Measuring Self-Reported Population Health: An International Perspective based on EQ-5D

Edited by Agota Szende and Alan Williams

EQ-5D

An Instrument to value Health from the
EuroQol Group

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On behalf of:
The EuroQol Group's International Task Force
on Self-Reported Health

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EuroQol Group

- The EuroQol Group is a network of international multi-disciplinary researchers devoted to the measurement of health-related quality of life. The EuroQol Group originally consisted of researchers from Europe, but nowadays includes members from North America, Asia, Africa, Australia, and New Zealand. The Group is responsible for the development of EQ-5D, a preference based measure of health-related quality of life.

- EQ-5D consists of the EQ-5D descriptive system that measures health-related quality of life on five dimensions (mobility, self-care, usual activities, pain/discomfort, and anxiety/depression) and the EQ VAS – a 20 cm vertical visual analogue scale that generates a self-rating of health-related quality of life. EQ-5D is widely used in clinical trials, observational studies, and other health surveys.

- The EuroQol Group has 2 primary research interests. One focuses on empirical work using EQ-5D, and the other focuses on methodological work to develop EQ-5D.

- The EuroQol Group is a "living" organization that, through its members, continuously conducts research using EQ-5D. Research areas include valuation and population studies, experimenting with the EQ-5D descriptive system, computerized applications, interpretation of EQ-5D ratings, and social inequalities in health status measurement.

- The EuroQol Group's website (www.euroqol.org) contains detailed information about EQ-5D, guidance for users, language versions, references, and contact details.

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Introduction

Rosalind Rabin, Frank de Charro, Agota Szende

Purpose of this booklet

During the 15 years since EQ-5D was first developed, a substantial amount of research has been carried out worldwide using the instrument. Among these studies were surveys conducted in various countries that measured the health-related quality of life of the general population. These studies have been informative in providing new data on population health characteristics, complementing the traditionally collected morbidity and mortality data.

The EuroQol Group is frequently asked to provide EQ-5D population reference data (sometimes called population norms) for a specific country or international region. Such data can be used to compare profiles for patients with specific conditions with data for the average person in the general population in a similar age and/or gender group.

In response to the increasing need for EQ-5D population reference data, the EuroQol Group established the Self-Reported Health Task Force Group whose objectives were as follows:
• Updating the international EQ-5D general population database archive.
• Providing easy-to-use tables with population normative data for individual countries.
• Illustrating the potential use of EQ-5D data in population health studies.
• Providing a recommended format to present and analyse EQ-5D data collected from future surveys.

This booklet summarises this work and presents the population norms for 15 countries, as well as results of some additional analyses of population health based on EQ-5D. The target audiences for this booklet are researchers using EQ-5D to collect data from patients or members of the general population and policy-makers using the collected information in health care decision-making. Readers wishing to learn more are encouraged to contact the EuroQol Business Management (userinformationservice@euroqol.org).

EQ-5D

EQ-5D is a standardized health-related quality of life questionnaire developed by the EuroQol Group in order to provide a simple, generic measure of health for clinical and economic appraisal (EuroQol Group, 1990). Applicable to a wide range of health conditions and treatments, it provides a simple descriptive profile and a single index value for health status that can be used in the clinical and economic evaluation of health care as well as in population health surveys (Figure 1).

EQ-5D is designed for self-completion by respondents and is ideally suited for use in postal surveys, in clinics, and in face-to-face interviews. It is cognitively undemanding, taking only a few minutes to complete. Instructions to respondents are included in the questionnaire.

EQ-5D essentially consists of 2 pages – the EQ-5D descriptive system (page 2) and the EQ VAS (page 3). The EQ-5D descriptive system comprises 5 dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression. Each dimension has 3 levels: no problems, some problems, severe problems. The respondent is asked to indicate his/her health state by ticking (or placing a cross) in the box against the most appropriate statement in each of the 5 dimensions. This decision results in a 1-digit number expressing the level selected for that dimension. The digits for 5 dimensions can be combined in a 5-digit number describing the respondent's health state. It should be noted that the numerals 1-3 have no arithmetic properties and should not be used as a cardinal

score. This current 3-level, 5-dimensional format of EQ-5D will remain unchanged for the immediate future.

The EQ VAS records the respondent's self-rated health on a vertical, 20 cm visual analogue scale where the endpoints are labelled 'Best imaginable health state' and 'Worst imaginable health state'. This information can be used as a quantitative measure of health outcome as judged by the individual respondents.

International EQ-5D archive of population surveys

The international EQ-5D database archive consists of EQ-5D population surveys collected in 15 countries. The database is structured in a standardized format to facilitate comparative research. The database currently includes observations on more than 29,000 individuals. Countries with 1 or more population surveys include: Armenia, Belgium, Canada, Finland, Germany, Greece, Hungary, Japan, The Netherlands, New Zealand, Slovenia, Spain, Sweden, United Kingdom and Zimbabwe. For a more detailed account of the data, see Annex 1.

All of the surveys used a standardized version of EQ-5D. The Dutch, Swedish and Finnish versions were translated in 1987 according to a 'simultaneous' process while the remaining versions were translated according to the EuroQol Group's translation protocol – based on international guidelines. However, some differences between sampling and data collection methods should be noted. Most importantly, some surveys covered the whole of the country, others only a specific part (such as prefectures, regions or even city areas). Therefore, care should be exercised in generalizing data outside the geographic location captured by the data collection. Surveys also differed in sample sizes and in the method of data collection. Some of the surveys were postal while others were performed as face-to-face interviews. Since the questions asked in EQ-5D are very simple to answer, there is no reason to believe that there would be a significant impact on results other than differences in response rates.

Figure 1: EQ-5D

By placing a tick in one box in each group below, please indicate which statements best describe your own health state today.

Mobility
I have no problems in walking about ❏
I have some problems in walking about ❏
I am confined to bed ❏

Self-Care
I have no problems with self-care ❏
I have some problems washing or dressing myself ❏
I am unable to wash or dress myself ❏

Usual Activities (e.g. work, study, housework, family or leisure activities)
I have no problems with performing my usual activities ❏
I have some problems with performing my usual activities ❏
I am unable to perform my usual activities ❏

Pain/Discomfort
I have no pain or discomfort ❏
I have moderate pain or discomfort ❏
I have extreme pain or discomfort ❏

Anxiety/Depression
I am not anxious or depressed ❏
I am moderately anxious or depressed ❏
I am extremely anxious or depressed ❏

To help people say how good or bad a health state is, we have drawn a scale (rather like a thermometer) on which the best state you can imagine is marked 100 and the worst state you can imagine is marked 0.

We would like you to indicate on this scale how good or bad your own health is today, in your opinion. Please do this by drawing a line from the box below to whichever point on the scale indicates how good or bad your health state is today.

Your own health state today

Best
imaginable
health state

100

9 0

8 0

7 0

6 0

5 0

4 0

3 0

2 0

1 0

0

Worst
imaginable
health state
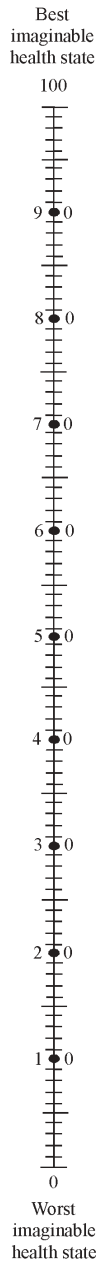
Analyses of EQ-5D data presented in this booklet focused on 3 main characteristics of the population: age, gender, and education level. Age in most surveys was measured as a continuous variable (life years), while gender was recorded as a categorical variable. Education level in each country was described on a 3-level scale, distinguishing low, medium, and high education level.

The structure of the booklet

The remaining part of this booklet presents results from 4 main analyses of the international EQ-5D database.

Chapter 2 presents population norms using EQ-5D for the 15 countries. EQ-5D norms are reported for EQ VAS scores, and for reported problems on each of the 5 dimensions of the EQ-5D descriptive system, all classified by age and gender. These EQ-5D norms can be used as reference data to compare profiles for patients with specific conditions and to assess the burden of disease. The chapter also demonstrates that cross-country differences exist in EQ-5D results after the population data is standardized for demographic differences.

Chapter 3 attempts to explain these cross-country differences by looking at macro data on the economic and health system characteristics of the 15 countries. Results show that it is the prior living standards of a country that mostly explain cross-country differences in self-reported health.

Chapter 4 specifically addresses the relationship between attained education level and self-reported health. After controlling for age and gender characteristics, the analysis shows that people with low education are generally speaking more likely to report more problems in all the 5 dimensions of health-related quality of life, although this impact on the anxiety/depression dimension is smaller in most countries.

Chapter 5 illustrates how EQ-5D can help to identify health inequalities at the level of individual health-related quality of life dimensions. The analysis indicates that in the majority of countries pain/discomfort explains the largest part of overall inequalities in self-assessed health. This finding highlights the importance of pain management programmes in tackling health inequalities.

A fuller account of this work was presented at the EuroQol Group's 20th annual meeting in Bled, Slovenia in 2003 and can be accessed via the EuroQol Group's website. Researchers planning to conduct new population surveys using EQ-5D should contact the EuroQol Business Management (userinformationservice@euroqol.org).

Population norms and their uses

Mark Oppe, Frank de Charro

Introduction

The EuroQol Group is frequently asked to provide EQ-5D population reference data (sometimes called normative data) for a specific country or international region. Such data can be used as reference data to compare profiles for patients with specific conditions with data for the average person in the general population in a similar age and/or gender group. This comparison helps to identify the burden of disease in a particular patient population.

The data used to prepare the population norm tables were mainly elicited from data gathered as part of the European Union funded EQ-net project and managed by the EuroQol Group Business Management in Rotterdam (Sintonen et al, 2003; Weijnen et al, 2003). Additional EQ-5D data from other countries have been added. Not all data used for each country is representative of that country. Some studies have been conducted in specific geographic regions or other subgroups of the population as a whole. The population norms tables are presented in Annex 2.

Description of the tables

The tables can be used as reference data to compare profiles for patients with specific conditions with data for the average person in the general population in a similar age and/or gender group. The tables contain information on the size of the study, EQ VAS ratings and proportion of reported problems on each of the EQ-5D dimensions.

Seven age groups were used to present the data: 18-29 yrs; 30-39 yrs; 40-49 yrs; 50-59 yrs; 60-69 yrs; 70-79 yrs; 80+ yrs. Data are presented separately for males and females and for both genders grouped together.

- *Study size*

The first part of each table contains information on the size of the sample on which the table was based, by age and gender.

- *EQ VAS data*

EQ-5D self-reported VAS data (EQ VAS) generates information on the self-perceived overall health-related quality of life of the general population. Presented in the tables are the mean and standard deviation of the EQ VAS ratings as well as the median and the 25th and 75th percentile ratings.

- *Data on the 5 dimensions*

The tables can also be used if the objective is to compare the responses on a specific EQ-5D dimension or the health profile based on all 5 EQ-5D dimensions. The tables contain information on the proportion of the population reporting level 1 (no problems), level 2 (some problems) and level 3 (extreme problems) per dimension, by age group and gender.

Using the population norms tables

Because the population norms data are presented by age and gender, there is no need for the sample to have the same age distribution as the general population. Therefore the data that are presented in the tables have not been weighted for age or gender. This means that international comparisons across several age groups should be made with caution. It should be borne in mind that the demographic build-up by age and gender varies between countries, and that the samples of the general population used to create the tables do not necessarily

follow that same distribution. However, international comparisons of data contained in a single cell (i.e. 1 age and gender group) are valid using non-weighted data.

EQ VAS

Using the mean in combination with the standard deviation enables comparisons to be made using fairly straightforward statistical techniques. Individual responses on the EQ VAS can be compared with the mean EQ VAS rating from a table using z scores. The z score is the difference between the individual score and the population mean, expressed in units of standard deviation of the population score. The z score can be obtained using the following equation:

$$z = \frac{X - \mu}{\sigma}$$

X = the individual response
μ = the population mean
σ = the population standard deviation

If normally distributed, approximately 95% of a group's scores will fall between plus and minus 2 standard deviations from the mean. A z score of $\pm$ 2 is therefore considered to be an extremely high or low score (Kind et al, 1999).

