16.1 VARIABLES WHICH MAY EXPLAIN INTERGROUP AND INTRAGROUP DIFFERENCES IN LIFESTYLE

The later years of life are perceived within most cultures as a time for slowing down and progressive dependence [1]. In the past and still to some extent, the dependence of the elderly is an outcome of the surrendering process, imposed by a younger generation on the older generation in order to limit or prevent the control of decision making and property ownership by the seniors. Thus, the idea that men and women should retire as they get older not only relative to employment, but also from other socially important tasks does not arise from the notion of retirement as reward for industry, but rather as a handing over of the keys, which may be forced [2].

However, perceptions about the personal and societal roles of elderly individuals differ by culture of origin, by country and by social class. Also, the activities that older men and women preferentially engage in, reflect interests gained earlier in life. While the actual activities of elderly men and women change over time due to changes in location, living conditions, household size and structure, economic status, occupational status, social position, and health, social ageing does not obliterate either behavioural trends or the context of life. Health variables which commonly lead to changes in lifestyle of the elderly include the presence or absence of physical and mental disability.

Activity patterns of the elderly may also vary considerably by whether or not the performance of physical work within or outside the household is necessary for personal well-being. Additionally, activity patterns, particularly the level and type of physical exercise, depend on whether or not there is local promotion of exercise as a measure for health maintenance, on exercise facilities available to elderly individuals and on their behavioural responses to health messages, if these exist [3]. Elderly who have participated in physical exercise in the past on a regular basis are also more likely to continue to do so later in life [4].
Whether or not particular household chores or food shopping is performed by the elderly is not necessarily related to their functional ability, but may be determined by traditional gender roles, by domicile, by family custom or by relative need [5]. Others who have studied the functional ability of community elderly have found that self-rating of ability for performance of daily activities within and outside the household may differ from the rating of their ability by family members. Furthermore, the accuracy of self-rating of performance and surrogate reporting of performance as compared to objective measures of performance varies with the activity. In general, self-reporting is more accurate than surrogate reporting as a measure of ability [6]. However, judgements as whether or not an activity, such as food shopping is often undertaken by the elderly individual is a value judgement which may be inaccurate.

Furthermore, in the cross cultural comparisons which are described in this report, intergroup differences in activity patterns and particularly of such variables as frequency of going shopping for food may be determined by household size, by differences of transportation and by availability or otherwise of refrigeration facilities. How elderly men and women spend their time outside the home will be influenced by whether or not they are employed in paid occupations or as volunteers. It may also differ by the extent to which elderly are caregivers for children or for homebound spouses or other household members.

16.2 INTERGROUP AND INTRAGROUP DIFFERENCES IN LIFESTYLE

16.2.1 Swedish Sample (Gothenburg)

Indications of an age-related slowing down process are reflected in the time of rising in the morning, reported by the men in the Swedish sample. While 28.8% of men between the ages of 70 and 79 years reported that they got up at 6 AM or earlier, only 19% of those over 80 reported that they got up at 6 AM or earlier. Also, none of the Swedish men under 80 reported that they got up after 9 AM, whereas 9.5% of those over 80 reported that they got up after 9 AM.

More of men the over 80 than those in the 70-79 age group reported their total hours of sleep as 8 hours. Similar shifts in the time of getting up and in hours of sleep can be seen for the women in the sample. The women who were over 80 in the Swedish sample also tended to go to bed earlier than those in the 70-79 age group. However, while there was a slight shift towards an earlier bedtime for the men over 80, this was less evident than the shift in the women's bedtime. Among the Swedish men, approximately one third of the 70-79 and of the over 80 group reported that they took a nap during the day. However, a greater proportion of the women over 80 reported that they took a nap (32.8%) versus those in the younger group in which 21.3% reported that they took naps.

Food shopping was performed by 91.55% of men and by 94.3% of women who were less than 80 years of age. For the respondents who were over 80, 78.9% of the men and 71.2% of the women bought food. Food shopping by paid help was reported by 15.8% of the men and by
21.2% of the women who were over 80. While the frequency of eating out varied, for men and women of both age groups, the highest per cent reported they ate out 1-2 times per month. A slightly higher per cent of the younger men and women than of the older group ate out at this frequency.

16.2.2 Australian sample (Adelaide)

The responses to the questionnaire administered to the Adelaide group provide detailed information on daily or frequent activities. Tabulation of these responses by gender and age allow identification of activities that differ by gender and also give evidence of the slowing down process with age.

