

CHAPTER 5

WELL-BEING, DISABILITY AND HEALTH

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CHAPTER 5

WELL-BEING, DISABILITY AND HEALTH

5.0 INTRODUCTION

In this study, assessment of health was of interest for the following reasons:

- 1) To describe or define the health status, function and quality of life of the populations surveyed.
- 2) To describe changes to health on migration
- 3) To examine the inter-relationships between health, food and lifestyle (see chapter 12).

There is general agreement in the literature on the five areas that should be included in a *total assessment* of groups of the elderly, defined as *multidimensional assessment of health status*. These include not only physical health, but also activities of daily living, mental health, social and economic functioning - all of which contribute to quality of life in this age group. Information on physical health alone is inadequate when considering well-being and quality of life of elderly folk (Fillenbaum, 1984).

The objectives of this chapter include:

1. Descriptive statistics for elderly Greeks by age group and gender on:
 - a) self-rated well-being
 - b) memory
 - c) activities of daily living
 - d) self-rated health status
 - e) use of the health care system
 - f) self-reported health conditions
 - g) self-reported use of medications and supplements
 - h) total health score
- 2) To describe changes to health, well-being and physical function in elderly migrant Greeks, by comparing with Spata Greeks and elderly Anglo-Celtic Australians.

Data on Spata Greeks was compared to:

- a) Euronut-Seneca study (de Groot et al., 1991) - rural Greeks aged 75 from Markopoulo (near Spata, M 33, F 27); Anogia and Archanes, Crete (M 31, F 45).
- b) WHO The elderly in eleven countries (Heikkinen et al., 1983) - rural Greeks aged 60-89 years (M 704, F 804; 50% aged 70+).

Data on Melbourne Greeks was compared to:

- a) National Health Survey, Australian Bureau of Statistics, 1989-90, Southern European Australians aged 70+ (M 25 800; F 25 900).
- b) Australian Institute of Multicultural Affairs (AIMA) survey, 1984, elderly Greeks aged 60+ (M 71, F 77; 20% aged 75+).
- c) Australian Council on the Ageing & Department of Community Services (ACOTA/DCS) survey 1981, 506 non-English speaking Australians aged 60+ (includes Southern Europeans M 113, F 102 of which only 27 subjects were Greek)
- d) Wahlqvist et al (IUNS, in press) - Anglo-Celtic elderly Australians aged 70-79 in Melbourne (M 50, F 49).
- e) Other international studies e.g Four country study in the Western Pacific (Andrews et al., 1986).

5.1 WELL-BEING AND MENTAL HEALTH

Cognitive status refers to the patient's *intellectual capability* (e.g memory, language, math, abstraction, reading, writing, orientation to time, place, and person) and *psychological status* (e.g well-being, depression) (Fillenbaum 1984; Kane and Kane, 1980). Reported here are responses related to self-reported well-being and memory, derived from the interviewer administered questionnaire (see Appendix 2).

5.1.1 SELF REPORTED STATUS OF WELL-BEING

The terms 'depression' and 'status of well-being' have been used when measuring the psychological status of individuals. The presence of depression is associated with a poor sense of well-being. Many nutrition screening programmes for the elderly use validated scales to measure depression, such as the Geriatric Depression Scale and Beck Depression Scale. These scales, however, have not been used extensively in non-English speaking populations. The questionnaire administered in Asian populations of the

Western Pacific (Andrews et al., 1986) used a simple measure of mental well-being (14 questions), and a list of symptoms indicative of psychiatric disorders. These questions were originally taken from the Cambridge Senior Citizens Capability and Health Survey. They are not designed to be diagnostic, but rather to identify the range of affective functioning in the study populations.

Subjects were asked whether they had experienced difficulty sleeping, unusual feelings of tension or anxiety, loss of interest, severe depression, extreme tiredness, or forgetfulness. Four questions relating to symptoms of psychoses were included (hearing things, seeing things, being watched/spied on, special messages) - however respondents had difficulty with these questions. In this study, self reported status of well-being included questions WB11-19 and SAR101-102 in the questionnaire (see Tables 5.1.1.1a-k). Questions WB11-17 were modified from the WHO Western Pacific study (Andrews et al., 1986) describing feelings of worry, depression, tiredness, loss of interest, and sleeplessness.

Due to the difficulties that Andrews et al. (1986) had with the questions regarding psychoses, these were excluded from the study. A further five questions describing well-being (WB17a, WB18, WB19 and SAR101-102) were created for the study. These questions described contentedness with life, tendency to laugh, enjoyment of music, feeling lonely (see Chapter 6) and feelings of acknowledgement and respect by friends and relatives. A simple score was created ranging from 0-7, with 7 representing a good state of well-being (with probably little or no depression) (see Chapter 3, section 3.8.2.1).

5.1.1.1 Sleep disturbance

Pattern of sleep (e.g time of waking, napping) as a descriptor of lifestyle is presented in Chapter 6. In this section, questions on sleep disturbances (WB11, WB12) are used to obtain information about well-being. For example, chronic poor sleep can have a detrimental impact on both psychological and physical well-being (Webb and Levy, 1982) but yet too much sleep may be a sign of deteriorating health.

Results: About 40% of the subjects had difficulty sleeping (see table 5.1.1.1a). However, significant differences were not found between gender, age group or centre.

Overall, 90% of the Greek elderly did not feel they were sleeping too much (see table 5.1.1.1b). Gender and centre differences were not significant, but age group differences were seen. Significantly more older women in Spata and older men in Melbourne

reported to be sleeping too much. There was about a 2-3 fold increase in 'sleeping too much' from age group 70-79 (5%) to 80+ (15%).

Table 5.1.1.1a

Question WB11
Do you have difficulty with sleep?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	37.5	52.6	27.3	28.6
No	62.5	47.4	72.7	71.4
WOMEN				
N	31	22	59	36
Yes	45.2	50.0	37.3	50.0
No	54.8	50.0	62.7	50.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

Table 5.1.1.1b

Question WB12
Do you find you are sleeping too much?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	6.3	10.5	7.6	25.0
No	93.7	89.5	92.4	75.0
WOMEN				
N	31	22	59	36
Yes	0	13.6	6.8	11.1
No	100.0	86.4	93.2	88.9

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata women; Melbourne men.

Centre differences: nil.

Comparisons with reported data: In the Four country study of elderly aged 60+ in Fiji, Korea, Malaysia and Philippines (Andrews et al., 1986), 34% of the men (n=572) and 40% of the women (n=713) reported having difficulties with sleep. In the Anglo-Celtic elderly study in Melbourne (Wahlqvist et al., 1993) 26% of the men and 45% of the women reported difficulty with sleep. The proportions from these studies are similar to

elderly Greeks (M 36%, F 45%). Almost all the Anglo-Celtic subjects did not feel they slept too much (99%) compared with 90% of elderly Greeks.

5.1.1.2 Worry

Results: Only gender differences in the age group 70-79 were significant for question WB13 'Do you worry more than usual about little things'. About half the women (55%) and one third of the men (30%) reported to worry more about little things (Table 5.1.1.2).

Table 5.1.1.2

Question WB13
Do you worry more than usual about little things?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	25.0	31.6	24.2	39.3
No	75.0	68.4	75.8	60.7
WOMEN				
N	31	22	59	36
Yes	48.4	63.6	61.0	47.2
No	51.6	36.4	39.0	52.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79 and 80+; Melbourne 70-79.

Age group differences: nil.

Centre differences: nil.

Comparisons with reported data: In the Four country study of elderly aged 60+ in Fiji, Korea, Malaysia and Philippines (Andrews et al., 1986), 31% of the men (n=572) and 38% of the women (n=713) reported 'worrying'. In the WHO 11 country study (Heikkinen et al., 1983) the greatest proportions of elderly reporting 'worrying' came from Greece (50%) and Italy (9-41%). In the elderly Anglo-Celtic Australian study in Melbourne, 24% of the men and 40% of the women reported 'worrying' which is slightly less than the proportions found in elderly Greeks in Spata and Melbourne (M 34%, F 55%). Overall, these studies indicate that elderly women tend to 'worry' more than men.

5.1.1.3 Life satisfaction

a) Interest in life

Results: Interest in life was captured in question WB14 (see table 5.1.1.3a). In Spata, only gender differences were significant. Almost half the women aged 70-79 reported having lost interest in doing things they used to enjoy, as opposed to only 20% of the men. This gender difference was not seen in the 80+ age group (30% reported losing interest in things they used to enjoy). Gender differences were not seen in Melbourne, only age group differences - the loss of interest in usual activities increased three-fold from 15% in age group 70-79 to 50% in the 80+ group. Centre differences were significant in the women aged 70-79 - twice as many women in Spata reported having lost interest in activities they usually enjoyed (see Table 5.1.1.3a).

Comparisons with reported data: In the Four country study of elderly aged 60+ (Andrews et al., 1986), 37% of the men and 40% of the women reported having 'lost interest'. These proportions are similar to elderly Greeks (M 30%, F 38%). In contrast, significantly less elderly Anglo-Celtic Australians (Wahlqvist et al., in press) reported having 'lost interest' (M 17%, F 17%).

Table 5.1.1.3a

Question WB14
Have you lost interest in doing things
you usually cared about or enjoyed?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	18.8	31.6	13.6	46.4
No	81.2	68.4	86.4	53.6
WOMEN				
N	31	22	59	36
Yes	45.2	36.4	18.6	52.8
No	54.8	63.6	81.4	47.2

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: Women 70-79.

b) Depression

Results: The feelings of depression or sadness were reported more frequently in women compared to men in the 70-79 age group in both centres. In Spata, almost half the women in this age group reported depression compared to only 15% of the men. In Melbourne, only 1.5% of the men and 18.6% of the women reported depression. Age group differences were observed in Melbourne only - depression increased with age in men. Centre differences also reached significance - a greater proportion of Spata elderly reported depression compared with Melbourne elderly (see table 5.1.1.3b).

Table 5.1.1.3b

Question WB15
Have you ever felt so sad or depressed you thought
you wanted to die?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	15.6	26.3	1.5	14.3
No	84.4	73.7	98.5	85.7
WOMEN				
N	31	22	59	36
Yes	48.4	27.3	18.6	13.9
No	51.6	72.7	81.4	86.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 70-79.

Age group differences: Spata nil; Melbourne men.

Centre differences: Men 70-79; Women 70-79.

Comparisons with reported data: In the Four country study of elderly aged 60+ (Andrews et al., 1986), 17% of the subjects reported feeling depressed. In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 12%, F 20%) reported feeling depressed compared to Melbourne Greeks (M 1.5%, F 18.6%) in this age group. In Spata, significantly more women reported depression in this age group (M 15.6%, F 48.4%). In the Australian Institute of Multicultural Affairs (AIMA) survey (1984) of elderly migrants aged 60+, depression was reported more frequently by Greeks (38%) (M 71, F 77) and Italians (22.6%) and less often by Chinese (12.8%) and German-born (10.3%). However, in all birthplace groups, reported depression was more common in those aged under 70 compared with those aged 75+. (This agrees with the low levels of depression found in elderly Melbourne Greeks aged 70+). Reported depression was also significantly higher among females in the AIMA sample.

c) Tiredness

Results: In Spata, gender differences were observed with more women (58%) reporting feelings of tiredness compared to the men (25%) in the 70-79 age group. Age group differences were not seen. In Melbourne, only age group differences were significant for both men and women, with feelings of tiredness reported twice as often in the 80+ group. Centre differences were seen in women only aged 70-79 - a greater proportion of Spata women reported feeling tired compared with Melbourne women (table 5.1.1.3c).

Table 5.1.1.3c

Question WB16
Do you feel tired most of the time?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	25.0	36.8	12.1	28.6
No	75.0	63.2	87.9	71.4
WOMEN				
N	31	22	59	36
Yes	58.1	59.1	22.0	50.0
No	41.9	40.9	78.0	50.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 80+.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: Women 70-79.

Comparisons with reported data: In the Four country study of elderly aged 60+ (Andrews et al., 1986), 45% of the men and 50% of the women reported feeling 'tired'. Comparing these Asian populations to elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 14%, F 30%) reported feeling 'tired' compared to Melbourne Greeks (M 12%, F 22%). In Spata, a greater proportion of women reported feeling 'tired' (M 25%, F 58%).

d) **Contentedness with life**

Results: In general, the level of discontent was low in Melbourne Greeks but high in Spata. In Spata, twice as many men in the 70-79 age group reported being content with their life (81.2%) compared to the women (48.4%). Similarly in Melbourne, more men (91%) than women (78%) reported being content with their life in the 70-79 age group (see table 5.1.1.3d). Age group differences were not observed within centres. Centre differences were seen only in the women in both age groups - a greater proportion of Melbourne women were content with their life compared with the Spata women.

Table 5.1.1.3d

Question WB17a
Are you happy and content with your every day life?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	81.2	63.2	90.9	75.0
No	18.8	36.8	9.1	25.0
WOMEN				
N	31	22	59	36
Yes	48.4	59.1	78.0	86.1
No	51.6	40.9	22.0	13.9

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 70-79.

Age group differences: Spata nil; Melbourne men.

Centre differences: Women 70-79 and 80+.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians, a greater proportion of women (F 90%, M 90%) reported feeling 'content with life' compared with Melbourne Greek women (F 78%, M 90%). In Spata, significantly less elderly reported feeling 'content' (M 70%, F 53%). These values agree with responses to the same question from the Euronut study (de Groot et al., 1991) on rural Greeks (M 73%, F 59%). In the Euronut study and the 11 country elderly study (Heikkinen et al., 1983) the lowest figures for 'life satisfaction' were found in rural Greece and a greater proportion of women from all countries were dissatisfied with their life compared with the men.

e) **Laughter**

Results: A greater proportion of Melbourne elderly (M 80%, F 72%) reported 'laughing' compared with Spata elderly (M 70%, F 45%). In Spata, only gender differences were significant - men aged 80+ (68.4%) reported laughing easily compared with the women (36.4%). In Melbourne, gender and age group differences were not seen. However, there appears to be a trend towards the men being more jovial than the women. Centre differences were seen with the women in both age groups - nearly twice as many Melbourne women reported laughing easily compared with Spata women (table 5.1.1.3e)

Table 5.1.1.3e

Question WB18
Do you laugh easily?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	22
Yes	75.0	68.4	83.3	78.6
No	25.0	31.6	16.7	21.4
WOMEN				
N	31	22	59	36
Yes	51.6	36.4	74.6	69.4
No	48.4	63.6	25.4	30.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 80+; Melbourne nil.

Age group differences: nil.

Centre differences: Women 70-79 and 80+.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians, greater proportions of men (86%) and women (F 90%) reported 'laughing' compared with Greek elderly.

f) **Music**

Results: Gender and age group differences were not seen within centres. Centre differences were significant for men and women in both age groups - 100% of the Spata elderly listened to music regularly compared with 70% of the Melbourne elderly.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians, 86% of the men and 85% of the women reported listening to music regularly.

5.1.1.4 Respect

Results: Overall, about 80% of subjects believed their family respected them. Gender and age group differences were not seen within centres. Centre differences were seen in the women aged 80+ - significantly less Spata women (59%) believed their family respected them compared with Melbourne women (86%) (see table 5.1.1.4).

Table 5.1.1.4

Question SAR102
Do you believe your children and grandchildren respect and acknowledge you?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Sometimes	9.4	5.3	6.1	7.1
Most of times	9.4	10.5	13.7	3.6
Always	81.2	84.2	80.2	89.3
WOMEN				
N	31	22	59	36
Sometimes	12.9	22.7	6.8	11.1
Most of times	19.4	18.2	8.5	2.8
Always	67.7	59.1	84.7	86.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: Women 80+.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians similar proportions (M 77%, F 71%) of subjects believed their family respected them compared with Melbourne Greeks.

5.1.1.5 Well-Being Score

The responses to 7 questions on well-being (WB11-WB17) were summed to generate the well-being score ranging from 0-7. The numbers in front of responses (0=Yes, 1=No) were used in the summation. A higher score indicated a better sense of well-being (see also Chapter 3).

