respondents made no Medicare claims, compared with 2% of respondents. These differences may be explained by:

- non-respondents being healthier;
- use of outpatients or alternative health practitioners instead of Medicare services;
- hospitalisation for most of the two year period;
- living overseas for most of 1995 and 1996 ;
- deceased.

In remote areas, over 20% of non-respondents made no Medicare claims compared with 4% of respondents. Most of these women lived in the Northern Territory, Western Australia and Queensland, where Medicare services are not routinely available unless the woman travels to a major town to see a doctor.

The figure below compares the number of GP visits made by all mid-age women selected in the sample, according to their response status.

Figure 3.3: **Percentage of all mid-age respondents and non-respondents who made between 0 and 52(+) GP visits during 1995/1996.**

**GP visits 1995, 1996
(Medicare/DVA funded)**

——— all respondents   - - - - - all non-respondents

The high percentage of non-respondents having no GP visits is mainly due to the number of women in this group who made no claims through Medicare.

In the figure below, only those mid-age women who made a claim through Medicare in the two year period are included.

Figure 3.4: **Percentage of mid-age respondents and non-respondents with a claim who made between 0 and 52(+) visits to a GP in 1995/1996**

**GP visits 1995,1996
(Medicare/DVA funded)**

——— Respondents with a claim   - - - - - Non-respondents with a claim
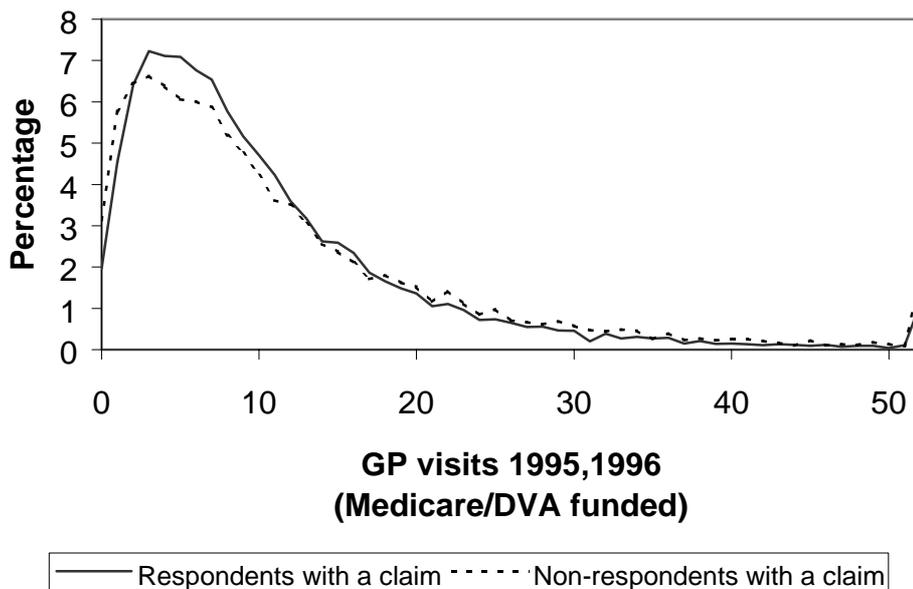
During 1995 - 1996, half of these mid-age women visited a GP between 4 and 14 times, with a median of 8 GP visits for the two year period. The distribution of GP visits was very similar for respondents and non-respondents, but a slightly higher proportion of respondents made between 5 and 12 visits to a GP in the last two years.

The following tables include only women who made at least one Medicare claim. A greater proportion of respondents were screened for cervical cancer, and had visited a specialist in the last two years.

Percentages of respondents and non-respondents who had a Pap test.

	Respondents	Non-respondents
Urban	42	37
Rural	37	30
Remote	33	30
Total	39	33

Percentages of respondents and non-respondents who made a specialist visit.

	Respondents	Non-respondents
Urban	59	54
Rural	51	46
Remote	44	39
Total	54	49

3.2.3 Older cohort (70-75 years)

The following table shows the number of older respondents and non-respondents living in each geographic area, who did not make any Medicare claims in the last two years.

	Respondents		Non-respondents	
	Claims	No claims*	Claims	No claims*
Urban	4937	29	10521	1207
Rural	7014	43	12712	1174
Remote	289	5	647	218
Total	12240	77	23880	2599

* women who had no Medicare service (including pap test or specialist visit)

Percentages of women who made Medicare claims by response status and living area.

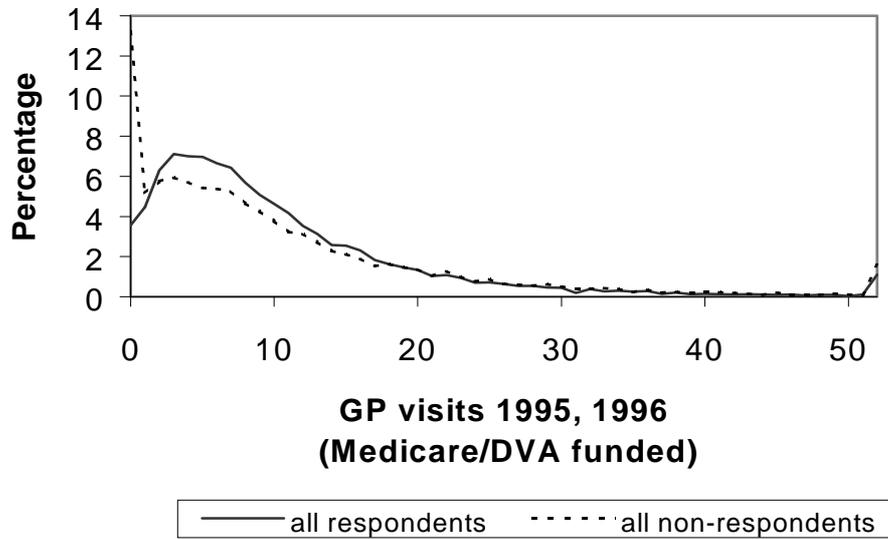|	Respondents	Non-respondents
Urban	99	90
Rural	99	92
Remote	98	75
Total	99	90

In urban and rural areas, about 10% of non-respondents had made no Medicare claims compared to 2% of respondents. These differences may be explained by:

- being in institutionalised care instead of Medicare services;
- being in hospital for most of 1995 to 1996;
- deceased.

In remote areas, 25% of non-respondents made no Medicare claims compared to 2% of respondents. Most of these women lived in the Northern Territory, Western Australia and Queensland, where Medicare services are not routinely available unless the woman travels to a major town to see a doctor.

The figure below compares the number of GP visits made by all older women selected in the sample, according to their response status.

Figure 3.5:   Percentage of all older respondents and non-respondents who made between 0 and 52(+) GP visits during 1995/1996.
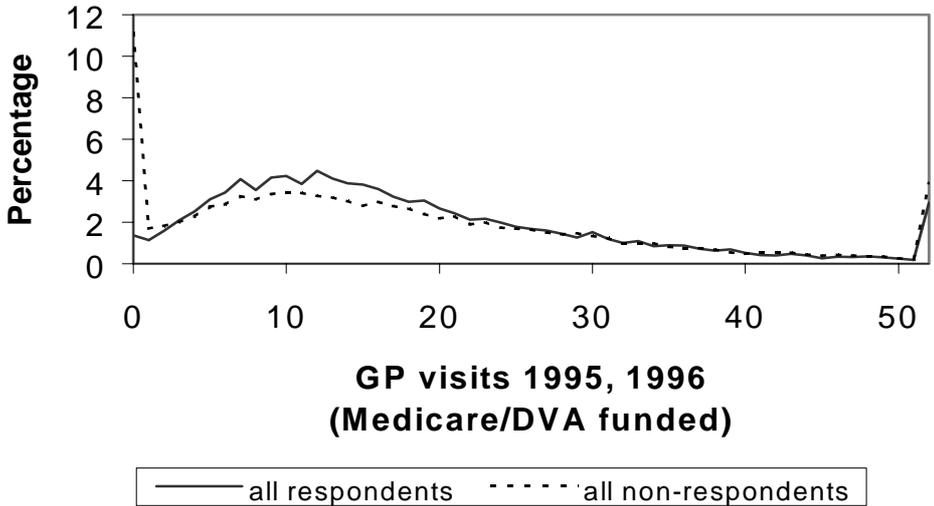
The high percentage of non-respondents having no GP visits is mainly due to the number of women in this group who made no claims through Medicare, as discussed earlier. As noted in the reasons for non-participation presented in the December 1996 report, there were 446 notifications of deceased women in this age group, 354 were travelling overseas and more than 400 were in need of long-term care and were unable to participate. For these reasons, one would expect a higher proportion of non-respondents to not have any GP attendances rendered through Medicare or DVA.

In the figure below, only those older women who made a claim through Medicare in the two year period are included.

Figure 3.6: **Percentage of older respondents and non-respondents with a claim who made between 0 and 52(+) visits to a GP in 1995/1996**
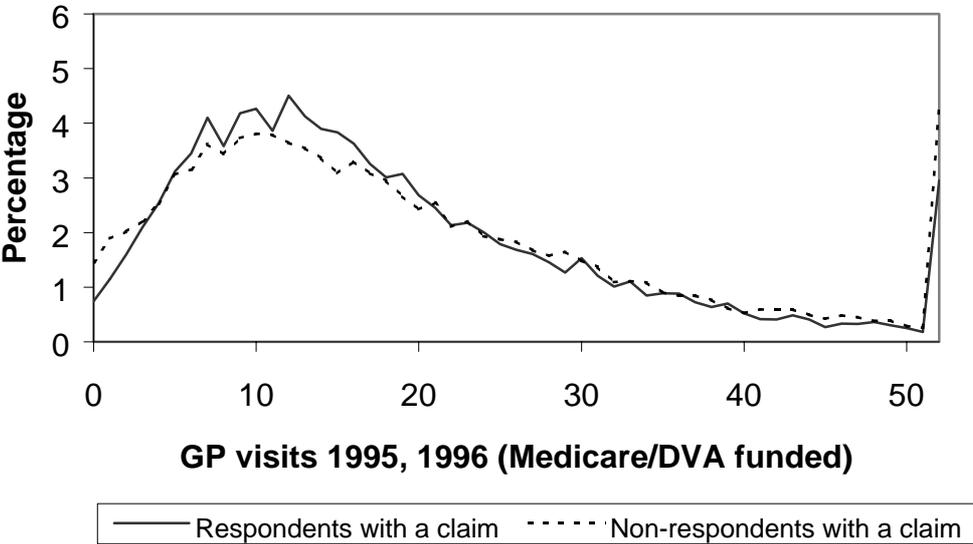
During 1995 - 1996, half of these women aged 70-74 visited a GP between 9 and 26 times, with a median of 16 GP visits for the two year period. The distribution of GP visits was very similar for respondents and non-respondents. There were however more 'very high' users of GP services (52+) among the non-respondents.

The remaining data are presented for those who made Medicare claims. A greater proportion of respondents had a Pap test and visited a specialist in the last two years.

Percentages of respondents and non-respondents who had a Pap test.

	Respondents	Non-respondents
Urban	13	9
Rural	11	8
Remote	12	9
Total	12	9

Percentages of respondents and non-respondents who had a specialist visit.

	Respondents	Non-respondents
Urban	76	69
Rural	69	62
Remote	58	53
Total	72	65

4. REPORTS ON SUB-STUDIES

4.1 IRON DEFICIENCY IN WOMEN OF CHILDBEARING AGE

PhD candidate: Amanda Patterson
Supervisors: Dr Wendy Brown (principal supervisor); Professor David Roberts (associate supervisor)

This project includes three studies which encompass the development, effect and treatment of iron deficiency for Australian women. The aims and design for each study were outlined in the previous report, and subsequent progress is detailed below.

4.1.1. Analysis of Women's Health Australia Baseline Data
Women's Health Australia Baseline Data were examined for associations between a history of low iron and factors thought to influence its development. The data were also analysed to investigate the possible effects of iron deficiency on general health and well-being for Australian women.

The results of this analysis was presented at the First National Women's Health Promotion Conference in September (see abstract in previous report).

4.1.2. General Practitioner Survey
This survey examines knowledge, attitudes and behaviours of General Practitioners with regard to diagnosis and treatment of iron deficiency in Australian women.

The questionnaire was sent to all General Practitioners in the Hunter Valley (n=500). One hundred and twenty seven surveys have been returned, giving a response rate of 25.4%. This compared well with the expected response rate of 30%. Mailing of surveys unfortunately coincided with school holidays when many General Practitioners were absent from their practice.

The data have been entered and analysis will commence shortly.

4.1.3. Intervention
Figure 1 is a flow diagram of the research protocol.

Recruitment
The original recruitment protocol involved identification of iron deficient women by pathology labs. Women identified as iron deficient were invited to participate in the study through a letter to their GP. Interested women telephoned the Women's Health Australia office and arranged an appointment.

The recruitment protocol did not provide adequate numbers of iron deficient women within the 3 months allocated. Subsequently, we advertised for women who were "currently iron deficient" through local radio and newspaper.

Sample size calculations suggested that 21 women per group were required to enable an increase in Serum Ferritin of 5ug/L to be detected with 80% power. Thus the aim was to recruit 25 women to each group (75 in total) allowing for attrition of 4 women per group. Recruitment is now complete (see Table 1).

Table 4.1:   Distribution of iron deficient and control women

Group	Number	Mean Serum Ferritin (ug/L)
Controls	24	47.55 ± 28.24
Diet	26	8.42 ± 3.13
Supplements	26	8.92 ± 3.67

Dietary Analysis

Dietary intake is being assessed using 7-day weighed records. Dietary data are entered into the Diet-1 nutrient analysis program (version 4). As Diet-1 provides only total iron intake, the program has been altered to allow the assessment of both haem and non-haem iron. A Microsoft Excel program has been written to calculate the bioavailable iron content of the diet. A paper on the development of this method will be presented at the Nutrition Society conference in Brisbane in November. An RMC grant has been awarded to allow further development of this program into a user-friendly product. Work will commence on this in January 1998.

Progress

Please refer to Figure 1.

All women have completed assessments at T0 and these data are currently being analysed.

Assessments at T1 will be completed by mid December.

Additional

A literature review has been accepted for publication by the Canadian based international journal "Nutrition Research".

A presentation was made to the Australian Iron Status Advisory Panel on 7th November. This is a group of independent Health Professionals, established to help foster research, education and communication in the area of iron status. The presentation was well received and instigated significant constructive discussion.

Figure 4.1:   **Flow diagram of proposed research protocol**

Recruitment and Blood Analysis
(for women of childbearing age)

Control
(ferritin $\geq 20\mu g/L$
haemoglobin $\geq 12g/L$)
(n=25)

Iron Deficient
(ferritin $\leq 15\mu g/L$
haemoglobin $\geq 95g/L$)
(n=50)

T0

Dietary Assessment

SF-36, Fatigue Scale, Cognitive Function Test

Intervention Commencement
(random allocation to groups)

No Intervention
(n=25)

Pills
(n=25)

Diet
(n=25)

Blood Analysis

SF-36, Fatigue Scale, Cognitive Function Test

Dietary Assessment

T1
after
3/12

Blood Analysis

SF-36, Fatigue Scale, Cognitive Function Test

Dietary Assessment

T2
after
9/12

4.2 HEALTH SERVICES UTILISATION

PhD candidate: Anne Young
Supervisors: Professor Annette Dobson; Dr Julie Byles

4.2.1 Introduction

As detailed in the June 1997 report, the purpose of this study is to identify factors which are important in explaining the use of health services by Australian women. Research on the health care system has identified a number of factors related to the use of health services. A model proposed by Andersen and Newman [1] has been chosen as the theoretical framework for the research and a recent version of the model is shown in the figure below. It includes health status outcomes and portrays the multiple influences on health service utilisation and health status. Feedback loops show that outcome, affects subsequent predisposing factors and perceived need for services, as well as health behaviour. A central question in health services research is whether the services are used according to need or not and if not, which factors can be modified to increase equity in the use of services.

4.2.2 Design

Data sources
Three sources of data are being used in this sub-study to estimate the relationships hypothesised in the model of health services utilisation. These sources are:

baseline data from the Australian Longitudinal Study on Women's Health (data on predisposing, enabling and need variables were collected in the questionnaire completed by the three age cohorts of women during April to September 1996)

data on utilisation of health services, in particular general practitioner and specialist medical services, obtained from the Health Insurance Commission (Medicare) for the years 1995 and 1996, for those women who provided written consent for this, and

data from an additional postal survey conducted during October 1997 for a large sample of the women in the middle and older age cohorts living in New South Wales (availability and use of health services survey).

Figure 4.2:   The Anderson-Newman Model of Health Services Utilisation
(Anderson & Ronald, 1995)

ENVIRONMENT   POPULATION CHARACTERISTICS   HEALTH   OUTCOMES
BEHAVIOURS
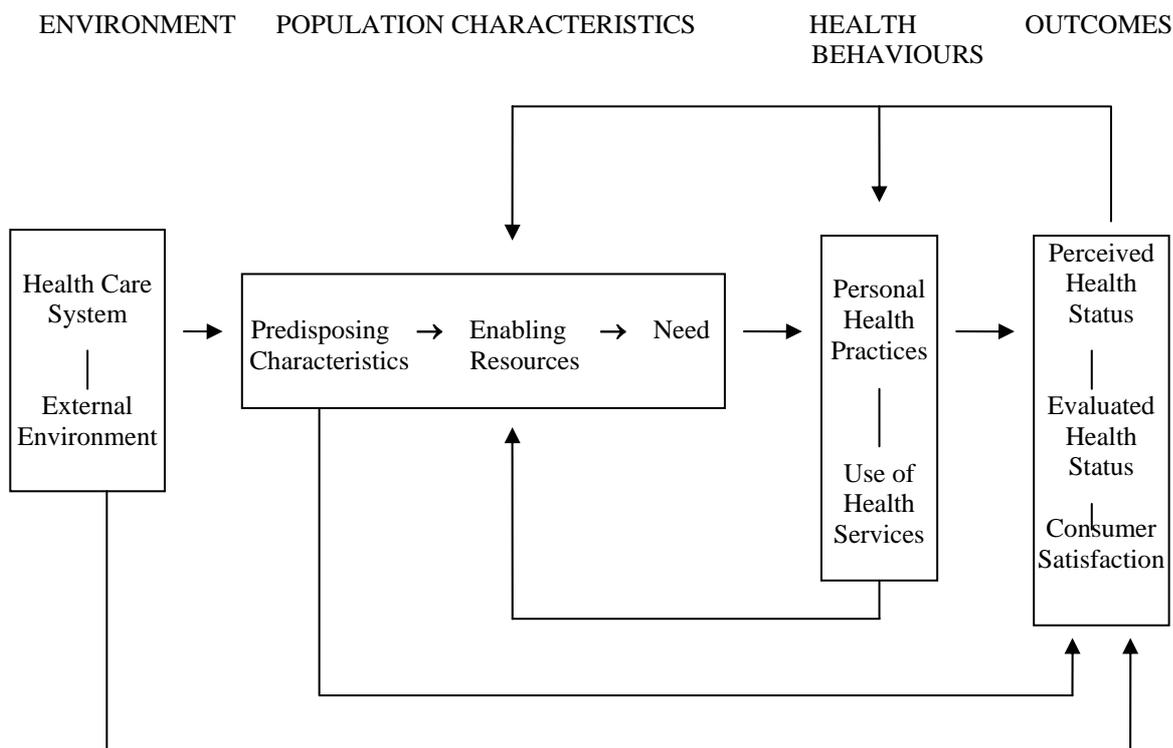
4.2.3   Progress

Availability and use of health services survey

Introduction
The explanatory components of the Andersen-Newman model are labelled predisposing (the predisposition of the individual to use services), enabling (the ability to secure services), and need (the need for services). As length and time limitations on the baseline questionnaire did not permit collection of data on all variables specified by the model, it was decided to survey a subgroup of women to obtain additional information about the availability of health services in their area, their access to and use of those services.