Example:
Is an EQ VAS rating of 76 that is reported by a 35-year-old male from the Netherlands high or low compared to other men his age in the Netherlands? The mean and standard deviation for Dutch men aged 30-39 are 81 and 15 respectively and so:

$$z = \frac{76 - 81}{15} = -0.33$$

His score is therefore 0.33 standard deviations below the mean score for Dutch men his age.

Using *z* scores assumes that the ratings are normally distributed. However, this is not always the case. The median EQ VAS ratings (with the 25th and 75th percentiles) have been included in the tables to facilitate comparisons of data that are not normally distributed. This will require more complicated statistical techniques.

A two-tailed t-test can be used for testing whether a group mean and the population mean are significantly different, but this also requires a normal distribution of the data.

The mean EQ VAS data from the 15 countries was pooled and are presented in figure 2. As can be seen, the mean EQ VAS ratings decrease with increasing age. Also, men of all age groups reported higher EQ VAS ratings than women. This difference between men and women was larger for old people than for young people.

Figure 2: Mean population EQ VAS ratings
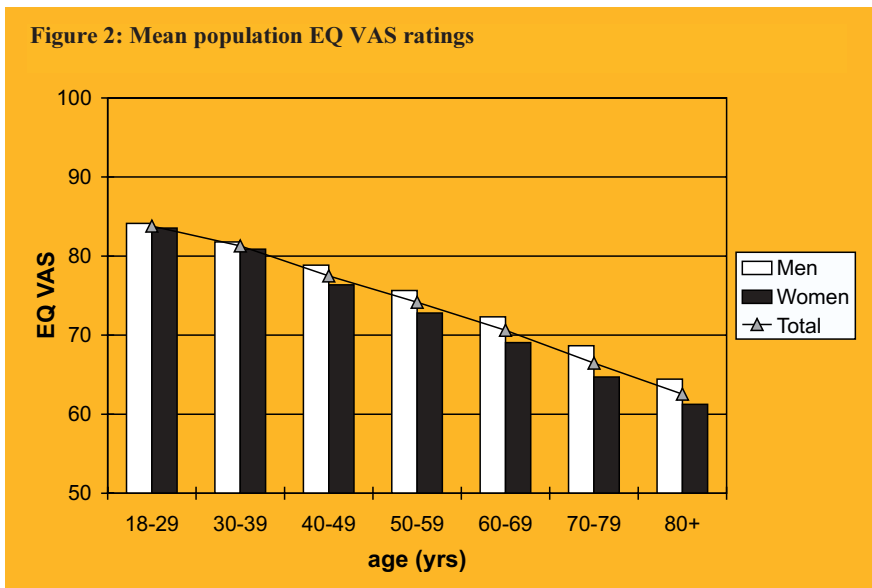
Figure 2 shows the mean EQ VAS ratings reported by men, women and both for 7 distinct age groups. The mean EQ VAS ratings are seen to decrease with increasing age. Also, men of all age groups reported higher EQ VAS ratings than women.

EQ-5D dimensions

As the data on the 5 EQ-5D dimensions is not continuous but ordinal, the information is presented as the proportions of the population reporting level 1 (no problems), level 2 (some problems) and level 3 (extreme problems) per dimension, by age group and gender. Because the number of people reporting severe problems is usually very small in general population surveys, the sum of the proportions of reported level 2 and level 3 problems is sometimes used. This essentially changes the 3-level EQ-5D dimensions into 2-level dimensions, with categories 'no problems' and 'problems'.
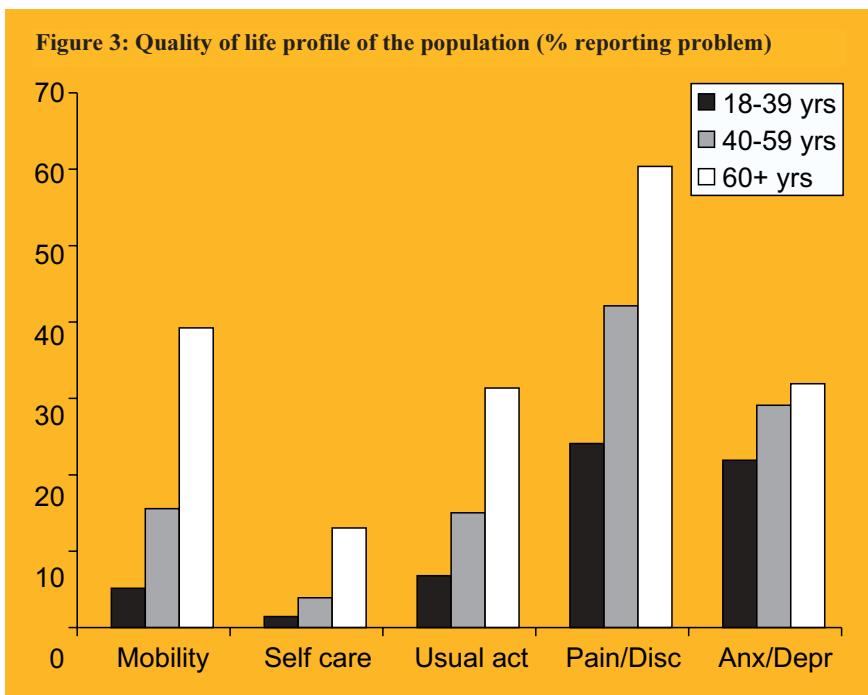
Figure 3: Quality of life profile of the population (% reporting problem)

Figure 3 shows the sum of the proportion of reported level 2 and level 3 problems for each of the 5 EQ-5D dimensions for 3 distinct age groups. Older people reported more problems with all dimensions but the effect of age was strongest for mobility and weakest for anxiety/depression

Figure 3 shows the sum of the proportion of reported level 2 and level 3 problems for each of the 5 EQ-5D dimensions for 3 distinct age groups. As can be seen from the figure, the proportion of problems increased with age on all dimensions. Problems with mobility increased the most with increasing age, whereas problems with anxiety / depression the least. For every age group the proportion of problems with pain was higher than the proportion of problems on the other dimensions.

Cross-country comparison of self-assessed population health

Finally, this chapter illustrates how EQ-5D data can be used in a cross-country comparison of self-reported health. When aggregate measures of self-assessed health are to be compared between countries, it is necessary to adjust for potential differences in age and gender. Table 1 presents mean EQ-5D data for 15 countries where demographic characteristics were standardized based on a European population structure (Eurostat, 1997). Note that the data presented in table 1 do not represent the actual situation in each country, but are based on the European age distribution. Because the age structure superimposed on the dataset was the same for each country, comparisons between countries can be made.

As can be seen in table 1, Armenia reported the lowest EQ VAS ratings, followed by Hungary, while Sweden and the United Kingdom reported the highest EQ VAS ratings. The highest proportion of problems on the 5 EQ-5D dimensions was reported by Armenia, followed by Slovenia. Note that while Hungary reported a lower mean EQ VAS than Slovenia, more problems were reported in Slovenia on the 5 EQ-5D dimensions. The same result was found at the other end of the spectrum. Japan reported the lowest proportion of problems but average EQ VAS ratings, while Sweden reported the highest EQ VAS ratings and average proportions of problems. These results indicate that countries also differed in how they answered the more general EQ VAS question relative to how they answered the more specific questions on the EQ-5D dimensions.

Table 1: Mean EQ-5D results in 15 (standardized for demographic differences between countries)

	EQ VAS	Mobility	Self Care	Usual Activity	Pain / Discomfort	Anxiety / Depression
Armenia	66.61	0.26	0.13	0.28	0.64	0.52
Belgium	80.96	0.13	0.03	0.15	0.42	0.21
Canada	80.35	0.16	0.02	0.14	0.38	0.30
Finland	79.42	0.20	0.05	0.18	0.39	0.14
Germany	82.22	0.18	0.03	0.13	0.37	0.18
Greece	77.78	0.15	0.07	0.12	0.19	0.11
Hungary	71.86	0.18	0.06	0.14	0.38	0.34
Japan	77.71	0.07	0.02	0.05	0.19	0.08
Netherlands	81.36	0.04	0.03	0.15	0.31	0.17
New Zealand	81.35	0.17	0.04	0.18	0.37	0.20
Slovenia	75.84	0.31	0.14	0.34	0.48	0.37
Spain	76.47	0.12	0.02	0.10	0.28	0.16
Sweden	83.49	0.10	0.02	0.08	0.42	0.30
UK	83.44	0.16	0.04	0.15	0.31	0.20
Zimbabwe	76.14	0.20	0.07	0.18	0.41	0.40

The table gives an overview of the mean EQ VAS ratings and the proportions of reported problems on each of the 5 EQ-5D dimensions. Data have been aggregated after age standardization based on a European population structure, in order to make the results between the 15 countries comparable.

Can we explain inter-country differences in levels of health?

Irina Cleemput

Introduction

The rate of self-reported problems on the 5 dimensions of EQ-5D is highly variable between countries. This was seen in EQ-5D data from 15 different countries. In this study, we examine whether there is a pattern in the prevalence of problems reported in the different countries and whether these patterns can be explained by differences in living standards and health care system performance. Also differences in the EQ VAS ratings between countries are explored. In addition, we examine whether macro-economic variables are correlated with the prevalence of problems, and with EQ VAS ratings in different age groups across countries.

Methods

EQ-5D descriptive system and EQ VAS data from 15 different countries were used. Living standards were estimated by means of GDP per capita and unemployment rate. Indicators for health care system performance were health expenditure per capita and health expenditure as a % of GDP, number of hospital beds per 1,000 people and number of physicians per 1,000 people. The indicators were selected on the basis of a presumed or possible relationship with self-reported health. Data were obtained from the World Health Organization Statistical Information System (www.who.int) and the World Bank (www.worldbank.org).

GDP per capita was used as an indicator of each country's wealth. It was assumed that poorer populations would have more health problems than richer populations. The relationship between self-reported health and health expenditure per capita and total health expenditure is a priori unclear because it depends on the causal relationship, e.g. higher health care expenditure might be a consequence of the fact that people are more ill or, on the contrary, the more health care is provided, the healthier the people will be and the less problems they report.

Country-level prevalences of problems on each dimension of EQ-5D were corrected for age using a European reference population (Eurostat, 1997). Adjustment for differences in age distributions was performed to avoid bias in the results due to the fact that some populations have a relatively high proportion of elderly people. Age adjustment was performed by weighting the prevalence of self-reported problems in each age category by the proportion of people in that age category of the standard population.

For the analysis of the age-group-level prevalence of reported problems on the EQ-5D descriptive system and the EQ VAS, larger intervals were used in order to increase sample size for each analysis. Age groups were defined at 10-year intervals, with the exception of the first age category: 18-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80+.

Countries were ranked based on mean self-assessed health results, and their living standards and health care system performance characteristics. For all correlation analyses, non-parametric Spearman rank correlations were calculated. A high rank correlation means that the ranking of countries on 1 variable (e.g. prevalence of self-reported health problems) is similar to the ranking of another variable (e.g. GDP per capita). Multivariate analysis was not appropriate given the small number of countries and the problem of multiple testing. Parametric correlations were not appropriate given the small number of observations (15 countries) and the skewed nature of the data.

Results and discussion

A negative correlation was observed between self-reported health problems on each EQ-5D dimension and GDP per capita. The correlations between GDP per capita and problems on the pain/discomfort and anxiety/depression dimensions did not, however, reach statistical significance. Countries with higher GDP per capita reported significantly fewer problems with mobility and self-care. Also the correlation with the EQ VAS rating was highly significant ($p<0.05$). Populations with a higher GDP per capita had higher mean EQ VAS ratings.