Results: In Spata, the mean well-being score was significantly higher in the men (5.5) compared with the women (4.0) aged 70-79. The score, however, did not appear to change with age. Similarly in Melbourne, the men had a higher score (6.0) than the women (5.1) in the 70-79 age group. Age group differences were seen in the men only -

the score decreased with age to 4.9 in the 80+ group. Centre differences were significant in the women aged 70-79 - Spata women had a lower score than Melbourne women (see table 5.1.1.5).

Table 5.1.1.5

Well-being score
(Questions WB11-17a)

Well-being score 0-7	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	5.5 ^a	4.7	6.0 ^{df}	4.9 ^f
SD	1.7	1.9	1.2	1.5
Minimum	1.0	0.0	2.0	2.0
5%	2.0	0.0	3.0	3.0
25%	4.5	4.0	6.0	4.0
50%	6.0	5.0	6.0	5.0
75%	7.0	6.0	7.0	6.0
95%	7.0	7.0	7.0	7.0
Maximum	7.0	7.0	7.0	7.0
WOMEN				
N	31	22	59	36
Mean	4.0 ^{ak}	4.0	5.1 ^{dk}	4.6
SD	1.8	1.9	1.7	1.7
Minimum	1.0	1.0	1.0	1.0
5%	2.0	1.0	1.0	1.0
25%	2.0	2.0	4.0	4.0
50%	4.0	4.5	6.0	5.0
75%	5.0	5.0	6.0	6.0
95%	7.0	7.0	7.0	7.0
Maximum	7.0	7.0	7.0	7.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata 70-79; Melbourne 70-79.

Age group differences: Spata nil; Melbourne men.

Centre differences: Women 70-79.

*High score indicates better sense of well-being

Comparisons with reported data: In a study of European migrants in Australia, Krupinski et al., (1973) found that, compared with men, women were relatively sheltered from emotional disorder. However, after 10 to 15 years in the country, when the women began to age and to lose their protected roles as wives and mothers, they experienced an increased risk of developing emotional disorders. Similarly in Melbourne Greeks, women reported a poorer sense of well-being than the men. In the study of elderly Anglo-Celtic Australians, a greater proportion of women (F 90%, M 90%) reported feeling 'content with life' compared with Melbourne Greek women (F 78%, M 90%). In the survey

of migrants aged 60+ (n=3016), conducted by the Australian Council on the Ageing & Department of Community Services (ACOTA/DCS, 1981), a life satisfaction index consisting of four dimensions was used to measure well-being. The dimensions addressed enthusiasm, contentment, optimism and congruence. Australian-born and migrants from North-West Europe and from English speaking countries had the highest reported levels of well-being, followed by Asia and Eastern Europe, with the lowest mean item scores on all dimensions occurring for persons of Southern European extraction (M 113, F 102).

5.1.2 MEMORY

One of the most widely validated short instruments measuring cognitive function is the Folstein Mini-Mental State Examination (Folstein et al., 1975). This examination measures orientation, recall, language, attention and calculation. This test has limitations cross-culturally; equivalent phrases in another language are not always available and it assumes a certain level of education and literacy. The questions on memory and orientation are more cross-culturally robust.

There were difficulties translating the Mini-Mental state test into Greek. Furthermore, the majority of the elderly Greek subjects had not finished primary school. Therefore only questions on orientation and memory were included in this study. A total of 5 questions were included e.g ability to recall correct year, month/day of the week, including their address and whether they feel they are more forgetful now.

These questions were taken from the questionnaire used in developing countries - WHO Western Pacific Study (Andrews et al., 1986) which were almost identical to the orientation questions in the mini-mental state instrument. A simple score was created ranging from 0-5, with 5 representing good memory and orientation. Questions relating to memory and orientation were asked at the beginning of the interview in order to assess the reliability of the subject's memory before proceeding to the rest of the questionnaire. Spouse or relatives/friends were included in the interview if incorrect answers to two or more of these questions were obtained.

5.1.2.1 Recall of Year

Results: Significantly more subjects aged 80+ in both centres (except Spata men) did not know the current year. Centre differences were seen only in men aged 80+ - a greater proportion of Melbourne men answered this question incorrectly (18%) compared with Spata men (0%) (see table 5.1.2.1).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 93%, F 86%) of subjects knew what year it was compared with elderly Greeks (M 97%, F 91%).

Table 5.1.2.1

**Question MA7
What year is it (now)?**

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
correct	100.0	100.0	95.5	82.1
incorrect	0	0	4.5	17.9
WOMEN				
N	31	22	59	36
correct	90.3	68.2	93.2	63.9
incorrect	9.7	31.8	6.8	36.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 80+; Melbourne nil.

Age group differences: Spata women; Melbourne men and women.

Centre differences: men 80+.

5.1.2.2 Recall of month

Results: A greater proportion of subjects aged 80+ (20%) in both centres (except Spata men) did not know the month of the year compared with the 70-79 age group (<5%). Centre differences were not seen (see table 5.1.2.2).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 88%, F 86%) of subjects knew the month of the year compared to elderly Greeks (M 97%, F 97%).

Table 5.1.2.2

Question MA8
What month is it (now)?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
correct	100.0	89.5	95.5	82.1
incorrect	0	10.5	4.5	17.9
WOMEN				
N	31	22	59	36
correct	100.0	77.3	96.6	75.0
incorrect	0	22.7	3.4	25.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: Spata women; Melbourne men and women. Centre differences: nil.

5.1.2.3 Recall of day

Results: A greater proportion of subjects aged 80+ (20%) in both centres (except Spata men) did not know the day of the week compared with the 70-79 age group (<5%). Centre differences were not seen (see table 5.1.2.3).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 88%, F 86%) of subjects knew the day of the week compared with elderly Greeks (96%).

Table 5.1.2.3

Question MA9
What day or date of the month is it (now)?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
correct	96.9	89.5	95.5	82.1
incorrect	3.1	10.5	4.5	17.9
WOMEN				
N	31	22	59	36
correct	96.8	77.3	94.9	72.2
incorrect	3.2	22.7	5.1	27.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata women; Melbourne men and women.

Centre differences: nil.

5.1.2.4 Recall of address

Results: A greater proportion of subjects aged 80+ in both centres (except Spata men) did not know their address compared with the 70-79 age group. Centre differences were also significant for the 80+ age-group - a greater proportion of Spata men and a smaller proportion of Spata women knew their address compared with Melbourne Greeks (see table 5.1.2.4).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, a similar proportion (M 93%, F 83%) of subjects knew their address compared with elderly Greeks (M 97%, F 91%).

Table 5.1.2.4

Question MA10
What is your address?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
correct	96.9	100.0	97.0	82.1
incorrect	3.1	0	3.0	17.9
WOMEN				
N	31	22	59	36
correct	87.1	45.5	94.9	75.0
incorrect	12.9	54.5	5.1	25.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 80+; Melbourne nil.

Age group differences: Spata women; Melbourne men and women.

Centre differences: men 80+; women 80+.

5.1.2.5 Forgetfulness

Results: Gender differences were seen in Spata only - a greater proportion of women aged 70-79 reported being forgetful compared with the men. Centre differences also reached significance for the men only in both age groups - a greater proportion of Melbourne men reported being forgetful compared with Spata men (see table 5.1.2.5).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 28%, F 27%) of subjects reported 'forgetfulness' compared with elderly Greeks (M 29%, F 37%).

Table 5.1.2.5

Question WB17
Do you forget where you left things more than you used to,
or forget the names of close friends or relatives?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Yes	6.3	21.1	28.8	57.1
No	93.7	78.9	71.2	42.9
WOMEN				
N	31	22	59	36
Yes	25.8	31.8	37.3	55.6
No	74.2	68.2	62.7	44.4

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne men.

Centre differences: men 70-79 and 80+.

5.1.2.6 Memory score

The responses to 5 questions on memory (MA7-10, WB17) were summed to generate the memory score ranging from 0-5. The numbers in front of responses (0=Yes, 1=No) were used in the summation. A higher score indicated better memory.

Results: In Spata, gender and age group differences were significant; the men had a higher memory score (4.7) than the women (3.9) and the memory score decreased in both men and women with age. In Melbourne, gender differences were not seen (mean score 4) however the score decreased significantly with age from 4.5 to 3.5. Centre differences were seen in the men only aged 70-79 and 80+ - Spata men had a significantly higher score than Melbourne men (see table 5.1.2.6).

Comparisons with reported data: In the Four country study of elderly aged 60+ (Andrews et al., 1986), cognitive function appeared to worsen with increasing age and men generally scored slightly better than women.

Table 5.1.2.6

Memory score
(Questions MA7-10, WB17)

Memory Score 0-5	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
Mean	4.9 ^{gaei}	4.6 ^{bej}	4.5 ^{fi}	3.7 ^{fj}
SD	0.5	0.8	0.9	1.5
Minimum	2.0	2.0	0.0	0.0
5%	4.0	2.0	3.0	0.0
25%	5.0	4.0	4.0	3.5
50%	5.0	5.0	5.0	4.0
75%	5.0	5.0	5.0	5.0
95%	5.0	5.0	5.0	5.0
Maximum	5.0	5.0	5.0	5.0
WOMEN				
N	31	22	59	36
Mean	4.5 ^{ag}	3.4 ^{bg}	4.4 ^h	3.3 ^h
SD	0.8	1.5	0.8	1.7
Minimum	2.0	0.0	1.0	0.0
5%	3.0	0.0	3.0	0.0
25%	4.0	3.0	4.0	2.0
50%	5.0	3.5	5.0	4.0
75%	5.0	5.0	5.0	5.0
95%	5.0	5.0	5.0	5.0
Maximum	5.0	5.0	5.0	5.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata 70-79 and 80+; Melbourne nil.

Age group differences: Spata men and women; Melbourne men and women.

Centre differences: men 70-79 and 80+.

5.2 DISABILITY

Impairments in functional status refer to the degree to which personal disabilities and social handicaps result from losses or abnormalities of structure or function in an organ or organ system. Pathology, either physical or mental, gives rise to impairment; impairments further limit physical or mental function. Impairments exert negative influences not only on morbidity and mortality, but also on social and psychological function. They limit an individual's quality of life and ability to live independently, to maintain or begin relationships, and to pursue recreational activities and other goals (Dwyer et al., 1991).

Functional assessment is the process of measuring changes in the basic functions necessary to sustain oneself independently. Activities of Daily Living (ADL) scales measure the degree of difficulty in coping with basic bodily functions (using the toilet, eating) and with performing basic tasks e.g walking between rooms, cooking etc. Many of these impairments affect an individual's ability to eat an adequate diet (US National Centre for Health Statistics, 1986). Studies have shown high correlations between true disability and ADL; 70% sensitivity, 87% specificity and 96% reliability (Spector, 1990). Reported here are questions related to self-reported disability (activities of daily living and use of medical aids) derived from the interviewer administered questionnaire.

5.2.1 ACTIVITIES OF DAILY LIVING

Activities of daily living included a series of questions (ADL88a-n2, ADL88O-P, EX84) relating to the degree of difficulty in performing basic tasks (walking, climbing stairs, cooking, housework, transportation, medication) and coping with basic bodily functions and self care (dressing, bathing, continence, feeding, transferring, toileting) (see Tables 5.2.1.1a-q). There were three levels for the degree of difficulty: without difficulty, with difficulty but no help, need help. The questions were taken from instruments used in the WHO 11 country study of the elderly (Heikkinen et al., 1983) and the Euronut-Seneca study (de Groot et al., 1991). These questions were originally adapted from the validated instrument developed by Katz and Akpom (1976). An ADL score was created in this study for measuring degree of disability (see Chapter 3 and section 5.2.1.6).

5.2.1.1 Mobility

a) Walking between rooms

Results: Overall, walking between rooms was not a major problem for more than 95% of the elderly subjects; less than 15% of the men and 30% of the women had some difficulty. Melbourne women aged 80+ had the most difficulty (47%). In Spata, ten times more women aged 70-79 (32%) reported difficulty walking between rooms compared with the men (3%). Similarly, in Melbourne three times more women had difficulty walking between rooms compared with the men in the 70-79 (M 6%, F 19%) and 80+ age groups (M 14%, F 47%). Age group differences were only seen in Melbourne women; the percentage of women reporting difficulty walking between rooms rose steeply from 18.6% in the 70-79 age group to 47.2% in the 80+ group. Centre differences were significant in

women aged 80+ - a greater proportion of Melbourne women reported difficulty walking between rooms (47.2%) compared with Spata women (18.2%) (see table 5.2.1.1a).

Table 5.2.1.1a

Question ADL88a
Are you able to walk between rooms?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	0	0	0	3.6
With difficulty, but no help	3.2	10.5	6.1	14.3
Without difficulty	96.8	89.5	93.9	82.1
WOMEN				
N	31	22	59	36
Cannot do it, need help	0	4.5	1.7	0.0
With difficulty, but no help	32.3	18.2	18.6	47.2
Without difficulty	67.7	77.3	79.7	52.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 70-79 and 80+.

Age group differences: Spata nil; Melbourne women. Centre differences: Women 80+.

Comparisons with reported data: In the Euronut-Seneca study (de Groot et al., 1991) similar proportions of Greek elderly aged 75, reported walking between rooms without difficulty (M 96%, F 89%) compared to Spata elderly aged 70-79 (M 97%, F 68%). In the elderly Anglo-Celtic study in Melbourne (Wahlqvist et al., in press) a significantly greater proportion of the subjects aged 70-79 reported walking between rooms without difficulty (M 100%, F 95%) compared with elderly Greeks (M 90%, F 75%). Similarly in the AIMA survey, the immigrant groups that reported the least difficulty walking between rooms included elderly Germans (8%), Chinese (3%) and Australian-born (25%) where as the Greek immigrants reported having the most difficulty (70% n=148).

b) Using the stairs

Results: Less than 20% of elderly Greeks reported being unable to climb stairs. About 15% of the men and 25% of the women reported some difficulty. In Spata, gender and age group differences were not seen. In Melbourne, gender differences were seen in the 80+ group, with three times more women (31%) reporting inability to use the stairs compared with the men (7%). Age group differences were also seen in the women, with a two fold increase in the reporting of inability to use the stairs from 70-79 (13.6%) to 80+ (30.6%). Centre differences were not significant (see table 5.2.1.1b).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions (M 14%, F 20%) of subjects reported some difficulty climbing stairs compared with elderly Greeks (M 24%, F 18%). In the Euronut-Seneca study (de Groot et al., 1991) similar proportions of Greek elderly reported climbing stairs without difficulty (M 67%, F 44%) compared with Spata elderly (M 69%, F 58%).

Table 5.2.1.1b

Question ADL88b
Are you able to use stairs?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	12.5	21.0	3.0	7.1
With difficulty, but no help	6.2	21.1	18.2	28.6
Without difficulty	81.3	57.9	78.8	64.3
WOMEN				
N	31	22	59	36
Cannot do it, need help	16.1	22.7	13.6	30.6
With difficulty, but no help	25.8	18.2	23.7	36.1
Without difficulty	58.1	59.1	62.7	33.3

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata nil; Melbourne 80+.

Age group differences: Spata nil; Melbourne women.

Centre differences: nil.

c) **Walking 400 metres**

Results: About 20% of Greek men had difficulty walking at least 400m compared with 55% of the women. In Spata, only gender differences were significant in the age group 70-79 - a greater proportion of women (35.5%) compared with men (9.4%) were unable to walk at least 400m. Similarly in Melbourne, 17% of women as opposed to 0% of men were unable to walk this distance. Age group differences were also significant - inability to walk 400m more than doubled in men (11%) and women (39%) aged 80+. Centre differences were seen for men only aged 70-79 - a greater proportion of Melbourne men (18%) reported having difficulty walking 400m compared with Spata men (3%) (see table 5.2.1.1c).

Table 5.2.1.1c

Question ADL88c
Are you able to walk at least 400m?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	9.4	15.8	0	10.7
With difficulty, but no help	3.1	10.5	18.2	21.4
Without difficulty	87.5	73.7	81.8	67.9
WOMEN				
N	31	22	59	36
Cannot do it, need help	35.5	36.4	17.0	38.9
With difficulty, but no help	22.6	18.2	20.3	27.8
Without difficulty	41.9	45.4	62.7	33.3

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 70-79 and 80+

Age group differences: Spata nil; Melbourne men and women.