Method
The sample of women selected in this substudy were those who satisfied the following criteria:
> in the mid and older age groups;
> residing in New South Wales (last known address);
> gave written consent for the release of data from Medicare (consent rates of 65% and
>   58% respectively for NSW mid and older age women);
> not known to be deceased;
> not selected in any other substudy in the previous six months.

These two age groups were chosen for more detailed investigation as the consent rate to access Medicare information was higher for these women than for the younger women. The use of services and the prevalence of symptoms is also higher for women in these age groups. New South Wales was chosen as the geographic region for further investigation because it is the state with the largest proportion of women in the study and it contains a diverse range of urban and rural areas.

The questionnaire for this substudy contained items to measure predisposing variables such as health beliefs, scepticism about medical care and propensity to seek care. Enabling resources such as access to medical services, transport, having a regular source of care, residential stability, and insurance status were also measured. An assessment of need for care was included by asking the women to indicate the medical conditions they had, or were receiving treatment for, in the last two years. The questionnaire was designed to be scanned by an optical mark reading (OMR) machine to eliminate the need for manual data entry. This substudy provided an opportunity to assess whether the OMR method was acceptable to women in the study. A copy of the questionnaire is shown in Appendix 3.

A pilot test was conducted during July 1997 using a random sample of 100 women in each of the mid and older age groups in the WHA pilot cohorts. The postal follow up method replicated that used in the main WHA survey, except that the final (4th) reminder was omitted, based on its poor performance in the main survey. The main survey was sent out in September 1997 with reminders being mailed during October 1997.

Results

4,829 women satisfied the selection criteria for the substudy and were sent a questionnaire. The project was notified of 8 deaths amongst these women and a further 8 had left their last known address and have not yet been located. Of the remainder, 95% had returned a completed survey form by mid November 1997. The time savings due to using OMR technology were evidenced by the fact that data for the first 50% of the sample were available and ready for analysis within three weeks of the first mailout. The response to this survey was very prompt, with a further 32% of the sample returning their questionnaires during the fourth week. Figures from a preliminary analysis of the data from the first 4541 women are included in this report.

Table 4.2:   Age group and area of residence of the first 4541 women in the substudy

	Mid	Older	
Urban NSW	865	861	
Rural/remote NSW	1546	1269	
TOTAL	2411	2130	4541

Figure 4.3: Percentage of women who see the same GP each visit, by age group and area of residence.
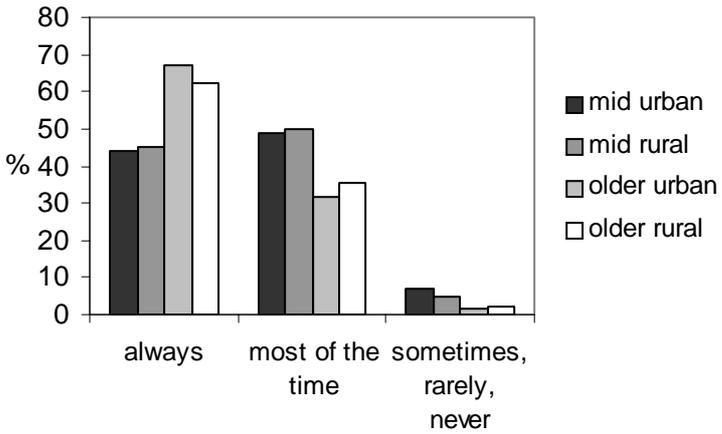
Figure 4.4: Percentage of women who needed to see a GP, dentist or specialist in the previous 12 months but did not do so, or were unable to do so (% of women in each age group and area of residence).
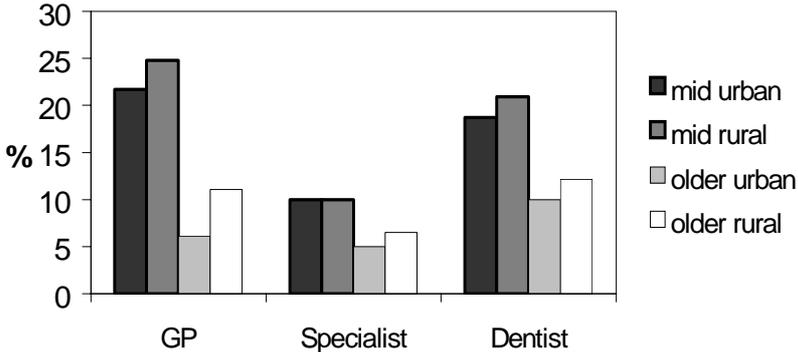
Figure 4.5: Reasons why women did not receive GP care (% of those women who needed to see a GP but did not do so or were unable to do so, during the last 12 months).
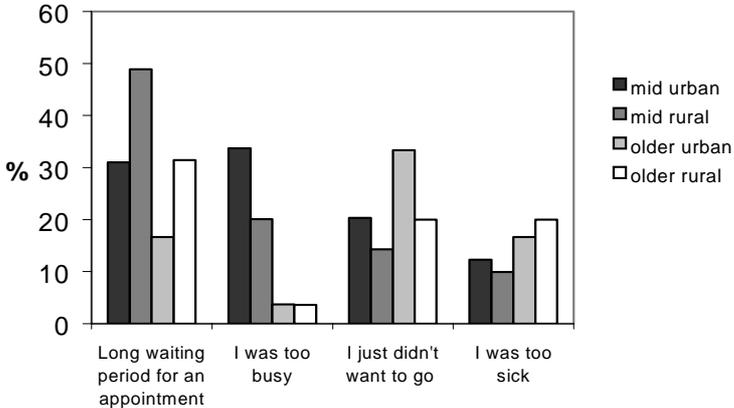
Figure 4.6:   Percentage of women with private health insurance for hospital cover
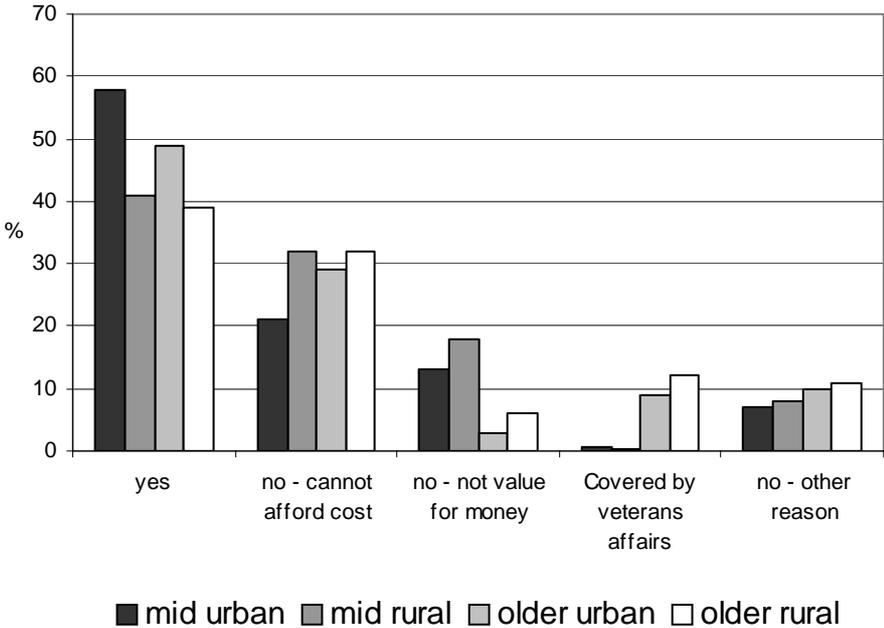
Figure 4.7:   Percentage of women with private health insurance for ancillary services
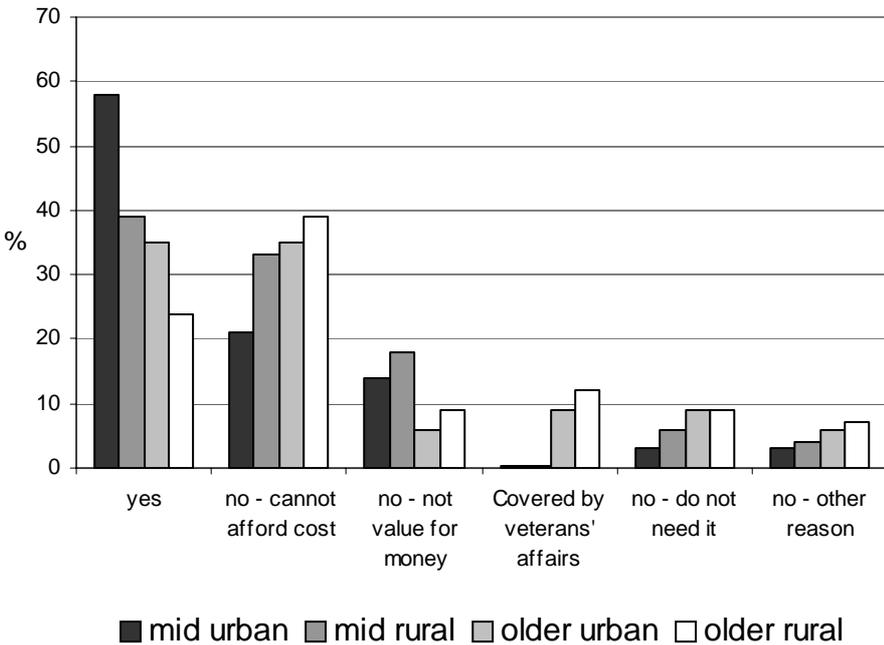
Figure 4.8:   **Percentage of women in the mid age group rating items as fair or poor**

Horizontal bar chart showing percentage of women in the mid age group rating items as fair or poor, comparing mid urban and mid rural. Items from top to bottom: Ease of filling prescriptions, Getting through by phone, Ease of obtaining Pap test, Personal manner of GP, Convenience of location, Technical skills of GP, Last GP visit overall, GP's explanation, Access to hospital, Time spent with the GP, Outcomes of medical care, Ease of obtaining mammogram, Access to emergency medical care, Access to counselling, Access to Women's Health Centre, Waiting time to get an appointment, Availability of advice by phone, Number of GPs to choose from, Hours GP is available, Ease of seeing GP of choice, Access to medical specialists, Time spent in the waiting room, Access to after-hours medical care, Access to a female GP, Access to GP who bulk bills.

%

■ mid urban □ mid rural

Figure 4.9:   Percentage of women in the older age group rating items as fair or poor

older urban ■ older rural ▢
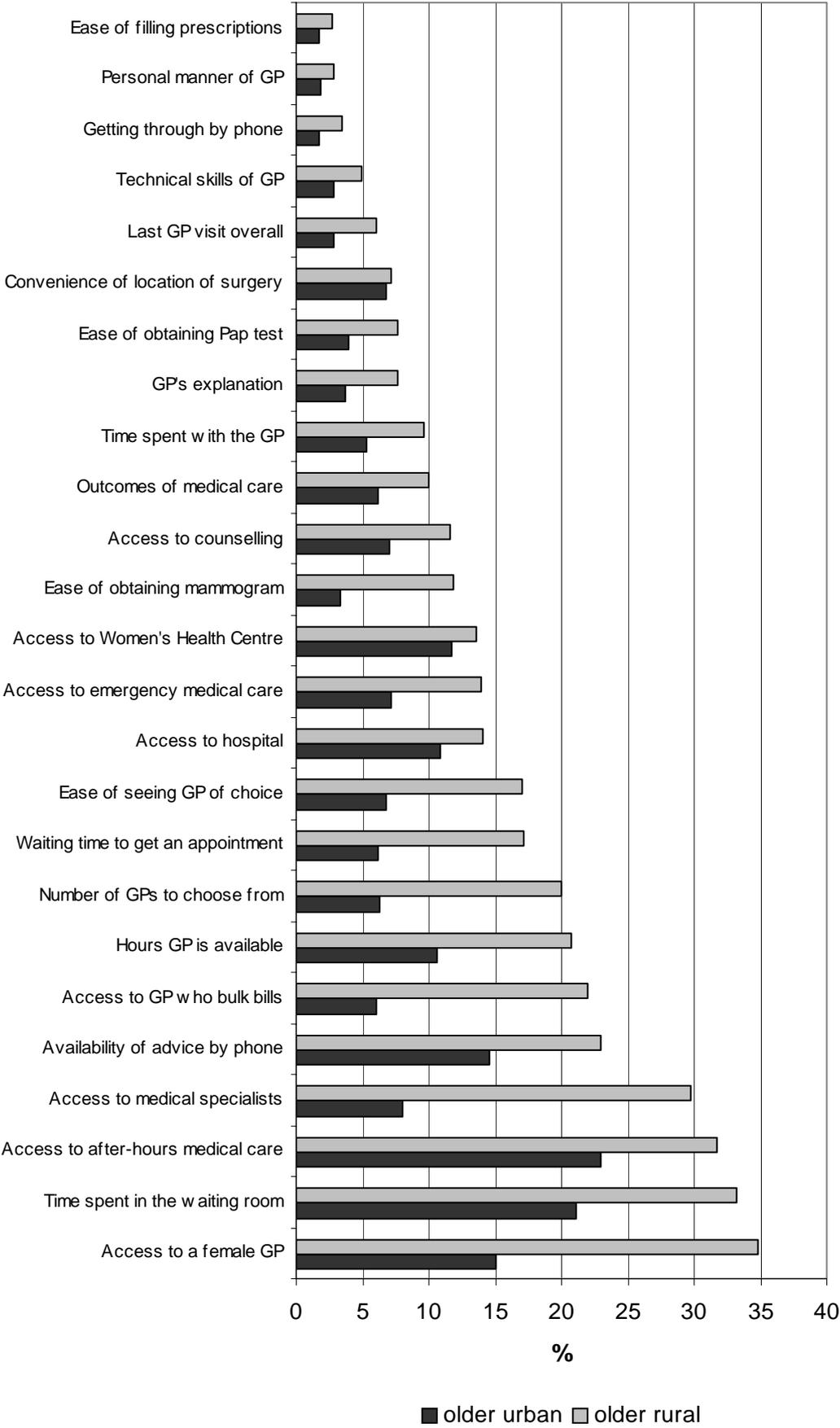
Figure 4.10:   Rating of satisfaction with the cost of the last visit to a GP.
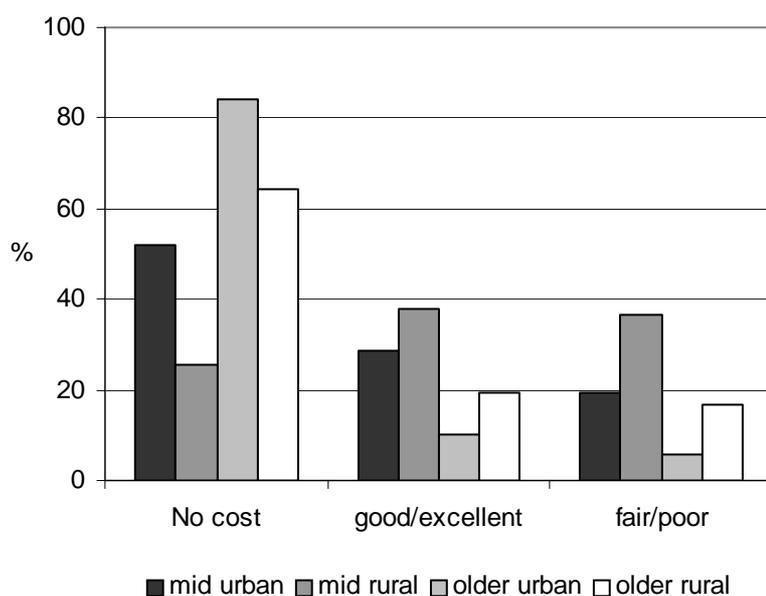
4.3   SOCIAL SUPPORT, HEALTH STATUS AND HEALTH CARE UTILISATION IN WOMEN AGED 70-74

PhD candidate: Brendan Goodger
Supervisor: Dr Julie Byles

4.3.1   Background
It is now recognised that social support is an important contributor to both health status and health outcomes for older people. Increased risks for premature morbidity, mortality, institutionalisation and increased utilisation of health and community services amongst older people have been shown to be associated with low social support. Australian research has traditionally been limited by measurement difficulties and a strong reliance on cross sectional research designs. This substudy involves a two year follow up of a sub sample of older women who completed the baseline questionnaire in 1996.

4.3.2   Progress
Two groups of 500 women each were randomly selected from the upper and lower quartiles of an index measuring social support. They were sent an abbreviated version of the baseline questionnaire in late August 1997, and a reminder card 10 days later. Women who had not responded (approximately 300) were contacted by telephone two weeks later and asked to participate. Reasons for non consent were recorded. Contact by telephone rather than automatically sending out another questionnaire package was very successful as it was both economical and successful in boosting the response rate.

4.3.3 Results

Of the 1000 participants surveyed 837 questionnaires were received and a preliminary response rate of close to 84% was obtained. During the study the researchers were notified that 10 participants were deceased and another 13 questionnaire packages were marked "return to sender". Of those marked return to sender, 10 participants could not be contacted. Approximately 15 women stated that they wanted to withdraw from the entire Women's Health project. If the deceased and return to senders are excluded from the study then a final response rate of close to 86% was obtained.

The final response rate of 86% and the very low withdrawal rate for this substudy is particularly pleasing. A response rate of this magnitude would be of merit in any study but is especially so given that these women are now aged up to 76 years old and that the survey was sent to some of the most vulnerable participants in the survey.

4.3.4 The Next Step

The data (both quantitative and qualitative) from these questionnaires have been checked and are currently being entered on computer. Results should be available in the next report. Some further questions in relation to health care utilization will be added to the final follow up questionnaire which will sent out in August 1998.

4.4 PSYCHOLOGICAL DISTRESS AND DISORDERED EATING AMONG YOUNG WOMEN

PhD candidate: Kylie Ball
Supervisor: A/Professor Christina Lee

This PhD project deals with the relationship between psychological distress, disruptive life events, and disordered eating among women in the 18-23 age group. These women represent the population group with the highest rates of disordered eating, negative body image, and diagnoses of anorexia nervosa and bulimia nervosa. The first stage, an analysis of the baseline data for the young cohort (N=14,000) established a cross-sectional relationship between psychological distress, low quality of life, stress, and life events on the one hand, and disordered eating and body dissatisfaction on the other hand. This analysis is complete and writing up almost completed. A second stage involving qualitative analysis of focus groups is in progress. Groups of young women both with and without a history of disordered eating are invited to discuss issues of stress and coping and to reflect on the role of eating as a reaction to stress. The third stage involves the selection, from the young cohort of the main survey, of 500 women who identify some signs of disordered eating and 500 who show no such signs. Questionnaires are sent to these women on two occasions, six months apart, examining body image, eating patterns, distress and life events; this stage, when finished, will permit a longitudinal analysis of the relationships between the variables and help to develop a clearer picture of the role of stress and life events in the aetiology of disordered eating. The initial questionnaire has been sent to these women, with a response rate of just over 52%. The second questionnaire will be sent in February/March 1998.