Figure 4: Living standards and self-reported health in 15 countries
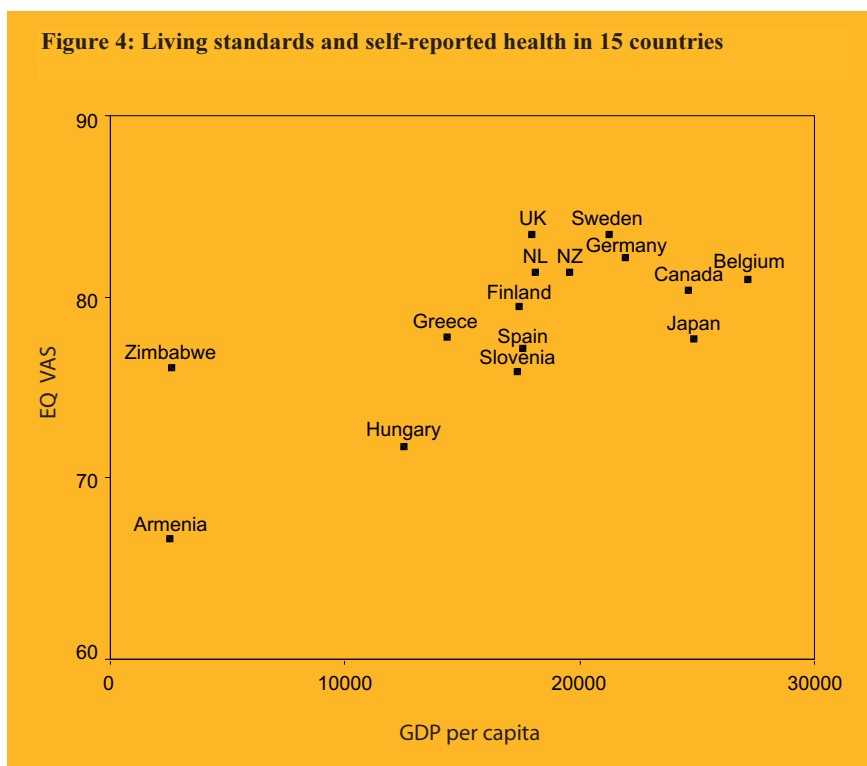
This figure shows the positive correlation between GDP per capita and EQ VAS. Given the problems with fully standardizing the EQ VAS rating for Zimbabwe for age, Zimbabwe was considered to be an outlier.

The positive relationship between living standards and self-reported health is graphically presented in Figure 4. Zimbabwe was an outlier, with a relatively small GDP per capita but mediocre mean EQ VAS score. None of the Zimbabwean respondents was 80 years of age or older, however, which may have influenced the results. The mean EQ VAS for Zimbabwe could not be fully standardized due to the absence of respondents who were 80 years or older. As this age group usually reports lower EQ VAS ratings the mean EQ VAS for Zimbabwe was probably overestimated relative to the EQ VAS ratings of other countries.

Regarding different age groups, it was observed that most significant correlations between self-reported health problems and living standards were observed in the 50-59 age group. An overview of all correlation coefficients is given in Table 2.

In general, GDP per capita correlated well with problems on mobility and self-care in almost all age groups. Correlations with problems with usual activities were mainly significant for the older age groups. Also health expenditure per capita correlated significantly with prevalence of mobility, self-care and usual activity problems. The correlations were negative, which indicates that higher levels of wealth and higher levels of health expenditure per capita are associated with fewer self-reported problems on these EQ-5D dimensions. The results on the EQ VAS indicated a similar relationship. Except for the 18-29 and 40-49 age groups, the correlations between the GDP per capita and the EQ VAS and between the health expenditure per capita and the EQ VAS were all significant at a level of 10%. The strongest correlation was seen in the 50+ age groups. A final observation is that unemployment rate correlated significantly with problems on mobility in all age groups. Interestingly, the EQ VAS ratings only correlated with unemployment rates in the 2 oldest age groups.

Significant correlations between self-reported problems and macro-economic variables were not always reflected in the correlations between the EQ VAS and these variables in different age groups.

This suggests that self-reported health according to the EQ VAS is determined by other factors besides the 5 dimensions of EQ-5D. Cross-cultural differences may also explain part of the observations. Some populations may be more reluctant to give positive answers to the questions in a survey than others. These aspects are not taken into account in this study, but are worth examining in future research. In conclusion, the analysis highlighted the important role of a country's living standards in determining the overall self-reported health of its general population.

Table 2: Spearman rank correlations between indicators of living standards and self-reported health

EQ-5D dimension	Age group	GDP per capita	Unemployment rate	Health expenditure (% of GDP)	Hospital beds per 1000 people	Physicians per 1000 people	Health expenditure per capita
Mobility	18-29	-0.196	0.496*	-0.068	-0.242	-0.057	-0.225
	30-39	-0.511*	0.518**	0.029	-0.121	0.009	-0.400
	40-49	-0.464*	0.454*	0.114	-0.016	0.000	-0.314
	50-59	-0.718**	0.504*	-0.007	0.005	0.176	-0.575**
	60-69	-0.668**	0.618**	0.050	-0.044	0.040	-0.546**
	70-79	-0.643**	0.464*	-0.043	0.038	-0.031	-0.536**
	80+	-0.658**	0.581**	0.227	-0.275	0.130	-0.497*
	ALL	*-0.636**￼*	*0.539**￼*	*0.000*	*0.044*	*0.029*	*-0.429*
Self-Care	18-29	-0.430	0.301	-0.491*	0.210	-0.310	-0.444*
	30-39	-0.495*	0.483*	0.032	-0.190	0.191	-0.377
	40-49	-0.679**	0.382	-0.129	0.132	0.145	-0.618**
	50-59	-0.782**	0.393	-0.179	-0.110	0.313	-0.661**
	60-69	-0.893**	0.486*	-0.182	0.093	0.289	-0.771**
	70-79	-0.676**	0.322	-0.045	0.267	0.325	-0.572**
	80+	-0.629**	0.433	0.392	0.005	0.394	-0.389
	ALL	*-0.793**￼*	*0.482*￼*	*-0.100*	*0.088*	*0.273*	*-0.644**￼*
Usual Activities	18-29	-0.064	0.239	0.064	0.008	-0.272	-0.014
	30-39	-0.164	0.229	0.150	0.132	-0.048	-0.061
	40-49	-0.425	0.211	-0.068	0.247	-0.055	-0.296
	50-59	-0.664**	0.521**	-0.014	0.209	-0.044	-0.600**
	60-69	-0.696**	0.475*	-0.100	0.049	-0.084	-0.614**
	70-79	-0.571**	0.400	0.218	0.055	0.172	-0.414
	80+	-0.420	0.323	0.275	0.055	0.037	-0.266
	ALL	*-0.482*￼*	*0.404*	*0.000*	*0.198*	*-0.141*	*-0.301*

EQ-5D dimension	Age group	GDP per capita	Unemployment rate	Health expenditure (% of GDP)	Hospital beds per 1000 people	Physicians per 1000 people	Health expenditure per capita
Pain/ Discomfort	18-29	0.000	0.254	0.311	-0.242	0.095	0.125
	30-39	-0.043	0.218	0.321	-0.148	0.229	0.129
	40-49	-0.246	0.193	0.175	-0.071	0.211	-0.086
	50-59	-0.521**	0.325	0.050	0.093	0.130	-0.371
	60-69	-0.254	0.186	0.229	-0.049	0.214	-0.096
	70-79	-0.418	0.282	0.043	0.231	-0.020	-0.304
	80+	-0.292	0.407	0.371	-0.110	-0.088	-0.143
	ALL	-0.204	0.236	0.179	-0.088	0.101	0.134
Anxiety/ Depression	18-29	-0.093	0.046	0.064	-0.280	-0.009	0.029
	30-39	-0.439	0.146	-0.221	-0.308	0.020	-0.346
	40-49	-0.343	0.200	-0.157	-0.374	0.141	-0.268
	50-59	-0.461*	0.246	-0.271	-0.566**	0.108	-0.386
	60-69	-0.518**	0.236	-0.354	-0.429	0.090	-0.475*
	70-79	-0.364	0.043	-0.296	-0.033	-0.148	-0.300
	80+	-0.216	-0.079	-0.020	-0.149	0.015	-0.079
	ALL	-0.389	0.207	-0.221	-0.324	0.037	-0.165
EQ VAS	18-29	-0.057	0.346	0.550**	0.038	0.185	0.014
	30-39	0.475*	-0.018	0.532**	-0.187	-0.267	0.454*
	40-49	0.418	-0.114	0.379	0.082	-0.152	0.368
	50-59	0.707**	-0.371	0.143	-0.077	-0.438	0.571**
	60-69	0.711**	-0.400	-0.014	-0.071	-0.434	0.536**
	70-79	0.736**	-0.457*	0.204	0.066	-0.463*	0.661**
	80+	0.747**	-0.478*	-0.198	0.294	-0.534*	0.489*
	ALL	0.654**	-0.239	0.354	-0.060	-0.300	0.459*

Table 2: Spearman rank correlations between indicators of living standards and self-reported health (continued)

* p<0.1, ** p<0.05.
This table gives an overview of Spearman rank correlation coefficients between self-reported health problems on EQ-5D dimensions and EQ VAS ratings and indicators of living standards and health care system performance in 15 countries. Correlations are presented for different age groups and for all age groups combined. Gross Domestic Product (GDP) per capita is calculated at purchasing power parity, meaning that currency conversion accounts for differences in price level between countries. GDP is the total value of all goods and services produced by an economy.

Education and health

Matejka Rebolj

Introduction

The level of attained education represents the cultural component of an individual's socio-economic status, and is an indicator of living circumstances in the earlier part of one's life. Education level is fairly stable over the life course. Later in life it shapes one's occupation and expected income potential. Through this mechanism, its indirect link with health is stronger than its direct effect (Singh-Manoux et al, 2002).

Among the higher education groups, lower prevalence of health risk factors has been observed. Given the existing health problems, individuals with a lower level of education experience greater ill-health (Eachus et al, 1999). Higher education can directly or through its vehicle mechanisms (such as being able to afford domestic help, home appliances, reduced workload or part-time work) enable extra coping pathways that are not available to individuals with lower levels of attained education (Simon, 2002). Furthermore, observational studies among people suffering from chronic conditions revealed that, through better self-management and compliance, better treatment results can be achieved among the better-educated (Katz, 1998; Karter et al, 2000; Goldman and Smith, 2002).

The aim of this chapter is to illustrate how higher levels of attained education are associated with self-reported health as measured by EQ-5D in the general populations of 15 countries, once the effects of age and gender have been taken into account.

Methods

In the analysis, we compared self-reported health of individuals with different education levels. Self-reported health was measured on the 5 dimensions of EQ-5D. Those reporting some or severe problems on an EQ-5D dimension were merged into 1 category, as only a small fraction of respondents among the general population reported severe problems. Attained highest education level was classified into 3 groups: low (i.e. primary), medium (i.e. secondary) and high (i.e. university degree). To give a special focus to the most disadvantaged group, the latter 2 education levels were amalgamated into a joint category in this analysis.

To estimate the relationship between health and education level, we calculated logistic regression age- and gender-adjusted odds ratios for reporting problems on a particular EQ-5D dimension. Odds ratios in this analysis were a measure for differences between prevalences of reporting health problems by the less- educated group compared to the better-educated group. An odds ratio higher than 1 indicated that the less-educated group reported more health problems than the better-educated group.

Results

The education odds ratios, adjusted for age and gender, are presented by country and by EQ-5D dimension in Table 3. The reference population group was men aged 18-29 years with medium or high education level. The odds ratios presented for demographic and education categories should be interpreted as relative to this reference group.

Demographic characteristics.
Each additional decade of life added between about 30% to more than 100% to the odds of self-reporting problems on mobility, self-care or usual activities, and approximately 30% to almost 90% to pain/discomfort. The highest age-related odds ratios in these dimensions were found in Armenia, Canada, Finland, Greece,

Spain, New Zealand and Slovenia. The results indicate that age was the most important factor influencing the reporting of health-related quality of life problems, irrespective of the country or EQ-5D dimension. The exception was the burden of anxiety/depression, which seemed to be spread uniformly over the entire age span.