Centre differences: Men 70-79.

Comparisons with reported data: In the Euronut-Seneca study, similar proportions of Greek elderly aged 75 reported walking 400 metres without difficulty (M 80%, F 56%) compared with Spata elderly aged 70-79 (M 87%, F 42%). In the study of elderly Anglo-Celtic Australians aged 70-79, a significantly greater proportion of women (85%) did not have difficulty walking 400m compared with the Greek women (52%) in this age group; proportions were similar for Anglo-Celtic men (86%) and Greek men (M 85%).

In the AIMA survey, the migrant groups that reported the least difficulty walking a kilometre included Germans (21%), Polish (19%) and Australian-born (14%) whereas

Greeks reported the most difficulty (42%). In the WHO 11 country elderly study (Heikkinen, 1983) almost two times more women were unable to walk 400 metres compared with the men.

d) Using public transport

Results: About 70% of the men and 40% of the women in both centres used public transport without difficulty. In Spata, only gender differences were significant. Four times more women (45.2%) compared to men (9.4%) aged 70-79 reported being unable to use public transport. Similarly in Melbourne, a greater proportion of women in both age groups reported difficulty compared with the men. Difficulty also increased with. Centre differences were significant in the women aged 70-79 - Melbourne women appeared more independent and able to commute using the public transport (70%) than the Spata women (42%) (see table 5.2.1.1d).

Table 5.2.1.1d

Question ADL88d
Are you able to get to places out of walking distance
i.e by bus, taxi, train?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	31	22
Cannot do it, need help	9.3	26.3	1.5	17.9
With difficulty, but no help	9.4	15.8	12.1	17.9
Without difficulty	81.3	57.9	86.4	64.2
WOMEN				
N	31	22	59	36
Cannot do it, need help	45.2	63.6	13.5	52.8
With difficulty, but no help	12.9	9.1	17.0	19.4
Without difficulty	41.9	27.3	69.5	27.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 70-79 and 80+

Age group differences: Spata nil; Melbourne men and women.

Centre differences: Women 70-79.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, a greater proportion of women (85%) did not have difficulty using public transport compared with Greek women in Melbourne (70%); proportions were similar for Anglo-Celtic men (88%) and Greek men (M 86%). Similarly in the AIMA survey, 60% of elderly Greeks (n=148) did not have difficulty using the public transport system. The groups that

reported the least difficulty included Germans (16%), Polish (13%) and Australian-born (10%). In the WHO 11 country study (Heikkinen, 1983), significantly more women were unable to use public transport compared with the men (rates for women twice as high as those for men).

5.2.1.2 Basic bodily functions

a) Toilet

Results: About 95% of the men and 70% of the women did not have difficulty using the toilet. In Spata, gender differences in the 70-79 age group reached significance - a greater proportion of women (19%) reported having difficulty using the toilet compared with the men (2%). In Melbourne, only age group differences were seen - difficulty using the toilet increased markedly with age. Centre differences were not significant (see Table 5.2.1.2a)

Table 5.2.1.2a

Question ADL88e
Do you have difficulty using the toilet?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	0	5.3	0	0
With difficulty, but no help	2.0	5.3	4.5	17.9
Without difficulty	98.0	89.4	95.5	82.1
WOMEN				
N	31	22	59	36
Cannot do it, need help	3.2	9.1	0	5.6
With difficulty, but no help	19.3	13.6	13.6	33.3
Without difficulty	77.5	77.3	86.4	61.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: nil.

Comparisons with reported data: In the Euronut-Seneca study, a similar proportion of Greek men reported using the toilet without difficulty (96%) compared to Spata men (93%). A greater proportion of Greek women did not have difficulty (95%) compared with Spata women (77%). In the WHO 11 country study, 70-90% of subjects did not have difficulty using the toilet. In the study of Anglo-Celtic Australians aged 70-79, similar proportions of elderly (M 98%, F 97%) did not have difficulty using the toilet compared with Melbourne Greeks (M 95%, F 86%).

b) Urinary incontinence

Results: Overall, 4% of the women reported frequent urinary incontinence as opposed to 1-2% of the men. Occasional incontinence was reported by about 12% of Melbourne women and 2% of men as opposed to 3% of Spata women and 8% of Spata men. Gender differences were not seen - within centres. Age group differences were significant in Spata men only - 16% of men 80+ reported urinary incontinence compared with 0% of men aged 70-79. Centre differences were not significant (see table 5.2.1.2b)

Table 5.2.1.2b

Question ADL880 How often do you wet yourself?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Never	100.0	84.2	96.9	92.8
Occasionally	0.0	15.8	1.5	3.6
Frequently	0.0	0.0	1.6	3.6
WOMEN				
N	31	22	59	36
Never	90.3	95.5	91.5	77.8
Occasionally	6.5	0.0	6.8	16.6
Frequently	3.2	4.5	1.7	5.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, a greater proportion of women (10%) reported frequent incontinence compared with Greek women (1.7%); proportions were similar for Anglo-Celtic men (2.4%) and Greek men (1.6%).

c) Faecal incontinence

Results: Frequent faecal incontinence was not reported by Greek elderly, except Spata women (4%). Occasional faecal incontinence rose to about 4% in men and women. Gender, age group and centre differences were not significant (see Table 5.2.1.2c).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, a greater proportion of women (5%) reported frequent faecal incontinence compared with Melbourne Greek women (0%). The Anglo-Celtic men did not report frequent faecal incontinence, however occasional faecal incontinence was reported by 10% of women and 2% of men.

Table 5.2.1.2c

Question ADL88P How often do you soil yourself?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80+ (%)
MEN				
N	32	19	66	28
Never	98.0	89.5	96.9	96.4
Occasionally	2.0	10.5	1.5	3.6
Frequently	0	0	1.6	0
WOMEN				
N	31	22	59	36
Never	90.4	95.5	98.3	91.7
Occasionally	6.4	0	1.7	8.3
Frequently	3.2	4.5	0	0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

d) Feeding

Results: About 10% of the men and 20% of the women reported having difficulty feeding themselves. In Spata, only gender differences reached significance - a greater proportion of women aged 70-79 (19%) reported having difficulty feeding compared with the men

(0%). In Melbourne, a greater proportion of men aged 80+ reported difficulty with feeding (18%) compared with the younger men (3%). Centre differences were significant for men only aged 80+ - a greater proportion of Melbourne men (18%) had difficulty feeding compared with Spata men (0%) (see Table 5.2.1.2d).

Comparisons with reported data: In the Euronut-Seneca study, similar proportions of Greek elderly reported to feed themselves without difficulty (M 94%, F 95%) compared to Spata elderly (M 95%, F 80%). In the study of elderly Anglo-Celtic Australians aged 70-79, a smaller proportion of subjects reported difficulties with feeding (M 2%, F 2%) compared with Melbourne Greeks (M 5%, F 12%). Recent surveys of functional status among noninstitutionalised Americans have shown that about 2% of people aged 65+ have trouble eating unassisted or without difficulty (US National Centre for Health Statistics, 1986).

Table 5.2.1.2d

Question ADL88k
Are you able to feed yourself?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	0	10.5	1.5	0
With difficulty, but no help	0	0.0	3.1	17.9
Without difficulty	100.0	89.5	95.4	82.1
WOMEN				
N	31	22	59	36
Cannot do it, need help	0	4.6	0	0
With difficulty, but no help	19.3	13.6	11.9	25.0
Without difficulty	80.7	81.8	88.1	75.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne men.

Centre differences: Men 80+.

5.2.1.3 Self care

a) Bathing

Results: About 10% of the men and 30% of the women reported having difficulty bathing. In Spata, only gender differences were significant - more women aged 70-79

(32%) reported difficulty with bathing compared with the men (3%). In Melbourne, only age group differences were seen - a greater proportion of 80+ men and women had difficulty bathing compared with the 70-79 age group. Centre differences were significant for the women aged 70-79 - a greater proportion of Spata women (32%) had difficulty bathing compared with Melbourne women (14%) (see table 5.2.1.3a).

Comparisons with reported data: In the Euronut-Seneca study, similar proportions of Greek elderly reported having difficulty washing themselves (M 17%, F 20%) compared with Spata elderly (M 7%, F 30%). In the study of elderly Anglo-Celtic Australians aged 70-79, a smaller proportion of subjects reported difficulties with bathing (M 0%, F 3%) compared with Melbourne Greeks (M 6%, F 14%). In the AIMA survey, 33% of elderly migrant Greeks (n=148) had difficulty bathing - the groups that reported the least difficulty included Germans (17%) and Chinese (3%). Recent surveys of functional status among noninstitutionalised Americans show that about 10% of people aged 65+ had trouble bathing (US National Centre for Health Statistics, 1986).

Table 5.2.1.3a

Question ADL88f

Are you able to wash and bathe yourself?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	3.1	0	1.5	14.3
With difficulty, but no help	0	10.5	4.6	10.7
Without difficulty	96.9	89.5	93.9	75.0
WOMEN				
N	31	22	59	36
Cannot do it, need help	16.2	13.7	1.7	16.6
With difficulty, but no help	16.1	13.6	11.9	30.6
Without difficulty	67.7	72.7	86.4	52.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne 70-79 and 80+.

Centre differences: Women 70-79.

b) Dressing

Results: About 10% of the men and 25% of the women had difficulty dressing. In Spata, only gender differences reached significance - a greater proportion of women aged 70-79

(19%) reported having difficulty compared with the men (0%). In Melbourne, gender differences were seen in the 80+ group - a greater proportion of women (39%) compared with men (7%) had difficulty dressing. Difficulty dressing increased with age in the women only (70-79 12%; 80+ 30%). Centre differences were not significant (see table 5.2.1.3b).

Comparisons with reported data: In the Euronut-Seneca study similar proportions of Greek men reported dressing themselves without difficulty (92%) compared with Spata men (M 90%). A greater proportion of women did not have difficulty dressing (94%) compared with Spata women (75%). In the study of elderly Anglo-Celtic Australians aged 70-79, a smaller proportion of subjects reported difficulties dressing (M 0%, F 3%) compared with Melbourne Greeks (M 8%, F 15%). Recent surveys of functional status among noninstitutionalised Americans showed that about 7% of people aged 65+ had trouble dressing (US National Centre for Health Statistics, 1986).

Table 5.2.1.3b

Question ADL88g
Are you able to dress and undress?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	3.1	0	1.5	10.7
With difficulty, but no help	0	15.8	6.1	7.2
Without difficulty	96.9	84.2	92.4	82.1
WOMEN				
N	31	22	59	36
Cannot do it, need help	6.5	9.1	1.7	5.6
With difficulty, but no help	19.3	13.6	13.6	38.9
Without difficulty	74.2	77.3	84.7	55.5

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 80+.

Age group differences: Spata nil; Melbourne women.

Centre differences: nil.

c) Appearance

Results: About 8% of the men and 23% of the women had difficulty taking care of their appearance. In Spata, gender and age group differences were not significant. In Melbourne, gender differences were seen in the 80+ age group - a greater proportion of women (42%) had difficulty taking care of their appearance compared with the men (18%). Difficulty dressing increased with age in the women only (70-79 16%, 80+ 45%). Centre differences were not significant (see Table 5.2.1.3c).

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, a significantly smaller proportion of subjects reported difficulties taking care of their appearance (M 0%, F 3%) compared with Melbourne Greeks (M 4.5%, F 12%).

Table 5.2.1.3c

Question ADL88h
Are you able to take care of your appearance?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	3.1	0	1.6	10.7
With difficulty, but no help	0	5.3	4.5	7.2
Without difficulty	96.9	94.7	93.9	82.1
WOMEN				
N	31	22	59	36
Cannot do it, need help	3.2	9.1	1.7	5.6
With difficulty, but no help	16.1	9.1	11.9	36.1
Without difficulty	80.7	81.8	86.4	58.3

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata nil; Melbourne 80+.

Age group differences: Spata nil; Melbourne women. Centre differences: nil.

d) Medicine

Results: About 10% of the men and 20% of the women had difficulty taking their own medicine (see table 5.2.1.3d).

Table 5.2.1.3d

Question ADL88m
Are you able to take medicine if you had to?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	3.1	15.8	3.0	0
With difficulty, but no help	0	0	1.5	14.3
Without difficulty	96.9	84.2	95.5	85.7
WOMEN				
N	31	22	59	36
Cannot do it, need help	3.2	13.6	3.4	11.1
With difficulty, but no help	6.4	4.6	6.8	19.5
Without difficulty	90.4	81.8	89.8	69.4

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil; Melbourne nil.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: Men 80+.

Gender differences were not significant within centres. Age group differences were significant in Melbourne only - a greater proportion of men (14%) and women (19%) aged 80+ reported difficulty taking their medicine compared with the 70-79 age group (M 1.5%, F 7%). Centre differences were seen in the men only aged 80+ - a greater proportion of Spata men (16%) compared with Melbourne men (0%) needed help to take their medicine (see Table 5.2.1.3d).

Comparisons with reported data: In the Euronut-Seneca study similar proportions of Greek elderly took their medication without difficulty (M 94%, F 97%) compared to Spata elderly (M 97%, F 90%).

5.2.1.4 Transfer

Results: Overall, 10% of the men and 30% of the women had difficulty transferring from bed. In Spata, only gender differences were significant - a greater proportion of women aged 70-79 (23%) reported having trouble getting in and out of bed compared with only 3% of men. In Melbourne only age group differences were seen - a greater proportion of women aged 80+ (42%) reporting difficulty compared with only 15% of women aged 70-79. Centre differences were not significant (see table 5.2.1.4).

Table 5.2.1.4

Question ADL88i
Are you able to get in and out of bed?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	3.1	0	0	7.1
With difficulty, but no help	0	5.3	6.1	10.7
Without difficulty	96.9	94.7	93.9	82.2
WOMEN				
N	31	22	59	36
Cannot do it, need help	3.3	4.5	3.4	8.4
With difficulty, but no help	19.3	18.2	11.9	33.3
Without difficulty	77.4	77.3	84.7	58.3

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne women.

Centre differences: nil.

Comparisons with reported data: In the Euronut-Seneca study similar proportions of Greek men reported transferring from bed without difficulty (95%) compared to Spata men (95%). Whereas a greater proportion of women reported not having difficulty (96%) compared with Spata women (77%). In the study of elderly Anglo-Celtic Australians aged 70-79, a smaller proportion of subjects reported difficulty transferring from bed (M 2%, F 3%) compared with Melbourne Greeks (M 6%, F 15%). Recent surveys of functional status among noninstitutionalised Americans showed that about 8% of people aged 65+ had trouble transferring from bed (US National Centre for Health Statistics, 1986).

5.2.1.5 Household chores

a) Cooking

Results: About 75% of the women within centres were able to cook without difficulty. In contrast, a greater proportion of Melbourne men (85%) compared with Spata men (58%) were able to cook if the need arose. In Spata, gender differences were significant for the 80+ age group - a greater proportion of women (77%) were still able to cook if the need arose, compared with only 42% of men. Difficulty cooking increased with age within centres. Centre differences were seen in men only - a greater proportion of Melbourne men could cook without difficulty compared with Spata men (see table 5.2.1.5a).

Table 5.2.1.5a

Question ADL88j

Are you able to do your own cooking if you had to?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	3.1	26.3	3.1	17.9
With difficulty, but no help	21.9	31.6	3.0	7.1
Without difficulty	75.0	42.1	93.9	75.0
WOMEN				
N	31	22	59	36
Cannot do it, need help	6.4	18.2	3.4	19.4
With difficulty, but no help	12.9	4.5	11.9	27.8
Without difficulty	80.7	77.3	84.7	52.8

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 80+; Melbourne nil.

Age group differences: Spata men; Melbourne men and women.

Centre differences: Men 70-79 and 80+.