4.5 THE USE AND EFFECTIVENESS OF LEGAL PROTECTION AS A SECONDARY PREVENTION STRATEGY TO REDUCE FREQUENCY AND SEVERITY OF REPEAT DOMESTIC VIOLENCE IN WOMEN'S LIVES

Phd candidate: Margrette Young
Supervisors: Professor Annette Dobson; Dr Julie Byles

In the first half of 1997, details of the design, methodology and sampling for the study were developed, funding was obtained to collect data using Computer Assisted Telephone Interview and ethics approval was granted.

In the meantime, data from the Women's Health Australia baseline surveys have been analysed to obtain cross-sectional information on the incidence and prevalence of violence in the three age cohorts and relationships between violence and health have been explored. The results were presented to the 29th Public Health Association conference in October in a paper entitled 'A Health Perspective on Violence'. A summary of the findings is described below.

The 12 month incidence of assault reported in the WHA surveys was strikingly similar to results from the 1996 Australian Bureau of Statistics Women's Safety Survey and the 1994 survey of Perth households (Ferrante et al., 1996; Women's Safety Australia, 1996).

Results of the analysis of WHA data also provided additional information on the prevalence of domestic violence by age. This has not been reported previously in Australia (or in Canada or USA) due to the smaller sample sizes of the other surveys. Results presented in the graph show the percentage of women in each age group assaulted in the last 12 months ('assault'), the percentage who said someone tried to harm them ('attempted assault') and the percentage who had ever been in a violent relationship with a partner or spouse ('DV').

Figure 4.11:   Assault and domestic violence by age
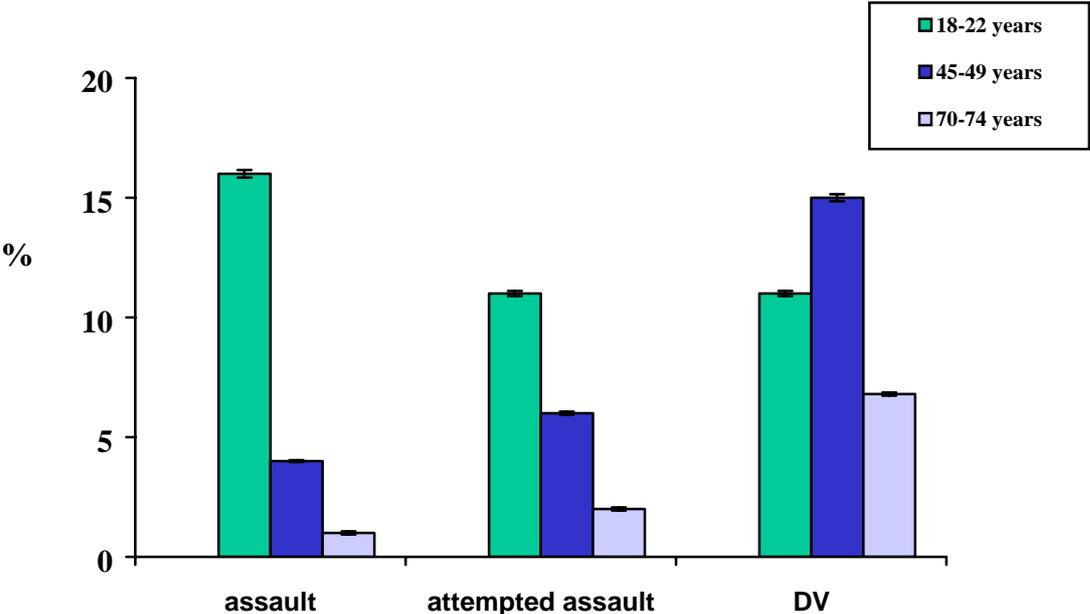
Mental and physical health of women was examined in relation to the violence they disclosed in the survey. Recent assault was examined separately from domestic violence since a large proportion of assaulted women had never been in a violent relationship with a partner or spouse (many women are assaulted by persons other than partners). Women who had been assaulted recently had significantly worse health than those who hadn't. This was apparent across all facets of mental and physical health. The differences were statistically and clinically significant. The magnitude of the detriment to health associated with assault for women who had never been in a violent relationship was comparable to that for women who had. Domestic violence was in itself associated with poorer mental and physical health. However, the health of women who had been in a violent relationship was significantly better if they had NOT been assaulted recently.

A paper reporting these results is currently being prepared.

4.6   EXPERIENCES OF WOMEN (AGED 45-49) SEEKING HELP FOR PSYCHOLOGICAL DISTRESS

M. Med Sc candidate: Sue Outram BA, RN
Supervisors: Dr Jill Cockburn; A/Professor Margot Schofield.

4.6.1   Aims
1. To describe the explanations women give for their psychological distress
2. To describe the sources of help for psychological distress
3. To explore the experiences of these women in seeking help for their psychological distress
4. To explore barriers to seeking help from the formal sector

4.6.2   Background
The high rate of mental illness/psychological disorder in the Australian community is considered to be a health problem of national significance. Some studies show women as having up to three times the reported rate of minor psychiatric disturbance as men. Recent reports have documented a lack of information about mental health and illness in the Australian community upon which to make policy decisions. Data from overseas studies are often inappropriately used to extrapolate to Australian populations where significant cultural and health service differences exist. There are no published Australian studies in adult populations which describe help seeking for psychological distress. It is important that help seeking pathways in community populations (as against clinical populations) are better understood in order to provide more effective and appropriate services. This includes the significance of psychological distress in women's lives, the expectations of people seeking help from formal networks such as medical practitioners and psychologists and their satisfaction with this help. It has been assumed that medical practitioners are the best source of help but reports from some patients would disagree. There is also evidence that that some GPs are not comfortable with psychological problems and prefer to treat physical illness. This study will make a contribution to understanding mental health and help seeking pathways in women and will provide data on which to base further larger scale studies through the Australian Longitudinal Study of Women's Health.

4.6.3 Design

The design is a cross sectional study of a sample of mid aged women drawn from the Women's Health Australia base line survey.

Methodology: Semi structured questionnaire administered by telephone survey.

Sample : Four hundred (400) women aged 45 - 49 who scored equal to or less than 52 on the Mental Health Index of the SF-36 in the base line study and who live in NSW were randomly selected. The women were sent a letter outlining the research and asking them to take part in a telephone interview.

The majority of the interviews were carried out by the investigator, assisted by two part time trained interviewers with extensive interviewing experience. These women were trained in delivering the semi -structured telephone interview and in support and referral for women who may need further assistance.

4.6.4 Sources of data

1. WHA baseline questionnaire:
Relevant socio-demographic variables (geographical location, education, occupation, marital status, children living at home) and health variables (visits to health professionals) for this sample were extracted from the survey data.

2. Substudy questionnaire
In relation to the most distressing period of time in the past year, information was collected about the following:

Perceived causes of distress;
Individual coping strategies;
Informal sources of help (partner, friends, family);
Formal sources of help (GP, psychiatrist, counsellors, psychologists, social/welfare workers, natural therapists, self help groups);
The type of help given (practical help, medications, counselling, sharing, referral);
Perceived effectiveness of this help;
Barriers to seeking help;
Confidence in their general practitioner in relation to mental health/emotional difficulties;
Individual women's perceived strengths in coping with life's difficulties.

3. Qualitative data
Beliefs and attitudes about key areas of 'help seeking' for psychological distress were explored during the telephone interviews which were often 40 minutes to one hour in duration. Data in six domains were analysed: help from partners, family, friends, medical practitioners, psychotropic medications, non medical mental health professionals.

4.6.5   Results

Response
Three hundred and twenty six interviews were completed. The response from the women contacted was very positive. Fifteen (15) women declined to take part, giving a refusal rate of 3.75%.

The consent rate was 81.2%. The main difficulties in interviewing the anticipated number of participants arose from lack of English proficiency, silent telephone numbers, and changes in address and/or telephone numbers since the base line survey. Five women had moved out of NSW (all to Queensland therefore not lost to the larger study but ineligible for this sub-study).

4.6.6   Progress
The data collection was completed December 1996 and entered in SAS program in February 1997. The analysis will be completed and a draft thesis written by February 1998.

Summary of the main findings
- Explanation for distress. Social factors, particularly relationships with partner and children, and work, and then physical illness, were the main reasons reported.
- Informal help. Women sought help from friends, partners and relatives in that order. Listening and sharing were the main types of help given; practical help was rarely given but was judged as very helpful when it was.
- Formal help. Eighty three percent of women had ever sought help from professionals for psychological distress. In the episode discussed in the past year, general practitioners were the main professionals consulted, with 52% of women talking to their GP. Thirty two per cent saw a mental health professional, but only 8.8% saw a psychiatrist. The majority of women expressed negative feelings about the use of psychotropic medications by doctors to treat emotional issues.
- Barriers. Attitudes and beliefs, including feeling one should cope alone, embarrassment and fears of others' opinions, were the largest category followed by lack of services or lack of knowledge of services. Structural factors such as costs, hours of opening and transport were considered less of a barrier. A consistent theme amongst women living in rural areas was lack of confidentiality in small towns where "everyone knows everybody". Despite these negative opinions expressed, there was no significant difference between rural and urban areas in the proportion of women who talked to their GP or a mental health specialist about their emotional problems.

4.7   OLDER AUSTRALIAN WOMEN AS WIDOWS

Researchers: Dr Julie Byles and Susan Feldman

The widows survey was sent to 430 women who indicated on the baseline survey that they were widowed and that their husband had died within the past 12 months. 78% (337) of these women completed and returned a questionnaire designed to gather information on the needs of recently widowed women. The questionnaire provides both quantitative and qualitative data on these needs as well as some longitudinal follow-up data on the women's health-related quality of life (SF-36). Data are currently being entered and analysed.

5   RESEARCH ACTIVITIES

During the second half of 1997, researchers presented 38 papers at conferences and have submitted abstracts for four more presentations in 1998. Four papers have been accepted and are 'in press', and researchers have also prepared nine papers for submission to journals for publication. Abstracts of presentations and papers submitted are included here.

5.1   PRESENTATIONS

Title: **THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN'S HEALTH: STUDY DESIGN**

Authors: Gita Mishra

Name of Conference: Regional Conference on Longitudinal Data Analysis, Columbia, Missouri, USA. 10-14 June 1997

The Women's Health Australia project is a longitudinal study of several cohorts of Australian women, which aims to examine the relationships between biological, psychological, social and lifestyle factors and women's physical and emotional health, and their use of and satisfaction with health care services. This project is designed to track the health of several cohorts of women over a period of up to twenty years. So far we have finished the first stage of recruitment of participants (N=41,578) for the three main cohorts (aged 18-22, 45-49 and 70-74). This paper will discuss the study design, major study themes and progress to date.

Title: **YOUNG AUSTRALIAN WOMEN AND THEIR ASPIRATIONS FOR WORK, EDUCATION AND RELATIONSHIPS**

Authors: Deidre Wicks and Gita Mishra

Name of Conference: National Conference on Unemployment, Adelaide. 18 - 20 June 1997

It is recognised that while women make up over half of tertiary enrolments, this outcome is not reflected in the gender composition of occupational structure, career patterns and pay distribution. There are a number of different explanations for this including a recent contribution from British sociologist Catherine Hakim who identified the main causal factor as women's own lack of career orientation and work commitment. Hakim's contribution has produced a lively debate with all sides acknowledging the lack of, and need for, longitudinal data on women's workforce participation.
The present paper investigates data from the first stage of the Women's Health Australia Longitudinal Study which provides a valuable opportunity to inform this debate through an analysis of the aspirations of a large group of young Australian women aged 18-22 years. The investigation will be conducted in relation to young women's aspirations for work, relationships and further education. In this context, the implications for the "Hakim debate" will be discussed.
It will be demonstrated in the paper that analysis of the initial data casts light on debates about women's workforce participation at the same time as establishing baseline data for future research on the work and family patters of this group of young women. The information will

have significance for policy debates in several areas, including health, child care, access to higher education and workforce planning.

Title: **RURAL WOMEN'S HEALTH, TIME USE AND THE LIFE CYCLE**

Authors: Lois Bryson

Name of Conference: Rural Australia: Towards 2000 Conference, Bathurst. 2-4 July 1997

While the factors affecting women in rural and remote areas are recognised as often different from those which affect women in urban Australia, this factor is not consistently studied, nor are the intricate and varied processes which are involved for women of different ages in `juggling' their time. Data from the first stage of the Women's Health Australia longitudinal study provide a valuable opportunity to explore the links between these factors and health. Data on health, time use, age and urban/rural/remote location comes from a sample of over 40,000 women in three age groups, 18-22 years, 45-49 and 70-74, randomly drawn from all over Australia, but with deliberate over-representation of women from non-metropolitan areas. Data about actual time use (paid/unpaid work/study, family responsibilities, leisure) and self assessed feelings about time pressures are examined for their links to other health indicators. These include: self-assessed health status, measures of current health (eg symptoms, medical conditions) and health history (eg past illnesses, health services usage). By linking patterns of time use with health data against the background of geographical location, the analysis has the capacity to cast light on social issues which are of specific interest for women residing in rural and remote Australia, and to contribute to policy debates about appropriate responses to the reality of rural/remote women's lives and their health concerns.

Title: **WOMEN'S HEALTH, TIME USE AND THE LIFE CYCLE**

Authors: Lois Bryson

Name of Conference: Gender and Health Conference, Sydney. July 1997

It is well recognised that many women are engaged in intricate processes of 'juggling time', yet there is little research connecting this to health issues. Data from the first stage of the Women's Health Australia longitudinal study provide a valuable opportunity to explore this connection because the three age groups of women, 18-22 years, 45-49 and 70-74 who make up the sample of over 40, 000 women, have contrasting time use patterns. Data about actual time use (paid/unpaid work/study, family responsibilities, leisure) and self assessed feelings about time pressures are examined for their links to other health indicators. These include: self-assessed health status, measures of current health (eg symptoms, medical conditions) and health history (eg past illnesses, health services usage). Linking time use and health data has the capacity to transcend the traditional compartmentalisation of women's lives, typical of so much research.

The analysis casts light on immediate health issues at the same time as contributing to other broad theoretical debates, for example that involving researchers such as Hakim in the UK and Probert in Australia about the nature of, and basis for, women's particular patterns of combining family and economic work. The analysis is also central to policy debates about appropriate responses to the fin de siecle reality of women's lives and their health concerns.

Title: **DIETING, BODY IMAGE AND WEIGHT: ETHNICITY AND ACCULTURATION**

Authors: Justin Kenardy

Name of Conference: Australian Tropical Health and Nutrition Conference, Brisbane. 17 July 1997

The Australian Longitudinal Study on Women's Health (ALSWH) has as one of its main themes eating, weight and shape. This has meant that data concerning eating and disordered eating, weight and weight history, and body image are available for both the 18-22 year old sample as well as the 45-49 year old sample. The samples also included data on country of origin, indigenous status, as well as time since immigration. There have been very few data from Australian women on the relationships between race, ethnicity and acculturation and eating, weight and shape. The data from the ALSWH allows us to examine these relationships. Higher Body Mass Index (BMI) was found in both younger Aboriginal and Torres Strait Islander (TSI) women and in particular in middle aged Aboriginal women. This was reflected in higher rates of dieting (55%) amongst aboriginal women and greater body dissatisfaction, as well as more dieting and higher prevalence of disordered eating amongst the TSI women. Younger women of Asian origin had lower BMIs. While young Asian and European migrant women had greater satisfaction with body weight and shape than Australian born women, they had dieting and disordered eating rates similar to the women of other ethnic origins including Australian born women. The middle aged Asian women had lower BMIs, greater weight and shape satisfaction, and lower rates of dieting overall. Perhaps the most interesting findings were related to time since immigration. In both age samples the trends were the same. The longer the time since arrival, the more similar the rates of dieting and disordered eating, the BMI, and shape and weight dissatisfaction are to Australian born women.

Title: **ASSOCIATION BETWEEN HEALTH, DISEASE AND RISK CATEGORY DETERMINED BY THE AUSTRALIAN NUTRITION SCREENING INITIATIVE QUESTIONNAIRE IN A POPULATION OF OLDER WOMEN IN AUSTRALIA**

Authors: David CK Roberts and Wendy J Brown

Name of Conference: 16th International Conference on Nutrition, Montreal, Canada. 27 July – 1 August 1997

12249 women aged 70-74 completed the Women's Health Australia Survey, which included the 12 item ANSI checklist of risk factors contributing to poor nutritional status. The checklist comprises social, medical and nutritional questions, providing 3 subscores. For 48% of respondents ANSI scores were in the 'good' (0-3) category, with 23% at moderate risk (4-5), 18% at high risk (6-8), and 12 % at very high risk (9+). Almost 70% did not "score" in the food items subscore, 55% did not score in the social items subscore but more than 60% scored in the medical items subscore, indicating the role disease plays in contributing to high scores in this population.

This preponderance of medical risk was seen in the close correlation between risk category from ANSI and responses to other "disease" questions. Stroke, diabetes, heart disease, asthma and bronchitis were all associated with higher scores as was increased usage of health care resources (hospital stays, visits to GPs and specialists). There was a strong trend for general health measures derived from the SF-36 questionnaire to follow the risk score. This achieved significance for specific questions about general health (tiredness, sleeping,

memory, concentration, bowel problems, constipation and indigestion) where an increasing risk score was mirrored by a greater proportion of the group having these problems. The ANSI questions and scoring system successfully identified those individuals with underlying disorders, many of which are responsive to nutritional intervention. These data also suggest that a high proportion of women in this age group could benefit from more detailed analysis of their nutritional status.

Title: **STARVING FOR ATTENTION: NUTRITIONAL RISK ASSESSMENT IN OLDER AUSTRALIAN WOMEN**

Authors: David CK Roberts and Wendy J Brown

Name of Conference: Aging Beyond 2000: One World One Future, Adelaide. 16-18 August 1997

In Australia 175 million meals are served per year to clients in need of care. 113 million are to elderly people. The food cost alone is $1.5million per day. If only half the food is eaten (through poor food choice/quality/taste), there is a large economic cost but there is a second cost in human terms of poor quality of life and increased morbidity. Correctly assessing nutritional risk utilising the Australian Nutrition Screening Initiative (ANSI) questionnaire may reduce/delay the demand on health care and associated costs. 12249 women (70-74) completed the Women's Health Australia Survey, which included the ANSI checklist. For 48% of respondents ANSI scores were in the 'good' (0-3) category, with 23% at moderate risk (4-5), 18% at high risk (6-8), and 12 % at very high risk (9+). Almost 70% did not "score" in the food items subscore, 55% did not score in the social items subscore but more than 60% scored in the medical items subscore. Stroke, diabetes, heart disease, asthma, bronchitis were all associated with higher scores as was increased usage of health care resources (hospital stays, visits to GPs and specialists). Tiredness, difficulty sleeping, poor memory and concentration, bowel problems, constipation and indigestion were also associated with high risk scores. The 12 ANSI questions and scoring system successfully identifies those individuals with underlying disorders, many of which are responsive to nutritional intervention. The data also suggest that a high proportion of women in this age group could benefit from more detailed analysis of their nutritional status.