Gender did not seem to play a very important additional role in determining self-reported health within the EQ-5D framework. Where these odds were significant, they usually favoured men – except in the Dutch and the Swedish samples. Among the dimensions, exceptions were pain/discomfort and anxiety/depression, with typical significant gender odds ratios falling in the range of 1.3-2.3. Greece showed an outlier pattern with high odds of over 4 in the self-care dimension.

Education level.
In most countries (with the exception of Germany, Japan, Spain, The Netherlands, and New Zealand), attaining at least the medium level of education translated into significantly lower age- and gender-adjusted odds of experiencing problems on any dimension. Where they were significant, these odds ratios were highest for indicators of physical functional disability. Among countries, a 2 - 3-fold difference between having a low level of education, and having at least medium level of education can be observed. For the mobility dimension the range of estimated odds ratios was 1.5-4.3, in self-care 1.5-3.9, for performing usual activities 1,4-3,3, and for experiencing pain/discomfort 1.2-2.9. The country with (uniformly) highest odds ratios (and prevalences) on the first 3 dimensions was Slovenia.

In general, the odds ratios for anxiety/depression were lower (range of 1.5-2.2), although they reach the level of 4.1 in Greece. Among the countries analysed, Greece was also the highest on the odds ratio for pain/discomfort (2.9). It is interesting to note that in Japan and the Netherlands, where education does not seem to play such an important role within the EQ-5D framework, the odds ratio was significant only for the anxiety/depression dimension. Countries with statistically significant, yet in comparison with other countries

in our selection relatively low age- and gender-adjusted education odds ratios were Armenia, Canada, Finland, UK, Sweden and Zimbabwe.

Discussion

This study shows that educational disparities in self-reported health are a phenomenon that can be observed across many different cultures. However, this relationship seems to possess some country-specific traits that deserve the attention of policy makers.

It seems that age is the most important overall predictor of experiencing problems on mobility, self-care, usual activities, and pain/discomfort in all countries. Gender does play an additional role, although its role is much smaller. Having attained at least a medium level of education, adjusted for age and gender, translated into lower odds of reporting problems on any dimension of EQ-5D in almost all surveyed countries. These odds ratios differed greatly by dimension and country. The differences in estimated odds ratios between education levels were 2 - 3-fold in mobility, self-care, usual activities and pain/discomfort, and slightly lower in anxiety/depression.

A typical profile of an individual reporting at least moderate problem on anxiety/depression was a woman with low education, while on all other dimensions it was an older less-educated person. For the Netherlands, New Zealand, Germany, Japan and Spain, our data indicated that there may be educational inequalities in self-assessed health favouring the better-educated groups but results did not reach statistical significance. Though EQ-5D data have yet to be further explored in this respect, a large body of literature (Kunst et al, 1995; Mackenbach et al, 1997; Regidor et al, 1999; Borrell et al, 1999; Dalstra et al, 2002; Blakely et al, 2002; Regidor et al; 2003; von dem Knesebeck et al, 2003; Nishi et al, 2004) has shown that education is an important determinant of health indicators in these countries as well.

Our data could not detect any clear and easily interpretable grouping of countries with similar age- and gender-adjusted educational disparities within the EQ-5D self-report health framework. None of the countries surveyed, however, seem to have avoided educational inequalities in self-reported health. Although it would be too simplistic to advise a policy that was only directed towards increasing the general education level in the general population, such a policy could potentially lower educational inequalities among current younger generations, and would also help reinforce some positive links between education and health, such as improved health-related behaviour. It would seem though that, given the observed differences in country profiles in EQ-5D self-reported health, good national policies to tackle educational inequalities should also identify the country-specific health mechanisms that are triggered by education. Further research using self-assessed health measures, such as EQ-5D, in conjunction with other relevant health, psychology, socio-economic studies can be useful in monitoring health inequalities internationally.

Table 3: Odds ratios (95% confidence intervals) for reporting problems on EQ-5D dimensions in 15 countries

Country	Dimension	Gender		Age		Education	
Armenia	**Mobility**	1.08	*(0.86-1.35)*	1.81**	*(1.70-1.94)*	1.46**	*(1.17-1.81)*
(Gharagebakyan	**Self-care**	0.75*	*(0.56-0.99)*	2.02**	*(1.85-2.20)*	1.56**	*(1.17-2.07)*
et al, 2003)	**Usual activ.**	0.94	*(0.76-1.17)*	1.63**	*(1.53-1.73)*	1.42**	*(1.16-1.74)*
	Pain/Disc.	1.81**	*(1.46-2.23)*	1.87**	*(1.74-2.00)*	1.22*	*(1.01-1.48)*
	Anx./Depr.	1.42**	*(1.17-1.72)*	1.36**	*(1.29-1.43)*	0.87	*(0.73-1.03)*
Belgium	**Mobility**	0.70*	*(0.50-0.98)*	1.61**	*(1.44-1.80)*	2.64**	*(1.85-3.76)*
(Cleemput et al,	**Self-care**	0.77	*(0.43-1.38)*	1.92**	*(1.55-2.38)*	2.85**	*(1.47-5.50)*
2004)	**Usual activ.**	0.91	*(0.67-1.24)*	1.42**	*(1.28-1.57)*	1.20	*(0.85-1.68)*
	Pain/Disc.	1.33*	*(1.06-1.68)*	1.28**	*(1.18-1.38)*	1.46**	*(1.12-1.91)*
	Anx./Depr.	0.94	*(0.72-1.24)*	1.04	*(0.95-1.14)*	1.72**	*(1.26-2.34)*
Canada	**Mobility**	1.47**	*(1.10-1.96)*	1.90**	*(1.72-2.10)*	1.54**	*(1.12-2.12)*
(Johnson et al,	**Self-care**	1.28	*(0.73-2.23)*	2.41**	*(1.91-3.04)*	1.11	*(0.62-1.98)*
2000)	**Usual activ.**	1.14	*(0.85-1.54)*	1.73**	*(1.57-1.91)*	1.76**	*(1.28-2.43)*
	Pain/Disc.	1.49**	*(1.19-1.88)*	1.40**	*(1.30-1.50)*	1.59**	*(1.20-2.13)*
	Anx./Depr.	1.28*	*(1.01-1.63)*	0.99	*(0.92-1.07)*	2.00**	*(1.47-2.64)*
Finland	**Mobility**	1.08	*(0.87-1.32)*	2.02**	*(1.89-2.16)*	1.47**	*(1.16-1.85)*
(Ohinmaa et al,	**Self-care**	1.06	*(0.77-1.45)*	2.30**	*(2.02-2.63)*	1.49*	*(1.08-2.07)*
1996)	**Usual activ.**	0.96	*(0.78-1.19)*	1.79**	*(1.68-1.92)*	1.71**	*(1.36-2.16)*
	Pain/Disc.	1.08	*(0.91-1.30)*	1.56**	*(1.49-1.64)*	1.68**	*(1.35-2.09)*
	Anx./Depr.	1.20	*(0.95-1.50)*	1.08*	*(1.02-1.15)*	1.48**	*(1.14-1.92)*
Germany	**Mobility**	0.77	*(0.42-1.40)*	1.37**	*(1.14-1.65)*	2.54*	*(1.01-6.45)*
(Claes et al,	**Self-care**	0.97	*(0.18-5.31)*	1.90*	*(1.03-3.49)*	1.41	*(0.14-14.1)*
1999)	**Usual activ.**	0.92	*(0.43-1.97)*	1.22	*(0.96-1.53)*	1.26	*(0.34-4.71)*
	Pain/Disc.	1.07	*(0.67-1.70)*	1.40**	*(1.21-1.61)*	0.85	*(0.35-2.11)*
	Anx./Depr.	1.76	*(0.91-3.40)*	1.14	*(0.94-1.39)*	1.17	*(0.36-3.82)*
Greece	**Mobility**	1.26	*(0.67-2.38)*	1.97**	*(1.57-2.48)*	2.09*	*(1.03-4.22)*
(Yfantopoulous,	**Self-care**	4.43**	*(1.62-12.12)*	2.61**	*(1.80-3.78)*	1.49	*(0.53-4.25)*
1999)	**Usual activ.**	1.78	*(0.85-3.71)*	2.44**	*(1.83-3.26)*	2.17	*(0.94-5.05)*
	Pain/Disc.	1.79*	*(1.02-3.14)*	1.66**	*(1.37-2.01)*	2.94**	*(1.56-5.52)*
	Anx./Depr.	1.25	*(0.65-2.39)*	1.13	*(0.91-1.41)*	4.07**	*(1.84-8.98)*
Hungary	**Mobility**	1.17	*(0.99-1.37)*	1.80**	*(1.71-1.89)*	2.00**	*(1.70-2.35)*
(Szende &	**Self-care**	0.84	*(0.66-1.07)*	1.82**	*(1.68-1.97)*	2.63**	*(2.02-3.42)*
Nemeth, 2003)	**Usual activ.**	1.02	*(0.86-2.12)*	1.65**	*(1.56-1.74)*	2.35**	*(1.96-2.80)*
	Pain/Disc.	1.44**	*(1.28-1.63)*	1.49**	*(1.43-1.55)*	1.96**	*(1.72-2.24)*
	Anx./Depr.	1.70**	*(1.51-1.92)*	1.24**	*(1.19-1.28)*	2.00**	*(1.75-2.28)*
Japan	**Mobility**	0.97	*(0.50-1.86)*	2.16**	*(1.66-2.82)*	1.83	*(0.93-3.63)*
(Tsuchiyaet al,	**Self-care**	1.89	*(0.49-7.33)*	1.60*	*(1.02-2.50)*	3.77	*(1.00-14.25)*
2002)	**Usual activ.**	1.21	*(0.56-2.58)*	1.86**	*(1.40-2.48)*	2.02	*(0.93-4.41)*
	Pain/Disc.	2.30**	*(1.47-3.59)*	1.53**	*(1.32-1.77)*	1.36	*(0.85-2.20)*
	Anx./Depr.	1.46	*(0.80-2.65)*	1.13	*(0.93-1.37)*	2.20*	*(1.17-4.13)*

Table 3: Odds ratios (95% confidence intervals) for reporting problems on EQ-5D dimensions in 15 countries (continued)