Comparisons with reported data: In the study of elderly Anglo-Celtic Australians aged 70-79, similar proportions of subjects reported being able to cook without difficulty (M 98%, F 98%) compared with Melbourne Greeks (M 94%, F 85%). Surveys of functional status amongst noninstitutionalised Americans indicate that 8% of people aged 65+ had difficulty preparing meals (US National Centre Health Statistics, 1986).

b) House work

i. Light housework

Results: About 20% of the men and 40% of the women reported having difficulty doing light housework. In Spata, a greater proportion of women (30%) aged 70-79 reported having difficulty doing light housework compared with the men (6%). In Melbourne, gender and age group differences were seen. Markedly more women aged 80+ (70%) compared with the men (30%) reported having difficulty with light housework. Inability to do light housework increased significantly with age in both men and women. Centre differences reached significance for women aged 80+ - 70% of Melbourne women compared with only 20% of Spata women reported being unable to do light housework (see Table 5.2.1.5b).

Comparisons with reported data: In the Euronut-Seneca study similar proportions of Greek elderly reported being able to do light housework without difficulty (M 75%, F 83%) compared with Spata elderly (M 86%, F 74%). In the WHO 11 country study (Heikkinen et al., 1983), 50% of the 70-75 year old women reported difficulties with light housework. In the study of elderly Anglo-Celtic Australians aged 70-79, only 3% of the subjects reported having difficulty doing light housework compared with Melbourne Greeks (M 20%, F 30%).

ii. Heavy housework

Results: Compared to light housework, twice as many men (50%) and women (70%) reported having difficulty doing heavy housework. In Spata, only age group differences were significant - almost all the 80+ men (80%) were unable to do heavy housework compared with 40% of the 70-79 men. In Melbourne, both gender and age group differences were found. Almost all the women aged 80+ (90%) were unable to do heavy housework compared with 60% of the men in this age group. A greater proportion of men

and women aged 80+ had trouble with heavy housework compared with the younger elderly. Centre differences did not reach significance (see table 5.2.1.5c).

Table 5.2.1.5b

Question ADL88l
Are you able to do light housework
(wash dishes) if you had to?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	6.2	21.1	6.1	25.0
With difficulty, but no help	0	0	12.1	3.6
Without difficulty	93.8	78.9	81.8	71.4
WOMEN				
N	31	22	59	36
Cannot do it, need help	9.7	13.6	13.6	36.1
With difficulty, but no help	19.4	9.1	15.2	33.3
Without difficulty	70.9	77.3	71.2	30.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne 80+.

Age group differences: Spata nil; Melbourne men and women; Centre differences: Women 80+.

Table 5.2.1.5c

Question ADL88m

Are you able to do heavy housework
(wash windows) if you had to?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Cannot do it, need help	21.9	42.2	16.7	32.1
With difficulty, but no help	15.6	36.8	10.6	25.0
Without difficulty	62.5	21.0	72.7	42.9
WOMEN				
N	31	22	59	36
Cannot do it, need help	38.8	54.6	30.6	80.6
With difficulty, but no help	19.3	22.7	15.2	8.3
Without difficulty	41.9	22.7	54.2	11.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil; Melbourne 80+.

Age group differences: Spata men; Melbourne men and women; Centre differences: nil.

Comparisons with reported data: In the Euronut-Seneca study similar proportions of Greek elderly aged 75 reported being able to do heavy housework without difficulty (M 50%, F 28%) compared with Spata elderly (M 40%, F 32%). In the Anglo-Celtic Australian study (Wahlqvist et al., 1993), 83% of men and 75% of women aged 70-79 did not have difficulty doing heavy housework.

5.2.1.6 Activities of daily living score

The responses to 15 questions on activities of daily living (ADLa-n and EX84) were summed as follows to generate the activities of daily living score ranging from 15-62: 1=No, 2=only with help, 3=with difficulty but without help, 4=without difficulty. A higher score indicated limited disability.

Results: Overall, the degree of disability in both Spata and Melbourne was high, especially for the women. Only 20% of the women and 40% of the men were able to perform all activities of daily living. This was also reflected in the ADL score with the majority of the women having scores in the low 50's and men in the high 50's. About one third of the women had ADL scores below 50 compared with less than one tenth of the men. A trend was observed (not significant) with Melbourne women aged 80+ reporting more disability (47% had scores below 50) than Spata women (23% had scores below 50) (see table 5.2.1.6).

In Spata, gender differences reached significance in the 70-79 age group - men had a higher mean score (59) (or less disability) than the women (54). Similarly in Melbourne, the men aged 70-79 and 80+ had higher mean scores (60 and 56) than the women (57, 49) respectively. Age group differences were also seen in Spata and Melbourne - the 80+ age group had lower mean scores (or more disability) than the younger elderly. Centre differences did not reach significance.

Comparisons with reported data: In the Euronut-Seneca study of elderly aged 75, a similar proportion of Greek subjects reported to be able to perform all ADL items (M 39%, F 18%) compared to Spata elderly (M 53%, F 29%). Additionally, in the 18 European centres studied, women had greater difficulty with ADLs than the men, mainly associated with mobility i.e using stairs, moving outdoors, walking. Impaired functioning was the most prevalent in Greece, Poland and Hungary and the least prevalent in France, Switzerland and Norway. In the WHO 11 country study (Heikkinen et al., 1983) of men and women aged 60-89 years, 60% of the men and 40% of the women were able to perform all ADL items. Women tended to have lower functional capacity than the men of

the same age. The percentage of persons in the US aged 65 and over, living in the community, reporting functional disability, increased significantly from age 65 to 85+ (US National Centre for Health Statistics, 1986). A greater proportion of American elderly reported being able to perform most ADLs (65-74 yrs 88%, 75-84 yrs M 79%, F 72%, 85+ M 59%, F 52%) compared with Greek elderly.

Table 5.2.1.6

Activities of daily living score
(Questions ADL88a-n + EX84)

ADL score 15-62	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
% able to manage all ADLs	53%	21%	65%	32%
Mean	59.4 ^{ae}	55.3 ^e	59.9 ^{cf}	55.89 ^{df}
SD	5.4	8.9	4.17	9.15
Minimum	35.0	29.0	43.0	31.0
5%	51.0	29.0	52.0	34.0
25%	59.0	52.0	60.0	52.5
50%	62.0	59.0	62.0	60.0
75%	62.0	62.0	62.0	62.0
95%	62.0	62.0	62.0	62.0
Maximum	62.0	62.0	62.0	62.0
WOMEN				
N	31	22	59	36
% able to manage all ADLs	29%	4%	39%	8%
Mean	54.0 ^a	52.2	56.9 ^{ch}	49.3 ^{dh}
SD	8.7	11.1	7.9	10.4
Minimum	30.0	25.0	29.0	28.0
5%	37.0	29.0	38.0	29.0
25%	48.0	52.0	55.0	41.5
50%	55.0	55.0	61.0	52.0
75%	62.0	59.5	62.0	62.0
95%	62.0	60.0	62.0	62.0
Maximum	62.0	61.0	62.0	62.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata 70-79; Melbourne 70-79 and 80+.

Age group differences: Spata men; Melbourne men and women.

Centre differences: nil.

* A high score indicates independence and limited disability.

In the Australian Institute of Multicultural Affairs (AIMA) survey of elderly migrants aged 60+, the most extreme degree of difficulty with outside mobility were reported by Greek-born and Chinese-born migrants. The greatest difficulties were reported for public transport and walking. As with other studies, women and the older age groups reported significantly greater difficulty with mobility outside the home. Perceived need for help with household chores were highest among Greek-, Italian-, Yugoslav-born (20%) and lowest amongst German and Chinese-born (6%). In the Australian Council on the Ageing & Department of Community Services (ACOTA/DCS) survey of elderly migrants aged 60+, a significantly greater proportion of women and migrants from non-English speaking countries reported needing assistance with household tasks. A greater proportion of Southern European-born Australians indicated that they could not look after themselves if necessary (32%) compared with all other groups and the survey average of 8%.

5.2.2 SELF-REPORTED USE OF MEDICAL AIDS

The use of medical aids, such as canes, walkers, glasses and hearing aids are an indication of disability in the population studied. However, the use of such aids may not necessarily reflect disability, but rather differences in accessibility or affordability within and between countries.

a) Walking aids

i. Handicapped limbs

The questions regarding handicapped arms or legs were taken from the Multi-level Assessment Instrument (Lawton et al., 1982). The definition of handicapped included inability or difficulty in using limbs due to paralysis, polio, accident or health conditions (e.g arthritis) which severely restricted their movement.

Results: Gender, age group or centre differences were not significant. Overall 2-3% of subjects had handicapped arms (except Spata women 0%) and 5% handicapped legs (except Spata men 0%) (see table 5.2.2a).

ii. Walking aids

Results: Self reported use of medical aids was obtained from the WHO 11 country study questionnaire (Heikkinen et al., 1983). Gender differences within centres were not significant for cane usage. About 20% of men and women aged 70-79 used a cane

compared to 40% aged 80+. Age group differences were significant within centres. A greater proportion of Spata men aged 80+ (53%) used a cane compared to 70-79 age group (12%). In Melbourne, a greater proportion of men (36%) and women (42%) aged 80+ used a cane compared to the younger elderly (M 12%, F 19%).

Table 5.2.2a

Question H46

Check by observation: any arms or legs handicapped/missing?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Arms	3.1	0	3.0	3.6
Legs	0	0	1.5	7.1
WOMEN				
N				
Arms	0	0	1.7	2.8
Legs	9.7	0	5.1	5.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

Centre differences were not significant for use of a cane (see table 5.2.2b). Other aids such as walkers, wheel chairs, back/leg braces, catheters, geriatric chairs were used minimally (<8% of subjects), especially by Spata men. However, there was a tendency for a greater proportion of Melbourne women aged 80+ to use walkers (11%) and geriatric chairs (8%).

Comparisons with reported data: In the Anglo-Celtic study, a smaller proportion of subjects aged 70-79 reported using a cane (M 0%, F 7%) or walker (M 0%, 2.5%) compared with Greek elderly (cane M 12%, F 22%; walker M 0%, F 4%). In the AIMA survey of migrant Australians, 20% of elderly Greeks reported using a cane compared with 10% for other migrant groups and the Australian born.

iii. Vision aids

Results: About 75% of Spata elderly and 85% of Melbourne elderly used glasses (see Table 5.2.2b). Gender and age group differences were not significant for the use of glasses within centres. Centre differences were significant for men only aged 70-79 - a greater proportion of Melbourne men used glasses (88%) compared with Spata men

(72%). About 15% of the elderly aged 70-79 reported partial blindness. A significantly greater proportion of Spata elderly aged 80+ (50%) reported partial blindness compared with Melbourne elderly (20%) (see Table 5.2.2c).

Table 5.2.2b

Question H47
Do you use any of the following aids:

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
use glasses	71.9 ⁱ	68.0	87.9 ⁱ	78.6
have hearing aid	0	0	3.0 ^f	14.3 ^f
use cane	12.5 ^e	52.6 ^e	12.1 ^f	35.7 ^{fb}
use walker	0	0	0	3.6
use wheelchair	0	0	0 ^f	7.1 ^f
use leg brace	0	0	0	0
use back brace	0	0	0 ^f	7.1 ^f
have pacemaker	0	0	0	0
have colostomy	0	0	0	0
have catheter	0	0	0	3.6
geriatric chair	0	0	0	0
use artificial limb	3.1	0	1.5	0
use dialysis machine	0	0	0	0
WOMEN				
N	31	22	59	36
use glasses	80.6	81.8	91.5	80.6
have hearing aid	0	0	5.1	2.8
use cane	25.8	27.3	18.6 ^f	41.7 ^f
use walker	6.4	0	1.7	11.1
use wheelchair	0	0	0	2.8
use leg brace	3.2	0	0	0
use back brace	3.2	0	1.7	0
have pacemaker	0	0	0	0
have colostomy	0	0	0	0
have catheter	0	0	0	0
geriatric chair	0	0	1.7	8.3
use artificial limb	6.4	0	0	0
use dialysis machine	0	0	1.7	0

Same pair of letters show significant differences, Chi-Square $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Comparisons with reported data: In the Euronut study subjects were asked if they could read easily with glasses if worn. This question may have been misinterpreted by subjects who cannot read. Spata and Melbourne Greeks were asked a general question about their eyesight (not in relation to reading). Similar proportions of Greek men (77%) in the Euronut study reported reading easily compared to Spata men (81%). A

significantly smaller proportion of women (36%) reported reading easily compared with Spata women (87%).

In the Anglo-Celtic Australian study, a similar proportion of subjects aged 70-79 used eye glasses (M 88%, F 92%) and reported good eyesight (M 90%, F 97%) compared to Melbourne Greeks (M 88%, F 91% and M 88%, F 86% respectively). In the AIMA survey, non-English speaking migrants reported the poorest eyesight (30%) compared with Australian-born and English speaking migrants (15%). Similar proportions reported using glasses across all ethnic groups (90%).

Table 5.2.2c

Question H41
How good is your eyesight (with glasses if used)?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
blind or partially blind	18.8	47.4	12.1	25.0
good or adequate	81.2	52.6	87.9	75.0
WOMEN				
N	31	22	59	36
blind or partially blind	12.9	50.0	13.6	13.6
good or adequate	87.1	50.0	86.4	86.4

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil.

Age group differences: Spata men and women. Centre differences: men 80+; women 80+.

iv. Hearing aids

Results: Hearing aids were not used at all by Spata elderly compared with 3% of Melbourne men aged 70-79, 14% of men aged 80+, and 4% of Melbourne women (see Table 5.2.2d). However, the prevalence of hearing difficulty was similar in both centres. About 30% of men aged 70-79 and 55% aged 80+ reported partial deafness or deafness compared with 14% and 42% of women respectively. Overall, more men had hearing problems than the women and hearing problems increased markedly with age (see Table 5.2.2d).

Comparisons with reported data: In the Euronut-Seneca study similar proportions of Greek men reported hearing problems (43%) compared with Spata men (44%). However, significantly more Greek women reported hearing problems (45%) than Spata women

(27%). About 6% of the Greek elderly in the Euronut study reported using a hearing aid (none of the elderly in Spata wore a hearing aid).

Table 5.2.2d

Question H42
How good is your hearing (with hearing aid if used)?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
deaf or partially deaf	34.4	52.6	25.8	57.1
good or adequate	65.6	47.4	74.2	42.9
WOMEN				
N	31	22	59	36
deaf or partially deaf	12.9	40.9	15.3	44.4
good or adequate	87.1	59.1	84.7	55.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata women; Melbourne men and women.

Centre differences: nil.

In the Anglo-Celtic Australian study, a similar proportion of subjects aged 70-79 reported poor hearing (M 21%, F 17%) compared to Melbourne Greeks (M 26%, F 15%). However, significantly more subjects wore a hearing aid (M 24%, F 7%) than Melbourne Greeks (M 3%, F 5%). In the AIMA survey, non-English speaking migrants, especially Greeks, reported the poorest hearing (20%) compared with Australian-born (5%) and English speaking migrants (8%). However, similar proportions of elderly used a hearing aid across all groups (5%) and males reported poorer hearing than did females. Similarly, in the WHO 11 country study (Heikkinen et al., 1983), a greater proportion of men reported poor hearing compared with women and poor hearing increased markedly with age (20% 60-64, 60%-70% 85-89 age groups).

5.3 HEALTH

Reports suggest that self-perception of health status correspond to objective health indicators and are predictive of future health and mortality (Linn and Linn, 1980; Femaro, 1980). When applied to population data it is a good indicator of actual health status and health service use (Fillenbaum, 1984). Nevertheless, a global self-report is a crude screening device at best and needs to be followed by a more specific approach (Kane and Kane, 1981). Fillenbaum (1984) reviewed all available questionnaires measuring the

health status of the elderly and concludes that the Multi-level Assessment Instrument (MAI) designed by Lawton et al (1982) is one of the most valid and reliable measures to use on such populations. MAI is carefully constructed, has been tested for reliability and validity and includes a physical health domain index, composed of subindices measuring self rated health, use of medical services (health behaviour) and health conditions.