Title: **NO MORE DINNERS, ONLY LUNCHES: THE EXPERIENCE OF WIDOWHOOD FOR OLDER AUSTRALIAN WOMEN**

Authors: Susan Feldman and Julie Byles

Name of Conference: Aging Beyond 2000 - One World One Future, Hawaii. 16-18 August 1997

The demographic profile of the Western world is changing, with the average life expectancy for Western women reaching beyond 80 years of age, on average seven years longer than that of their male counterparts. This life expectancy difference is also reflected in demographic profiles from developing countries, revealing an extended period of widowhood for a great many women worldwide. Little contemporary Australian research has paid specific attention to this group of women or the key factors that determine their relationship to their "community" and in that the impact on the quality of their health and wellbeing. The current research picture of older women who are widows is limited by the general view that this new phase of life is one categorised only by loss and grief, combined with adverse physical and psychological effects.

This paper will report on the preliminary findings of a sub sample of randomly chosen Australian widowed women – over 4,000 between the ages of 70-74 – who are participants in the Australian Longitudinal Study on Women's Health. The paper will undertake a more detailed analysis of the interrelationship between the social, cultural and economic circumstances of widowhood in order to determine the impact of the loss of a spouse on the quality of the health and wellbeing of this group of older Australian women. It will be argued that for many women the death of their partner is a transitional event that allows them to move into another phase of their lives. This analysis will combine both qualitative and quantitative data.

Title:	**THE IMPACT OF QUALITY NUTRITIONAL CARE ON HEALTH OUTCOMES IN THE ELDERLY**
Authors:	David CK Roberts
Name of Conference:	Annual General Meeting of the Australian Society for Geriatric Medicine, Adelaide Convention Centre. 20-23 August 1997

In Australia about 175 million meals are served per year to clients in need of care. Of these meals, 74 million are in nursing homes, 33 million in hostels, 63 million in public and private hospitals and 6 million through Meals on Wheels. The bulk of these (113 million) are to elderly people. The food cost alone is $561 million per year or $1.5 million per day. If only half the food is eaten (through poor food choice/quality/taste), there is a large economic cost (wasting $750,000 per day) but there is a second cost in human terms of poor quality of life and increased morbidity. Risks associated with poor nutrition include greater risk of fractures, poor wound healing, more recurrent infections, impaired immunity, impaired taste, and increased length of hospitalisation.

Each of the above has a health care $ cost which is increased as a result of poor nutrition. Correctly assessing nutritional risk (utilising a tool such as the Australian Nutrition Screening Initiative questionnaire) prior to the need for nursing home care can reduce/delay the demand on health care and associated costs. The ANSI program aims to raise awareness of the problem of malnutrition amongst older people and consists of a checklist comprising the 12 most common factors contributing to risk of malnutrition in the older adult. The focus is on older Australians because older persons are the single largest demographic group at disproportionate risk of malnutrition, the older person tends to be in the health care system more than other age groups, and there are many clearly defined avenues to reach the elderly with information. The principles that guide the ANSI are that good nutrition helps keep people healthy and speeds recovery when they are sick and injured, that good nutrition promotes vitality and independence, that scientific evidence indicates that people with good nutritional status have shorter hospital stays and fewer and less costly complications and that the first step to improving a person's nutritional health is to evaluate his or her nutrition status.

Results of surveys using the Checklist in 3 states (NSW, Victoria and South Australia) showed that about 30% of the over 65s had one or more risk factors for poor nutritional health. The nationwide Women's Health Australia Survey of more than 12000 70-74 year old women has shown a similar proportion at risk. Stroke, diabetes, heart disease, asthma and bronchitis were all associated with higher scores as were increased usage of health care resources (hospital stays, visits to GPs and specialists). Of equal interest was the strong trend for general health measures derived from the SF-36 questionnaire to follow the risk score.

Considering that 12% of Australians are over 65 now, that represents more than half a million people who may require additional health care as time progresses. Intervening early may save considerable amounts of health care dollars as well as increasing the proportion of healthy aged rather than frail aged people. Correctly intervening after assessing the risk will decrease

health care costs in the longer term. Getting the food right is a win/win situation. Decreased waste ($) and healthier, happier clients.

Title: **SMOKING, MENSTRUAL PROBLEMS AND EARLY MENOPAUSE: WOMEN'S HEALTH AUSTRALIA PROJECT**

Authors: Margot Schofield, Annette Dobson and Gita Mishra

Name of Conference: 10th World Conference on Tobacco or Health, Beijing, China. 24-28 August 1997,

Women's Health Australia is a longitudinal study of young, middle-aged and older Australian women. This paper describes the relationship between smoking status, menstrual problems and early menopause among the middle-aged cohort of 14,200 women aged 45 to 49 years. The sample frame was the national health insurance data base. Participants were randomly selected, with over-sampling from rural and remote areas and are broadly representative of Australian women in those age groups. Results from the baseline survey show a strong positive relationship between smoking and menstrual problems, and smoking and early menopause. Current smokers were more likely than ex-smokers or never smokers to report having heavier, more changeable, and irregular periods over the past 12 months as well as severe period pain. They were also more likely to report having completed a natural menopause. The findings support previous work suggesting that smoking is associated with higher risk of menstrual problems and early menopause.

Title: **PROBABILITY OF MISCARRIAGE AMONG SMOKERS: WOMEN'S HEALTH AUSTRALIA BASELINE SURVEY**

Authors: Margot Schofield, Gita Mishra and Annette Dobson

Name of Conference: 10th World Conference on Tobacco or Health, Beijing, China. 24-28 August 1997

Women's Health Australia is a longitudinal study of several cohorts of Australian women. The study aims to examine the relationships between biological, psychological, social and lifestyle factors and women's physical and emotional health over a period of 20 years. This paper presents retrospective self-reported data from the baseline survey on the relationship between smoking and history of miscarriages in 14,780 women aged 18-22, and 14,200 women aged 45 to 49 years. The sample frame was the national health insurance data base. Participants were randomly selected, with over-sampling from rural and remote areas and are broadly representative of Australian women in these age groups. There was a strong positive relationship between smoking status and number of reported miscarriages. Three or more miscarriages were reported by 7.4% of current smokers, 5.3% of ex-smokers and 3.7% of never smokers in the middle age group. Among young women, 1 or 2 miscarriages were reported by 6.2% of current smokers, 4.7% of ex-smokers, and 1.4% of never smokers. A positive relationship was also found between number of miscarriages, age of starting to smoke and number of cigarettes smoked. The results provide strong evidence of a link between smoking and miscarriages and suggest that new initiatives are needed to prevent smoking among women of childbearing age.

Title:	THE HEALTH IMPACT OF DIETING IN YOUNG AUSTRALIAN WOMEN: THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN'S HEALTH
Authors:	Justin Kenardy
Name of Conference:	14th World Congress on Psychosomatic Medicine, Cairns. 31 August 1997

Dieting is seen as one of the core factors in the development of problematic eating and weight disorders. This study examines the impact of dieting on mental and physical health in a large sample of young Australian women. As part of the Australian Longitudinal Study on Women's Health, 14,810 women aged 18 to 22 years were asked about their dieting and eating history and behaviours, physical and psychological health, weight, and body image. Lifetime prevalence of dieting was 55%, with over 20% reporting having undertaken five or more diets in the last year. More frequent dieting was associated with greater relative body mass (BMI), poorer physical and emotional health, greater likelihood of disordered eating behaviours, and poorer body image. Of more concern was the finding related to age of first diet. More than 11% of the sample reported engaging in their first diet before age 13. These women had a greater risk of disordered eating behaviours, higher BMI, poorer physical and emotional health, and greater usage of the health system than women who started diets later, or who had reportedly never dieted. This has significant implications for public health and preventive programs.

Title:	THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN'S HEALTH – WEIGHT, SHAPE AND DIETING
Authors:	Justin Kenardy
Name of Conference:	Challenge the Body Culture Conference, Brisbane. 7 September 1997

The Australian Longitudinal Study of Women's Health has as one major "theme" the issues of weight, shape and dieting. In this paper these factors are explored in the sample of younger women. In particular the psychological and physical correlates of dieting was examined. In total 14800 women aged 18-22 years were assessed using a random mail sample stratified on geographic region. Current dieting was relatively frequent with 47.8 % reporting dieting to lose weight in the last year. Furthermore 20.9% of women who were underweight (BMI< 18.5) were currently dieting to lose weight. Current frequent dieting (5 or more diets in the last year) was associated with significantly poorer mental health and more physical illness after controlling for BMI, smoking, and life stress. Interestingly, compared to women who never diet, those who dieted less frequently in the last year (1-4 times) had a slightly lower likelihood of depression whereas those who dieted more frequently had a 75% higher likelihood of depression.

This specific relationship for frequent dieting also held for disordered eating with these women 2.7 times the likelihood of reporting current bingeing and 4.2 times the likelihood of current puging behaviours. Body dissatisfaction was strongly related to dieting frequency. Age of dieting onset was also assessed with diet onset before age 15 associated with poorer mental health, more physical illness, higher likelihood of disordered eating, more body dissatisfaction. These results were interpreted as indicating the pathological impact of dietary failure, and are of particular concern given the age of the sample.

<table>
<tr><td>Title:</td><td>GETTING MOVEMENT ON THE WOMEN'S HEALTH AGENDA</td></tr>
<tr><td>Authors:</td><td>Wendy J Brown and Gita Mishra</td></tr>
<tr><td>Name of Conference:</td><td>Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997</td></tr>
</table>

Objectives: (1) To report on the development and use of a short, simple measure for estimating levels of population physical activity. (2) To evaluate the relationship between activity levels and indicators of physical and mental health and well being in women.

Design: Cross-sectional data from mail survey to women in three age groups (18-23; 45-50; 74-79), selected randomly from the HIC/Medicare data base.

Participants: Women participating in the Australian Longitudinal Study on Women's Health (the Women's Health Australia project) (N= 41500). (Including women from all walks of life in all States and Territories of Australia)

Results: Only 23% of the young, 12.1% of the middle and 9.7% of the older women reported activity levels which equate with energy expenditure (EE) of 1200 kcals per week. (Current US guidelines suggest EE of 200 kcals per day will result in health benefits). Activity levels were positively associated with SF36 sub-scale scores, and inversely associated with self reported hypertension, osteoporosis, back pain, tiredness and constipation, particularly in older women.

Conclusions: The data confirm that the majority of Australian women do not have sufficient daily activity to maintain optimal levels of health. This finding supports the call for more attention to movement on the women's health agenda. While the direction of causality cannot be implied from these cross-sectional data, the results suggest that significant health benefits may accrue from activity equivalent to EE of only 600 kcals/week. The longitudinal nature of the WHA study will allow testing of this hypothesis in due course.

<table>
<tr><td>Title:</td><td>PSYCHOLOGICAL STRESS IN THE AETIOLOGY OF DISORDERED EATING</td></tr>
<tr><td>Authors:</td><td>Kylie Ball and Christina Lee</td></tr>
<tr><td>Name of Conference:</td><td>Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997</td></tr>
</table>

Objective: Psychological stress and inadequate coping skills have been hypothesised to play an important role in the aetiology of disordered eating. This paper reviews the empirical evidence which has emerged regarding the proposed relationships among stress, coping skills and various forms of disordered eating.

Method: A search of psychological and medical databases was conducted to identify studies examining life events, and other types of psychological stress and coping strategies, in relation to the onset of disordered eating.

Results: While many studies have reported evidence supporting such a relationship, this research appears to be plagued by methodological problems, including the use of non-representative populations, unstandardised assessment instruments and retrospective methodologies. In addition, several studies have reported finding which challenge the notion of a relationship amongst these factors.

Discussion: The implications of these findings are discussed and suggestions for future research, including the utilisation of longitudinal, prospective studies, are presented.

Title:　　　　　　　　**TOO LATE FOR PREVENTION?**

Authors:　　　　　　　Julie E Byles, Lyn Francis, Mary McKernan and Meredith Tavener

Name of Conference:　Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997

Many preventive health measures exclude older people. Cancer screening programs, for example, are mainly directed towards people aged under 70 years. Further, there are few health promotion materials designed for older people, despite increasing health limitations and needs. This paper explores the need for a greater focus on disease prevention and health promotion for older women.

Methods: 1) Data were collected from 12624 women aged 70-74 years as part of the baseline survey of the Australian Longitudinal Study on Women's Health. 2) Health promotion materials for key health issues were reviewed.

Results*: 1) One-third of the women surveyed had never had a mammogram. Of the 7830 women who had an intact uterus 14% had never had a Pap test, and 18% had a test more than five years previously. A further 7% were not sure when their last test was. Nutrition screening (ANSI) indicated the 23% were at very high risk. Around 10% of women took medications for nerves or to help them sleep. Eight percent of women drank more than the NHMRC recommendations of two standard drinks per day and 6% were current smokers. 2) A survey of health agencies in NSW and Queensland yielded only a handful of pamphlets on these issues, suitable for older people.

Conclusions: Health promotion and disease prevention has been largely neglected for older women. Programs specifically designed for older women (and men) should be considered.

*proportions weighted to correct for oversampling in rural and remote areas.

Title:　　　　　　　　**WOMEN'S ATTITUDES TO PSYCHOTROPIC DRUG USE**

Authors:　　　　　　　Sue Outram and Margot Schofield

Name of Conference:　Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997

The baseline survey of the Australian Longitudinal Study on Women's Health, conducted in 1996, identified a sub-sample of 325 women in New South Wales aged 45-49 years who had high levels of psychological distress as measured by the SF-36. The aim of this sub-study was to determine how many women sought formal help for their distress, to explore the experiences of these women in seeking help for their psychological distress, and to explore reasons for not seeking help. Trained interviewers administered a semi structured interview by telephone. High rates of psychotropic drug use by women have been highlighted in various studies in the past decade. In this study 36% of women said they had taken tablets or medicines to help them cope with a recent episode of psychological distress. Medications included psychotropic drugs, natural products such as evening primrose oil and Hormone Replacement Therapy. This paper will present information about the medications used and will discuss the resistance to medicating feelings expressed by many of the women who were interviewed and the potential this has for promoting women's health and well being.

Title: SCREENING FOR CERVICAL CANCER: HEALTH CARE, ISOLATION AND SOCIAL SUPPORT

Authors: Julie Byles and Margaret Harris

Name of Conference: Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997

Objectives: To test hypothesised associations between cervical cancer screening and health care use, geographical isolation, social roles and social support in middle-aged women.
Design: Cross sectional data from a mail survey to women aged 45-49 years, randomly selected from the HIC/Medicare data base.
Participants: Participants in the Australian Longitudinal Study on Women's Health (the Women's Health Australia project) (N=14200).
Results: As in other studies, women with lower education and occupational status, NESB and ATSI women were least likely to be screened (p≤0.001). There were also highly significant associations between screening and the number of visits to a local doctor, convenience of location of GP, preference for a female provider and use of oral contraceptives or hormone replacement therapy (p≤0.001). Post menopausal women were less likely to be screened than other women in this age range (p≤0.001). While geographical isolation was not significantly associated with screening, social support was a highly significant factor (p≤0.001). Conversely, time use was inversely associated with screening: the busiest women were most likely to be screened.
Conclusions: The importance of social support as a facilitator of screening warrants further exploration. Greater insight into this aspect of women's lives may open new avenues for promoting and enabling cervical screening among all women.

Title: THE PREVALENCE OF LEAKING URINE IN AUSTRALIAN WOMEN

Authors: Pauline Chiarelli and Wendy J Brown

Name of Conference: Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997

Objectives: Evaluation of the prevalence of urinary incontinence in Australian women.
Design: Retrospective analysis of data from the Australian Longitudinal Study on Women's Health.
Participants: The prevalence of leaking urine (in the last 12 months) was estimated to be 12.8% (CI 12.2-13.3) in the younger group, 36.1% (CI 35.2-37.0) in the middle group and 35% (CI 34.1-35.9) in the older group. Amongst Aboriginal and Torres Strait Islander women, prevalence was higher in the younger women (19.4%; CI 14.83-23.9) and among women reporting English as a second language, prevalence was lower in the middle group (30%; CI 26.7-32.9). Variables which were associated with higher rates of leaking urine included parity, pregnancy or birth within the last year, upper respiratory tract conditions, obesity, constipation, other bowel problems, diabetes and stroke. Women who reported having urine that burns or stings, or ever having had a prolapse, hysterectomy, bilateral oophorectomy or repair of prolapsed vagina, bladder, or bowel, were also more likely to report leaking urine.
Conclusion: Urinary incontinence is common amongst Australian women of all ages. Continence promotion should begin before first pregnancy, and secondary prevention services should be more widely available.

Title:	FACTORS ASSOCIATED WITH LOW IRON IN WOMEN OF CHILDBEARING AGE
Authors:	Amanda Patterson and Leonie Middlelink
Name of Conference:	Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997

Objectives: To investigate associations between low iron and factors thought to influence its development, and to examine possible health effects of iron deficiency for Australian women.
Design: Cross-sectional data from the baseline survey of the Australian Longitudinal Study on Women's Health (ALSWH) (middle cohort: 45-49 years).
Results: Women who reported (ever) having had low iron were more likely to report: pregnancies and childbirth ($p=0.001$, $p=0.001$); heavy periods ($p=0.001$); low or high levels of exercise ($p=0.001$); constant tiredness ($p=0.001$) and lower scores on all sub-scales of the SF36. Women with a history of low iron were less likely to report taking the oral contraceptive pill ($p=0.005$) or drinking alcohol. There was no association between history of low iron and current dieting status ($p=0.211$), or number of diets in the last 12 months ($p=0.128$).
Conclusion: While no causality can be implied from these data, the findings highlight those factors which may be important in the development of low iron. Further exploration of these issues will inform the development of health promotion programs for the prevention of low iron in Australian women.

Title:	WOMEN: LIVING WELL INTO THE 21ST CENTURY
Authors:	Sue Outram and Margot Schofield
Name of Conference:	Women Living Well Into the 21st Century, Newcastle. 7-8 September 1997

The baseline survey of the Australian Longitudinal Study on Women's Health, conducted in 1996, identified a sub-sample of 325 women in New South Wales aged 45-49 years who had high levels of psychological distress as measured by the SF-36. The aim of this sub-study was to determine how many women sought formal help for their distress, to explore the experiences of these women in seeking help for their psychological distress, and to explore reasons for not seeking help. Trained interviewers administered a semi structured interview by telephone. High rates of psychotropic drug use by women have been highlighted in various studies in the past decade. In this study 36% of women said they had taken tablets or medicines to help them cope with a recent episode of psychological distress. Medications included psychotropic drugs, natural products such as evening primrose oil and Hormone Replacement Therapy. This paper will present information about the medications used and will discuss the resistance to medicating feelings expressed by many of the women who were interviewed and the potential this has for promoting women's health and well being.

Title:	ALCOHOL CONSUMPTION AND EMOTIONAL HEALTH IN AUSTRALIAN WOMEN
Authors:	Helen A Jonas and Annette J Dobson
Name of Conference:	Australian Epidemiological Association, Melbourne. 5 October 1997

During 1996, over 40,000 women in three age groups (18-22 years, N=14665; 45-49 years, N=14036; 70-74 years, N=12839) completed mailed baseline questionnaires for the population-based Australian Longitudinal Study on Women's Health. These questionnaires provided self-reported data on a range of demographics, physical characteristics, lifestyle patterns, the SF-36 Health Survey, and other physical and emotional issues. Women were asked how often they usually drank alcohol, how many drinks they usually had when they drank alcohol, and how often they drank 5 or more drinks on one occasion.