For the elderly group, residing in Adelaide, the frequency of performing a number of common daily activities differed by gender in a traditionally western manner. Thus, a greater per cent of men than of women reported doing household repairs, going to sporting events, participating in certain leisure sports, such as golf and lawn bowls and participating in other physical exercise. On the other hand, common activities reported by a greater per cent of women than men included doing housework, attending the senior citizens' club, going to church or participating in other religious activities and doing knitting, sewing or craftwork. Other common daily activities were not differentially reported by gender, but showed age differences in participation. These included going out for drives or picnics, going out to a restaurant, non-grocery shopping and gardening.

For each of these activities, more of the younger rather than the older group reported daily participation. Since it is unlikely that such activities as going for drives or picnicking were daily events, it may be inferred that the respondents were reporting that they went or participated on a regular basis. Volunteer work was reported more frequently by the younger group of men and women as were part time jobs. However, with respect to part time jobs, such employment was only reported by 6.9% of the younger men and by 3.2% of the younger women. Only 2.2% of the older men and none of the older women reported that they had part time jobs. There was a further group of activities for which there was no gender nor age effect relative to reporting frequency. These included reading, listening to the radio and watching TV.

16.2.3 Greek sample (Melbourne)

As with Swedes, the Greek men and women in the Melbourne sample, who were older also tended to get up later than those in the younger group. Also, more of the over 80 group of men and women reported that they took a daily nap. For the Melbourne Greeks, there was a large spread in the total hours of sleep reported both for the men and for the women in both the younger and in the older age groups.

Food shopping was undertaken less by the over 80 group of men and women than by the younger group. Conversely, the older group reported more frequently than the younger group that
someone else did the food shopping. A person employed to do food shopping was more frequently reported by the older than by the younger group. Among the women over 80, 52.8% reported that their children did the food shopping. Eating with others, on a daily basis, was reported by 87.9% of the younger men, by 85.7% of the older men and 83.0 and 84% of the younger and the older women respectively. Eating alone was more frequently reported by the older group of men and women. The frequency of eating out was most likely to be reported as 1-2 times per month. When eating out, it was most likely that they ate in a friend’s home.

16.2.4 Greek sample (Spata)

Among the Greeks in the Spata sample, there was a wide spread in the bedtimes reported and also in the hours of sleep per night reported. There were no definite gender differences in these sleep pattern characteristics nor were there marked age group differences in these sleep parameters. On the other hand, the time of getting up tended to be later for the older group of men and women. As with the Melbourne Greeks, food acquisition for this Greek group was both from the garden and also from the store. Food shopping was reported by a higher per cent of men than women in both age groups such that 62.5% of the younger men and 47.4% of the older men went food shopping while 48.4% of the younger women and 31.8% of the older women went food shopping.

16.2.5 Chinese sample (Tianjin-urban)

In the Tianjin urban sample, a higher percent of the men over 80 (68.4%) reported sleeping for more than 8 hours per day than did the men who were between 70 and 79 years of age (26.2%). However, these differences need to be examined with caution since there were only 19 men in the older group. Approximately a third of the men under 80 reported that they were very active. The proportion of the men reporting that they were very active declined with age and the per cent of women reporting that they were physically active was lower than the men. The per cent reporting that they were inactive was higher in the women than in the men.

The physical exercise most commonly reported was strolling outdoors, more by men than by women, but there was little decline in this activity with age. When compared to the Beijing sample, a lower per cent of the men reported riding a bicycle as their usual means of transportation. Food shopping as a frequent pursuit was more commonly reported by the men than by the women and within gender groups was more frequently reported by the groups who were less than 80 years of age.

It is difficult to make direct comparison of the common activities of the Tianjin sample with the Adelaide sample for which the greater detail is provided and for which all activities are reported on a daily rather than a weekly frequency. However, it is possible to discern certain similarities and differences. As for the Adelaide group, the women rather than the men reported sewing, whereas the men were more likely to report frequent physical exercise. Reading was much less
frequently reported for both sexes in this sample and for both age groups. A greater proportion of the younger men spent time reading. Time spent in listening to the radio or watching TV, reported by the Tianjin urban group showed a downward trend in the over 80 than in the 70-79 age group, both for the men and for the women. It is also of interest, with respect to the decline in such passive occupations as radio listening and TV watching, that a higher per cent of the over 80 men and women reported that they had lost interest in doing things they usually enjoyed than those in the younger group. Weekly visits from friends were reported by approximately a third of the younger men and by a slightly lower percent of the older men and the women of both age groups.