Reported here are responses related to health, derived from the interviewer administered questionnaire. The questions and scores were taken in their entirety from the Multi-level Assessment Instrument (Lawton et al.1982) (see also Chapter 3). The assessment of health included the following domains:

1. self assessment of overall health, including a question on whether their health problems affected their functional ability
2. self reported health conditions
3. use of medical services
4. medication use

5.3.1 SELF-RATED HEALTH

Self rated health was measured as global health (past and current), as relative health (compared to other persons of the same age) and as functional health (does health affect quality of life). These aspects of self rated health were captured in questions H34-37.

5.3.1.1 Global health

In question H34, a 4-scale response was used by participants to rate their overall health as poor, fair, good or excellent.

Results: A greater proportion of Melbourne men (88%) and women (68%) rated their health as good/excellent compared with Spata (M 57%, F 42%). Gender differences were not significant in Spata. In Melbourne, a greater proportion of men in both age groups rated their health as good/excellent compared with the women. Age group differences were not seen within centres i.e the 80+ subjects did not rate their health more poorly than the younger subjects. Centre differences were significant for men and women aged 70-79 - a greater proportion of Melbourne elderly reported their health to be good/excellent compared with Spata (see Table 5.3.1.1).

Comparisons with reported data: In the Euronut-Seneca study (de Groot et al., 1991) similar proportions of Greek elderly aged 75 reported good health (M 58%, F 42%) compared to Spata elderly (M 62%, F 39%). In all centres, men had a better self-perceived health than women and age group differences were not significant. Of the 17 centres studied, 10 centres reported greater proportions of good health than the Greek centres. In the WHO 11 country study (Heikkinen et al., 1983) significantly more Greek elderly aged 70-79 reported good health (M 80%, F 63%) compared with Spata elderly in this age group (M 62%, F 36%). In the 80+ age group proportions in the WHO study (M 54%, F 50%) were similar to Spata (M 52%, F 45%). A smaller proportion of Northern European (5 sites) elderly reported good health, men reported better health than the women and age group differences were not seen.

In the AIMA survey of Australian migrants aged 60+, 50% of the 1110 sample claimed to be in good/excellent health; 60% of Australian-born reported good health. The Greek-born reported the poorest health with 32% claiming good/excellent health and 40% poor health. This is in contrast to Melbourne Greeks aged 70+ where 78% reported good/excellent health. In the AIMA survey, males claimed better health than females and self reported health declined with age (especially in men).

Table 5.3.1.1

Question H34
How would you rate your overall health at the present time?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Poor	9.4	21.1	3.1	7.1
Fair	28.1	26.3	6.0	7.2
Good	37.5	42.1	75.8	71.4
Excellent	25.0	10.5	15.1	14.3
WOMEN				
N	31	22	59	36
Poor	22.6	22.8	8.5	8.3
Fair	38.7	31.8	22.0	25.0
Good	29.0	40.9	55.9	66.7
Excellent	9.7	4.5	13.6	0.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata nil; Melbourne 70-79 and 80+

Age group differences: nil.

Centre differences: Men 70-79; Women 70-79.

In the ACOTA study on Australian migrants, 70% of subjects reported their health to be good/excellent and 5% reported poor health. Women were more likely to report poor health but age group differences were not seen. A smaller proportion of Southern European migrants reported good/excellent health (55%). In the Anglo-Celtic Australian study (Wahlqvist et al., 1993), a significantly smaller proportion of men aged 70-79 reported good/excellent health (61%) compared with Melbourne Greek men (91%); a similar proportion of Anglo-Celtic women reported good health (74%) compared to Greek women (70%).

5.3.1.2 Past health

In question H35 participants were asked to report whether their health had deteriorated over the past three years (see Table 5.3.1.2).

Results: Overall, 50% of Spata elderly felt their health had deteriorated compared with 30% of Melbourne men and 50% of Melbourne women. Significant differences were not seen between gender or age groups within centres. However, between centre comparisons indicated that the women aged 80+ in Spata (27%) tended to report improved health over the past three years compared with Melbourne women (17%) (see table 5.3.1.2).

Table 5.3.1.2

Question H35
Is your health now better, about the same,
or not as good as it was three years ago?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Not as good now	50.1	42.1	25.8	35.7
Same	43.7	47.4	53.0	35.7
Better now	6.2	10.5	21.2	28.6
WOMEN				
N	31	22	59	36
Not as good now	51.7	50.0	45.9	50.0
Same	29.0	22.7	38.9	33.3
Better now	19.3	27.3	15.2	16.7

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: Women 80+.

Comparisons with reported data: In the Anglo-Celtic Australian study (Wahlqvist et al., in press), a similar proportion of men aged 70-79 believed their health had deteriorated

(29%) compared with Melbourne Greek men (30%); a smaller proportion of women (32%) reported worse health compared with Greek women (48%). In the AIMA survey of migrant Australians, reported deterioration in health was greatest among Greek-born (75%) and least among German-born (35%) and Australian-born (45%).

5.3.1.3 Quality of life

Health is one prerequisite for quality of life. This aspect was captured in question H36 where subjects were asked to report the degree to which their health affects their lifestyle.

Results: The majority of Greek elderly felt their health affected their lifestyle (M 55%, F 68%). In Spata, gender and age group differences were not significant. In Melbourne, significantly more men aged 80+ did not feel their health affected their lifestyle (42%) compared with the women (17%). Age group differences were also seen - a greater proportion of men and women aged 80+ reported their health to affect their lifestyle compared with the younger elderly.

Table 5.3.1.3

Question H36
Do your health problems stand in the way
of your doing the things you want to do?

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	32	19	66	28
A great deal	34.4	52.6	9.1	35.7
A little	12.5	21.1	27.3	21.4
Not at all	53.1	26.3	63.6	42.9
WOMEN				
N	31	22	59	36
A great deal	35.5	31.8	18.7	36.1
A little	32.3	40.9	27.1	47.2
Not at all	32.2	27.3	54.2	16.7

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata nil; Melbourne 80+.

Age group differences: Spata nil; Melbourne men and women. Centre differences: Women 80+.

Centre differences were significant for women only aged 80+ - a greater proportion of Spata women did not think their health affected their lifestyle (27%) compared with Melbourne women (17%) (see Table 5.3.1.3).

Comparisons with reported data: In the Euronut study, similar proportions of Greek men aged 75 believed their health affected their lifestyle (46%) compared to Spata men aged 70-79 (47%). A smaller proportion of the women (53%) believed their health

affected their lifestyle compared to Spata women (68%). In the Anglo-Celtic Australian study, a greater proportion of men aged 70-79 thought their health affected their lifestyle (55%) compared with Melbourne Greek men (36%); a similar proportion of women (50%) reported their health affecting their lifestyle compared to Greek women (46%)

5.3.1.4 Relative health

Results: In question H37 participants were asked to compare their health with other people their age. Overall, 80% of Melbourne elderly believed their health was better than their peers compared with 60% of Spata men and 40% of Spata women. Gender and age group differences were not significant within centres. A greater proportion of Melbourne men and women aged 70-79, believed their health was better than their peers compared with Spata elderly (see Table 5.3.1.4).

Table 5.3.1.4

Question H37
Would you say your health is better, about the same, or not as good as most people your age?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Not as good	15.7	21.0	7.6	3.6
Same as others	15.6	15.8	10.6	7.1
Better than others	68.7	63.2	81.8	89.3
WOMEN				
N	31	22	59	36
Not as good	32.3	31.8	20.3	5.6
Same as others	29.0	22.8	5.1	8.3
Better than others	38.7	45.4	74.6	86.1

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: Men 70-79; Women 70-79.

Comparisons with reported data: In the Euronut-Seneca study, similar proportions of Greek elderly aged 75 believed their health was better than their peers (M 58%, F 40%) compared to Spata elderly (M 69%, F 39%). In the WHO 11 country elderly study, a similar proportion of Greek elderly aged 70-79 believed their health was worse than others (27%) compared with Spata elderly (24%) but a greater proportion aged 80+ reported worse (44%) than Spata elderly aged 80+ (26%). In the Anglo-Celtic study, a smaller proportion of elderly aged 70-79 thought their health was better than their peers (M 48%, F 35%) compared with Melbourne Greeks (M 82%, F 75%) aged 70-79.

5.3.1.5 Self rated health score

The responses to questions H34-H37 were scored according to guidelines in the Multi-level Assessment Instrument, to generate the self rated health score. The numbers in front of responses were used in the summation (see Chapter 3 and Appendix 2). The subindex ranges from 4-13, a higher score indicating better self-rated health.

Table 5.3.1.5

Self-rated health score (Questions H34-37)

score 4-13	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	31	22	66	28
Mean	7.8 ⁱ	8.1 ^j	10.3 ^{ci}	9.8 ^{dj}
SD	2.4	2.3	1.8	2.0
Minimum	4.0	4.0	4.0	6.0
5%	4.0	4.0	6.0	6.0
25%	6.0	6.0	10.0	8.5
50%	8.0	9.0	11.0	10.0
75%	10.0	10.0	11.0	11.0
95%	12.0	11.0	12.0	13.0
Maximum	12.0	12.0	13.0	13.0
WOMEN				
N	32	19	59	36
Mean	9.0 ^k	8.3	9.3 ^{ck}	8.9 ^{gd}
SD	2.5	2.5	2.4	1.8
Minimum	4.0	4.0	4.0	4.0
5%	4.0	4.0	5.0	4.0
25%	7.5	7.0	8.0	8.0
50%	10.0	9.0	10.0	9.0
75%	11.0	10.0	11.0	10.0
95%	12.0	12.0	13.0	11.0
Maximum	12.0	12.0	13.0	12.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata nil; Melbourne 70-79 and 80+. Age group differences: nil. Centre differences: Men 70-79 and 80+; Women 70-79. * A high score indicates better self-rated health.

Results: The men in Melbourne had a significantly greater score than the women for both age groups; however this was not observed in Spata. Age group differences were not found in either centre. Melbourne elderly had a higher (better) self rated health score than Spata elderly (see table 5.3.1.5).

5.3.2 USE OF HEALTH CARE SYSTEM

Use of the health care system is covered in questions H38-H40 (see Tables 5.3.2a,b,c).

5.3.2.1 Visits to doctor

Results: About 75% of Melbourne elderly visited the doctor frequently compared with 45% of Spata elderly. This does not necessarily indicate that Melbourne elderly are not as healthy as Spata elderly, but rather that health care is more accessible or affordable in Australia. In Spata, only gender differences were significant. A greater proportion of men aged 70-79 (50%) reported having visited the doctor more than three times compared with the women (20%).

Table 5.3.2.1

Question H38
About how many times did you see any type of doctor
during the past 12 months?

Do not include doctors seen while subject
was a patient in hospital

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
> 13 times	3.1	5.3	10.6	7.1
3 - 12 times	50.0	47.3	57.6	67.9
0 - 2 times	46.9	47.4	31.8	25.0
WOMEN				
N	31	22	59	36
> 13 times	3.2	9.2	10.2	8.4
3 - 12 times	19.4	45.4	61.0	83.3
0 - 2 times	77.4	45.4	28.8	8.3

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 70-79; Melbourne nil.

Age group differences: Spata nil; Melbourne women.

Centre differences: Men 70-79; Women 70-79.

In Melbourne, only age group differences were significant. A greater proportion of women aged 80+ (80%) visited the doctor compared with the younger women (60%). Centre differences were also seen - a greater proportion of Melbourne elderly aged 70-79 visited the doctor compared with Spata elderly (table 5.3.2.1).

Comparisons with reported data: In the WHO 11 country study (Heikkinen et al., 1983) about 70% of the Greek elderly reported they had visited a doctor in the preceding 12 months. In the Anglo-Celtic Australian study, a slightly greater proportion of elderly aged 70-79 visited the doctor frequently (85%) compared with Melbourne Greeks (70%).

5.3.2.2 Hospital stay

Results: About 20% of the Greek elderly reported having spent a few days in hospital over the past 12 months, except Spata men aged 80+ (50%). Significant differences were seen in Spata only. A greater proportion of men aged 80+ reported having spent a few days in hospital (50%) compared with the women (19%) and the younger men (12%). Centre differences were not significant (see Table 5.3.2.2).

Table 5.3.2.2

Question H39
About how many days have you spent in hospital
during the past 12 months?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
> 22 days	6.3	10.5	3.0	7.2
1 - 21 days	6.2	42.1	18.2	21.4
None	87.5	47.4	78.8	71.4
WOMEN				
N	31	22	59	36
> 22 days	6.5	0.0	5.1	5.6
1 - 21 days	12.9	9.1	13.5	13.8
None	80.6	90.9	81.4	80.6

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata 80+; Melbourne nil.

Age group differences: Spata men; Melbourne nil.

Centre differences: Nil.

Comparisons with reported data: In the Anglo-Celtic Australian study, a similar proportion of elderly aged 70-79 had spent a few days in hospital (20%) over the past 12 months compared with Melbourne Greeks (20%). In the AIMA survey of migrant

Australians, a greater proportion of Greek elderly reported having spent a few days in hospital compared with the other migrant groups.

5.3.2.3 Sick in bed

Results: About 80% of the subjects in Spata and Melbourne did not spend any days in bed because of illness. Gender, age group and centre differences were not significant (see table 5.3.2.3).

Comparisons with reported data: In the AIMA survey, a greater proportion of elderly Greek migrants reported having been bed ridden (28%) compared with other migrant groups.

Table 5.3.2.3

Question H40
About how many days during the past 12 months
have you been sick in bed all or most of the day?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
> 14 days	3.1	15.8	4.5	0.0
1 - 14 days	0.0	5.3	6.1	10.7
None	96.9	78.9	89.4	89.3
WOMEN				
N	31	22	59	36
> 14 days	9.7	13.6	3.4	5.6
1 - 14 days	6.4	0.0	11.9	25.0
None	83.9	86.4	84.7	69.4

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: nil. Age group differences: nil. Centre differences: nil.

5.3.2.4 Health behaviour score

The responses to these questions (H38-H40) were also scored according to guidelines in the Multi-level Assessment Instrument to generate the health behaviour score. The numbers in front of responses were used in the summation (see Chapter 3 and Appendix 2). The score ranged from 3-9, a higher score indicating limited use of medical services (Table 5.3.2.4).

Results: Gender and age group differences were not seen within centres. Centre differences were significant for women only in both age groups - Spata women had a higher mean score (i.e less use of the health care system) than Melbourne women.

Table 5.3.2.4

Health behaviour subindex
(Questions H38-40)

	SPATA	MELBOURNE		
Score 3-9			70 - 79	80 +
MEN				
N			31	22
Mean			8.2	8.0
SD			1.4	1.2
Minimum			3.0	5.0
5%			5.0	6.0
25%			8.0	8.0
50%			9.0	8.0
75%			9.0	9.0
95%			9.0	9.0
Maximum			9.0	9.0
WOMEN				
N			32	19
Mean			8.2 ^k	7.4 ^l
SD			0.9	1.6
Minimum			6.0	4.0
5%			6.0	4.0
25%			8.0	6.0
50%			8.0	8.0
75%			9.0	9.0
95%			9.0	9.0
Maximum			9.0	9.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata nil; Melbourne nil.

Age group differences: Spata nil; Melbourne nil.

Centre differences: Women 70-79 and 80+.

* A high score indicates limited use of health care system.

5.3.3 SELF-REPORTED HEALTH CONDITIONS

Self reported health conditions are covered in question H43 (see Table 5.3.3).