	Non-drinker	Rarely drink	Low harm	Hazardous	Harmful
Young	*(n=1311)*	*(n=4874)*	*(n=7366)*	*(n=793)*	*(n=21)*
Mental Health (MH)	69.1	67.5	68.8	64.2*	53.0*
Social Functioning (SF)	77.0	75.9	76.8	71.8*	58.3*
Role Functioning-Emotional (RE)	73.5	51.1	50.4	63.5*	41.7*
Middle	*(n=3131)*	*n=4153)*	*(n=6653)*	*(n=612)*	*(n=121)*
Mental Health (MH)	72.0	72.1	74.2	70.2	64.6*
Social Functioning (SF)	80.3	80.6	84.2	79.6	71.6*
Role Functioning-Emotional (RE)	76.1	77.0	79.7	74.6	62.9*
Older	*(n=4324)*	*(n=3031)*	*(n=3912)*	*(n=375)*	*(n=50)*
Mental Health (MH)	75.7*	77.0	78.7	77.2	79.7
Social Functioning (SF)	78.3*	81.1	84.8	84.4	85.0
Role Functioning-Emotional (RE)	73.0*	76.2	79.8	79.7	76.5

The responses for usual patterns of drinking were categorised as "non-drinker", "rarely drink", and the three NHMRC categories of "low harm" (up to 2 standard drinks/day), "hazardous" (2.01-4.00 drinks/day), and "harmful" (4+ standard drinks/day). Within each age-group, the mean values for each of the 8 SF-36 scales differed significantly for some of the usual patterns of drinking (see Table for examples).

Title:	FOR RICHER, FOR POORER, IN SICKNESS AND IN HEALTH: MARITAL STATUS AND OLDER WOMEN'S HEALTH, RELATIONSHIPS AND FINANCIAL SECURITY
Authors:	Julie Byles, Susan Feldman and Gita Mishra
Name of Conference:	29th Annual Conference of Public Health Association of Australia, Melbourne. 5-8 October 1997

Older women face many biological and social changes, not least being a change in their marital status. In the baseline survey of the Australian Longitudinal Study on Women's Health, 34.5% of the 12624 women aged 70-74 years were widowed, and 13.5% of these women had lost their spouse within the past 12 months. These women have very different health and social needs from other women of the same age.

Results *Health*: Compared with married women, women widowed in the past 12 months had the lowest self-rated health and were more likely to report they were stressed about their health. Recently widowed women also scored significantly lower than other groups of women (including women widowed for longer than 12 months) on all 8 sub-scales of the SF-36 ($p<0.01$). Recently widowed women were also more likely to be taking medication for 'nerves' (28% reported use of these medications) and 'medication to help you sleep' (25% reported use) than other women ($p<0.01$). There was also a trend for recently widowed women to report more visits to a GP in the last twelve months. *Relationships*: Stress regarding family relationships was associated with marital status with a trend for recently widowed women to be most likely to report such stress. There was also a trend for widows to be more likely to be unhappy with the amount of time spent alone than other women (desiring less time alone than they currently had). However, scores on the Dukes Social Support Instrument did not vary according to marital status and showed generally high levels of support for most women. *Financial Security*: Compared to married women, who are widows were more likely to be stressed about money and their living arrangements, more likely to report difficulty managing on the income available, and less likely to have private health insurance ($p<0.001$).

Conclusions These findings provide a framework for exploring the short and longer-term needs of women who are widows within the longitudinal study. More immediately, comments provided by the women provide further insights for the provision of appropriate health care and community support.

Title:	**PSYCHOLOGICAL DISTRESS AMONG MID AGE WOMEN IN NSW: HELP SEEKING AND BARRIERS TO SEEKING HELP**
Authors:	Sue Outram and Margot Schofield
Name of Conference:	29th Annual Conference of the Public Health Association of Australia, Melbourne. 5-8 October 1997

The baseline survey of the Australian Longitudinal Study on Women's Health, conducted in 1996, identified a sub sample of 325 women in New South Wales aged 45-49 years who had high levels of psychological distress as measured by the SF-36. The aim of this sub study was to determine how many women sought formal help for their distress, to explore the experiences of these women in seeking help for their psychological distress, and to explore reasons for not seeking help. Trained interviewers administered a semi structured interview by telephone. All but 4.3% of these women affirmed they had been very distressed or very worried in the past year. Fifty one per cent of women reported consulting a general practitioner to get help, 8% a psychiatrist, 17% a counsellor, 11% psychologist and 5% a social worker. The women were asked what had made it difficult or stopped them seeking professional help. This paper will present data on the professionals consulted and the reasons women gave for not seeking help. An important concern for women in small country towns and rural areas was privacy and the fear of lack of confidentiality.

Title: A HEALTH PERSPECTIVE ON VIOLENCE

Authors: Margrette Young, Annette Dobson and Julie E Byles

Name of Conference: 29th Annual Conference of the Public Health Association, Melbourne. 5-8 October 1997

Australian and overseas data on violence show that young women are at greatest risk. This study reports cross-sectional data on violence and young women's well-being (using short form general health survey - SF-36).
Method: Self-reported data from postal questionnaires in the baseline surveys of the Australian Longitudinal Study of Women's Health; 3 cohorts (18-22, 45-49, 70-74 years) of 12 -14,000 women in each.
Results: Lifetime prevalence of domestic violence (DV) was highest in middle-aged women (12% young, 16% middle-aged, 6% older women; $p<0.01$). More young women reported recent physical assault than women of other ages (16%, 4%, 1%; $p<0.01$).
Young women's SF-36 scores were significantly associated with both DV and recent assault. Young women who had experienced a violent relationship (DV group) had lower scores than the non-DV group across all the physical, mental, social and emotional functioning scales of SF-36 (eg mental summary scores = 40.5, 46.4, $t=16.33$, $p<0.0001$; physical summary scores = 46.4, 49.1, $t=10.68$, $p<0.0001$). Women reporting recent assault had worse mental health than those who did not. The differences were clinically and statistically significant ($p<0.001$).
Conclusion: The more violence young women experienced, the worse was their overall mental health (comprising general mental health, vitality, social and emotional functioning). There was some evidence that mental health of young women who experienced a violent relationship improves if physical aggression ceases. Research now underway aims to provide longitudinal data on the recovery process and what women do to protect themselves from repeated violence.

Title: HEALTH AND SOCIO-ECONOMIC CLASS: A SURVEY OF A COHORT OF AUSTRALIAN WOMEN

Authors: Deidre Wicks, Lois Bryson and Gita Mishra

Name of Conference: 29th Annual Conference of the Public Health Association of Australia, Melbourne. 5-8 October 1997

This paper examines data from the Australian Longitudinal Study on Women's Health (ALSWH) concerning the relationship between morbidity and socio-economic class for women aged 45-49 years. Morbidity measures are based on recent illness, self reported health status, diagnosis of chronic illness and other measures of physical and mental health status (SF-36). An occupational classification system (ASCO) is used to designate social class since this has proved to be a reliable and accessible indicator of social and economic position (Coxon & Davies, 1986). For purposes of comparison of morbidity, women in the manager and professional (MP) occupational categories were compared with women in the machine operator and manual worker (MM) categories. The study found significant class differences among middle aged women in the experience of morbidity. For example, women in the MM categories were more likely to experience breathing difficulties (22%) than women in the MP categories (15%), chest pain (MM 16%, MP 9%), headaches/ migraine (MM 66%, MP 51%) and stiff or painful joints (MM 64%, MP 46%). There are few gender specific studies of morbidity among Australian women. The data provide a solid foundation for exploring the short and longer term effects of class on the

health of a large cohort of Australian women and lay the basis for appropriate policy intervention to mitigate these effects.

Title:	**WOMEN'S HEALTH AUSTRALIA: A HEALTH PROFILE OF MID-LIFE RURAL WOMEN**
Authors:	Wendy Brown, Anne Young and Julie Byles
Name of Conference:	National Rural Public Health Forum, Adelaide. 12-15 October 1997.

More than 14,000 women aged 45-50 from every state and territory are participating in the Australian Longitudinal Study on Women's Health. This study is designed to track the health of Australian women for 20 years, and to understand lifestyle and health care factors that influence women's health. The study deliberately over-represents women from rural (N = 7955) and remote areas (N = 954). This early analysis of baseline data provided by the women compares responses for urban, rural and remote area women. The data show that while rural and remote women in this age group have similar levels of self-rated health, they have significantly fewer visits to general practitioners and specialists ($p<0.001$) and more visits to alternative health care providers. Rural and remote women were also more likely to undergo gynaecological surgery than women living in urban areas ($p<0.001$). Other results suggest that drinking and overweight are more common among rural and remote women. In the main however, the results reflect the strength and independence of rural and remote women. Further follow-up will allow divergence in health and health care equity to be explored as these women move into their older years.

Title:	**WOMEN'S HEALTH AUSTRALIA: INITIAL FINDINGS**
Authors:	Gita Mishra, Wendy Brown and the Women's Health Australia Researchers
Name of Conference:	Managing and Measuring Health Outcomes: From Policy to Practice, Canberra. 31 October – 1 November 1997

The Australian Longitudinal Study on Women's Health (now known as the Women's Health Australia (WHA) project) is designed to track the health of the several cohorts of women over a period of up to 20 years. It involves three large cohorts of women who were 18-22, 45-49 and 70-74 years at the time of the baseline survey in 1996. It also involves several smaller 'special' cohorts of indigenous women and women from non-English speaking backgrounds.

This paper describes the early findings from the baseline survey of the three main cohorts, in relation to the study's five major themes: health service utilisation; healthy weight and exercise; time use and social roles; violence against women; and women's life stages and key life events.

In particular, the paper illustrates the use of the MOS SF-36 instrument in assessing the effects of "risk factors" such as smoking, alcohol, inactivity and domestic violence.

Title: **HYSTERECTOMY AND INCONTINENCE IN MIDDLE AGE WOMEN**

Authors: Gita Mishra, Julie Byles, Wendy Brown and Pauline Chiarelli

Name of Conference: Managing and Measuring Health Outcomes: From Policy to Practice, Canberra. 31 October – 1 November 1997

Data from the baseline survey on the Australian Longitudinal Study on Women's Health indicate that more than one in five women in the 45-49 year age group have had a hysterectomy, and that between 20 and 40% of women leak urine.

Women who reported hysterectomy were more likely to live in rural and remote areas, to have private health insurance and lower levels of education. They were also more likely to report having had other gynaecological surgery. The highest levels of hysterectomy were seen in Western Australia, and the lowest in the ACT and Victoria. Women who reported hysterectomy had lower scores on the SF-36 (mean PCS = 47.1 vs 50.3, 0<0.0001; mean MCS = 44.8 vs 47.3, $p<0.0001$) and greater use of health services.

While leaking urine was strongly associated with parity, women who had had a hysterectomy, or other gynaecological surgery were also more likely to report leaking urine.

These data raise questions about the reasons for regional and inter-state variation in hysterectomy, and suggest that women who do have gynaecological surgery should be routinely provided with information on the prevention of urinary incontinence.

Title: **WOMEN'S HEALTH, PAID WORK AND THE LIFE CYCLE**

Authors: Bryson L & Warner Smith P

Name of Conference: The National Annual Conference of the Australian Sociological Association, Wollongong, 9-12 December 1997

Employment has been a key focus of feminist research over recent decades. Nonetheless, the connections between paid employment and health have been little studied. Data from the first stage of the Women's Health Australia longitudinal study, planned over a twenty year period, provide a valuable opportunity to explore this connection. A sample of more than 14,000 women, who comprise the group aged between 45-49 years in the study, allow us to examine the way in which work and health are related.

What we find is that access to paid employment represents more than an essential basis for access to socio-economic life chances and equal citizenship. This fundamental connection has been long recognised by feminist theorists but our data demonstrate that paid work is also linked to matters of life, and if not death, then certainly poorer health. Women in paid work report significantly better health than those who are not in paid work. Furthermore, the data also indicate a link between health status and the actual number of hours worked. For example, women who have only a few (less than 16) hours per week of paid work have health status closest to those with no paid work.

The paper focuses on what we find to be the complex links between the hours women work, their life circumstances and measures of their health status. The data illustrate the importance of being engaged in paid work for the health and well-being of women in contemporary Australian society. The data alert us to dimensions of the nature and importance of paid work for women and for citizenship which have been under-recognised in feminist debates.

Title: **IS LIFE A PARTY FOR YOUNG WOMEN IN AUSTRALIA?**

Authors: Wendy Brown and Jean Ball

Name of Conference: Australian Council on Health, Physical Education & Recreation
21st Biennial National /International Conference, Adelaide.
January 1998

During 1996, baseline data for the Australian Longitudinal Study on Women's Health (now known as the Women's Health Australia or WHA project) were collected from women in three age groups (18 - 23; 45 - 50; 70 - 75). The project aims to explore how changes in biological, psychological, social and lifestyle factors impact over time on women's physical and emotional health. Participants in the study were randomly selected from the HIC/Medicare data base, and represent women from all walks of life, from every State and Territory of Australia.
This paper will report baseline findings from the young cohort (N=14600), focusing on lifestyle issues which may impact over time on health outcomes. Descriptive data on self-reported lifestyle variables, as well as causes of, and methods of coping with stress, will be included. One third of the cohort are current smokers (mean ($\pm$ sd) age of starting smoking, 15.4 ± 2.35 years); 17.4% drink 5 or more drinks at least once a week; 27% use condoms to protect against STD's; 29.2% had a BMI <20 kg/m^2 and 40.8% do little or no exercise. Only 1.6% said they were happy with their weight, and more than half the cohort (57%) had (ever) dieted to lose weight. The mean (sd) age when first dieted was 15.4 ± 2.50 years. The most common causes of stress in this group are money, employment and study, and the most common method of coping was talking to a good friend. These cross-sectional data provide insights into the health behaviours of young Australian women, and highlight issues which could be addressed in health education and/or health promotion programs.

Title: **PHYSICAL ACTIVITY, WELL-BEING AND SYMPTOMS AMONG THREE AGE GROUPS OF WOMEN**

Authors: Christina Lee

Name of Conference: Fifth New Zealand Health Psychology Conference, Palmerston North, New Zealand. 18-20 February 1998

Data from Women's Health Australia, a longitudinal survey of the well-being of over 42,000 Australian women, were used to examine the relationship between an index of physical activity and several measures of physical and psychological well-being. Increasing levels of vigour, mental health, and physical well-being, and decreasing levels of back pain, tiredness, and other symptoms, were associated with increasing physical activity in three age groups, although the relationship with body mass index differed across age groups. Although cross-sectional, these data support the argument that any increase in physical activity will be associated with improvements in well-being. The greatest benefits, however, are associated with a shift from minimal to moderate physical activity. Since the majority of women in both Australia and New Zealand have low levels of physical activity, promotion of moderate activity will have a major impact on women's health.

Title:	**FAMILY CAREGIVING IN THE LIVES OF MIDDLE-AGED AUSTRALIAN WOMEN: HEALTH, STRESS, AND ADJUSTMENT**
Authors:	Christina Lee and Jenny Porteous
Name of Conference:	Society of Behavioural Medicine (USA) 19th Annual Conference, New Orleans. 25-28 March 1998

Responsibility for family-based care of the ill and disabled falls disproportionately on middle-aged women, and caregiver burden is a major source of stress for a growing minority of the population. The Women's Health Australia survey, a large-scale longitudinal survey of the well-being of Australian women in three age groups, provides an opportunity to investigate the impact of family caregiving.

Of a nationally representative sample of 14,136 women aged 45-49 years, 19.7% stated that they regularly provided care for a disabled, frail or elderly person (carers: N=2,738). Although carers and non-carers did not differ in health-related behaviours including exercise, smoking, alcohol use and medical screening, chi-square (alpha = 0.001) showed that carers rated their own health significantly worse than did non-carers, were more likely to report back pain, and perceived themselves as significantly more stressed. Carers were significantly less likely to be employed full-time, but more likely to report feeling rushed and busy, and 42% reported that they were not satisfied with their current caring arrangements.

Qualitative analysis of open-ended responses indicated highly variable circumstances and coping strategies. Caring for parents seemed less burdensome than caring for disabled children. A significant minority were happy with their caring status, while others described an impossible daily struggle. A recurrent theme was a sense of being exploited and unappreciated at a social level, and of inadequacy of health care systems.

Title:	**PREDICTORS OF BODY DISSATISFACTION AND DISORDERED EATING IN A COMMUNITY SAMPLE OF YOUNG AUSTRALIAN WOMEN**
Authors:	Kylie Ball
Name of Conference:	5th International Congress of Behavioural Medicine, Copenhagen. 19-22 August 1998

The majority of young women in developed countries are discontented with their bodies, and a significant minority of these women develop serious eating disorders. This paper draws on a large-scale community survey to examine predictors and correlates of body dissatisfaction and of disordered eating.

Data from a nationally representative sample of 12,614 women aged 18-23 years, collected as part of the Women's Health Australia longitudinal survey, demonstrated significant correlations between self-reports of body dissatisfaction and disordered eating, and levels of stress, major life events, and depression. Following this, a sample of 500 women who reported disordered eating and 500 who did not was selected, and these women were surveyed on two occasions six months apart. Analysis demonstrated both cross-sectional and longitudinal relationships between stress, life events, depression, and symptoms of disordered eating.

These findings add to existing evidence, much of which has been based on small samples and has used exclusively cross-sectional designs, suggesting that women at risk of developing eating disorders may be identified and preventive measures taken.

- ACITHN Conference, Brisbane, 17 July 1997;
- Melbourne Epidemiology Group, Hepburn Spa, 1-3 October 1997;
- Women's Health Statewide, Adelaide, 15 October 1997;
- SA Health Commission, Adelaide, 16 October 1997;
- Department of Health and Family Services, Public Health Division, Canberra, 29 October 1997;
- Active Australia National Agency Forum, Australian Sports Commission, 3 October 1997;
- NSW Corrections Health Service Conference, Sydney, 10 November 1997;
- National Public Health Information and Research Working Group, Canberra, 5 December 1997.

5.2 PUBLICATIONS

5.2.1 Papers accepted

Title: **VALIDITY OF THE SF-12 COMPARED WITH THE SF-36 HEALTH SURVEY IN PILOT STUDIES OF THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN'S HEALTH**

Authors: Schofield MJ & Mishra G

Abstract:

Objectives: Brief quality of life scales such as the Medical Outcomes Study Short-Form General Health Survey (SF-36 and SF-12) are in growing demand. This study formed part of the pilot studies for the Australian Longitudinal Study on Women's Health (ALSWH) and aimed to assess the relative merits of using the SF-36 versus the SF-12 for the ALSWH. It also compared norms for the SF-12 derived from the independently administered SF-12 versus the SF-12 embedded in the SF-36. The relative validity of the SF-12 and SF-36 scores was estimated for groups differing in self-reported physical and mental health status.

Method: Two samples of women resident in the Illawarra and Central West districts of New South Wales, Australia were randomly selected from the Health Insurance Commission database (N=3000 in Study 1, N=600 in Study 2). The sample was stratified into young (18-22 years), mid age (45-49) and older women (70-74), and into women living in urban (40%), rural (30%) and remote (30%) areas. In Study 3, 500 households were selected by random digit dial from the telephone white pages and 89 eligible women were identified. Consenting women in all three studies completed a mailout survey.

Results: SF-36 scale scores for the ALSWH pilot studies were similar to US norms, with physical health declining with age, and mental health improving with age. For the older age group only, differences were observed in the health profiles derived from the SF-12 independently administered and SF-12 embedded in the SF-36. For the SF-36 and independently administered SF-12, there were differences in health profile means in all three age groups. Relative validity tests for physical health showed that the SF-12 physical health scores discriminated between women with poor versus good physical health (more versus fewer symptoms in the past 12 months). Mental health relative validity tests showed the SF-12 mental health scores discriminated well between groups who scored as psychologically distressed on the GHQ-12 and those who did not.