Country	Dimension	Gender		Age		Education	
The Netherlands (Essink-Bot et al, 1993)	**Mobility**	0.42**	*(0.24-0.75)*	2.19**	*(1.76-2.74)*	1.32	*(0.75-2.34)*
	Self-care	0.81	*(0.42-1.56)*	2.06**	*(1.60-2.65)*	0.96	*(0.49-1.89)*
	Usual activ.	0.63*	*(0.44-0.91)*	1.39**	*(1.25-1.54)*	1.20	*(0.82-1.76)*
	Pain/Disc.	0.73*	*(0.54-0.98)*	1.38**	*(1.27-1.50)*	0.99	*(0.72-1.37)*
	Anx./Depr.	0.48**	*(0.33-0.68)*	1.03	*(0.94-1.14)*	1.51*	*(1.03-2.22)*
New Zealand (Devlin et al, 2000)	**Mobility**	1.04	*(0.77-1.40)*	1.77**	*(1.60-1.95)*	1.22	*(0.89-1.67)*
	Self-care	0.77	*(0.44-1.32)*	1.71**	*(1.43-2.05)*	1.25	*(0.71-2.20)*
	Usual activ.	1.10	*(0.83-1.47)*	1.59**	*(1.45-1.75)*	1.06	*(0.78-1.44)*
	Pain/Disc.	1.08	*(0.85-1.37)*	1.47**	*(1.36-1.58)*	1.26	*(0.97-1.65)*
	Anx./Depr.	1.43*	*(1.08-1.89)*	1.12*	*(1.03-1.21)*	1.26	*(0.93-1.70)*
Slovenia (Prevolnik Rupel & Rebolj, 2001)	**Mobility**	0.70	*(0.48-1.03)*	1.98**	*(1.75-2.24)*	4.30**	*(2.54-7.28)*
	Self-care	0.86	*(0.54-1.38)*	1.62**	*(1.40-1.86)*	3.93**	*(2.33-6.64)*
	Usual activ.	0.93	*(0.66-1.31)*	1.49**	*(1.34-1.65)*	3.29**	*(2.04-5.30)*
	Pain/Disc.	1.05	*(0.77-1.45)*	1.54**	*(1.39-1.71)*	2.24**	*(1.35-3.70)*
	Anx./Depr.	1.13	*(0.83-1.54)*	1.17**	*(1.06-1.28)*	1.64*	*(1.05-2.57)*
Spain (Gaminde et al, 2001)	**Mobility**	1.04	*(0.74-1.47)*	1.83**	*(1.63-2.06)*	1.51	*(0.93-2.46)*
	Self-care	1.02	*(0.54-1.93)*	1.96**	*(1.55-2.50)*	2.77	*(0.80-9.62)*
	Usual activ.	0.98	*(0.67-1.44)*	1.61**	*(1.42-1.82)*	1.43	*(0.84-2.44)*
	Pain/Disc.	1.29*	*(1.01-1.67)*	1.33**	*(1.22-1.44)*	1.22	*(0.89-1.68)*
	Anx./Depr.	2.25**	*(1.56-3.24)*	1.17**	*(1.05-1.31)*	1.40	*(0.90-2.19)*
Sweden (Burström et al, 2001)	**Mobility**	0.79	*(0.60-1.04)*	1.82**	*(1.65-2.01)*	1.81**	*(1.33-2.47)*
	Self-care	1.38	*(0.76-2.49)*	1.68**	*(1.36-2.07)*	1.06	*(0.54-2.07)*
	Usual activ.	0.67*	*(0.50-0.92)*	1.26**	*(1.13-1.39)*	1.64**	*(1.16-2.32)*
	Pain/Disc.	0.77**	*(0.65-0.91)*	1.26**	*(1.19-1.34)*	1.90**	*(1.57-2.31)*
	Anx./Depr.	0.63**	*(0.53-0.75)*	0.97	*(0.91-1.03)*	1.32*	*(1.07-1.62)*
UK (Kind, 1998)	**Mobility**	0.91	*(0.75-1.10)*	1.63**	*(1.54-1.73)*	1.71**	*(1.39-2.09)*
	Self-care	0.81	*(0.57-1.14)*	1.41**	*(1.27-1.57)*	1.90**	*(1.29-1.79)*
	Usual activ.	0.88	*(0.73-1.07)*	1.38**	*(1.31-1.47)*	1.59**	*(1.29-1.95)*
	Pain/Disc.	1.02	*(0.88-1.20)*	1.39**	*(1.33-1.46)*	1.78**	*(1.51-2.09)*
	Anx./Depr.	1.35**	*(1.14-1.61)*	1.11**	*(1.06-1.17)*	1.54**	*(1.28-1.86)*
Zimbabwe (Jelsma, 2003)	**Mobility**	1.75**	*(1.23-2.50)*	1.52**	*(1.33-1.75)*	2.20**	*(1.57-3.09)*
	Self-care	0.76	*(0.46-1.25)*	1.37**	*(1.10-1.70)*	1.24	*(0.69-2.23)*
	Usual activ.	1.21	*(0.89-1.65)*	1.43**	*(1.25-1.63)*	1.80**	*(1.30-2.49)*
	Pain/Disc.	1.34**	*(1.10-1.65)*	1.33**	*(1.20-1.46)*	1.58**	*(1.25-1.99)*
	Anx./Depr.	1.19	*(0.97-1.46)*	1.28**	*(1.16-1.41)*	1.49**	*(1.18-1.88)*

*P<0.05, ** P<0.01.

This table gives odds ratios for reporting problems on EQ-5D dimensions for gender (1 if female, 0 if male), age (in decades of life with age groups: 18-29, 30-39, 40-49, 50-59, 60-69, 70-79, 80+), and education categories (1 if low education, 0 if medium or high) by country and EQ-5D dimension (1 if at least moderate problems, 0 if no problems). The reference population group is men aged 18-29 with medium or high education. All odds ratios are adjusted for the other 2 factors. For example, a statistically significant education odds ratio of 1,50 in mobility reveals that in that country the odds of reporting at least moderate problems on mobility are 50% higher among the low educated than among those with at least medium education, where age and gender have been adjusted for.

Chapter 5

Measuring health inequalities

Agota Szende

Introduction

While the improvement of the overall *level of health* of the population continues to be a high priority in public health care, there is a growing concern about the *distribution of health* within the population (WHO, 1998; CEC, 2001). While the previous chapters mainly provided evidence on the level of health in general populations of different countries, this chapter illustrates how the EQ-5D can help to measure inequalities in self-reported health by socio-demographic characteristics and at the level of quality of life dimensions within each country.

Methods

The method used is the concentration index, which is a single index measure of relative inequalities (Wagstaff et al, 1991; Kakwani et al, 1997). The overall health concentration index measures the mean difference in health between individuals as a proportion of the average health of the total population. This index can also be interpreted as a measure of how unequal the distribution of health is in the population. Health inequality is measured on a scale between 0 (meaning complete equality in health) and 1 (meaning complete inequality in health). This overall index can be decomposed to identify the impact of various factors, such as socio-demographic characteristics, in order to determine how much each factor contributes to inequalities (Wagstaff and Doorslaer, 2002).

In the current analysis, overall health was measured by the EQ VAS. Decomposition analysis was performed to determine inequalities by socio-demographic factors and by the level of each of the EQ-5D dimensions. Results of the analysis of 15 countries are shown in Table 4.

Results

Results of this study suggest that the level of inequalities in self-assessed health and the health inequality profile by EQ-5D dimension differed substantially across countries. In terms of the overall level of inequalities, Belgium presented the lowest level of relative inequalities (0.0933) while Armenia had the highest relative inequalities (0.1949).

Substantial differences were uncovered in the extent to which the socio-demographic and the morbidity model explained overall inequalities in self-assessed health. Socio-demographic factors explained the smallest proportion of health inequalities in Japan (1.5%), The Netherlands (1.6%), and New Zealand (2.2%). The socio-demographic model was most powerful in Armenia (34.7%), Slovenia (27.8%), and Hungary (24.3%). The 5 dimensions of EQ-5D were generally powerful in explaining overall self-assessed health. The explained proportion of the index varied from 15.3% in Japan and 17.7% in Zimbabwe to 51.7% in Greece and 53.3% in Slovenia.

Within the socio-demographic model, gender played the smallest role in explaining overall inequalities in self-assessed health, while age was the most important determinant. Education played a consistent role in explaining overall inequalities in health in each country, but variation was observed whether it was medium or high educational level that was more important.

The health inequality profile according to the EQ-5D dimensions showed different patterns across countries. Pain/discomfort was the

highest contributor to overall inequalities in self-assessed health in most (n=7) countries, with a particularly high relative share in Spain (54.3%) and Japan (49.8%). Problems with usual activities contributed most to inequalities in 5 countries with the highest relative share in The Netherlands (40.9%) and Canada (39.9%). In Belgium and Slovenia, problems with pain/discomfort and usual activities contributed equally to inequalities. Greece showed an outlier pattern with mobility being the main contributor (39.3%). The relative share of anxiety/depression was highest in Zimbabwe (31.8%), while New Zealand had the highest relative share of self-care (16.8%) in explaining overall inequalities in self-assessed health.

Discussion

This study is one of the first analyses measuring overall inequalities in self-assessed health, and the first multi-country study that uses an internationally validated health-related quality of life instrument in the decomposition analysis of health inequalities. The study demonstrates that EQ-5D is a powerful tool in the analysis of inequalities in self-assessed health.

Results showed that significant inequalities in overall self-assessed health exist in each country involved in the study. The decomposition analysis of the socio-demographic model indicated that gender played a minimal role while age played an important role. Education level played some role in explaining overall inequalities in health in most countries, although the degree of impact varied across countries. Generally speaking, education-related inequalities in health were only about one third as powerful as the impact of age. It could be argued that this share of education in explaining health inequalities is still important, since while decline of health with age is often regarded as a natural course of life, differences in education level between people are often regarded by society as unfair.

The analysis of the overall health inequality index alongside the EQ-5D dimensions offered a special insight into the health inequality profile of the study populations. Results revealed that, in the majority of countries, pain/discomfort explained the highest relative share of inequalities in overall self-assessed health. The finding that pain/discomfort had a high share in explaining overall health inequalities is unique. One potential explanation for the lack of similar investigations elsewhere is that pain has so far not been regarded as a distinct morbidity indicator, but has been considered as a consequence or co-morbidity of various health conditions. However, recent literature and clinical practice reveals that a change in paradigm in the approach to pain is underway. In the UK, for example it has been revealed that pain affects over 25% of the population. A wide variation was observed in the availability of pain services from hospital to hospital and from region to region within the UK. Survey data also showed that only 7% of chronic pain sufferers had access to appropriate specialist care in a year with most visiting their GPs, and 11% suffering in silence. (CSAG, 2000; NOP 2002; Foster, 2003). These results reveal the potential role of pain management in tackling inequalities.

The analysis also showed that the health inequality profile can be specific to the population of each country or geographical areas. For this reason, health policy-makers should consider this specific health inequality profile when developing strategies to address inequalities in a particular country. For example, it might be worthwhile to consider why problems with mobility play such an important role in the Greek population. If the explanation is related to geographical conditions (e.g. many hills, islands) along with inadequate transportation, then it can be further informative for local policy-makers to know how they can promote more equity by providing support for those in most need (e.g. support for transport for disabled people or providing home treatment, etc).

Finally, it has to be noted that the above results should not be used for ranking countries based on health inequality among their populations. Each country should consider the results within the light of their own social and health care context. Studies like this can give an insight into the nature of health inequalities, which in turn can help policy-makers to improve their own strategies in promoting greater equity.

Table 4: Health inequality profile of 15 countries

	Inequality index	Socio-demographic factors					Quality of life factors					
		Explained share	Gender	Age	Education medium	Education high	Explained share	Mobility	Self-care	Usual activity	Pain / Disc.	Anxiety / Depr.
Armenia	0.1949*	34.7%	1.4%	94.9%	0.3%	3.7%	51.5%	15.5%	13.0%	19.2%	45.6%	6.7%
Belgium	0.0933*	7.9%	1.7%	57.9%	11.1%	29.3%	44.3%	10.6%	3.3%	34.7%	34.4%	17.0%
Canada	0.1062*	7.7%	0.1%	84.7%	7.9%	7.2%	38.8%	20.6%	5.7%	39.9%	22.4%	11.5%
Finland	0.1115*	18.7%	2.2%	79.0%	4.8%	14.0%	45.7%	14.2%	10.6%	37.3%	25.0%	12.9%
Germany	0.1131*	18.8%	-0.6%	57.5%	12.6%	30.5%	48.9%	22.6%	7.5%	37.3%	24.0%	8.7%
Greece	0.1223*	16.8%	1.4%	77.4%	13.5%	7.7%	51.7%	39.3%	2.3%	25.8%	22.2%	10.4%
Hungary	0.1555*	24.3%	1.1%	79.0%	11.2%	8.7%	43.4%	19.1%	6.4%	14.1%	39.8%	20.5%
Japan	0.1117*	1.5%	8.9%	38.5%	12.3%	40.3%	15.3%	6.0%	-2.1%	18.4%	49.8%	27.9%
Netherlands	0.1041*	1.6%	0.5%	81.4%	16.8%	1.2%	39.4%	9.5%	0.6%	40.9%	36.8%	12.2%
New Zealand	0.1013*	2.2%	3.6%	71.0%	-4.1%	29.5%	36.0%	19.6%	16.8%	27.9%	17.1%	18.7%
Slovenia	0.1359*	27.8%	0.9%	55.2%	18.8%	25.1%	53.3%	22.7%	14.0%	27.6%	27.5%	8.2%
Spain	0.1332*	9.0%	2.9%	70.4%	2.8%	23.9%	39.7%	12.8%	0.9%	17.7%	54.3%	14.3%
Sweden	0.1025*	4.2%	1.5%	37.3%	9.1%	52.1%	43.7%	9.0%	-0.3%	17.7%	43.2%	30.4%
UK	0.1090*	9.0%	0.1%	64.5%	10.3%	25.2%	33.2%	19.1%	4.3%	27.7%	30.1%	18.8%
Zimbabwe	0.1180*	2.9%	11.7%	44.6%	29.0%	14.6%	17.7%	13.6%	6.4%	12.3%	35.9%	31.8%

* $P<0.01$

This table summarizes the health inequality profile of 15 countries. The first column gives the value of the overall self-assessed health inequality index (based on EQ VAS). Results of the decomposition analysis along the socio-demographic and the morbidity factors are presented separately. The first column in each of the two model results refers to the share of inequalities that the model variables explained. (For example, in Armenia 34,7% of the inequality index was explained by the socio-demographic model and 51,5% of the inequality index was explained by the quality of life model.) The rest of the columns give the share of each factor in the explained part of overall inequalities. (For example, in Armenia pain/discomfort alone was responsible for 45,6% of the explained part of the health inequality index.)