Table 5.3.3

Question 43
In the past year, have you (had):

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	32	19	66	28
Diabetes	6.2	10.5	16.7	10.7
Hypertension	37.5	36.8	37.9	42.9
Heart trouble	21.9	21.0	19.7	28.6
Circulation problem	19.7	31.6	15.1	17.9
Stroke	0.0	15.8	3.0 ^f	21.4 ^f
Arthritis/rheumatism	34.4	26.3	28.8 ^c	32.1 ^d
Tumor/cancer	3.1	5.3	3.4 ^f	0.0 ^{df}
Ulcer	15.6	21.0 ^b	12.1	7.1
Nerves/tense	12.5 ⁱ	5.3	1.5 ^{fi}	10.7 ^f
Constipated	3.1 ⁱ	10.5	18.2 ⁱ	25.0
Trouble sleeping	12.5	10.5	4.5 ^c	7.1
Parkinsons	12.5	5.3	4.5	3.6
Emphysema/asthma	9.4	5.3	7.6	7.1
Glaucoma	0.0	0.0	3.0	0.0
Cataracts	15.6 ^e	47.4 ^e	21.2	32.1
Liver trouble	0.0	0.0	0.0	0.0
Gallbladder problem	0.0	5.3	3.0	0.0
Kidney trouble	0.0	0.0	1.5	0.0
Bladder trouble	0.0	15.8	1.5	0.0
Broken hip	0.0	0.0	0.0	7.1
Other broken bones	0.0	0.0	6.1	10.7
Anaemia	0.0	0.0	4.5	0.0
Prostate problem	3.1	15.8	19.7	21.4
Osteoporosis	0.0	5.3	1.5	0.0
Urine tract infection	0.0	5.3	0.0	0.0
Uric acid/gout	3.1	5.3	4.5	3.6
Stomach/Intestinal problem	0.0	5.3	3.0	7.1
Bronchitis	0.0	0.0	9.1	17.9

Same pair of letters show significant differences, Chi-Square $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Table 5.3.3 (continued)

Question 43
In the past year, have you (had):

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
WOMEN				
N	31	22	59	36
Diabetes	16.1	22.7	20.3	22.2
Hypertension	41.9	54.5	54.4	55.6
Heart trouble	19.3	13.6 ^l	30.5 ^h	50.0 ^{hl}
Circulation problem	32.3	27.3	18.6	13.9
Stroke	16.1 ^k	4.5	6.8 ^k	11.1
Arthritis/rheumatism	35.5 ^k	31.8 ^l	66.1 ^{ck}	61.1 ^{dl}
Tumor/cancer	3.2	4.5	3.0	14.3 ^d
Ulcer	12.9	0.0 ^b	16.9	11.1
Nerves/tense	6.4	9.1	3.4	13.9
Constipated	0.0 ^k	4.5 ^l	23.7 ^k	27.8 ^l
Parkinsons	6.4 ^k	4.5	0.0 ^k	2.8
Troubles in sleeping	19.3	31.8	18.6 ^c	16.7
Emphysema/asthma	3.2	4.5	1.7	5.6
Glaucoma	3.2	9.1	0.0	5.6
Cataracts	16.1 ^g	40.9 ^g	15.2 ^h	47.2 ^h
Liver trouble	0.0	0.0	1.7	0.0
Gallbladder problem	9.7	9.1	11.8	0.0
Kidney trouble	3.2	0.0	6.8	2.8
Bladder trouble	3.2	4.5	3.4	2.8
Broken hip	6.4	0.0	5.1	19.4
Other broken bones	19.3	18.2	5.1	5.6
Anaemia	6.4	0.0	11.9	5.6
Prostate problem	0.0	0.0	0.0	0.0
Osteoporosis	6.4	18.2	11.9	11.1
Urinary tract infection	0.0	4.5	0.0	8.3
Uric acid/gout	6.4 ^k	0.0	0.0 ^k	0.0
Stomach/Intestinal problem	3.2	9.1	8.5	11.1
Bronchitis	0.0	0.0	1.7	2.8

Same pair of letters show significant differences, Chi-Square $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

5.3.3.1 Diabetes

Results: Overall, 10% of the men and 20% of the women reported having diabetes. Gender, age group and centre differences were not significant (see table 5.3.3 and Chapter 11 section 11.2.7).

Comparisons with reported data: In the Euronut-Seneca study, the prevalence of self-reported diabetes for the Greek elderly aged 75 was around 8% (gender specific data not

available). Ten out of 17 centres reported a prevalence of diabetes between 10-15%. Denmark (4%) and the Netherlands (7%) had the lowest prevalence. In the Anglo-Celtic Australian study, 9% of the men and women aged 70-79 reported diabetes. In the National Health Survey (NHS) (Australian Bureau Statistics 1989-90), prevalence of diabetes for Southern European-born (SEB) was 13% for the men and 12% for the women aged 70+. The prevalence for Australian-born (AB) was lower (M 5%, F 3%).

5.3.3.2 Hypertension

Results: Overall, 40% of the men and 50% of the women reported having hypertension. Gender, age group and centre differences were not significant. In Spata, systolic blood pressure averaged 147mmHg for the men and 155mmHg for the women. In Melbourne, systolic blood pressure was 152mmHg for the men and 155mmHg for the women. Gender, age group and centre differences were not significant (see tables 5.3.3, 5.3.3.2a

Table 5.3.3.2a

Systolic Blood Pressure mmHg

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	26	15	63	28
Mean	147.7	146.0	152.1	152.7
SD	19.0	21.9	23.2	22.3
Minimum	100.0	110.0	110.0	110.0
5%	120.0	110.0	120.0	120.0
25%	140.0	130.0	130.0	140.0
50%	150.0	140.0	150.0	150.0
75%	160.0	160.0	170.0	170.0
95%	170.0	190.0	198.0	190.0
Maximum	190.0	190.0	210.0	200.0
WOMEN				
N	20	9	57	35
Mean	146.7	162.2	155.0	154.7
SD	20.1	31.1	24.7	27.8
Minimum	110.0	130.0	85.0	90.0
5%	110.0	130.0	120.0	110.0
25%	132.5	140.0	135.0	130.0
50%	150.0	150.0	155.0	160.0
75%	160.0	180.0	170.0	180.0
95%	185.0	220.0	190.0	190.0
Maximum	190.0	220.0	210.0	195.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil.

In Spata, diastolic blood pressure averaged 78mmHg for the men and women. In Melbourne, diastolic blood pressure averaged 80mmHg for the men and 83mmHg for the

women. Gender and age group differences were not significant within centres. Melbourne women aged 70-79 had a significantly higher diastolic blood pressure than Spata women (see table 5.3.3.2b).

Table 5.3.3.2b**Diastolic Blood Pressure mmHg**

	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	26	15	63	28
Mean	78.4	76.7	81.5	79.5
SD	15.1	10.4	12.9	13.4
Minimum	50.0	60.0	55.0	50.0
5%	60.0	60.0	60.0	60.0
25%	70.0	70.0	70.0	72.5
50%	80.0	80.0	80.0	80.0
75%	90.0	80.0	90.0	82.5
95%	100.0	100.0	100.0	110.0
Maximum	120.0	100.0	120.0	120.0
WOMEN				
N	20	9	57	35
Mean	74.5 ^k	80.0	82.4 ^k	83.5
SD	12.8	18.0	12.1	15.1
Minimum	50.0	60.0	55.0	50.0
5%	55.0	60.0	60.0	50.0
25%	65.0	70.0	75.0	75.0
50%	75.0	70.0	80.0	80.0
75%	80.0	90.0	90.0	98.0
95%	95.0	110.0	100.0	110.0
Maximum	100.0	110.0	110.0	120.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: women 70-79.

Comparisons with reported data: In the Euronut-Seneca study (de Groot et al., 1991) the prevalence of self-reported hypertension for the Greek elderly aged 75 was around 30% (gender specific data not available). Thirteen out of 17 centres reported a prevalence of hypertension below 30%; the Dutch and Swiss sites had the lowest prevalence (15% and 10% respectively). In the WHO 11 country study (Heikkinen et al., 1983), the prevalence of hypertension ranged from 10%-60%, with the majority of countries reporting a prevalence of 20% for men and 30% for women. Similarly to Greek elderly, in the Anglo-Celtic Australian study in Melbourne, 30% of the men and 50% of the women aged 70-79 reported hypertension. In the National Health Survey (NHS) (ABS, 1989-90), the prevalence of hypertension for Southern European-born (SEB) was 22% for the men and 42% for the women aged 70+. The prevalence for Australian-born (AB) was similar (M 23%, F 32%).

5.3.3.3 Heart trouble

Results: About 23% of the men reported heart trouble. In contrast, 16% of Spata women and 40% of Melbourne women reported heart trouble. Gender and age group differences were not seen in Spata. In Melbourne, only age group differences were significant - a greater proportion of women aged 80+ (50%) reported heart trouble compared with the younger women (30%). Centre differences were significant for women only aged 80+ - a greater proportion of Melbourne women (50%) reported heart trouble compared with Spata women (14%) (see table 5.3.3).

Comparisons with reported data: In the Euronut-Seneca study the prevalence of self-reported heart trouble for the Greek elderly aged 75 was around 23% (gender specific data not available). Thirteen out of 17 centres reported a lower prevalence of heart trouble (<20%). Spain (5%), Italy (5%) and Switzerland (10%) reported the lowest prevalence. In the Anglo-Celtic Australian study, a greater proportion of men aged 70-79 (58%) reported heart trouble compared with Greek men (22%) in this age group; a similar proportion of women (27%) reported heart trouble compared to Melbourne women (30%).

In the National Health Survey (NHS) in Australia, the prevalence of heart disease for SEB was 11% for the men and 7% for the women aged 70+. The prevalence for Australian-born (AB) was similar (M 11%, F 10%). In the ACOTA study of Australian migrants, the non-English speaking-born (NESB) elderly aged 65-74 were more likely to report diseases of the circulatory system (12%) compared with Australian-born (10%) and other English-born (8%). The prevalence increased almost three fold in those aged 75+ for the NESB compared to less than 1.5 times for AB.

5.3.3.4 Circulation problems

Circulation problems were defined as raised blood fats (cholesterol and triglycerides).

Results: About 20% of the men and 23% of the women reported circulation problems. Gender, age group and centre differences were not significant.

Comparisons with reported data: In the Anglo-Celtic Australian study, a similar proportion of subjects aged 70-79 (M 21%, F 31%) reported circulation problems compared with Melbourne Greeks (20%). In the National Health Survey (NHS) in Australia, the prevalence of hypercholesterolaemia was higher in SEB aged 70+ (M 19%, F 10%) than in AB (M 2%, F 3%).

5.3.3.5 Stroke

Results: A greater proportion of men aged 80+ men (18%) reported to have had a stroke compared with the younger men (1%). In contrast, a greater proportion of younger women in Spata reported stroke (16%) compared with the 80+ (4%) women (the reverse was seen in Melbourne). Gender and age group differences were not significant in Spata. In Melbourne, only age group differences were seen in the men - a greater proportion aged 80+ reported stroke (21%) compared with the younger men (3%). Centre differences were significant for women aged 70-79 - a greater proportion of Spata women (16%) reported stroke compared with Melbourne women (7%).

Comparisons with reported data: In the Euronut-Seneca study the prevalence of self-reported stroke for the Greek elderly aged 75 was 5% (data not collected on 80+ Greek elderly). Spain (0%) and Switzerland (1%) reported the lowest prevalence. In the Anglo-Celtic Australian study, a greater proportion of men aged 70-79 (9%) reported stroke compared with Greek men (3%). The proportion of women reporting stroke (5%) was similar to the Greek women in Melbourne (7%).

5.3.3.6 Arthritis/rheumatism

The symptoms of arthritis are similar to rheumatic pain. Therefore, self-reported arthritis could in fact be rheumatism. It was not possible to report separately the prevalence of these disorders.

Results: Overall, 30% of the men reported rheumatism/arthritis (R/A). In contrast, 30% of Spata women and 60% of Melbourne women reported R/A. Gender and age group differences were not seen in Spata. In Melbourne, gender differences were significant for both age groups - a greater proportion of women (60%) reported R/A compared with the men (30%). Centre differences were significant for women only in both age groups- a greater proportion of Melbourne women (60%) reported R/A compared with Spata women (30%).

Comparisons with reported data: In the Euronut-Seneca study the prevalence of self-reported arthritis for the Greek elderly aged 75 was around 50% (gender specific data not available). Thirteen out of 17 centres reported a lower prevalence of arthritis (<50%). The Netherlands (5%) and Norway (10%) reported the lowest prevalence. In the Anglo-Celtic Australian study, a similar proportion of subjects aged 70-79 (M 42%, F 62%) reported R/A compared to Melbourne Greeks (M 30%, F 66%) in this age group. In the National

Health Survey (NHS) in Australia, the prevalence of arthritis for SEB aged 70+ (M 23%, F 55%) was similar to AB (M 35%, F 46%).

5.3.3.7 Malignancy

Results: About 4% of the Spata elderly reported malignancy. In Melbourne, 3% of young elderly reported malignancy and 14% of women 80+. Gender and age group differences were not seen in Spata. In Melbourne, gender differences were significant - a greater proportion of women aged 80+ (14%) reported malignancy compared with the men (0%). Centre differences were not significant.

Comparisons with reported data: In the Euronut-Seneca study the prevalence of malignancy for Greek subjects aged 75 was around 1% (gender specific data not available). Seven out of 17 centres reported a higher prevalence of cancer (>2%). In the Anglo-Celtic Australian study, a greater proportion of elderly aged 70-79 (M 14%, F 7%) reported malignancy compared with Melbourne Greeks (3%) in this age group. The Anglo-Celtics also reported skin cancer (M 21%, F 14%). In the National Health Survey (NHS) in Australia, the prevalence of malignancy for SEB aged 70+ (M 5%, F 6%) was similar to AB (M 8%, F 5%).

5.3.3.8 Ulcer

Results: About 14% of the elderly reported an ulcer (except Spata women aged 80+). In Spata, gender differences were significant - a greater proportion of men aged 80+ (21%) reported an ulcer compared with the women (0%). Gender and age group differences were not seen in Melbourne. Centre differences did not reach significance.

Comparisons with reported data: In the Anglo-Celtic Australian study, a greater proportion of men aged 70-79 (21%) reported an ulcer compared with Melbourne Greek men (12%) in this age group. A significantly smaller proportion of Anglo-Celtic women reported an ulcer (5%) compared with Greek women (17%). In the National Health Survey (NHS) in Australia, the prevalence of ulcers for SEB aged 70+ (M 8%, F 8%) was greater than AB (M 4%, F 2%).

5.3.3.9 Nervous disorder

Results: About 8% of the elderly reported being tense/nervous. In Spata, gender and age group differences were not significant. In Melbourne, age group differences were

seen - a greater proportion of men aged 80+ (11%) reported 'nerves' compared with the younger men (1%). Centre differences did not reach significance.

Comparisons with reported data: In the Anglo-Celtic Australian study, a similar proportion of elderly aged 70-79 (9%) reported 'nerves' compared with Melbourne Greeks. In the National Health Survey (NHS) in Australia, the prevalence of nerve problems was significantly greater in SEB aged 70+ (8%) than AB (2%).

5.3.3.10 Constipation

Results: About 4% of the Spata elderly and 23% of Melbourne elderly reported being constipated. Gender and age group differences were not significant within centres. Centre differences were seen in men aged 70-79 and women in both age groups - a greater proportion of Melbourne elderly reported constipation compared with Spata elderly.

Comparisons with reported data: In the Anglo-Celtic study, a smaller proportion of elderly men aged 70-79 (5%) reported constipation compared with Melbourne Greek men (20%); a similar proportion of women (21%) reported constipation compared to Greek women (26%).

5.3.3.11 Health Conditions Score

The responses to questions H41-H43 and H46 were scored according to guidelines in the Multi-level Assessment Instrument to generate the self-reported health conditions score. The numbers in front of responses were used in the summation 1=yes, 2=no (see Chapter 3 and Appendix 2). The subindex ranged from 25-50, a higher score indicating better health with few health problems (see Table 5.3.3.11).

Table 5.3.3.11

Self-reported health conditions score (Questions H41-43+H46)

Score 25-50	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	31	22	66	28
Mean	46.8	46.0	47.3 ^{cf}	46.2 ^{df}
SD	2.1	2.1	1.9	1.9
Minimum	43.0	40.0	43.0	42.0
5%	44.0	43.0	44.0	43.0
25%	45.0	45.0	46.0	45.0
50%	47.0	46.5	48.0	46.0
75%	48.0	47.0	49.0	47.5
95%	50.0	48.0	50.0	49.0
Maximum	50.0	49.0	50.0	50.0
WOMEN				
N	32	19	59	36
Mean	47.4	46.2	46.3 ^{ch}	45.2 ^{dh}
SD	1.8	2.5	2.3	2.2
Minimum	42.0	40.0	40.0	41.0
5%	44.0	40.0	41.0	41.0
25%	46.5	44.0	45.0	44.0
50%	47.5	46.0	47.0	45.0
75%	49.0	48.0	48.0	46.5
95%	50.0	50.0	49.0	49.0
Maximum	50.0	50.0	50.0	50.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata nil; Melbourne 70-79 and 80+.