Title: **DEVELOPMENT, PREVENTION AND TREATMENT OF IRON DEFICIENCY IN WOMEN**

Authors: Patterson AJ, Brown WJ & Roberts DCK

Abstract:

Iron deficiency is the most common nutritional deficiency in the world. Women of childbearing age are at particular risk of developing iron deficiency due to the iron losses associated with menstruation and childbirth. Women in less developed countries are often unable to obtain adequate dietary iron for their needs due to poor food supplies and inadequate bioavailable iron. In this situation, fortification and supplementation of the diet with extra iron is a reasonable approach to the prevention and treatment of iron deficiency. In Western countries however, food supply is unlikely to be an issue in the development of iron deficiency, yet studies have shown that many women in these countries receive inadequate dietary iron. Research has shown that the form of iron and the role of enhancers and inhibitors of iron absorption may be more important than total iron intake in determining iron status. Despite this, very little research attention has been paid to the role of diet in the prevention and treatment of iron deficiency. Dietary modification would appear to be a viable option for the prevention and treatment of iron deficiency in Western women, especially if the effects of enhancers/inhibitors of absorption are considered. While dietary modification has the potential to address at least part of the cause of iron deficiency in women of childbearing age, its efficacy is yet to be proven.

Title: **NORMS FOR THE PHYSICAL AND MENTAL HEALTH COMPONENT SUMMARY SCORES OF THE SF-36 FOR YOUNG, MIDDLE AND OLDER AUSTRALIAN WOMEN**

Authors: Mishra G & Schofield MJ

Abstract:

The SF-36 was developed in the US to provide an eight scale health profile and two component summary scores representing physical and mental health. The published norms and scoring procedures are based on data from the US general population. The Australian Longitudinal Study on Women's Health (Women's Health Australia) undertook a survey in 1996 of over 40,000 Australian women in three age groups: 18-22, 45-49, and 70-74 years and provided age and gender specific norms for the SF-36 health profile. From this data, factor weights and factor score coefficients were calculated for these age and gender specific populations of Australian women. Thus, component summary scores for physical and mental health can now be calculated using formula standardised to the relevant Australian population. This will facilitate interpretation of the physical and mental health component summary scores in the Australian context and will allow more meaningful comparisons within the young, middle-aged and older cohorts of Australian women in the Australian Longitudinal Study on Women's Health.

Title: **FOOD HABITS OF YOUNG AND MIDDLE-AGED WOMEN LIVING OUTSIDE THE CAPITAL CITIES OF AUSTRALIA**

Authors: Dobson A, Mishra G, Brown W & Reynolds R

Abstract:

Young (18-22 years) and middle-aged (45-49 years) women living in urban and rural areas of New South Wales completed a brief food frequency questionnaire as part of a wider health survey. Urban women in both age groups consumed meat less frequently than women in rural areas and women in the less populated rural areas were more likely to eat green and yellow vegetables and least likely to eat dried beans. Otherwise there were few geographic differences in food habits. Middle-aged women consumed reduced-fat milk, fruit, vegetables, fish and biscuits and cakes significantly more frequently, and rice, pasta, full-cream milk, fried and take-away food less frequently than younger women. Smokers in both age groups consumed fresh fruit, vegetables and breakfast cereals significantly less frequently than non-smokers, and women with low levels of habitual physical activity consumed fresh fruit and cereals less frequently than more active women. The findings suggest that strategies aimed at changing eating behaviours should be age group specific and targeted specifically for smokers and less active women.

5.2.2   Papers submitted

Title: **PSYCHOLOGICAL STRESS AND DISORDERED EATING: AN EXPLORATORY STUDY WITH YOUNG AUSTRALIAN WOMEN**

Authors: Ball K, Lee C & Brown W

Abstract:

An exploratory study was conducted to examine whether the relationships between psychological stress and disordered eating, reported in many studies using American samples, would be found in a sample of young Australian women. A total of 212 women aged 18-22 years completed a questionnaire assessing a number of women's health issues, including life event stress levels, psychological distress, disordered eating behaviours, and concerns about weight and eating. While results showed few strong relationships between stress and eating variables for the sample overall, those women with high psychological stress levels appeared to be more likely to engage in disordered eating behaviours than women with low levels of stress. Results suggest that further investigation, targeting subgroups of women scoring highly on measures of psychological stress or disordered eating, may help clarify our understanding of the relationships between these factors in young Australian women.

Title: **WHAT IS A HEALTHY WEIGHT RANGE FOR MIDDLE AGED WOMEN?**

Authors: Brown WJ, Dobson AJ & Mishra G

Abstract:

<u>Objective</u>: To explore associations between body mass index (BMI) and selected indicators of health and well-being and to suggest a healthy weight range (based on BMI) for middle aged Australian women.

<u>Design</u>: Population based longitudinal study (cross-sectional baseline data).

<u>Subjects</u>:   13,431 women aged 45-49 who participated in the baseline survey for the Australian Longitudinal Study on Women's Health.

<u>Results</u>:   Forty eight percent of women had a BMI>25 kg/m^2. Prevalence of medical problems (eg hypertension, diabetes), surgical procedures (cholecystectomy, hysterectomy) and symptoms (eg back pain) increased monotonically with BMI, while indicators of health care use (eg visits to doctors) showed a 'J' shaped relationship with BMI. Scores for several sub-scales of the MOS short form health survey (SF-36) (eg general health, role emotional, social function, mental health and vitality) were optimal when BMI was around 19-24 kg/m^2. After adjustment for area of residence, education, smoking, exercise and menopausal status, low BMI was associated with fewer physical health problems than mid-level or higher BMI, and the nationally recommended BMI range of 20 – 25 was associated with optimum mental health, lower prevalence of tiredness and lowest use of health services.

<u>Conclusions</u>: Acknowledging the limitations of the cross-sectional nature of these data, the results firmly support the benefits of leanness in terms of reducing the risk of cardiovascular disease, diabetes and gall bladder disease. The findings are moderated however by the observation that both low and high BMI are associated with decreased vitality and poorer mental health. The optimal range for BMI appears to be about 19 - 24 kg/m^2. From a public health perspective this study provides strong support for the recommended BMI range of 20 - 25 as an appropriate target for the promotion of healthy weight for middle aged Australian women.

Title: **YOUNG AUSTRALIAN WOMEN AND THEIR ASPIRATIONS FOR WORK, EDUCATION AND RELATIONSHIPS**

Authors: Wicks D & Mishra G

Abstract:

It is recognised that while women make up over half of tertiary enrolments, this outcome is not reflected in the gender composition of occupational structure, career patterns and pay distribution. There are a number of different explanations for this including a recent contribution from British sociologist Catherine Hakim who identified the main causal factor as women's own lack of career orientation and work commitment. Hakim's contribution has produced a lively debate with all sides acknowledging the lack of, and need for, longitudinal data on women's workforce participation. The present paper investigates data from the first stage of the Australian Longitudinal Study on Women's Health which provides a valuable opportunity to inform this debate through an analysis of the aspirations of a large group of young Australian women aged 18-22 years. The investigation will be conducted in relation to young women's aspirations for work, relationships and further education. In this context, the implications for the "Hakim debate" will be discussed. It will be demonstrated in the paper that analysis of the initial data casts light on debates about women's workforce participation at the same time as establishing baseline data for future research on the work and family

patterns of this group of young women. The information will have significance for policy debates in several areas, including those concerned with child care, access to higher education and workforce planning.

Title: **HYSTERECTOMY AMONG WOMEN IN AUSTRALIA: AN ISSUE OF EQUITY AND ACCESS IN HEALTH CARE**

Authors: Byles JE, Mishra G & Schofield M

Abstract:

Objectives: To identify differences in hysterectomy rates across urban, rural and remote areas of Australia and across states; to separate these geographic differences from the effect of sociodemographic influences (such as education, parity, religion); to assess whether women who have hysterectomy have different quality of life and levels of health care utilisation than women who have not had this procedure.

Methods: Data were collected from 14205 women aged 45-49 years participating in the baseline survey of the Australian Longitudinal Study on Women's Health (Women's Health Australia project), a large-scale national study of factors affecting the health of women. Proportions were weighted to account for deliberate over-representation of women in rural and remote areas.

Results: The estimated prevalence of hysterectomy was 22%. Factors significantly associated with hysterectomy in a multiple logistic regression model included living in a remote area, state of residence (highest prevalence in Western Australia, and lowest rates in the Australian Capital Territory and Victoria), having private health insurance, lower levels of education, being currently or previously married, having had other gynaecological procedures, and other (non-gynaecological) surgical procedures. Compared with women who had not had hysterectomy, women who had had hysterectomy had significantly poorer physical and mental health as measured by the SF-36 quality of life profile (mean PCS = 47.07 vs 50.26, p < 0.0001; mean MCS = 44.75 vs 47.29, p<0.0001). There were also significant differences between women who had and had not had a hysterectomy in terms of the number of visits to a general practitioner in the past year.

Conclusions: High hysterectomy rates, regional variations, and associated demographic characteristics indicate a need for more careful evaluation of gynaecological care for women in Australia, particularly those living in remote areas and those with lower levels of education.

Title: **FOR RICHER, FOR POORER, IN SICKNESS AND IN HEALTH: OLDER WIDOWED WOMEN'S HEALTH, RELATIONSHIPS AND FINANCIAL SECURITY.**

Authors: Byles JE, Feldman S & Mishra G

Abstract:

Aim: To provide a profile of widowed older women, to highlight the health and social needs of these women in the short and long term, and to contrast these with needs of ageing women in general

Method: 12,624 women aged 70-74 years across Australia completed baseline questionnaires for the Australian Longitudinal Study on Women's Health. 34.5% of the women were widowed, and 13.5% of these widowed women had lost their spouse within the past 12

months. The self-reported health, health care use, financial security, social support and quality of life profiles of these two groups of widows were compared with those of married women of the same age.

Results: *Health and health-related quality of life* - Compared to married women, women widowed in the past 12 months had the lower self-rated health and were more likely to report they were stressed about their health. Recently widowed women also scored significantly lower than married women on all 8 sub-scales of the SF-36. However sub-scales scores for women widowed longer than 12 months were no different from the scores for married women. Recently widowed women were also more likely to be taking medication for 'nerves' (28% reported use of these medications) and 'medication to help you sleep' (25% reported use) than other women. *Financial and structural issues* - Women who reported difficulty managing on their income were more likely to be widowed than women who said managing was "not too bad" or "easy"; women with health insurance were less likely to be widows than women who had no health insurance. These associations held for women widowed in the last 12 months and women widowed for more than 12 months. *Relationships* - Women were more likely to say they make their own decisions about their life if they were widowed than if they were married. However, stress with relationships with children or other family members was more likely to be reported by widows than other women and women who would like less time alone were also more likely to be widowed than married. Scores on the Dukes Social Support Instrument did not vary according to marital status and showed generally high levels of support for most women.

Conclusions: This study identifies women widowed in the last 12 months as having particular physical and mental health needs as well as financial and practical needs relating to managing on their income. These findings provide a framework for exploring the short and longer-term needs of women who are widows within the longitudinal study. More immediately, comments provided by the women provide further insights for the provision of appropriate health care and community support.

Submitted: *Women and Health*, 1997.

Title: **LIFE EVENTS SCALES FOR YOUNG, MIDDLE-AGED AND OLDER WOMEN**

Authors: Dobson A, Schofield M, Ball J, Ellem J, Reynolds R & Wicks D

Abstract:

This paper describes the development and use of three age-specific life events scales designed for the Australian Longitudinal Study on Women's Health (ALSWH). Starting with published lists of life events, additional items of importance to women (e.g. violence and sexual abuse) were included while items inappropriate for the study population were deleted. A series of studies was conducted to obtain information on the 12 month incidence of the events, their perceived severity and the acceptability and face validity of the lists for women aged 18-22, 45-49 and 70-74 years. Using this information, shorter lists were developed and used in the baseline postal survey of the ALSWH involving a random sample of over 40,000 women from all over Australia. The reliability of the instruments was assessed by comparing results from different samples of women in the same age groups. Validity was tested by comparison with the physical and mental health component summary (PCS and MCS) scores of the SF-36 quality of life measure. As well as considering the performance of individual items, both unweighted scores (percentage of events experienced in the last 12 months) and weighted scores (weighted by the perceived severity of the events) were assessed. There were differences in the incidence and perceived severity of specific life events among women at different stages of their lives. Young women experienced more events and perceived them to require more adjustment. Negative events were perceived to require more adjustment than

positive ones. For many of the life events there were clinically (as well as statistically) significant differences in mean PCS and MCS scores between women who experienced the event and those who did not. The perceived severity ratings for items were correlated with differences in mean PCS and MCS scores for middle-aged and older women who did or did not experience the events (but not for younger women). Life events scores, summed over all items in the lists, showed differences among the three age groups and were negatively correlated with concurrently assessed PCS and MCS. There was little evidence that the weighted scores performed any better than the unweighted ones. The results suggest that these gender and age-specific life events scales will be useful tools for studying women's health in their social context. The predictive validity of the scales, in terms of health outcomes over time, will be assessed through the ALSWH.

Submitted: *Social Science & Medicine*, 1997.

Title: **HEALTH HABITS AND PSYCHOLOGICAL FUNCTIONING AMONG YOUNG, MIDDLE-AGED AND OLDER AUSTRALIAN WOMEN**

Authors: Lee C

Abstract:

The Women's Health Australia (WHA) project aims to assess psychosocial influences on the health of Australian women, to inform policy and service delivery in Australia. Pilot data from a representative sample of 612 women from three age groups (18-22, 45-49, and 70-74) included the Women's Health Questionnaire, 12-item General Health Questionnaire, and Medical Outcomes Study SF-12 and Social Support Scale, as well as self-reports of menstrual status, height and weight, exercise status, and use of alcohol and tobacco. Psychological distress was highest in the youngest age group, and depression was associated with unhealthy body weight, smoking, and lack of exercise. The findings suggest that young adulthood, rather than middle or old age, is the time of greatest distress for women. Further, the connection between depressed mood and unhealthy lifestyles may be associated with the later development of disease.

Submitted: *Health Psychology*, 1997.

Title: **CHOICE OF GP: WHO DO YOUNG RURAL WOMEN PREFER?**

Authors: Bryson L and Warner Smith P

Abstract:

The demand for female medical practitioners by women in rural areas appears to be increasing and to be generational in character. However, the distribution of general practitioners in country Australia is heavily weighted to older men, and access to a women's health centre also decreases with distance from the metropolitan areas. Data from the Australian Longitudinal Study of Women's Health indicate that young women are significantly more likely than middle-aged or older women to prefer to see a female doctor. It is argued here that it is the 'culture of practice' exhibited by female doctors which young women find attractive, rather than an essentialising appeal of the gender of the practitioner. The findings suggest that restricted access to female practitioners may affect health outcomes if young rural women are reluctant to seek medical services provided by male doctors practising in traditional mode.

Submitted: *Australian Journal of Rural Health*, 1997.

Title: **HEALTH, STRESS AND COPING AMONG WOMEN CAREGIVERS: A GENDER-BASED ANALYSIS**

Authors: Lee C

Abstract:

Informal family-based care or frail or dependent adults places a significant burden on family caregivers. While there is little evidence for increased risk of major illness, the impact of caregiving on subjective well-being, preventive behaviours, lifestyle, and opportunities for employment and career development is well documented. The individual-based focus of much contemporary research on this topic has tended to obscure the social and cultural forces which underlie the fact that the majority of family caregivers are women, and to ignore the gender inequities which are perpetuated by an assumption that family caregiving is naturally the work of women. This paper reviews existing evidence on the burden of caregiving, and argues that there is now a need for psychological research which addresses issues of public policy rather than the individual woman and her personal ability to cope with this major and disruptive responsibility.
Submitted: *Health Psychology*, 1997.

5.3   ADDITIONAL RESEARCH GRANTS

Federal Office of Road Safety: Follow up study on risk factors for female drivers. $20,942

5.4   COMMITTEES

Wendy Brown
NSW Health: Steering committee for the evaluation of the National Women's Health Program in NSW.

NSW Health: Review committee for the development of a strategic plan for the promotion of physical activity in NSW.

National Heart Foundation: National physical activity program committee.

Australian Sports Commission/Federal Dept of Health: Active Australia national monitoring, evaluation and research group.

Annette Dobson
National Breast Cancer Centre: Chair – Monitoring Working Party for the National Breast Cancer Centre.

5.5   WOMEN'S HEALTH AUSTRALIA MONTHLY SEMINAR SERIES

17 JUNE 1997   -   Julie Brooks – Domestic violence as a system of punishment;
                  -    Margrette Young – The effectiveness of legal protection in the
                           prevention of violence by partners in the lives of young
                           Australian women.

1 JULY 1997   -   Pauline Chiarelli – Women's waterworks: prevalence, problems and
                           prevention of urinary incontinence;
                  -    Lauren Williams – Weight change at menopause: A substudy of the
                           Australian Longitudinal Study on Women's Health.

15 JULY 1997   -   Sue Outram – Women's expectations for seeking help for emotional
                           distress;
                  -    Brendan Goodger – An examination of the factors relating to social
                           isolation in the elderly.

5.6   VISITORS

Dr Michael Gliksman, Medical Technology Assessment Group, Chatswood, NSW, 25 July
        1997.

Prof Rosemary Crompton, Dept of Sociology, University of Leicester, UK, 5 September
        1997.

Dr Mary-Anne Schroll, Department of Geriatrics, Copenhagen City Hospital, Denmark, 5
        September 1997.

6   COMMUNICATION WITH PARTICIPANTS

Our commitment to provide all participants with feedback on the study findings was
continued in 1997. Following a 'generic' newsletter to all participants in 1997 (see June 1997
report), a separate newsletter was developed for each cohort during November 1997 (see
Appendix 4). These will be posted early in December.

As we will not be surveying the younger and older cohorts again until 1999 and 2000, we will
include a request with the newsletter for these two cohorts, for each woman to provide us with
the name and contact details of a friend or relative who will be able to help us to contact the
woman in the event that we may lose track of her (see Appendix 5). Reusable envelopes,
with the WHA address on the 'return' (reply paid) side are being used to send the newsletters,
so that participants can return this contact information to the researchers. The cost of this is
likely to be in the vicinity of $10,000 if half of the participants respond to this request (not
included in the original budget).

Despite the high cost, maintaining the cohort is paramount to the long term viability of the
study, and pilot testing of this method of tracking has proven to be helpful in maintaining the
pilot cohorts.

7   SUBMISSION FOR CONTINUED FUNDING

During October 1997, a submission was prepared for continued funding of the study for the next triennium. This was presented to the Department of Health and Family Services following the meeting of the National Advisory Committee on 28 October. The submission includes examples of research questions which will be explored during the course of the longitudinal study, as well as the time frame for the follow-up surveys of each of the main and special cohorts, and budgetary details for the next three years. A copy of the submission is included here.

7.1   INTRODUCTION

1. The Australian Longitudinal Study on Women's Health commenced in 1995, when researchers at the University of Newcastle, in conjunction with the University of Queensland, were the successful tenderers for the project. It is funded by the Commonwealth Department of Health and Family Services. The original grant was for the first three years of the project, and funding is now required for the next three year period.

2. The study looks at women's health from a social perspective. It is planned to run for 20 – 25 years, tracking the health of women as they progress through different life stages from young adulthood to middle age, from middle age to senior years, and from senior years progressively through old age. The longitudinal design will allow exploration of the cause and effect relationships between social, economic, environmental and biological factors and health outcomes.