References

Badia X, Roset M, Herdman M, Kind P (2001). A comparison of United Kingdom and Spanish general population time trade-off values for EQ-5D health states. Medical Decision Making 21 (1): 7-16.

Bjork S, Norinder A (1999). The weighting exercise for the Swedish version of the EuroQol. Health Econ 8 (2):117-26.

Blakely T, Woodward A, Pearce N, Salmond C, Kiro C, Davis P (2002). Socio-economic factors and mortality among 25-64 year olds followed from 1991 to 1994: the New Zealand Census-Mortality Study. N Z Med J 115: 93-97.

Borrell C, Regidor E, Arias LC, Navarro P, Puigpinós R, Domínguez V, Plasčncia A (1999). Inequalities in mortality according to educational level in two large Southern European cities. Int J Epidemiol 28: 58-63.

Burström K, Johannesson M, Diderichsen F (2001). Swedish population health-related quality of life results using the EQ-5D. Quality of Life Research 10 (7): 621-635.

Claes C, Greiner W, Uber A, Schulenburg J-M. Graf v.d (1999). An interview-based comparison of the TTO and VAS values given to EuroQol states of health by the general German population. In: Greiner W, J-M. Graf v.d. Schulenburg, Piercy J. (Editors). (EuroQol) Plenary Meeting. Discussion Papers. Hannover Uni-Verlag Witte: 13-39.

Cleemput I, Kind P, Kesteloot K (2004). Re-scaling social preference data: implications for modelling. In: Kind P, Macran S. (Editors). 19th Plenary Meeting of the EuroQol Group. Discussion Papers. Centre for Health Economics, University of York: 13-123.

Commission of the European Communities (2001). Decision of the European Parliament and of the Council adopting a programme of Community action in the field of public health (2001- 2006) Brussels.

CSAG. Services for patients with pain (2000). CSAG Support Team, The Unit of Health-Care Epidemiology, Institute of Health Sciences, Oxford.

Dalstra JAA, Kunst AE, Geurts JJM, Frenken FJM, Mackenbach JP (2002). Trends in socioeconomic health inequalities in the Netherlands, 1981-1999. J Epidemiol Community Health 56: 927-934.

Devlin NJ, Hansen P, Kind P, Williams A (2000). The health state preferences and logical inconsistencies of New Zealanders: A tale of two tariffs. York Centre for Health Economics, UK and University of Otago New Zealand. Discussion paper no 180.

Eachus J, Chan P, Pearson N, Propper C, Smith GD (1999). An additional dimension to health inequalities: disease severity and socio-economic position. J Epidemiol Community Health 53: 603-611.

Essink-Bot ML, Stouthard M, Bonsel GJ (1993). Generalizability of valuations on health states collected with the EuroQol questionnaire. Health Economics 2: 237-246.

EuroQol Group (1990). EuroQol – A new facility for the measurement of health-related quality of life. Health Policy 16: 199-208.

Eurostat. Statistiques démographiques 1987 (1997). Office des publications officielles des communautés européennes, Luxembourg.

Foster D (2003). Adult chronic pain management services in the UK. Pain Society.

Gaminde I, Cabasés J (1996). Measuring valuations for health states among the general population in Navarra (Spain). In: Badia X, Herdman M, Segura A. (Editors). EuroQol Plenary Meeting. Discussion Papers. Barcelona. Institut Universitari de Salut Publica de Catalunya: 113-123.

Gaminde I, Roset M (2001). Quality adjusted life expectancy. In: Cabasés J, Gaminde I. (Editors). 17th Plenary Meeting of the EuroQol Group. Discussion Papers. Universidad Pública de Navarra: 173-183.

Gharagebakyan G, Ghukasyan H, Williams A, Szende A (2003). Social inequalities in self-reported health: Is Armenia different from Slovenia? In: Rupel VP (Eds). 20th Plenary Meeting of the EuroQol Group. Discussion Papers. Republic of Slovenia, Ministry of Health: 79-87.

Goldman DP, Smith JP (2002). Can patient self-management help explain the SES health gradient? Proceedings of the National Academy of Sciences of the USA, 99: 10929-10934.

Jelsma J, Hansen K, Weerdt W de, Cock P, Kind P. (2003). How do Zimbabweans value health states? Population Health Metrics. 1:11.

Johnson JA, Pickard AS (2000). Comparison of the EQ-5D and SF-12 health surveys in a general population survey in Alberta, Canada. Med Care 38 (1): 115-21.

Kakwani NC, Wagstaff A, Doorslaer EV (1997). Socioeconomic inequalities in health: measurement, computation and statistical inference. Journal of Econometrics 77: 87-103.

Karter AJ, Ferrara A, Darbinian JA, Ackerson LM, Selby JV (2000). Self-Monitoring of Blood Glucose: Language and financial barriers in a managed care population with diabetes. Diabetes Care 23: 477-483.

Katz PP (1998). Education and self-care activities among persons with rheumatoid arthritis. Soc Sci Med 46: 1057-1066.

Kind P, Dolan P, Gudex C, Williams A (1998). Variations in population health status: results from a United Kingdom national questionnaire survey Bmj 316 (7133): 736-41.

Kind P, Hardman G, Macran S (1999). UK Population norms for EQ-5D.York Centre for Health Economics Discussion Paper 172.

Knesebeck O von dem, Lüschen G, Cockerham WC, Siegrist J (2003). Socioeconomic status and health among the aged in the United States and Germany: A comparative cross-sectional study. Soc Sci Med 57: 1643-1652.

Kunst AE, Geurts JJM, Berg J van de (1995). International variation in socio-economic inequalities in self reported health. J Epidemiol Community Health 49: 117-23.

Mackenbach JP, Kunst AE, Cavelaars AEJM, Groenhof F, Geurts JJM (1997). EU Working Group on Socioeconomic Inequalities in Health. Socioeconomic inequalities in morbidity and mortality in western Europe. The Lancet 349: 1655-1659.

Nishi N, Makino K, Fukuda H, Tatara K (2004). Effects of socio-economic indicators on coronary risk factors, self-rated health and psychological well-being among urban Japanese civil servants. Soc Sci Med 58: 1159-1170.

NOP Omnibus Survey. Pain. 4-6 October 2002. NOP World.

Ohinmaa A, Eija H, Sintonen H (1996). Modelling EuroQol values of Finnish adult population. In: Badia X, Herdman M, Segura A. (Editors). EuroQol Plenary Meeting. Discussion Papers. Barcelona. Institut Universitari de Salut Publica de Catalunya: 67-76.

Prevolnik Rupel V, Rebolj M (2001). The Slovenian VAS tariff based on valuations of EQ-5D health states from the general population. In: Cabasés J, Gaminde I. (Editors). 17th Plenary Meeting of the EuroQol Group. Discussion Papers. Universidad Pública de Navarra: 11-23.

Regidor E, Barrio G, Fuente L de la, Domingo A, Rodriguez C, Alonso J (1999). Association between educational level and health related quality of life in Spanish adults. J Epidemiol Community Health 53: 75-82.

Regidor E, Calle ME, Navarro P, Domínguez V (2003). The size of educational differences in mortality from specific causes of death in men and women. Eur J Epidemiol 18: 395-400.

Schulenburg J.-M. G. v. d, Claes C, Greiner W, Uber A (1996). The German version of the EuroQol quality of life questionnaire. In: Badia X, Herdman M, Segura A. (Editors). EuroQol Plenary Meeting. Discussion Papers. Barcelona. Institut Universitari de Salut Publica de Catalunya: 135-161.

Simon JG (2002). How is your health in general? Qualitative and quantitative studies on self-assessed health and socioeconomic differences herein [thesis]. Rotterdam, The Netherlands: Erasmus University Rotterdam.

Singh-Manoux A, Clarke P, Marmot M (2002). Multiple measures of socio-economic position and psychosocial health: proximal and distal measures. Int J Epidemiol 31: 1192-1199

Sintonen H, Weijnen T, Nieuwenhuizen M, Oppe S, Badia X, Busschbach J, Greiner W, Krabbe P, Ohinmaa A, Roset M, de Charro F (2003). Comparison of EQ-5D VAS valuations: analysis of background variables. In: Brooks R, Rabin R, de Charro F. (Editors). The measurement and valuation of health status using EQ-5D: A European perspective. Kluwer Academic Publishers:81-103.
Szende A, Nemeth R. (2003). Health-related quality of life of the Hungarian population. Orv Hetil 144 (34): 1667-74.

Tsuchiya A, Ikeda S., Ikegami N, Nishimura S, Sakai I, Fukuda T, Hamashima C, Hisashige A, Tamura M (2002). Estimating an EQ-5D population value set: the case of Japan. Health Econ 11 (4): 341-53.

Wagstaff A, Doorslaer EV (2002). Overall vs. Socioeconomic Health Inequality: A Measurement Framework and Two Empirical Illustrations. Equity Project.

Wagstaff A, Paci P, Doorslaer EV (1991). On the measurement of inequalities in health. Social Science and Medicine 33: 545-557.

Weijnen T, Nieuwenhuizen M, Ohinmaa A, de Charro F (2003). Construction of the EQ-net VAS and TTO databases. In: Brooks R, Rabin R, de Charro F. (Editors). The measurement and valuation of health status using EQ-5D: A European perspective. Kluwer Academic Publishers:55-81.

World Health Organization (1998). Health21 - health for all in the 21st century. Copenhagen: WHO.

Yfantopoulos Y (1999). Quality of life measurment and health production in Greece. In: Greiner W, J-M. Graf v.d. Schulenburg, Piercy J. (Editors). (EuroQol) Plenary Meeting. Discussion Papers. Hannover Uni-Verlag Witte: 100-114.