16.3 ALCOHOL CONSUMPTION: GENDER, AGE AND CULTURAL DIFFERENCES IN FREQUENCY AND LEVEL OF USE

16.3.1 Introduction

A number of previous studies of alcohol consumption by the elderly have focused on either the diet and health behaviours of heavy drinkers or have been concerned with relationships between alcohol abuse and the risk of malnutrition [7,8]. Other studies have examined the patho-physiological and metabolic effects of alcohol, particularly relative to its hypertensive and diabetogenic effects [9,10].

Investigators with public health concerns have tried to identify relationships between alcohol use and risk of falls and other accidents in the elderly. Important findings which may have importance relative to chronic disease and disability in later life include the findings that heavier drinkers are less aware of connections between diet and health and that they are very unlikely to make dietary changes to promote good health. A strong association has also been found between drinking and smoking and between heavier drinking and higher incidence of smoking-related diseases in older men and women [11].

16.3.2 Swedish sample (Gothenburg)

Consumption of alcoholic beverages was reported very commonly by the respondents in this sample. Within the sample, consumption was more commonly reported by men than by women and within gender groups was more frequently reported by those under the age of 80.

16.3.3 Greek sample (Spata)

In Spata, Greece, the overall reporting of alcohol consumption was lower than in the Swedish sample. However as in Sweden, men were more likely to report drinking alcohol than women. Within gender groups, the younger men were more likely to drink, but among the women, the older group, that is those over 80 years of age were more likely to report drinking.
16.3.4 Greek sample (Melbourne)

For Greek men in Melbourne, the reporting of alcohol beverage consumption showed a slightly lower prevalence than among the Greek men in Spata, Greece. On the other hand, the Greek women in Melbourne were more likely to report drinking than the Spata women.

16.3.5 Chinese sample (Tianjin urban)

For the Tianjin, China sample, alcohol consumption was very largely confined to men. Even among the men, the number who reported drinking (12.8% of the men 70-79 years of age) was much lower than that of the Swedes and lower than that of the Greeks living in Melbourne and Spata. Among the Tianjin men, it was the younger ones who were more likely to report drinking. Only 6.9% of the older men reported drinking alcohol. Most of the older and younger men who reported drinking alcohol drank liquor (spirit). Among the women, only 2% of the older women drank and they reported drinking wine.

16.3.6 Discussion

The finding that alcohol consumption was more common in men than in women was similar to the findings of other older population samples. For example, in a longitudinal study of elderly men and women, living in Perugia, Italy, Fidanza et al. [12] found that alcoholic beverages were consumed more by elderly men than by elderly women and that among alcohol consumers, alcohol intake was higher in men. In the same study, it was found that there was a slight decline in alcohol consumption in men and in women with increasing age.

Relationships between alcohol consumption and dietary pattern has been studied in older moderate drinkers in Hawaii. While in this study, the drinkers were found to have higher cholesterol intakes than the abstainers, in the cross cultural studies described here, this relationship between moderate alcohol intake and cholesterol intake has not presently been identified. This may be explained by confounding variables or by the possibility that it does not exist in these more aged groups of men and women. Other studies of the community elderly have shown that high intake of alcohol is associated with more evidence of protein energy malnutrition [13]. Protein energy malnutrition has not been found in the groups of elderly studied. This may be explained by the fact that alcohol abuse was not identified as a problem in the study populations.

16.4 SMOKING: INTRA AND INTERGROUP DIFFERENCES IN CURRENT AND PAST SMOKING HABITS

16.4.1 Introduction

Concern about the smoking habits of the elderly is not only related to effects of smoking on their
health and the health of others, but also relates to our examination of variables which affect change versus retention of old habits in later life.

International comparisons of changes in smoking prevalence in industrialised countries, including Sweden and Australia, have shown that since 1974, there has been a sex-dependent decrease in smoking. However, in Australia, the decline in smoking did not begin until 1983. In the report by Pierce [14], which documents the changes in smoking in industrialised countries, evidence was presented that shows the decline in smoking is strongly related to higher education. In the countries studied, a twofold difference was found in smoking prevalence between groups with the highest and the lowest educational level. Lack of decline in smoking prevalence in Australia until 1983 is attributed to the lack of a clear government focus on smoking as a determinant of chronic disease.

Descriptive data is provided here on the smoking habits of the elderly in the groups studied. However, by disaggregating the data for these elderly groups by gender and age, we gain insights into the differences that exist between countries and within countries in the past and current smoking histories of elderly men and women. Furthermore, in future research, comparisons of smoking history between countries will allow insight into the temporal relationship between the initiation of public anti-smoking messages and smoking cessation.