3. Longitudinal research has particular advantages in indigenous communities. The time devoted to consultation and building partnerships between communities and researchers is repaid and reinforced over time, as the information obtained can be used as a community resource, preventing repetition of effort and monitoring changes in health status and health behaviour over time. This approach has the additional advantage of allowing changes in health status to be assessed in the context of changes in health infrastructure at a community level.

4. During 1996, three large cohorts were established: young women aged 18-23 years (N=14,700); middle aged women, 45-50 (N=14,200); and older women aged 70-75 (N=12,600). The sample was drawn randomly from the Medicare database (the most complete list of people in Australia), with intentional over-sampling of women from rural and remote areas (who comprise 60% of the participants). To ensure that women from non-English speaking backgrounds and indigenous women would be included in the project, two smaller cohorts of women from the Philippines and the former Yugoslav republics (N=300 for each), and three smaller cohorts of indigenous women from urban and rural communities were also established. Baseline surveys have been conducted with all cohorts.

5. It is proposed that each cohort be surveyed at three yearly intervals, on a 'rolling' basis, beginning with the middle aged and Filipina cohorts in 1998 (from current funding), followed by the older and Yugoslav cohorts in 1999 and the young and indigenous cohorts in 2000. The third survey of the middle aged and Filipina cohorts will take place during the final year of the next triennium (first half of 2001). Three yearly surveys are necessary for documentation of major life events such as birth of first child (young), menopause (middle), and events such as widowhood and the occurrence of major age-related health problems in the older cohort.

6. Between the three yearly surveys, in-depth sub-studies will be conducted on specific issues. From the main cohorts, groups of 200-400 women who have important but relatively rare conditions or events (eg anorexia nervosa or miscarriage) can be identified. Factors leading to the development of the problem, and possible strategies for prevention and treatment or coping can then be investigated. Funds for these nested sub-studies will be sought separately (eg from NHMRC).

7. In 1997 two sub-studies have response rates of 85-90%. This indicates that the women are willing to continue in the study. Regular contact through newsletters and the media will be used to encourage continued participation.

8. More than half the women in the main cohorts have given permission for access to selected Medicare data. The unique capacity of the project to link self-reported information to data from health care utilisation records will provide empirical evidence on which to base improvements in the efficiency and effectiveness of health service policy and practice.

9. Although the study is based at the Universities of Newcastle and Queensland, it is already becoming a major national resource for both information and research. The researchers are working with SA Health, Queensland Health and NSW Health to provide data for planning purposes. There is also inter-sectoral collaboration with the Federal Office of Road Safety (women drivers and injury) and the Criminal Justice Commission (domestic violence). Links are developing with researchers at seven other Universities, and with organisations such as the Australian Institute of Health & Welfare, the National Heart Foundation and the Jean Hailes Foundation. The project can also provide infrastructure for further studies (eg family health) and evaluative information for government strategies such as Active Australia. Internationally, the WHO in Geneva, Health Canada and the Hong Kong Department of Public Health have expressed interest in collaboration.

10. This request for continued funding is based on the documented achievements of the study in its first three years. As this is a longitudinal study, the value of the research will grow over time. There are already some very clear associations in the baseline data, which show that the study has the potential to contribute significantly to the evidence base on which health and social policy decisions can be formulated.

7.2 SELECTED EARLY FINDINGS 1997

- Women in rural and remote areas have poorer access to health services than urban women. Barriers include lack of bulk-billing and confidentiality, little choice of provider, inconvenient surgery times for working women, long distances and long waiting times.
- Despite poorer access to services, mid age women from rural and remote areas report higher levels of gynaecological surgery.

- Young women experience much higher levels of stress than mid age or older women.
- Stressful events are associated with increased risk of road accidents for women drivers (work carried out in collaboration with the Federal Office of Road Safety).

- The risk of miscarriage among young women who smoke (33% of the young cohort) is five times greater than for women who have never smoked.

- Young and middle aged women who smoke are more likely to report menstrual symptoms such as irregular periods, heavy bleeding, painful periods and PMS.

- Women who are underweight (28% of the young cohort) or overweight (48% of the mid cohort) have lower physical and mental health and vitality, and greater use of health services than women whose weight is in the healthy range.

- Young women who begin dieting at an early age (13 or less) have greater risk of disordered eating, high BMI, poorer physical and mental health and greater use of health services than women who have never dieted.

- The prevalence of recent physical assault is highest in young women. Women who have experienced assault or violence have lower levels of physical, mental, emotional and social functioning.

- Recently widowed women have significantly poorer physical and mental health, but health levels of women widowed for longer than one year are no different from those of married women.

7.3   POLICY IMPLICATIONS

The data will be used to inform the development of more effective, appropriate and accessible health services which meet the gender specific needs of women at different life stages. They will provide evidence on which to base efficient and effective health and social policy decisions and will help to identify the positive and negative outcomes of selected medical interventions (eg gynaecological procedures). The study will enhance the ability of using routinely collected administrative databases, such as Medicare, to describe health status and health service utilisation, by linking them with measures of individual socioeconomic and health status for the large cohort of women in the study.

The findings will also inform the development of appropriate health promotion and disease prevention strategies and the development of health information and education materials. They can also be used to promote intersectoral collaboration between agencies which have an interest in population health (eg employment, law enforcement, education, transport, housing, recreation etc).

7.4   SELECTED RESEARCH QUESTIONS FOR THE LONGITUDINAL STUDY

Health Services (including Rural Health)

- How do demands for health care (including nature of medical conditions experienced and provider preference) change as women age? How do these demands impact on health service use and private health insurance?

- What is the sequence of gynaecological surgical procedures and operations (eg prolapse repair, hysterectomy) and what are the side effects (eg incontinence, constipation) and long term health outcomes for women who undergo these procedures?

Mental Health

- Are the high levels of stress in young women associated only with 'youth' or is this a generational effect which will persist as these women grow older? If it persists, what will be the long term health outcomes of stress and associated behaviours such as binge drinking, smoking, dieting and eating disorders?

- Do government-initiated programmes such as Active Australia and the NSW campaign to promote healthy body image reduce levels of depression?

Public Health and Health Promotion

- What are the main factors which contribute to marked changes in body weight (eg dieting, exercise, food intake, hormone use, stress, unemployment) at different stages of life? In particular, what factors underlie increasing weight gain at menopause?

- What strategies (eg legal protection, counselling, social support) are most effective in promoting recovery from domestic violence?

Family Health

- What are the impacts on health and well-being of landmark events in women's lives (such as childbirth and motherhood, moving in and out of employment, menopause, retirement, widowhood)? Under what circumstances are these life events most effectively negotiated?

- What are the long term health effects and opportunity costs for women who care for an older, frail or infirm family member?

Healthy Ageing

- What services are effective in supporting older women during the transition to increasing levels of dependency?

- What are the health effects of sleep disturbance and hypnotic drug use?

- What are the antecedents and consequences of dementia?

Immigrant women

- The health of immigrants typically deteriorates with the amount of time spent in their new country, particularly for elderly immigrants. How do socio-economic status, social support, commensurate employment and language proficiency contribute to deterioration of health with increasing term of residency in Australia?

- Humanitarian immigrants often face different issues from people who immigrate by choice. Support for this group tends to be greatest in the initial phases of re-settlement, however there is evidence that mental health problems, in particular, become manifest once settlement issues are resolved. Do mental health problems develop with increasing duration of living in Australia?

Indigenous women

- How do changing patterns of health service provision for indigenous communities impact on health service utilisation and long term health outcomes?

- What is the time frame for development of long-term health problems such as diabetes in indigenous women?

- Family and social support structures are very different in indigenous communities. What are the health effects of changes in family and social support structures for indigenous women?

- The timing of major life events (eg birth of first child, bereavement) is often very different for indigenous women compared to other women. What are the health impacts of these events and what are the most appropriate ways of helping indigenous women cope with these events?

7.5 THE AUSTRALIAN LONGITUDINAL STUDY ON WOMEN'S HEALTH: WORK PLAN 1998 – 2001

	1998 Jan - June	1998 – 1999 July – Oct – Feb – June	1999 - 2000 July – Oct – Feb - June	2000 - 2001 July – Oct – Feb - June
Baseline Survey				
Analyses of specific issues	▬▬▬	▬▬		
Dissemination of results	▬▬▬	▬▬▬		
FOLLOW UP SURVEYS				
MID COHORT Survey prep and pilot				▬▬
Survey	▬▬			
Data entry		▬▬		▬▬
Analyses		▬▬▬		
Reporting		▬▬▬▬	▬▬	
OLDER COHORT Survey prep and pilot		▬▬		
Survey		▬▬		
Data entry			▬▬	
Analyses			▬▬▬	
Reporting	▬▬			▬▬▬
YOUNG COHORT Survey prep and pilot			▬▬	
Survey			▬▬	
Data entry				▬▬
Analyses				▬▬▬
Reporting	▬▬▬			
NEWSLETTERS	🗒	🗒 🗒	🗒 🗒	🗒 🗒
TRACKING PARTICIPANTS	▪ ▪ ▪ ▪	▪ ▪ ▪ ▪ ▪ ▪	▪ ▪ ▪ ▪ ▪ ▪	▪ ▪ ▪ ▪ ▪ ▪

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		1998 Jan - June	1998 – 1999 July – Oct – Feb - June	1999 - 2000 July – Oct – Feb - June	2000 - 2001 July – Oct – Feb - June
FOLLOW UP SURVEYS *Special Cohorts*					
NESB					
FILIPINA	Design/consultation			▓▓▓▓	
	Data collection	▓▓▓▓			▓▓▓
	Analyses		▓▓▓		
	Reporting		▓▓▓▓▓▓▓	▓	
YUGOSLAVIA	Design/consultation		▓▓▓		▓▓▓▓
	Data collection		▓▓▓		
	Analyses			▓▓▓	
	Reporting			▓▓▓▓▓	▓▓▓
INDIGENOUS					
CHERBOURG	Design/consultation			▓▓▓▓	
	Data collection	▓▓▓▓			▓▓▓
	Analyses		▓▓▓		
	Reporting			▓▓▓▓▓▓	
WOORABINDA	Design/consultation			▓▓▓▓▓	
	Data collection				▓▓▓
	Analyses	▓▓▓			▓▓
	Reporting		▓▓▓▓		
BRISBANE	Design/consultation	▓▓▓			▓▓▓▓
	Data collection		▓▓▓		
	Analyses		▓▓▓▓		
	Reporting			▓▓▓▓▓	

SUB-STUDIES *(continuing from 1996-8)*	Researcher / Student	1998 – 1999 July – Oct – Feb - June	1999 - 2000 July – Oct – Feb - June	2000 - 2001 July – Oct – Feb - June
Theme: Health Service Utilisation				
Health service utilisation	A Young (AD/JB)*	▬▬▬▬▬		
Help seeking for emotional distress	S Outram (MS)*	▬▬		
Iron deficiency and tiredness	A Patterson (WB)*	▬▬▬▬		
Social support – older women	B Goodger (JB)*	▬▬▬▬▬▬		
Asthma and health services	G Rose (LM)*	▬▬▬▬▬▬▬		▬
Theme: Weight and exercise				
Disordered eating, stress and coping	K Ball (CL/WB)*	▬▬▬▬▬		
Weight gain at menopause	L Williams (WB)*	▬▬▬▬▬▬▬▬▬		
Depression and binge eating	J Kenardy	▬▬▬▬▬		
Theme: Violence against Women				
Role of legal protection in the prevention of violence (young cohort)	M Young (JB/AD)*	▬▬▬▬▬▬		
Violence and punishment (mid)	J Brooks (LB)*	▬▬▬▬		
Theme: Time use – women and work				
Aspirations of young women	D Wicks	▬▬		▬▬
Family and working roles: effect on long term health	P Warner-Smith (LB)**	▬▬▬▬▬▬▬▬▬		
The health of carers and the health impact of caring	J Porteous (CL)**	▬▬▬▬▬▬▬▬▬		
Theme: Life stages and key events				
The health of older women as widows	S Feldman (JB)*	▬▬▬▬▬▬▬▬		
Contraceptive choice	S Strazzari (LB/DW)*	▬▬▬		
Psychological health and symptoms in mid life	C Lee	▬▬▬▬▬▬▬		
Special Cohorts				
Horn of Africa women	P Allotey*	▬▬▬▬▬▬▬▬		
South Sea Islander women	M Kellaher	▬▬▬▬▬▬		
South Asian women	Z Hussain	▬▬▬▬▬▬		
Thai women	S Jirrawong*	▬▬▬▬▬		

*PhD student (supervisor); **Post-doctoral project

7.6 BUDGET FOR THE MAIN AND SPECIAL COHORT STUDIES 1998-2001

Item	note	1998-1999	1999-2000	2000-2001
MAIN COHORTS				
Salaries		455433	478346	490685
Surveys		91225	95786	100576
Office costs		41000	43050	45203
Travel/NAC		31500	33075	34729
Newsletters		85500	89775	94264
Substudies		21000	22050	23153
UN o'heads (15%)	1	108849	114312	118291
Sub-total		834507	876394	906901
UN salary contribution	2	101558	106386	106688
UN in-kind contribution	3	165651	174071	180112
Total project cost		**1101716**	**1156851**	**1193701**
SPECIAL COHORTS				
Salaries		115676	87325	90755
Maintenance		10000	10000	10000
Travel		6000	6000	6000
ATSI project		69717	53698	54773
Yugoslav project		9696	0	0
Filipina project		5000	0	0
Total project cost		216089	157023	161528
UQ salary contribution	2	43763	44462	44837
UQ in-kind contribution	3	98380	76667	79641
Total project cost		**358232**	**278152**	**286006**
TOTAL FOR PROJECT		**1459948**	**1435003**	**1479707**
less UN contribution		267209	280457	286800
less UQ contribution		142143	121129	124478
Requested from Commonwealth		**1050596**	**1033417**	**1068429**

Notes:
1 UN overheads to meet IT costs (including library, www etc), administration etc
2 Salaries of researchers to be met by the relevant University
3 In-kind expenses include cost of rent, infrastructure, maintenance etc

7.6.1   Annual costs for main cohort studies (University of Newcastle 1998-99)

SALARIES	note	base	5% (contract loading)	29% (overheads)	total	annual cost
Project Manager C-4		61681	3084	18782	83547	
Statistician B-5		53034	2652	16149	71835	
Statistician B-1		46117	2306	14043	62465	
Data Manager HEW 7-4		43562	2178	13265	59005	
Secretary HEW 4-2		29456	1473	8969	39898	
Research Assistant HEW 5-4		34129	1706	10392	46228	
Research Assistant HEW 5-4		34129	1706	10392	46228	
Research Assistant HEW 5-4		34129	1706	10392	46228	
						455434
UN SALARY CONTRIBUTION	1					
1 x level E x 0.20 (AD)		87622		25410	22606	
1 x level D x 0.15 (CL)		72633		21064	14054	
2 x level C x 0.15 (JB, DW)		65140		18891	25209	
3 x level B x 0.10 (LW, JG, SO)		54764		15882	31791	
1 x level a x 0.15 (PWS)		40813		11836	7897	
						101557
SURVEYS			unit cost	N	total	
Print and set up surveys			0.85	15000	12750	
Mail merge/print letters etc			0.25	15000	3750	
Envelopes (incl. printing)			0.45	15000	6750	
Reminders (print/label)			0.25	15000	3750	
Follow-up			1.00	8000	8000	
Postage - surveys			0.85	15000	12750	
Postage - thank you/reminders			0.45	15000	6750	
Return mail			0.85	13500	11475	
Data entry (scanning)			1.50	13500	20250	
HIC data linkage			1.00	5000	5000	
						91225
OFFICE COSTS						
Computers/software					6000	
Computer support/maintenance					5000	
Consumables					7500	
Photocopier					3000	
Office phone/fax					5000	
1800 number					5000	
Printing (reports/pilots)					3000	
Office mail (including pilots)					3500	
Publicity					3000	
						41000
TRAVEL			unit cost	N	total	
Project travel (meetings/publicity)					5000	
Conference travel (dissemination)			650	10	6500	
National Advisory Committee	2		10000	2	20000	
						31500
Carried forward to next page						**720716**

	note	unit cost	N	total	annual cost
Carried forward					**720716**
SUBSTUDIES	3	7000	3	21000	**21000**
NEWSLETTERS	4				
Printing (two per year)		0.5	90000	45000	
Postage		0.45	90000	40500	
					85500
UNIVERSITY INKIND CONTRIBUTION	5			165651	**165651**
TOTAL PROJECT COSTS					**992867**
less University salary contribution					101558
less University in kind contribution					165651
SUB-TOTAL					**725658**
UN overheads (15%)	6				108849
TOTAL					**834507**

Notes:

1 Investigator salaries to be met by University of Newcastle

2 NAC cost will depend on location of members and venue for the meetings

3 Funds for sub-studies could be sought from other funding bodies

4 Feedback to the participants is very important
   (It may be possible to seek corporate sponsorship for this)

5 'In-kind' expenses include cost of rent, infrastructure, maintenance etc

6 UN overheads to meet IT costs (including library, www etc), administration etc

7.6.2 Annual salary costs for the main cohort studies (1999-2000)

	note	base	5% (contract loading)	29% (overheads)	total	annual cost
SALARIES						
Project Manager C-5		65945	3297	20080	89323	
Statistician B-6		56955	2848	17343	77146	
Statistician B-2		49761	2488	15152	67401	
Data Manager HEW 7-5		44807	2240	13644	60691	
Secretary HEW 4-3		30286	1514	9222	41022	
Research Assistant HEW 5-5		35133	1757	10698	47588	
Research Assistant HEW 5-5		35133	1757	10698	47588	
Research Assistant HEW 5-5		35133	1757	10698	47588	
						478347
UN SALARY CONTRIBUTION	1					
1 x level E x 0.20 (AD)		91127		26427	23511	
1 x level D x 0.15 (CL)		77936		22601	15081	
2 x level C x 0.15 (JB, DW)		67746		19646	26218	
3 x level B x 0.10 (LW,JG,SO)		56955		16517	33062	
1 x level A x 0.15 (PWS)		44004		12761	8515	
						106387

7.6.3 Annual salary costs for the main cohort studies (2000-2001)

	note	base	5% (contract loading)	29% (overheads)	total	annual cost
SALARIES						
Project Manager C-6		67746	3387	20629	91762	
Statistician C-1		58752	2938	17890	79580	
Statistician B-3		51557	2578	15699	69834	
Data Manager HEW 7-5		44807	2240	13644	60691	
Secretary HEW 4-4		31116	1556	9475	42147	
Research Assistant HEW 5-6		36095	1805	10991	48891	
Research Assistant HEW 5-6		36095	1805	10991	48891	
Research Assistant HEW 5-6		36095	1805	10991	48891	
						490687
UN SALARY CONTRIBUTION	1					
1 x level E x 0.20 (AD)		91127		26427	23511	
1 x level D x 0.15 (CL)		77936		22601	15081	
2 x level C x 0.15 (JB, DW)		67746		19646	26218	
3 x level B x 0.10 (LW, JG, SO)		56955		16517	33062	
1 x level A x 0.15 (PWS)		45562		13213	8816	
						106688