Annex 1

EQ-5D population surveys

Annex 1: EQ-5D survey characteristics for 15 countries

	Source	Data collection	Sample size*	Data representativeness
Armenia	Gharagebakyan, 2003	November 2002	2222	Face to face interviews on a random sample of 1300 households (2337 individuals) selected from the general population of 5 regions of Armenia (Yerevan city, Gegharkounik, Shirak, Lori, and Suinik.)
Belgium	Cleemput, 2004	July, August 2001	1274	Postal survey on a random sample of 2754 people from the Flemish-speaking population of Belgium.
Canada	Johnson et al, 2000	June 1997	1518	Postal survey on a random sample of 4200 potential participants from a computerized database of residential telephone listings in Alberta.
Finland	Ohinmaa et al, 1996	November 1992	2411	Postal survey on a random sample of 4000 persons chosen from the Finnish computerised population registry.
Germany	Schulenburg et al, 1996	June 1994	370	Postal survey on a random sample of 1000 households selected from the German telephone list.
	Claes et al, 1999	April 1997	121	Postal survey on a random sample of 1000 households selected from the German telephone list.
	Claes et al, 1999	October 1997 to March 1998	337	Telephone interviews with individuals based on a random sample of 4000 households selected from the German telephone list.
Greece	Yfantopoulous 1999	March, April 1998	464	Face to face interviews on a sample of 500 individuals selected from the general population
Hungary	Szende and Nemeth, 2003	October to December 2000	5503	The questionnaire was self-administered during a personal interview on a random sample of 7000 people from the electoral registry.
Japan	Tsuchiyaet al, 2002	August, September of 1998	620	Face to face interviews on a random sample of 972 individuals selected from the general population (over age 20) of 3 Prefectures in Japan - Saitama, Hiroshima and Hokkaido
Netherlands	Essink-Bot et al, 1993	January 1991	857	Postal survey on a random selection of 1400 households based on postal area codes on the right bank of the River Maas in Rotterdam (districts with over 20 % of immigrants were excluded).

Annex 1: EQ-5D survey characteristics for 15 countries (continued)

	Source	Data collection	Sample size*	Data representativeness
New Zealand	Devlin et al, 2000	January 1999	1328	Postal survey on a random sample of 3000 New Zealanders selected from the electoral roll.
Slovenia	Prevolnik Rupel and Rebolj 2001	April, May 2000	742	Postal survey on a randomized sample of 3000 people selected from the general population in collaboration with the Statistical Office of Slovenia
Spain	Badia et al, 2001	October 1996 to November 1997	973	Face to face interviews on a random sample of 1930 individuals selected from the general population of a primary health care district on the outskirts of Barcelona, covering 4 different socioeconomic areas.
	Gaminde et al, 1996	September 1995	300	Face to face interviews on a sample of 300 individuals selected from the general population of Navarra.
	Gaminde et al, 2001	December 1999 to January 2000	1468	Face to face interviews on a random sample of 1508 individuals selected from the general population of Navarra.
Sweden	Björk et al, 1999	April 1994	534	Postal survey on a randomized sample of 1000 Swedish citizens selected from the general population from an address register.
	Burström et al, 2001	During 1998	3069	Postal survey with the EQ-5D descriptive system - the Stockholm County public health survey - on a representative sample of the (Stockholm) population aged 20-88 years.
United Kingdom	Kind, 1998	August, November 1993	3395	Face to face interviews on a random sample of 5324 individuals selected from the general population (based on the Postcode Address file) from England, Scotland and Wales.
Zimbabwe	Jelsma, 2003	March 2000	2350	2488 residents from Glenview (a high density suburb of Harare) were selected for interview. As compared to the 1992 census Harare Profile, males were underrepresented and there were more young and better educated respondents than in the general population.

* These are the sample sizes used in this booklet

Annex 2

EQ-5D population norms data

ARMENIA

Source: Gharagebakyan, 2003

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	145	95	145	85	89	85	17	661
WOMEN	332	268	361	183	199	182	31	1556
TOTAL	477	363	506	268	288	267	48	2217

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	87.1	69.2	66.8	63.1	57.4	50.5	45.5
	- Std Dev	16.8	23.1	20.9	20.3	20.9	19.2	19.8
	Median	95	70	70	64	60	50	48
	- 25th	80	50	50	50	40	40	36
	- 75th	100	90	80	80	70	62	58
WOMEN	Mean	84.8	73.0	63.6	59.7	50.8	45.0	37.2
	- Std Dev	15.5	17.6	19.3	19.0	18.3	17.8	25.5
	Median	90	80	61	60	50	50	30
	- 25th	80	60	50	50	40	30	20
	- 75th	98	90	80	75	64	54	50
TOTAL	Mean	85.5	72.0	64.5	60.8	52.9	46.7	40.0
	- Std Dev	15.9	19.2	19.8	19.5	19.4	18.4	23.8
	Median	90	80	70	60	50	50	40
	- 25th	80	60	50	50	40	35	20
	- 75th	100	90	80	80	70	60	50

ARMENIA

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	92.4	77.9	81.4	72.9	55.1	44.7	35.3
	Level 2	6.2	20.0	18.6	24.7	42.7	51.8	58.8
	Level 3	1.4	2.1	0.0	2.4	2.2	3.5	5.9
WOMEN	Level 1	94.6	86.6	78.9	72.1	50.3	33.0	19.4
	Level 2	5.4	13.4	21.1	26.8	48.2	61.5	67.7
	Level 3	0.0	0.0	0.0	1.1	1.5	5.5	12.9
TOTAL	Level 1	93.9	84.3	79.6	72.4	51.7	36.7	25.0
	Level 2	5.7	15.2	20.4	26.1	46.5	58.4	64.6
	Level 3	0.4	0.6	0.0	1.5	1.7	4.9	10.4

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	94.5	88.4	91.7	87.1	71.9	57.6	52.9
	Level 2	4.1	10.5	6.9	11.8	25.8	35.3	35.3
	Level 3	1.4	1.1	1.4	1.2	2.2	7.1	11.8
WOMEN	Level 1	98.5	95.9	93.4	94.0	79.9	50.5	22.6
	Level 2	1.5	3.7	6.1	4.4	17.6	41.2	54.8
	Level 3	0.0	0.4	0.6	1.6	2.5	8.2	22.6
TOTAL	Level 1	97.3	93.9	92.9	91.8	77.4	52.8	33.3
	Level 2	2.3	5.5	6.3	6.7	20.1	39.3	47.9
	Level 3	0.4	0.6	0.8	1.5	2.4	7.9	18.8

Cont.

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	86.2	73.7	75.2	70.6	51.7	41.2	41.2
	Level 2	11.7	22.1	21.4	25.9	39.3	47.1	52.9
	Level 3	2.1	4.2	3.4	3.5	9.0	11.8	5.9
WOMEN	Level 1	93.1	79.9	74.0	73.6	51.5	33.5	25.8
	Level 2	6.3	19.4	24.4	24.7	44.4	52.2	48.4
	Level 3	0.6	0.7	1.7	1.6	4.0	14.3	25.8
TOTAL	Level 1	91.0	78.2	74.3	72.7	51.6	36.0	31.3
	Level 2	8.0	20.1	23.5	25.1	42.9	50.6	50.0
	Level 3	1.0	1.7	2.2	2.2	5.6	13.5	18.8

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	77.9	45.3	42.1	35.3	16.9	15.3	11.8
	Level 2	17.2	43.2	45.5	50.6	60.7	56.5	64.7
	Level 3	4.8	11.6	12.4	14.1	22.5	28.2	23.5
WOMEN	Level 1	65.1	41.4	27.4	23.0	6.5	7.1	9.7
	Level 2	32.2	54.1	62.6	63.4	68.3	62.1	51.6
	Level 3	2.7	4.5	10.0	13.7	25.1	30.8	38.7
TOTAL	Level 1	69.0	42.4	31.6	26.9	9.7	9.7	10.4
	Level 2	27.7	51.2	57.7	59.3	66.0	60.3	56.3
	Level 3	3.4	6.3	10.7	13.8	24.3	30.0	33.3

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	71.5	50.0	51.7	50.6	40.2	35.3	47.1
	Level 2	25.7	40.4	37.2	40.0	41.4	47.1	35.3
	Level 3	2.8	9.6	11.0	9.4	18.4	17.6	17.6
WOMEN	Level 1	66.7	50.6	40.2	38.3	26.9	28.2	35.5
	Level 2	31.2	42.6	50.0	48.6	54.8	43.1	35.5
	Level 3	2.1	6.8	9.8	13.1	18.3	28.7	29.0
TOTAL	Level 1	68.1	50.4	43.5	42.2	31.0	30.5	39.6
	Level 2	29.5	42.1	46.3	45.9	50.7	44.4	35.4
	Level 3	2.3	7.5	10.1	11.9	18.3	25.2	25.0

BELGIUM

Source: Cleemput, 2004

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	55	120	124	95	87	80	41	602
WOMEN	64	169	147	118	97	58	19	672
TOTAL	119	289	271	213	184	138	60	1274

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	85.0	83.7	82.0	79.8	77.3	71.4	73.0
	- Std Dev	8.7	12.4	13.1	13.9	14.2	16.0	14.8
	Median	87	85	85	80	80	75	70
	- 25th	80	79	75	70	70	64	65
	- 75th	90	90	90	90	89	81	80
WOMEN	Mean	84.9	81.6	82.7	80.1	80.0	73.3	68.6
	- Std Dev	12.0	13.7	13.2	14.7	14.4	18.5	18.5
	Median	90	85	85	80	80	75	77
	- 25th	80	75	75	75	70	69	57
	- 75th	91	90	90	90	90	84	80
TOTAL	Mean	84.9	82.5	82.4	79.9	78.7	72.2	71.8
	- Std Dev	10.5	13.2	13.1	14.3	14.3	17.1	15.8
	Median	88	85	85	80	80	75	70
	- 25th	80	75	75	75	70	68	64
	- 75th	90	90	90	90	90	84	80

BELGIUM

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	96.4	98.3	88.7	77.9	73.8	55.3	55.0
	Level 2	3.6	1.7	11.3	22.1	26.2	44.7	45.0
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	95.2	94.1	94.6	86.3	76.6	70.7	47.4
	Level 2	4.8	5.9	5.4	13.7	23.4	24.1	52.6
	Level 3	0.0	0.0	0.0	0.0	0.0	5.2	0.0
TOTAL	Level 1	95.8	95.8	91.9	82.5	75.3	61.9	52.5
	Level 2	4.2	4.2	8.1	17.5	24.7	35.8	47.5
	Level 3	0.0	0.0	0.0	0.0	0.0	2.2	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	100.0	98.4	95.8	96.4	84.2	72.5
	Level 2	0.0	0.0	1.6	4.2	3.6	10.5	27.5
	Level 3	0.0	0.0	0.0	0.0	0.0	5.3	0.0
WOMEN	Level 1	100.0	98.2	97.9	97.4	96.8	86.2	83.3
	Level 2	0.0	1.8	2.1	2.6	2.1	8.6	11.1
	Level 3	0.0	0.0	0.0	0.0	1.1	5.2	5.6
TOTAL	Level 1	100.0	99.0	98.1	96.7	96.6	85.1	75.9
	Level 2	0.0	1.0	1.9	3.3	2.8	9.7	22.4
	Level 3	0.0	0.0	0.0	0.0	0.6	5.2	1.7

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	94.5	92.5	87.0	81.1	84.3	61.6	50.0
	Level 2	5.5	7.5	13.0	18.9	15.7	32.9	50.0
	Level 3	0.0	0.0	0.0	0.0	0.0	5.5	0.0
WOMEN	Level 1	90.6	85.6	91.2	83.9	79.4	74.1	57.9
	Level 2	9.4	13.2	7.5	14.4	19.6	19.0	36.8
	Level 3	0.0	1.2	1.4	1.7	1.0	6.9	5.3
TOTAL	Level 1	92.4	88.5	89.3	82.6	81.7	67.2	52.5
	Level 2	7.6	10.8	10.0	16.4	17.8	26.7	45.8
	Level 3	0.0	0.7	0.7	0.9	0.6	6.1	1.7

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	69.1	70.0	65.3	53.7	46.4	32.9	45.0
	Level 2	30.9	30.0	33.1	44.2	51.2	57.9	55.0
	Level 3	0.0	0.0	1.6	2.1	2.4	9.2	0.0
WOMEN	Level 1	77.8	55.6	57.1	55.9	26.8	39.7	38.9
	Level 2	22.2	42.6	42.2	40.7	68.0	58.6	44.4
	Level 3	0.0	1.8	0.7	3.4	5.2	1.7	16.7
TOTAL	Level 1	73.7	61.6	60.9	54.9	35.9	35.8	43.1
	Level 2	26.3	37.4	38.0	42.3	60.2	58.2	51.7
	Level 3	0.0	1.0	1.1	2.8	3.9	6.0	5.2