Age group differences: Spata nil; Melbourne men and women.

Centre differences: nil. *High score indicates few health problems.

In Spata, gender and age group differences were not significant. In Melbourne, men had higher scores than the women and the score decreased with age. Centre differences were not significant. The percentage of elderly who did not report any health problems was low in both Spata (M 8%, F 6%) and Melbourne (M 9%, F 3%). About 70% of the women and 55% of the men reported three health complaints (see table 5.3.3.11).

Comparisons with reported data: In the Euronut-Seneca study, 85% of the Greek women and 70% of the men reported suffering from a chronic disease .

5.3.4 SELF-REPORTED USE OF MEDICATIONS AND SUPPLEMENTS

5.3.4.1 Medications

The increase in morbidity that occurs with ageing leads to increased drug consumption. Elderly people consume 25% of all prescription and non-prescription drugs (Fisher, 1980), many of which have important interactions with nutrients (Hartshorn, 1977). Self-reported use of medications and supplements are covered in questions H44 and H45.

Table 5.3.4.1

Question H44
I have a list of common medicines that people take.
Would you please tell me if you take any of the following regularly?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	31	22	66	28
Mx arthritis	0.0	0.0	15.1 ^b	17.8 ^c
Mx hypertension	37.5	36.8	30.3	42.8
Mx diuretics	3.1	5.2	12.1	3.5
Mx heart digitalis	12.5	15.7	12.1	25.0
Mx chest pain	12.5	5.2	12.1	10.7
Mx anticoagulant	0.0	0.0	3.0	3.5
Mx circulation	12.5	21.0	4.5	3.5
Insulin injection	0.0	5.2	0.0	3.5
Mx diabetes	6.2	0.0	12.1	7.1
Mx ulcers	0.0	5.2	7.5	3.5
Mx pain killer	0.0	0.0	3.0	3.5
Aspirin	40.6 ⁱ	47.3 ^j	15.1 ⁱ	21.4 ^j
Mx tranquillizer	6.2	10.5	1.5	3.5
Mx sleeping	6.2	0.0	6.0	10.7
Mx constipated	0.0	10.5	3.0	3.5
Mx seizures	0.0	0.0	0.0	0.0
Mx thyroid	0.0	0.0	1.5	0.0
Mx cortisone	0.0	0.0	0.0	0.0
Mx antibiotic	3.1	15.7	1.5	3.5
Mx hormones	0.0	0.0	0.0	0.0
Mx depression	0.0	0.0	1.5	3.5
Mx glaucoma	3.2	4.5	0.0	0.0
Mx muscle relax	0.0	0.0	1.5	0.0
Mx allergy	0.0	0.0	3.0	7.1
Mx gout	0.0	0.0	1.5	3.5

Table 5.3.4a (continued)

Question H44
I have a list of common medicines that people take.
Would you please tell me if you take any of the following regularly?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
WOMEN				
N	32	19	59	36
Mx arthritis	12.9	9.0	42.3 ^b	47.2 ^c
Mx hypertension	38.7	45.4	47.4	52.7
Mx diuretics	9.6	0.0	18.6	22.2
Mx heart digitalis	6.4 ^k	13.6 ^l	23.7 ^k	33.3 ^l
Mx chest pain	3.2	0.0	13.5	5.5
Mx anticoagulant	0.0	0.0	0.0	5.5
Mx circulation	16.1	27.2	5.0	5.5
Insulin injection	0.0	9.0	1.6	2.7
Mx diabetes	12.9	18.1	10.1	13.8
Mx ulcers	3.2	0.0	10.1	5.5
Mx pain killer	0.0	4.5	16.9	13.8
Aspirin	25.8	40.9 ^l	16.9	11.1 ^l
Mx tranquillizer	9.6	9.0	5.0	2.7
Mx sleeping	12.9	13.6	8.4	11.1
Mx constipated	0.0	4.5	5.0	13.8
Mx seizures	0.0	0.0	0.0	2.7
Mx thyroid	0.0	0.0	0.0	2.7
Mx cortisone	3.2	0.0	1.6	2.7
Mx antibiotic	6.4	4.5	0.0	2.7
Mx hormones	0.0	0.0	-	-
Mx depression	3.2	0.0	3.3	11.1
Mx glaucoma	0.0	5.2	0.0	2.7
Mx muscle relax	3.2	0.0	0.0	0.0
Mx allergy	3.2	0.0	1.6	2.7
Mx gout	0.0	0.0	3.3	0.0

Same pair of letters show significant differences, Chi-Square $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

i. Arthritis

Results: Arthritis medication was taken by 45% of Melbourne women compared with less than 10% of Spata elderly and 16% of Melbourne men. Gender and age group differences were not seen in Spata. In Melbourne, a significantly greater proportion of women took arthritis medication compared with the men. Centre differences were also significant for men and women in both age groups - a greater proportion of Melbourne elderly took medication for arthritis compared with Spata elderly.

Comparisons with reported data: A significantly smaller proportion of Anglo-Celtic Australian women aged 70-79 took arthritis medication (F 14%, M 12%) compared with Melbourne Greek women (F 42%, M 15%) in this age group.

ii. Hypertension

Results: About 37% of men and 46% of women took medication for hypertension (this does not include diuretics). Gender, age group and centre differences were not significant. Diuretics were used by less than 5% of Spata elderly, by 7% of Melbourne men and by 20% of Melbourne women.

Comparisons with reported data: In the Anglo-Celtic Australian study, a significantly smaller proportion of men aged 70-79 (14%) reported taking antihypertensives compared with Melbourne Greek men (30%). A similar proportion of women (36%) took medication compared to Greek women (47%) in this age group. None of the subjects reported taking diuretics.

iii. Heart problems

Results: Overall, 12% of Spata elderly took medication for their heart (digitalis), compared with 18% of Melbourne men and 28% of Melbourne women. Gender and age group differences were not significant within centres. Centre differences were seen in women only in both age groups - a greater proportion of Melbourne women reported taking medication for heart disease compared with Spata women. Medication for chest pain was less common. Only 1% of Spata women and 8% of men reported taking such medication compared with 10% of Melbourne men and women. Differences within and between centres were not significant. Interestingly, a significantly greater proportion of Spata elderly (M 43%, F 33%) took aspirin regularly compared with Melbourne elderly (M 18%, F 14%).

Comparisons with reported data: In the Anglo-Celtic Australian study, a significantly smaller proportion of elderly women aged 70-79 (7%) reported taking digitalis pills for their heart compared with Melbourne Greek women in this age group (24%). A similar proportion of men (9%) took heart pills compared with Melbourne Greek men (12%). None of the Anglo-Celtic elderly reported to take medication for chest pain compared with 10% of Melbourne Greeks. Less than 2% took aspirin regularly.

iv. Diabetes

Results: Less than 5% of the Greek elderly took insulin to treat diabetes and about 10% took tablets. Differences within and between centres were not significant.

Comparisons with reported data: In the Anglo-Celtic Australian study, none of the elderly reported taking insulin or hypoglycaemics.

5.3.4.2 Medication score

Results: Question H44 was scored using a similar method for the other health scores (1=yes, 2=no). The source of this question was from the OARS questionnaire (see Chapter 3) and a score was devised ranging from 21-42.

Table 5.3.4.2
Self-reported Medication score (Questions H44)

Score 21-42	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	31	22	66	28
Mean	40.3	39.9	40.5	40.0
SD	1.2	1.5	1.5	1.9
Minimum	38.0	37.0	35.0	35.0
5%	38.0	37.0	38.0	37.0
25%	40.0	39.0	40.0	38.5
50%	40.0	40.0	41.0	40.0
75%	41.0	41.0	42.0	41.5
95%	42.0	42.0	42.0	42.0
Maximum	42.0	42.0	42.0	43.0
WOMEN				
N	32	19	59	36
Mean	40.6	40.2	39.5	39.3
SD	1.4	1.6	1.8	1.7
Minimum	38.0	36.0	35.0	35.0
5%	38.0	36.0	36.0	35.0
25%	39.0	39.0	38.0	38.0
50%	41.0	41.0	40.0	39.5
75%	42.0	41.	41.0	40.0
95%	42.0	42.0	42.0	42.0
Maximum	42.0	42.0	42.0	42.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: nil. Age group differences: nil. Centre differences: nil

*A high score indicates limited use of medications.

The mean medication score for Spata and Melbourne Greeks was about 40. This indicates, that on average most subjects took about 2 medications (Table 5.3.4.2). Gender, age group and centre differences were not significant. About 20% of the elderly did not take any medications in both Spata (F 15%, M 27%) and Melbourne (F 13%, M 26%). About 40% of Melbourne elderly (F 40%, M 46%) and 50% of Spata elderly (F 60%, M 45%) reported taking 1-2 medications. A greater proportion of Melbourne women (not significant) took >3 medications (47%) compared with Melbourne men (28%) and Spata elderly (F 25%, M 28%).

5.3.4.3 Vitamin supplements

The US National Research Council report (1989) suggests that nutrient supplements for older adults may be necessary to achieve adequate intakes of several micronutrients, given their lower energy intakes due to lower levels of physical activity. Elderly supplement users appear to be more nutrition and diet conscious, paying more attention to the nutritional quality of the foods they eat (eat more vegetables and fruit) and adding a variety of supplements for good measure (Horwath, 1989a).

Results: Vitamin supplement use was low in Greek elderly; about 15% of men and 25% of women reported using supplements (see Table 5.3.4.3). Gender and age group differences were not seen in Spata. In Melbourne, significantly more women aged 70-79 (25%) reported using supplements compared with men (10%). Centre differences were not seen. The most common vitamin supplements used by elderly Greeks were as follows: vitamin B12 injection (4%), potassium (4%), iron/folate (4%), calcium (3%), multivitamins (2%), B group vitamins (2%), vitamin C (1%).

Comparisons with reported data: The most popular supplements used by elderly in Australia and US include: multivitamins, vitamin E, vitamin C, B vitamins, bran and wheat germ (Horwath, 1989a). The biggest users of vitamin supplements are identified as women, young, Westerners, well-educated, high income with a better profile of health promoting behaviours (e.g exercise, nutritionally adequate and healthy diet) (Chapman et al., 1991). Among persons younger than 65 in the US, 37% of men and 63% of women consumed nutrient supplements, and that prevalence rose with age. About half of those who use supplemental vitamins take only one kind, usually a multivitamin or vitamin C. In contrast, people aged over 65 more frequently took specialised products (e.g potassium, calcium, B vitamins, vitamin E and iron) than broad-spectrum products (Chapman et al., 1991). This group tended to take two or more specialized vitamin and mineral products at

a time. However, there is an absence of data showing that older people chronically use very high doses of supplements.

Table 5.3.4.3

Question H45
Have you taken any herbal medicines or vitamins
in the past year?

	SPATA		MELBOURNE	
	70 - 79 (%)	80 + (%)	70 - 79 (%)	80 + (%)
MEN				
N	31	22	66	28
Yes	18.8	10.5	10.6	14.3
No	81.2	89.5	89.4	85.7
WOMEN				
N	32	19	59	36
Yes	12.9	27.3	25.4	25.0
No	87.1	72.7	74.6	75.0

Chi-Square was used to test for differences in question responses (general associations) between gender, age group or centre, significance level at 5%.

Gender differences: Spata nil; Melbourne 70-79.

Age group differences: nil.

Centre differences: nil.

5.3.5 TOTAL HEALTH SCORE

Results: The health section from the Multi-level Assessment Instrument (MAI) (Lawton et al., 1982) was used in this study to generate a general health score by summing the responses to questions. The general health score was composed of three subindices or scores (self rated health, health behaviour, health conditions + non index item) to give a final score ranging from 33 to 74 (see Chapter 3 for more detail).

The mean score of Greek elderly was 65. Gender and age group differences were not significant in Spata. In Melbourne, gender differences were seen in both age groups - the men had a higher score than the women. Age group differences were also significant - elderly aged 80+ had lower scores than their younger counterparts (see table 5.3.5). A greater proportion (not significant) of men had a score >70 (25%) compared with the women (12%). A score between 65-69 was found in 33% of Spata elderly (F 36%, M 31%) and 38% of Melbourne elderly (F 36%, M 41%). A smaller proportion of Melbourne men (31%) were found to have low scores (<65) compared with Melbourne women (51%) and Spata elderly (F 53%, M 48%).

Table 5.3.5

Total health score

(self rated health score + health behaviour score + health conditions score + H47C)

Score 33-74	SPATA		MELBOURNE	
	70 - 79	80 +	70 - 79	80 +
MEN				
N	31	22	66	28
Mean	65.0	64.1	67.4 ^{cf}	65.6 ^{df}
SD	4.8	3.7	3.9	4.0
Minimum	55.0	55.0	54.0	57.0
5%	56.0	59.0	60.0	58.0
25%	62.0	62.0	65.0	62.5
50%	66.0	64.0	68.0	66.5
75%	68.0	67.0	70.0	68.0
95%	73.0	69.0	72.0	71.0
Maximum	74.0	70.0	74.0	73.0
N	32	19	59	36
Mean	66.6	63.9	65.4 ^{ch}	63.4 ^{dh}
SD	4.3	5.5	5.0	4.0
Minimum	57.0	54.0	51.0	50.0
5%	58.0	54.0	54.0	56.0
25%	64.0	62.0	63.0	61.0
50%	66.5	65.0	66.0	64.0
75%	70.0	68.0	69.0	66.0
95%	73.0	73.0	71.0	69.0
Maximum	73.0	73.0	73.0	72.0

Same pair of letters show significant differences, Wilcoxon $p < 0.05$:

a,b,c or d within centres - between gender for a given age group

e,f,g or h within centres - between age groups for a given gender

i,j,k or l between centres - for a given age group and gender

Gender differences: Spata nil; Melbourne 70-79 and 80+.

Age group differences: Spata men; Melbourne women and men. Centre differences: nil.

* A high score indicates better health

5.4 DISCUSSION

Studies on elderly Greek migrants to Australia have shown that they tend to have a poorer sense of well-being compared with Australian-born and Anglo-Celtic Australians (Krupinski et al., 1973; Australian Council on the Ageing, 1981). Elderly women in particular, appear to be at greater risk of psychological disorders (Kahn and Antonucci, 1980). Similarly in the current study, elderly Greeks in Melbourne and Spata reported a poorer sense of well-being compared with Anglo-Celtic Australians (Wahlqvist et al., in press). The elderly Greek women generally appeared less satisfied with life, with a poorer sense of well-being than the men. Similar results were also obtained in the Euronut study (de Groot et al., 1991).

Women have been reported to have a greater access to relationships that are close, confiding and emotionally intimate compared with men (Kahn and Antonucci, 1980). Yet research indicates that women's greater involvement in the lives of others can be a source of stress or emotional disturbances (Kessler et al., 1985). Presumably worry and concern about others, as well as the provision of specific supportive acts, may at some point become overwhelming, resulting in increased psychological disorder.

In and on itself, migration does not determine mental health status and well being; instead, the kinds of stresses endured, the availability of social support and differences in personal make-up determine whether resettlement results in realized ambition, blocked opportunity or psychiatric disorder (Krupinski et al., 1973). In addition to chronic strains such as unemployment and separation from family, research suggests that daily 'hassles', such as language problems, frustration of not being able to find favourite foods, homesickness, problems with landlords and inability to understand the transportation system are powerful threats to the well-being of immigrants and refugees (Beiser, 1990).