7.6.4   *Annual costs for special cohort studies (1998-99)*

	note	1998-99	1999-2000	2000-2001	total
SALARIES					
Study Coordinator		62962	66025	69454	198441
Statistician (0.5)		31831	0	0	31831
Research Assistant (0.5)		20883	21301	21301	63485
UQ SALARY CONTRIBUTION	1				
Academic		22880	23161	23537	69578
Research Assistant		20883	21301	21301	63485
TRAVEL					
Local travel		2000	2000	2000	6000
Conference travel		4000	4000	4000	12000
MAINTENANCE					
Stationery		2000	2000	2000	6000
Communication		4000	4000	4000	12000
Other maintenance		4000	4000	4000	12000
ATSI COHORT					
Aboriginal Liaison officer		41789	43698	44773	130260
Research Assistant		12928	0	0	12928
Casual interviewers		10000	10000	10000	30000
Travel		5000	0	0	5000
YUGOSLAV COHORT					
Research assistant		9696	0	0	9696
FILIPINA COHORT					
Travel		5000	0	0	5000
University in-kind expenses	2	98380	76667	79641	254688
TOTAL		**358232**	**278153**	**286007**	**922392**

Notes:
1   Salaries of researchers to be met by the University of Queensland
2   In-kind expenses include rent, infrastructure, maintenance etc

7.7   JOB DESCRIPTIONS

The following job descriptions are provided to justify the requested salary budget for the project. The size of this project is such that eight full time staff (equivalent to 2.7 full time staff for each cohort study of 12-14,000 women) are required for the main cohort studies and one full time and five part time staff are required for the special cohort studies. Their duties are as follows:

7.7.1   *Project Manager (UN)*

In conjunction with the study director and the inter-disciplinary group of senior researchers, the project manager will be responsible for:

1   Development of *strategic plans* for the implementation and continuation of the project;

2   *Financial resource management:* financial planning and management of budgetary aspects of the main cohort studies and oversight of project budgets for nested sub-studies; liaison with Commonwealth government officers re contracts and amendments; overseeing tendering, purchasing, accounts payable etc; half yearly reporting for DOHFS; maintenance of budgetary records; monitoring of sub-study budgets etc;

3   *Human resource management:* identify skills, knowledge, attitudes required for project tasks; decide on range of staff needed for these tasks; recruit staff; coordinate all staffing issues including contracts, responsibilities and job descriptions, performance appraisal and feedback, chair research team meetings, ensure compliance of all staff with privacy act; train, support and provide development opportunities for staff; coordinate day to day issues such as leave/ time in lieu etc; apply University EEO and equity policies relating to human resource management;

4   *Project management:* coordination of all aspects of the main cohort and nested sub-studies; contribute to project design; development and testing of research materials; preparation and checking of all project materials; liaison with printers, mail house, Australia post; data entry companies; organisation of casual staff for data entry, telephone contacts etc; contribute to evaluation of appropriateness, effectiveness and efficiency of the research methods;

5   Preparation of ethics applications and liaison with University Human Research Ethics committee for the main cohort studies and the sub-studies;

6   Coordination of preparation of reports for Government at six monthly intervals;

7   Contribute to interpretation of findings and preparation of papers for publication in peer reviewed journals;

8   Preparation and presentation of papers at conferences, scientific meetings, meetings of government and non-government organisations;

9   Coordinate development and editing of newsletters for communication of findings to study participants and other interested groups;

10   Development of public relations strategies including preparation of materials for project publicity and liaison with media representatives (including radio and television interviews, as well as interviews for the print media including magazines and newspapers); ensure accurate dissemination of study findings to relevant media groups;

11   Liaison with collaborating researchers at other Universities, including negotiation of memoranda of understanding for all collaborators;

12   Liaison with other internal and external agencies including government and non-government organisations (eg HIC, AIHW, NHF, Cancer screening units) re collaboration and dissemination of project findings;

13   Liaison with national and international visitors and organisation of seminars for visitors and post graduate students;

14   Supervision of honours and post-graduate students and guidance for students doing work experience/placements with the project;

15   Preparation of funding submissions for government, granting bodies, corporate sponsors;

16   Organisation and preparation of materials for fortnightly meetings of all researchers and quarterly meetings of senior researchers;

17   Organisation and preparation of materials for National Advisory Committee meetings (location, agenda, minutes etc);

18   Asset management including planned acquisition, use and maintenance and disposal of project assets.

7.7.2 Statisticians

In conjunction with the study director and project manager, the two project statisticians will:

1   Liaise with senior researchers, students, and collaborators from other Universities to ensure high quality statistical analyses of the study findings;

2   Undertake advanced statistical analyses and interpretation of research results for the preparation of papers for publication, and contribute to the writing of these papers;

3   Undertake advanced statistical analyses and interpretation of research results for the preparation of papers for presentation at conferences and meetings and present at conferences/meetings where appropriate;

4   Contribute to the preparation of reports for government;

5   Liaise with ABS, HIC, AIHW and other holders of relevant databases about comparative data, and prepare comparisons of study participants with national data from other sources as appropriate;

6   Assist with the development of grant applications and funding proposals;

7   Contribute to teaching and supervision of honours and post-graduate students;

8   Assist with study design for the main cohort and nested sub-studies.

The senior statistician will play a major role in all aspects of study design, advanced and complex statistical analyses and interpretation, publishing of scientific papers, and involvement in professional and academic activities. The second statistician will provide support to the researchers by carrying out more routine analyses which are needed for publications and presentations.

7.7.3 Data Manager

In conjunction with the study director and project manager, the data manager will:

1   Select, arrange, purchase and maintain appropriate computing hardware and software for the project;
2   Develop and maintain baseline databases for the three main cohorts including:
       data files and consent files for each age group,
       checking and maintaining data quality,
       updating name and address details;
2   Develop and maintain databases for all pilot studies;
3   Provide software support to WHA office team - SAS, Excel, Word, Access and general PC problems, including informal teaching of use of this software;
4   Liaise with University network support officer about PC and network problems in WHA office;
5   Liaise with investigators, students and collaborating researchers to create subsets of data, including associated files (formats, labels, variables);
6   Select samples for sub-studies, including creation of name and address lists for mailing and maintain databases for all sub-study participants and for selected sub-studies;
7   Liaise with mailing houses re mailing lists, including provision of databases for reminders and replacement packages;
8   Liaise with data entry companies re data requirements and problems with data sets;
9   Liaise with HIC re Medicare data; provide lists for checking of IDs and consent forms;
10   Liaise with ABS, AIHW and other holders of other key databases re requests for comparative data;
11   Participate in the development of project materials and check surveys during compilation for data and data entry issues;
12   Prepare frequency tables and produce up-dated data books at regular intervals;
13   Carry out data analysis for specific publications and presentations;
14   Prepare data entry programs for sub-studies in Access;
15   Ensure all data files are backed up regularly and stored in geographically separate and secure locations;
16   Maintain filing system for all data management issues, including documentation of SAS variables, programs etc.

7.7.4 Research Assistants

Generic duties which are common to all RAs include the following:

1   Carrying out literature searches and critical appraisal of literature for questionnaire development and publications;
2   Assistance with development of questionnaires, project materials, newsletters etc for the main cohorts and the nested sub-studies;
3   Organisation of focus groups for trialing of survey materials;
4   Assistance with pilot testing of study methods and materials.;
5   Organisation of tender documents for printing/mailing etc;
6   Coordination of printing, packing and mailing of questionnaires and reminders;
7   Organisation of submissions for bulk mail through liaison with Australia Post;
8   Answering 1800 number enquiries from participants re survey questions, address changes and general enquiries etc;

9   Carrying out telephone interviews with women who are unable to read/understand or answer the written questions;
10   Organisation of telephone interviews in languages other than English;
11   Maintenance of the cohort – finding address changes and tracking 'lost to follow up' participants' (one cohort per RA). (NB 25% of the young cohort have already changed their address!);
12   Assistance with preparation of publications, reports etc (eg typing, proof reading, finding and checking references);
13   Assistance with nested sub-studies (eg printing, packing mailing, responding to telephone enquiries.

In addition to these generic duties, each RA has specific additional duties:

RA one:
1   Maintenance of the middle cohort;
2   Maintenance of the resource library and database;
3   Assistance with preparation of bi-annual reports;
4   Maintenance of the publications data base (papers submitted, in press, presented at conferences etc);
5   Specific assistance with nested studies which require expertise in psychological aspects of health (eg cognitive functioning tests);
6   Assistance with development of databases for data entry (MS Access).

RA two:
1   Maintenance of the young cohort;
2   Assistance with all aspects of public relations and publicity for the project (including media liaison and interview schedules, press releases, responses to public enquiries by mail, telephone, www etc);
3   Assistance with organisation and supervision of student placements and work experience programs.

RA three:
1   Maintenance of the older cohort and linkage to the National Death Index;
2   Assistance with other data linkage projects.

7.7.5   Secretary

The project secretary will use advanced operations of software packages and standard office equipment to:

1   Provide secretarial support for the Project Manager, Director and researchers, including typing of correspondence, reports, papers, spreadsheets, databases, presentations (slides and overheads) etc;
2   Register and distribute all incoming mail;
3   Answer and delegate all incoming calls on main office line;
4   Read, and reply to or forward all generic office email;
5   Type and set-up all questionnaires and survey materials ready for printing;
6   Set up and maintain an extensive filing system for project materials, correspondence and all administrative records of the project;
7   Maintain and order stock and office stationery;
8   Maintain records for all purchases, check and reconcile purchases against accounts, organise payment of accounts;
9   Organise travel arrangements for meetings, conferences, etc;

10   Arrange meetings and teleconferences, and produce and circulate minutes for these meetings;
11   Respond to public enquiries (front counter and telephone);
12   Respond to enquiries from study participants.

7.7.6 *Position descriptions for the special cohort studies (University of Queensland)*

The research co-ordinator is responsible for conducting the research as negotiated with the other investigators and for supervising consultation with the different cohort communities. The co-ordinator is also responsible for data collection and management. Other responsibilities include preparing biannual reports to the Commonwealth Department of Health and Family Services, materials for distribution to the cohort and committee members, and research publications. The research co-ordinator is also responsible for supervising/training students and short term research assistants.

The statistician is involved in the analysis of data from ALSWH, the Longitudinal Study of Immigrants to Australia, the National Aboriginal and Torres Strait Islander Survey and other public domain statistics. Responsibilities also include the development of sampling strategies. Database development, maintenance and reporting is also supported by the statistician both within the ALSWH and in the communities where the study is conducted. The statistician also provides expert advice to other team members and students.

The Aboriginal liaison officer is involved in maintaining community consultation and steering groups. Her principal duties include conducting studies, under supervision, with indigenous women, and with supporting communities interested in collecting their own data and developing interventions. She also participates in data management, analysis, report writing and feedback to the communities.

The research assistants will be responsible for tracking and communication with the cohorts and for associated administrative duties. They will be involved in interviewing participants and attending community events. The research assistants will also be involved in data entry and maintenance of the qualitative database.

8. REFERENCES

Andersen, Ronald M. Revisiting the behavioral model and access to medical care: Does it matter? *Journal of Health and Social Behavior* 1995; 36: 1-10.

Women's Safety Australia 1996, Australian Bureau of Statistics, Commonwealth of Australia 1996.

Ferrante A, Morgan F, Indermaur D, Harding R (1996) Measuring the extent of domestic violence, Hawkins Press, Leichhardt NSW.

PART C

1. NATIONAL ADVISORY COMMITTEE

National Advisory Committee Meeting
Tuesday 28 October 1997
Juliana House, Woden, ACT

Present: Rhonda Galbally (Chair), Margaret Kelaher (UQ), Noela Baigrie (UQ), Gail Williams (UQ), Agnes Whiten, Brendan Gibson (DHFS), Annette Dobson (UN), Gloria Sutherland, Dorothy Broome, Christina Lee (UN), Wendy Brown (UN), Renate Watkinson, Sally Redman, Jeanette Ward, Jan Bennett (DHFS) & Manoa Renwick (DHFS).

1. Welcome

    Rhonda welcomed everyone to the meeting.

2. Minutes and matters arising

    Minutes of the last meeting were accepted as a true record. It was agreed that matters arising would be covered later in the meeting.

3. Overview of Progress

    Several members of the committee expressed their satisfaction with the progress made this year. Representatives of the Department of Health and Family Services (DHFS) said that the Department was satisfied with the quality of the study and Jan suggested that the data could be used to improve health services and inform changes in policy and practice.

a. Annette presented an overview of the study design and some findings on health service utilisation:

    - While there appears to be some over-representation of women with tertiary education, there is also a large proportion with only school education and it should be possible to adjust for potential biases. The demographic characteristics of respondents will be compared with 1996 Census data when available (soon);

    - Census data on Aboriginal women and women with non-English speaking backgrounds will also be obtained for comparisons;

    - Care is needed when presenting data on problems such as tiredness and heavy periods, to avoid undue medicalisation.

b. Wendy presented some of the findings which are relevant for health promotion.

    Issues:

    - Capacity to take account of comorbidity and complexity of risk factors is a strength of this study compared with single issue studies;

- Miscarriage and smoking data should to be communicated to DHFS staff concerned with Tobacco Control Policy;

- Need to publish smoking data as soon as possible si it has been peer-reviewed and is in the public domain before it is used for health promotion;

- Need to be careful with danger of health promotion for women to avoid undue emphasis on children and pregnancy;

- Message to Active Australia re benefits of exercise for improving mental as well as physical health;

- Need to take care with presentation of cross-sectional data so as not to imply causation – this can only be deduced from the longitudinal study.

c.   Christina Lee presented findings relating to stress levels in young women.

Issues:

- Self-mutilation was not specifically considered – possibility of a focused substudy (eg with funding from the Mental Health Strategy);

- Need to do more validity work on the stress scale;

- Need to assess underreporting of eating disorders;

- General problem of clinical versus statistical significance. Need to specify criteria of "meaning" or "what matters" in real terms, and then present and interpret results in this context;

- Good idea to liaise with George Paton (Centre for Adolescent Health);

- Need to look at different strategies for cohort maintenance.

d.   Christina then presented data on paid work and health.

Issues:

- Look at Graycar and Herman's work on carers;

- Get Lois to look at Michael Marmot's data on health and social class (Lancet, June);

- We should look at a validated culturation scale for assessing ethnicity;

- This is a fantastic resource. The committee is overwhelmed by the data!

Action:

- Gail agreed to circulate her paper on the "Mater mothers' study";

- Rhonda suggested we contact Judith Lumley re health utilisation data. Rhonda requested that copies of overheads be circulated with the minutes.

e. Noela Baigrie presented an update of work with the indigenous cohorts. She outlined the aims of the special cohort study, particularly the need for consultation/negotiation with communities. Consultations have taken place with women in Brisbane, Cairns, Cherbourg, Gold Coast, Hervey Bay, Rockhampton, Stradbroke Island and Woorabinda.

Woorabinda – Household survey conducted in May in collaboration with other groups. Women were asked to nominate priorities.

Cherbourg – Seven local women were trained to collect data which have been presented back to the community.

Issues:

- Longitudinal study is particularly important for indigenous women as it allows researchers to build trust, avoid exploitation and build partnerships with the community;

- The importance of community involvement and ownership was emphasised.

f. NESB cohorts. Margaret Kelaher presented progress with the Filipina cohort. Comparisons were given of responses from 90 women in Mt Isa and 372 women in other areas.

Issues:

- Need to make reasons for choice of cohorts clearer for presentation purposes (eg Mt Isa is a main remote centre with limited health services);

- Issues identified in Mt Isa (health service utilisation) included lack of bulk-billing, problems of accessing female doctors and specialists, and waiting times;

- Do the problems faced by these women result in different health outcomes? Suggest looking at Pap rates and mental health issues;

- Issue of commensurate employment is very important.

Margaret then presented data on women from the former Yugoslavia - 118 women in Brisbane (Serbian, Croatian, Bosnian) - humanitarian immigrants (refugees). Main issues include ethnicity, mixed marriages and recognition of qualifications. One aim of the study is to analyse differences between those who report that their health has deteriorated since arrival in Australia, compared with those who perceive no change or improvement. Some interesting findings relating to symptoms, conditions, use of health services were discussed.

Issues:

- Same analyses should be done for the main study and the special cohort studies to compare the results;

- Suggestion that the next meeting should explore specifically the issue how NESB policy can be informed by the special cohort studies.

g.   Wendy reported briefly on the HIC consent process. More than 21,000 women have given consent for access to Medicare data. All consent signatures checked by HIC. Data will include GP visits, gender/age of GP, Pap tests, specialist visits.

The meeting broke for lunch at 12.30pm.

Meeting resumed.

4.   <u>Funding issues</u>

Jan Bennett spoke about the potential of the project to drive the policy work of the Department. The funding decision will not be related to the quality of the project as this is a clearly valuable project. There is a limitation of having the funding solely from the Public Health Division of DHFS, especially since the current appropriation for DHFS is only until June 1999. It is probably therefore not a good idea to rely solely on funding from the Public Health Division in the long term. Alternative suggestions included the National Public Health Information Working Group (NPHIWG) or joint funding from the States and Commonwealth.

Brendan Gibson explained that the NPHIWG (chaired by Richard Madden) has no mechanism for funding projects but is to develop a rational basis for doing so. (AIHW is developing a public health information model which will provide a framework).

Annette raised the issue of NHMRC funding – it may not be possible to fund a project of this scope through the usual project or program funds. Discussion with NHMRC should be through Bob Wells and Jack Best. National Biomedical Risk Factor Survey is one of the first initiatives of the National Public Health Information Working Group and Annette will be attending a meeting to discuss this survey.

Jeanette suggested briefing sessions for major groups involved in Department of Health planning (Jan and Brendan can advise about dates). The ability to link with and collaborate with other groups is important. For example, synergy with other groups such as PHA and liaison with Mental Health, Rural Health, Aboriginal Health, National Cancer Control Initiative etc. Other strategies should include letters to the Liberal politicians, particularly the Liberal women and the "parliamentary partners" group in NSW (see Sally Redman). Other important potential contacts are Faye LoPo in NSW and Vivienne Lim – the secretary for the National Public Health Partnership. All parliamentary women should be sent a letter and a newsletter.

Corporate sponsorship

There were some discussion about corporate sponsorship for the project. Sally Redman offered to share the sponsorship policy which has been developed by the National Breast Cancer Centre. In terms of NHMRC funding, Jeanette and Sally offered their assistance with commenting on applications. Action for future funding includes contacting:

- John Loy - head of the Health Section Development Division which includes rural and mental health;
- Helen Evans - head of the Office of Aboriginal and Torres Strait Island Health Services;
- Dr Ian Anderson - Aboriginal medical officer;
- Jane Holton - Aged Care Division;
- Andrew Tongue - Office of the Aged;
- Barry White - Children and Family Services;
- Jack Best - Chair of the Strategic Planning Committee of the NHMRC;
- Bob Wells – Office of NHMRC;
- Margaret Burgess - Director of National Centre for Excellence in Immunisation Research.

Brendan and Manoa will help with contact numbers.

The meeting closed at 3.30pm.

APPENDICES

1. MATERIALS USED FOR THE PILOT MID FOLLOW-UP
2. PILOT MID FOLLOW-UP QUESTIONNAIRE WITH FREQUENCIES
   For copies of all ALSWH main surveys please visit:
   http://www.newcastle.edu.au/centre/wha/surveys.html

3. AVAILABILITY AND USE OF HEALTH SERVICES SURVEY
   Not available online.

4. DECEMBER 1997 NEWSLETTER
   For a copy of the 1997 ALSWH participant newsletter please visit:
   http://www.newcastle.edu.au/centre/wha/Reports/newsletters.html

5. CHANGE OF ADDRESS SHEET FOR MID FOLLOW-UP
   Not available online.