16.4.2 Swedish group (Gothenburg)

Current, regular smoking was reported by more men than women in the Swedish sample. Among the men, who currently smoked regularly, the per cent who smoked was slightly higher among those over 80 years of age than among those who were less than this age. However, among the women who smoked regularly, the per cent reporting this habit was much higher in the group who were less than 80 years of age (23.8% than in those over 80 years of age). The per cent who reported having stopped smoking was greater among the older than among the younger men, while among the women, more of the younger group reported having stopped smoking. Overall, more of the men than the women had been smokers and this gender difference in smoking history was greater for the older than for the younger groups.

There were interesting differences in the duration of smoking between the men and the women such that more of the men than the women reported having smoked for more than 2 decades. Among the men, more of the older age group had quit smoking. However, among the women, it was more frequently reported by the younger group that they had smoked in the past but had now stopped. It is further to be noted that there were many more women than men who had never smoked and this non-smoking group formed the largest group among the older women.

16.4.3 Greek group (Spata)

It appears, with respect to past and present smoking habits, that smoking is more a habit of men
rather than women. Very few of the women reported currently smoking. Among the men, both in younger and older groups, a lower percentage of Spatan Greeks reported currently smoking than did the Swedes. However, a high percentage of the Spatan men had smoked in the past. Smoking cessation was reported by 43.8% of men between 70 and 79 years of age and by 47.4% of men over 80. None of the women reported that they had stopped smoking.


16.4.4 Greek group (Melbourne)

The gender difference in smoking that characterised the Spatan Greeks was also found in the Greeks in Melbourne. Indeed, there were strong similarities between the smoking histories of these two Greek samples. In this sample, 54.6% of men in the 70-79 years age group reported that they had stopped smoking compared with 50% of the older age group.

16.4.5 Chinese group (Tianjin)

In the Tianjin sample, current smoking was rather common in both the younger men and in the
younger women, with more men than women being current smokers. Heavy smoking (more than 1 pack per day), was uncommon for both sexes. There was no cessation of smoking reported by the men over 80 and it was reported infrequently by the men between 70 and 79 years of age. In this group, about 10% reported that they had stopped smoking, all within the past 10 years. Among the women over 80, 15.3% reported they had stopped smoking within the past 10 years and among the women between the ages of 70 and 79 years, 2.6% reported that they had stopped smoking.

16.4.6 Discussion and recommendations for future research

When examining the data on the smoking habits of the elderly respondents in the different study groups, characteristics of the smokers emerge. In all groups studied, the smokers are more likely to be the younger men. Also, there are more smokers in the study groups in which the respondents are predominantly blue-collar workers. For example, in the Beijing study, a higher percentage of men who were smokers were residents of the working class neighbourhood. Conversely, in the study groups in which the educational level was higher, such as the Gothenburg group and Community 2 in the Beijing study, less of the respondents smoked.

This distribution of smoking by social class is discussed in the Margaret Whitehead's Health Divide [15]. In this report on health inequalities in the UK, she comments that class trends from mortality from lung cancer and heart disease show a similar distribution to that of smoking. While she does not attempt to explain the different smoking behaviours of different social classes and their health outcomes, she does suggest that more generally a high prevalence of negative health behaviours of lower socio-economic groups arise from two major causes. Firstly, those in the lower social group may have less concern about protecting their health for the future. Secondly, a greater unsafeness of the environment is accepted by those in the lower social group who consume or use unsafe products.

In a US study of predictors of smoking cessation and relapse in older adults, it was found that cessation was closely linked to diagnosis of coronary heart disease, stroke and cancer. However, it was also shown that the oldest were more likely to quit smoking and that relapse rate was less, in people who were 65 years of age or older when they quit. Smoking cessation was also found to be associated with the past smoking of fewer cigarettes, and fewer years of smoking [16].

Data was obtained from counties in East Boston, New Haven, Iowa and Washington for Epidemiological Studies of the Elderly (EPESE) populations. Study participants were interviewed by trained interviewers. The interviews were either face-to-face or were conducted over the telephone. Among eligible community residents 80-84% completed initial interviews and the annual follow-up rate in these communities were greater than 94%. Annual smoking cessation and relapse rates were 10% and less than 1% respectively. Interval diagnosis of myocardial infarction, stroke and cancer increased subsequent to smoking cessation. The prevalence of smoking declined from 15% at baseline to 12% and 9% at certain time intervals.
After 3 years, 28% of 1259 baseline smokers had quit. After 6 years, the cessation rate had increased to 46%.