Older immigrants are particularly vulnerable to the stress of migration. Seniors retain a stronger adherence to traditional values, and differential acculturation among age groupings in families and communities, may lead to their isolation. Overall, the longer people remain in a country of resettlement, the better their mental and emotional health and sense of well being. While the presence of a like-ethnic community provides some material advantages (e.g such as help in finding jobs), its effectiveness in imparting a feeling of belonging, together with a sense of cultural identity and historical continuity, may have even more relevance for individual mental and emotional health (Beiser, 1990).

Some authors have suggested that, to maintain good mental health and well-being over the long run, newcomers must shift some of their social ties from the immigrant community to the society at large, a process sometimes called 'structural assimilation'. It has been suggested that ethnic ties may work against social mobility and psychological well-being (Berry, 1986). The psychological adjustment of immigrants on arrival follows a series of predictable stages, from elation to depression to recovery (Beiser, 1990). According to the model, most new-comers resolve the phase of unhappiness; some however, become trapped in a cycle of despair, disorder and compromised social behaviour. However, it appears that these stages occur if there is little or no available family or like-ethnic community in the host country (Beiser, 1990).

The significantly lower sense of well-being of Spata women compared with Melbourne women is interesting. It is not always sufficiently appreciated that living with an extended

family can cause, rather than relieve, strains between generations, resulting in reduced life satisfaction and well-being (Davies, 1993). The majority of Spata women lived with their children and grandchildren and they were also more likely to report lack of respect accorded to them by their family.

The ability to manage basic activities of daily living (ADL) is a significant predictor for being housebound, for placement in a nursing home and death (Heikkinen, 1987; Avlund 1988). Additionally, it is one of the most important factors determining quality of life and well-being in the elderly (Schlettwein-Gsel, 1991; Dwyer et al., 1991). It is important to note here, that reported inability to perform ADLs does not necessarily reflect only physical inability but possibly also 'psychological' inability. For example, being unable to use public transport may be associated with language difficulties rather than impaired mobility.

Studies on elderly Greek migrants to Australia have shown that they tend to report markedly more disability than other ethnic groups, the Australian-born and Anglo-Celtic Australians (Australian Council on the Ageing, 1981; Australian Institute of Multicultural Affairs, 1984). Even in Europe, elderly Greeks report the greatest levels of disability compared with other European countries (de Groot et al., 1991). Furthermore, elderly women report significantly more disability than the men (de Groot et al., 1991; Heikkinen et al., 1983; Wahlqvist et al., in press).

In the current study, elderly Greeks (mainly women) also reported more disability than Anglo-Celtic Australians (Wahlqvist et al., in press). The reasons for this gender difference in disability is not clear; it has been suggested that elderly men may represent a more selective group of survivors than women (de Groot et al., 1991). The greater disability seen in elderly Greek women compared with other ethnic groups in Australia and in Europe is intriguing. Contributing factors, both psychological and physical, require further investigation as this may explain their poorer sense of well-being. The link between health and disability is not an obvious explanation since other population groups with equivalent or even greater prevalences of diseases (such as arthritis in Anglo-Celtic women) did not have such high levels of disability.

The biological processes of ageing start to become manifest in several organs between ages 70-75, and beyond that age there seems to be a rapid decline in a number of functions, particularly among women. Self-perception of health status has been found to correspond to objective health indicators and are predictive of future health and mortality

(Linn and Linn, 1980; Femaro, 1980). When applied to population data it is a good indicator of actual health status and health service use (Fillenbaum, 1984).

In most studies, elderly women tend to rate their health worse than the men, age group differences are not seen and more than 50% of the elderly consider themselves to be quite healthy despite the high prevalence of chronic diseases (de Groot et al., 1991; Australian Institute of Multicultural Affairs, 1984; Australian Council on the Ageing, 1981; Heikkinen et al., 1983). Old people may change their standards in relation to health and accept some symptoms as belonging to normal ageing (Heikkinen et al., 1983).

Studies on elderly Greek migrants to Australia have shown that they tend to report poorer health (40%) than other ethnic groups, the Australian-born and Anglo-Celtic Australians (<20%) (Australian Council on the Ageing, 1981; Australian Institute of Multicultural Affairs, 1984). In contrast, there is no evidence from this study that Melbourne Greeks rated their health as poorly (<10%). In another study, elderly Anglo-Celtic Australians tended to report worse health (mainly men) than Greek elderly (Wahlqvist et al., in press). The picture, however, is quite different for elderly Greeks in Greece. Spata Greeks reported worse health than Melbourne Greeks and in the Euronut study (de Groot et al., 1991), Greek elderly in Markopoulo and Crete reported worse health than elderly in other European countries. It appears that the health of elderly migrant Greeks may be better than Spata Greeks. The prevalence of various diseases will help clarify this observation.

The most common chronic conditions in elderly men and women include hypertension (30-60%), arthritis (30-60%), heart conditions (20-50%), hearing impairments (30%), constipation (30%), hypercholesterolaemia (10-20%), respiratory problems (10-20%), diabetes (10-20%), visual impairments (10-20%), ulcers (10-15%), stroke (5-10%) and cancer (1-10%) (USA National Centre for Health Statistics, 1988; ABS 1991; de Groot et al., 1991; Wahlqvist et al., in press). Gender differences in disease prevalence are not as apparent in the 70+ age group. Similar proportions of elderly Greeks reported these complaints, except for heart disease, stroke and diabetes. Melbourne women reported more heart problems (40%) than the men (23%) and the Spata women (16%). In contrast, a greater proportion of elderly Anglo-Celtic Australian men reported heart trouble (58%) compared with the women (27%) (Wahlqvist et al., in press).

It appears that Melbourne Greek men have not reached the high prevalence of heart disease reported in Anglo-Celtic Australian men but the Greek women (mainly aged 80+) have caught up and surpassed the rates for both Greek men and Anglo-Celtic women.

The prevalence of stroke increased markedly in the 80+ Greek men from about 3% to 15-20%. This increase was not apparent in the women. Spata women aged 70-79 had a high prevalence of stroke (16%) compared with Melbourne women (7%) and the men. Prevalence of stroke was higher in Anglo-Celtic Australian men aged 70-79 (9%) but similar for the women (5%) (ABS, 1991; Wahlqvist et al., in press). Diabetes prevalence was 20% in the elderly Greek women compared with 10% in the Greek men and Anglo-Celtic Australians.

There has been considerable interest in the health and diet of Greeks in Australia and Greece given their low mortality rates from heart disease and cancer, but not strokes (WHO, 1992; Young, 1986; McMichael et al., 1980). Mortality data on Greek Australians indicate that heart disease rates are even lower than Greeks in Greece (Powles, 1990a). Mortality rates from these diseases increase markedly in the 70+ age group. Cancer rates approach levels found in elderly Anglo-Celtic Australians, but heart disease rates remain significantly lower (Young, 1986). Some studies however have indicated that this reduced mortality in elderly migrant Greeks is associated with an equally high (or higher) level of morbidity from these diseases compared with the Australian-born (ACOTA, 1981; AIMA, 1984; ABS, 1991; Dollis, 1989; Colson, 1986; McCallum, 1992).

This was observed in the current study for the Melbourne women only who reported similar levels of stroke and heart disease (but not cancer) to Anglo-Celtic women in Melbourne (Wahlqvist et al., in press). Melbourne Greek men reported a lower prevalence of heart disease and stroke compared with Anglo-Celtic men. This is also reflected in the poorer self-rated health by Anglo-Celtic men compared with Greek men. It appears that the migrant Greek women may be losing their protection against these diseases at a faster rate than the men. Dietary and lifestyle differences may provide an explanation for the sustained protection by elderly Greek men after so many years in the new environment. According to self-reported health complaints, Melbourne Greeks did not appear 'healthier' than Spata Greeks as suggested by mortality data. The health conditions score was not significantly different between centres. In contrast to expectations, the Melbourne women had a significantly higher prevalence of heart disease, cancer and arthritis and Spata women had a higher prevalence of stroke. The men in both centres had similar prevalences for most diseases. According to self-rated health and well-being, Melbourne elderly appeared 'healthier'.

The women in both centres reported more health complaints than the men, which is consistent with their poorer self rated health, well-being and greater disability. This was also observed in another study of elderly subjects aged 75 in 19 European centres,

including Greece (de Groot et al., 1991). Gender differences in health complaints, self rated health, well-being and disability are not as marked in Anglo-Celtic Australians (Wahlqvist et al., in press; ABS, 1991).

It is imperative to preserve and maximise health and functional status in the ageing population so that these individuals can meet the challenges of their later years. Early screening to identify risk factors and preventable or treatable health problems that can then be ameliorated is one important step in this direction. Screening no longer concentrates solely on measuring health status; approaches are focusing more and more on measuring disability and the effects of nutrition-related interventions on restoring or maintaining function, well-being and quality of life (Dwyer et al., 1991). With greater attention to prevention and early treatment to diminish risks and sequelae of disease, both the occurrence and the severity of poor health and associated decrements in the quality of life and in independent function may be decreased.

5.5 SUMMARY

In general, the well-being of elderly Greeks was low to moderate. The majority of the women were located in the middle of the range and the men towards the top end of the range. The well-being of the Greek women in Melbourne appeared better than Spata women. The men in both centres reported more positive feelings of well-being than the women. The men at both sites had equivalent reported levels of well-being. Elderly Anglo-Celtic Australians have a slightly better reported sense of well-being than Greeks in Melbourne.

Significantly more women reported worrying (55%) and feeling depressed (30%) and being discontented with their life (35%) compared to the men (30%, 15%, 14% respectively). This is also reflected in the well-being score (0-7) with women having a significantly lower mean score (4.5) than the men (5.7). A greater proportion of Spata women aged 70-79 reported feeling depressed (48%), tired (58%), discontented (52%) and to have 'lost interest' (45%) compared with Melbourne women (19%, 22%, 22%, 19%, respectively). This was also reflected in the well-being score - Spata women had a significantly lower score (4.0) than the Melbourne women (5.1).

In general, the memory of elderly Greeks was good, with the majority of subjects having scores at the top end of the range (0-5). The ability to remember year, month, day, address and names appeared to worsen with increasing age in both centres and men scored better than women (mainly in Spata). Spata men in both age groups had a significantly higher memory score (4.7) than Melbourne men (4) whereas the women had similar scores (4). Anglo-Celtic Australians had a similar memory score to Melbourne Greeks.

The degree of disability in both Spata and Melbourne was similarly high, especially for the women. Only 20% of the women and 40% of the men were able to perform all activities of daily living. About one third of the women had low ADL scores compared with less than one tenth of the men. For all the ADL items which included mobility, self care, household chores and basic bodily functions, a greater percentage of women reported difficulty with such tasks compared with the men. Also, the 80+ men and women tended to have greater difficulty with ADLs compared with the 70-79 age group.

In contrast, Anglo-Celtic Australians appeared to have significantly less disability (especially the women) for all ADL items compared to Greek elderly. The gender differences observed in Greek elderly were not evident in Anglo-Celtic elderly. The

greater disability of elderly Greeks is also seen in their use of walking aids. About 20% of the men and women aged 70-79 and 40% aged 80+ used a cane. This is in marked contrast to Anglo-Celtic Australians (M 0%, F 7%).

The data also suggests that Spata women aged 80+ were less disabled than the Melbourne women aged 80+. For example, a trend was observed (not significant) with Melbourne women aged 80+ having lower ADL scores (47%) than Spata women (23%) (significant for ability to walk between rooms and to do light housework). This was also reflected in the use of walkers by a greater proportion of Melbourne women in this age group (11%) compared with Spata women (0%). Furthermore, a greater proportion of Spata women aged 80+ (27%) reported improved health over the past three years compared with Melbourne women (17%) and a greater proportion did not think their health affected their lifestyle (27%) compared with Melbourne women (17%).

Overall, a significantly greater proportion of Melbourne men (88%) and women (68%) rated their health as good/excellent compared to Spata (M 57%, F 42%). Men were more likely to report good health compared to the women. The 80+ age group did not rate their health more poorly than the younger elderly. A significantly smaller proportion of Anglo-Celtic Australian men reported good health (61%) compared to Melbourne men (proportions were the same for the women 70%). In contrast to other Australian studies on migrant Greeks, there is no evidence from this study that Melbourne Greeks rated their health poorly. Interestingly, even though Melbourne Greeks had better self rated health, a greater proportion visited the doctor frequently (75%) compared to Spata elderly (45%).

The percentage of elderly who did not report any health problems was low in both Spata (M 8%, F 6%) and Melbourne (M 9%, F 3%). About 70% of the women and 55% of the men reported three health complaints. It is striking that so many elderly had health complaints, and yet many had good self-perceived health. Apparently the many diagnoses were handled in such a way that they were not perceived as a handicap.

The percentage of elderly reporting health complaints were similar in both centres. However, women tended to report more complaints than men and health problems tended to increase with age. The most common health problem was *hypertension* in both men (40%) and women (50%) in both centres. This prevalence is similar to that found in elderly Anglo-Celtic Australians (M 30%, F 50%).

The second most common health complaint was *arthritis*. About 30% of the elderly reported arthritis. A significantly greater proportion of Melbourne women (60%) appeared to be suffering from this disorder, approaching the higher levels found in elderly Anglo-Celtic Australian women (62%) (prevalence for men 42% similar to Greek men).

The third most common complaint was *heart disease*. About 23% of the men reported this disease. However, a significantly greater proportion of Melbourne women (40%, mainly women aged 80+) reported heart disease compared to both the men and Spata women (16%). In contrast, a greater proportion of elderly Anglo-Celtic Australian men reported heart trouble (58%) compared to the women (27%).

The fourth most common complaint was *diabetes*. About 10% of the men and 20% of the women reported this disorder. Diabetes appears to be far more common in Greek women than in Anglo-Celtic Australian elderly (M 10%, F 10%). This is probably related to their higher levels of obesity (see Chapter 11).

The fifth most common complaint was constipation. Significantly more Melbourne elderly (23%) reported this problem compared with Spata elderly (4%). Similar levels of constipation are found in Anglo-Celtic elderly women (21%) but not men (5%). Constipation on migration could be related to increased consumption of animal foods and decreased intake of plant foods and water (see Chapter 9).

Less common health complaints included stroke, ulcers and cancer. Strokes were reported mainly in the 80+ group (14%), except in Spata women (aged 70-79 16%). Reported stroke by Anglo-Celtic Australians was similar to Greeks. About 14% of the Greek elderly reported an ulcer in both centres. Cancer was reported in less than 4% of the elderly, except Melbourne women aged 80+ (14%). Reported cancer was higher in Anglo-Celtic Australians (M 14%, F 7%).

On average, most subjects took about 2 medications. Only 20% of the elderly reported not taking any medications in both Spata and Melbourne. A greater proportion of Melbourne women (not significant) took >3 medications (47%) compared with Melbourne men (28%) and Spata elderly (M 28%, F 25%). The most common medication taken was for hypertension (40% of elderly). Diuretics were rarely taken by most subjects (<6%), except Melbourne women (20%).

Medication for arthritis was mainly taken by Melbourne women (45%) compared with <10% for the rest of the sample. Heart pills (digitalis) were also mainly taken by

Melbourne women (28%) compared with <12% for the rest of the sample. About 5% of the elderly were on insulin and 10% were on hypoglycaemics to treat their diabetes. In general, vitamin supplement use was low in Greek elderly (M 15%, F 25%). In Melbourne, significantly more women aged 70-79 (25%) reported using supplements compared to men (10%). The most common vitamin supplements used by elderly Greeks included vitamin B12 injection (4%), potassium (4%), iron/folate (4%), calcium (3%), multivitamins (2%), B group vitamins (2%), vitamin C (1%).

Overall, it appears that Greek men in Melbourne and Spata have similarly good levels of health and well-being, with low reported rates of heart disease and cancer, disability and use of medications. In contrast, Greek women were not as healthy as the men, especially in Melbourne. They had more health complaints, a greater degree of disability and lower sense of well-being. Melbourne women, especially aged 80+, did not appear as healthy as Spata women due to their higher rates of heart disease, arthritis, cancer and use of medication. Nevertheless, they still reported a better sense of well-being and self-reported health. This is probably due to their better social networking and social activity (see Chapter 12).