Eighty-seven per cent of the 3-year quitters remained as non-smokers at the final follow-up. Smoking cessation was positively associated with older age, never having married, smoking fewer cigarettes per day, fewer years of smoking, no history of myocardial infarcts, stroke or cancer or intermittent claudication. In this study, the per cent quitting smoking did not vary by gender. However, there were some regional differences. Among former smokers, the relapse rate was 3%.

We have concern, that in the Beijing and the Tianjin study, data on smoking status by age group indicated that in respondents who were less than 80 years of age, there were few non-smokers. This was true for both men and women in the Beijing study and for men in the Tianjin study. Relatively recent initiation of smoking has previously been linked to lung cancer in older Hispanics in the US [17]. The possibility has been debated that higher lung cancer risk in older Hispanic smokers in the US could be influenced by their adoption of the US diet. Cause of death should be examined in a follow-up of the IUNS study, particularly in relation to smoking and dietary patterns.

In a study of 2092 adults, conducted in St Louis and Kansas City, MO, 76.7% reported knowing that smoking was associated with lung cancer, 74.1% reported they knew of an association with emphysema and 67.2% reported knowing of an association with heart disease. Knowledge of the adverse health effects of smoking was less common among the older group of respondents, among women, among those of lower education, among current smokers and among Afro-Americans [18]. Future research for the IUNS study should include examination of relationships between access to smoking prevention programs, knowledge of health effects and smoking cessation in older adults of differing ethnicities, cultures and socio-economic status in different countries. Such a study should also include data collection on tobacco promotion programs at the research sites.

### 16.5 ADDITIONAL INFORMATION

#### 16.5.1 Aboriginal Australians (Antigone Kouris-Blazos)

**16.5.1.1 Alcohol use**

Elderly Aborigines at Junjuwa rarely consumed alcohol (except for three elderly persons who were known by the local nurse as being heavy consumers). In contrast to the elderly, many younger adults tended towards overindulgence.

**16.5.1.2 Smoking habits**
Information not obtained. However, no elderly were seen smoking.

16.5.1.3  Sleep

The elderly at Junjuwa go to bed at dusk and rise at dawn - which is what they traditionally did out in the bush. The difference being, however, that now they no longer hunt or gather food but rather prefer to spend most of their day sleeping or resting with midmorning and afternoon naps being commonplace.

16.5.1.4  Exercise

About 30% of the elderly Aborigines had difficulty walking - in most cases requiring an aid such as a cane. The mobile elderly would walk 1-2 times/week to the river, roadhouse, supermarket and store. Overall, they followed a relatively sedentary lifestyle.
16.6 SUMMARY

- The time of rising for the majority of SWE elderly was between 7-8 AM; about 30% took a daily nap.

- GRK-S tended to go to bed later (75% after 10 PM) than GRK-M (60% after 10 PM). GRK-S tended to rise from bed earlier (55% at 6 PM) than GRK-M (35% at 6 PM). GRK-S tended to sleep less hours (80% < 7 hours) per night than GRK-M (60% < 7 hours). About 90% of GRK-S reported to take a daily nap compared to about 40% GRK-M. Men were more likely to nap than the women.

- SWE, GRK, CTJ-U elderly aged 80+ tended to go to bed earlier, to rise later, to sleep more hours at night and to take daily naps than the younger subjects.

- The exercise score could only be computed for the Caucasian elderly and the Japanese. The least active were the GRK elderly (especially women, only 10% defined as very active); except 40% of GRK-S men were defined as very active due to farming activities. ACA and SWE elderly were the most active with 40% defined as very active. The JPN elderly were moderately active.

- In the Chinese samples, about 30% of the elderly reported they were 'very active', especially the men. The most commonly reported exercise was walking and riding a bicycle.

- Consumption of alcoholic beverages was reported most frequently by SWE, followed by GRK-S, GRK-M and least frequently by CTJ-U. In all centres, a greater proportion of younger men reported drinking alcohol compared to the women and 80+ men.

- Current regular smoking was reported more frequently by CTJ and CBJ, followed by SWE and lastly by GRK-S and GRK-M. The majority of the Chinese women reported to smoke compared with less than 5% of the Greek women. In all groups, smokers were more likely to be the younger men. Heavy smoking of more than one pack a day was uncommon in all study centres.
16.7 REFERENCES


16.8 ILLUSTRATIONS

Photo 16.1 Spata, Greece (1988): a fit man in his late 70's did a lot of farming, and smoked.
CHAPTER 16

LIFESTYLE

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