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	78.2	84.2	83.1	69.5	81.0	76.3	60.0
	Level 2	20.0	14.2	16.9	30.5	17.9	22.4	40.0
	Level 3	1.8	1.7	0.0	0.0	1.2	1.3	0.0
WOMEN	Level 1	87.3	81.1	74.8	80.3	74.2	81.0	82.4
	Level 2	12.7	18.9	23.8	15.4	24.7	19.0	11.8
	Level 3	0.0	0.0	1.4	4.3	1.0	0.0	5.9
TOTAL	Level 1	83.1	82.4	78.6	75.5	77.3	78.4	66.7
	Level 2	16.1	17.0	20.7	22.2	21.5	20.9	31.6
	Level 3	0.8	0.7	0.7	2.4	1.1	0.7	1.8

CANADA

Source: Johnson et al, 2000

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	44	169	232	199	175	145	45	1009
WOMEN	52	86	108	66	65	78	53	508
TOTAL	96	255	340	265	240	223	98	1517

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	82.1	83.4	81.2	81.1	77.3	71.9	64.3
	- Std Dev	10.9	10.4	13.7	15.5	17.2	17.9	21.5
	Median	85	85	85	85	80	75	63
	- 25th	80	80	75	75	70	64	50
	- 75th	90	90	90	93	90	85	82
WOMEN	Mean	84.1	83.2	81.2	79.2	78.1	73.9	65.8
	- Std Dev	11.7	12.4	14.2	14.8	16.2	18.1	17.5
	Median	85	85	80	80	80	75	70
	- 25th	79	75	75	75	70	64	50
	- 75th	90	90	90	89	90	90	80
TOTAL	Mean	83.2	83.3	81.2	80.6	77.5	72.6	65.1
	- Std Dev	11.3	11.1	13.8	15.3	16.9	17.9	19.4
	Median	85	85	83	85	80	75	65
	- 25th	80	80	75	75	70	64	50
	- 75th	90	90	90	90	90	85	80

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	93.2	94.6	90.5	83.4	74.3	56.9	38.6
	Level 2	6.8	5.4	9.5	16.1	25.7	43.1	59.1
	Level 3	0.0	0.0	0.0	0.5	0.0	0.0	2.3
WOMEN	Level 1	98.0	95.3	87.0	76.9	64.1	50.6	25.5
	Level 2	2.0	4.7	13.0	23.1	35.9	48.1	72.5
	Level 3	0.0	0.0	0.0	0.0	0.0	1.3	2.0
TOTAL	Level 1	95.8	94.9	89.4	81.8	71.5	54.8	31.6
	Level 2	4.2	5.1	10.6	17.8	28.5	44.8	66.3
	Level 3	0.0	0.0	0.0	0.4	0.0	0.5	2.1

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	100.0	98.3	98.0	97.6	92.9	73.8
	Level 2	0.0	0.0	1.7	1.0	1.8	6.4	23.8
	Level 3	0.0	0.0	0.0	1.0	0.6	0.7	2.4
WOMEN	Level 1	100.0	97.7	99.1	100.0	98.4	89.6	70.0
	Level 2	0.0	2.3	0.9	0.0	1.6	9.1	26.0
	Level 3	0.0	0.0	0.0	0.0	0.0	1.3	4.0
TOTAL	Level 1	100.0	99.2	98.5	98.5	97.9	91.7	71.7
	Level 2	0.0	0.8	1.5	0.8	1.7	7.3	25.0
	Level 3	0.0	0.0	0.0	0.8	0.4	0.9	3.3

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	93.2	95.2	91.3	84.8	77.1	60.8	40.9
	Level 2	6.8	4.8	8.3	14.1	19.4	33.6	47.7
	Level 3	0.0	0.0	0.4	1.0	3.5	5.6	11.4
WOMEN	Level 1	96.1	94.2	88.9	83.1	73.4	60.3	46.0
	Level 2	3.9	4.7	9.3	12.3	21.9	34.2	52.0
	Level 3	0.0	1.2	1.9	4.6	4.7	5.5	2.0
TOTAL	Level 1	94.7	94.9	90.5	84.4	76.1	60.6	43.6
	Level 2	5.3	4.7	8.6	13.7	20.1	33.8	50.0
	Level 3	0.0	0.4	0.9	1.9	3.8	5.6	6.4

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	79.5	74.4	67.5	59.8	50.6	39.4	31.8
	Level 2	18.2	24.4	31.2	38.7	47.6	55.6	63.6
	Level 3	2.3	1.2	1.3	1.5	1.8	4.9	4.5
WOMEN	Level 1	74.5	70.9	54.6	46.8	42.9	39.0	19.2
	Level 2	25.5	27.9	39.8	45.2	54.0	54.5	75.0
	Level 3	0.0	1.2	5.6	8.1	3.2	6.5	5.8
TOTAL	Level 1	76.8	73.2	63.4	56.7	48.5	39.3	25.0
	Level 2	22.1	25.6	33.9	40.2	49.4	55.3	69.8
	Level 3	1.1	1.2	2.7	3.1	2.1	5.5	5.2

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	68.2	79.2	73.2	72.2	75.7	64.8	70.7
	Level 2	27.3	20.2	24.2	27.3	24.3	35.2	29.3
	Level 3	4.5	0.6	2.6	0.5	0.0	0.0	0.0
WOMEN	Level 1	68.0	75.3	63.0	64.1	71.0	76.3	58.8
	Level 2	32.0	23.5	36.1	35.9	29.0	22.4	41.2
	Level 3	0.0	1.2	0.9	0.0	0.0	1.3	0.0
TOTAL	Level 1	68.1	77.9	69.9	70.2	74.5	68.8	64.1
	Level 2	29.8	21.3	28.0	29.4	25.5	30.7	35.9
	Level 3	2.1	0.8	2.1	0.4	0.0	0.5	0.0

FINLAND

Source: Ohinmaa et al, 1996

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	209	165	161	120	241	201	66	1163
WOMEN	256	190	175	123	202	212	90	1248
TOTAL	465	355	336	243	443	413	156	2411

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	85.1	84.0	82.3	74.7	69.0	65.2	62.3
	- Std Dev	11.7	11.6	15.0	17.6	19.5	21.0	23.7
	Median	89	85	85	80	70	70	61
	- 25th	80	80	79	68	60	50	50
	- 75th	95	92	92	90	80	80	80
WOMEN	Mean	87.0	87.3	82.3	78.2	70.3	67.5	56.6
	- Std Dev	12.2	10.8	17.8	15.8	19.1	20.6	23.1
	Median	90	90	86	80	75	70	55
	- 25th	80	80	80	70	60	50	40
	- 75th	95	95	95	90	82	85	79
TOTAL	Mean	86.2	85.7	82.3	76.5	69.6	66.4	58.9
	- Std Dev	12.0	11.3	16.5	16.8	19.4	20.8	23.4
	Median	90	90	85	80	72	70	60
	- 25th	80	80	79	70	60	50	40
	- 75th	95	95	94	90	80	81	80

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	96.6	89.6	90.1	73.1	56.9	44.6	42.4
	Level 2	3.4	9.8	9.9	26.9	43.1	54.4	56.1
	Level 3	0.0	0.6	0.0	0.0	0.0	1.0	1.5
WOMEN	Level 1	96.5	95.8	86.8	76.4	55.7	42.9	18.9
	Level 2	3.1	4.2	12.6	23.6	44.3	55.7	80.0
	Level 3	0.4	0.0	0.6	0.0	0.0	1.4	1.1
TOTAL	Level 1	96.5	92.9	88.4	74.8	56.4	43.7	28.8
	Level 2	3.3	6.8	11.3	25.2	43.6	55.1	69.9
	Level 3	0.2	0.3	0.3	0.0	0.0	1.2	1.3

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	99.0	99.4	98.8	94.1	90.0	83.5	66.2
	Level 2	1.0	0.0	1.3	5.9	9.2	14.9	30.8
	Level 3	0.0	0.6	0.0	0.0	0.8	1.5	3.1
WOMEN	Level 1	99.6	98.9	97.7	95.9	93.0	83.6	51.7
	Level 2	0.4	1.1	1.1	4.1	7.0	14.5	42.5
	Level 3	0.0	0.0	1.1	0.0	0.0	1.9	5.7
TOTAL	Level 1	99.3	99.1	98.2	95.0	91.3	83.5	57.9
	Level 2	0.7	0.6	1.2	5.0	8.2	14.7	37.5
	Level 3	0.0	0.3	0.6	0.0	0.5	1.7	4.6

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	95.2	90.2	91.9	71.7	65.4	54.9	43.3
	Level 2	4.8	8.6	6.2	23.3	31.6	40.4	51.7
	Level 3	0.0	1.2	1.9	5.0	3.0	4.7	5.0
WOMEN	Level 1	95.7	94.7	87.4	82.8	66.7	55.2	28.2
	Level 2	3.9	4.7	10.9	17.2	29.8	39.9	58.8
	Level 3	0.4	0.5	1.7	0.0	3.5	4.9	12.9
TOTAL	Level 1	95.5	92.6	89.6	77.3	66.0	55.1	34.5
	Level 2	4.3	6.5	8.6	20.2	30.8	40.2	55.9
	Level 3	0.2	0.8	1.8	2.5	3.2	4.8	9.7

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	79.2	75.8	65.6	48.7	42.3	26.3	32.3
	Level 2	20.3	23.6	33.8	49.6	56.5	70.6	63.1
	Level 3	0.5	0.6	0.6	1.7	1.3	3.1	4.6
WOMEN	Level 1	82.3	75.3	60.0	46.3	35.0	31.9	19.1
	Level 2	17.3	24.2	36.6	51.2	62.5	65.2	68.5
	Level 3	0.4	0.5	3.4	2.5	2.5	2.9	12.4
TOTAL	Level 1	80.9	75.5	62.7	47.5	39.0	29.2	24.7
	Level 2	18.7	23.9	35.2	50.4	59.2	67.8	66.2
	Level 3	0.4	0.6	2.1	2.1	1.8	3.0	9.1

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	87.0	85.3	88.8	82.2	88.6	86.8	81.5
	Level 2	12.6	13.5	11.3	15.3	10.5	12.7	12.3
	Level 3	0.5	1.2	0.0	2.5	0.8	0.5	6.2
WOMEN	Level 1	91.8	86.2	81.7	88.5	81.5	81.9	71.6
	Level 2	8.2	13.8	16.6	11.5	17.5	17.6	25.0
	Level 3	0.0	0.0	1.7	0.0	1.0	0.5	3.4
TOTAL	Level 1	89.6	85.8	85.1	85.4	85.4	84.3	75.8
	Level 2	10.2	13.6	14.0	13.3	13.7	15.2	19.6
	Level 3	0.2	0.6	0.9	1.3	0.9	0.5	4.6

GERMANY

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	45	66	82	119	123	45	4	484
WOMEN	77	53	36	57	42	42	33	340
TOTAL	122	119	118	176	165	87	37	824

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	88.4	87.4	83.3	78.5	73.8	75.4	71.3
	- Std Dev	9.4	12.4	15.9	20.1	17.3	21.0	24.3
	Median	90	90	90	85	75	80	75
	- 25th	85	80	80	73	61	63	46
	- 75th	95	95	91	93	87	91	93
WOMEN	Mean	88.3	86.6	83.2	81.1	75.3	75.5	57.4
	- Std Dev	10.1	14.6	15.7	15.8	19.9	19.2	27.4
	Median	90	90	88	81	77	80	60
	- 25th	85	85	76	71	63	64	34
	- 75th	95	95	95	95	90	90	75
TOTAL	Mean	88.4	87.0	83.3	79.4	74.2	75.5	58.9
	- Std Dev	9.8	13.4	15.8	18.8	18.0	20.0	27.1
	Median	90	90	90	85	75	80	63
	- 25th	85	85	80	73	61	63	40
	- 75th	95	95	95	93	90	90	79

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	95.6	90.9	83.8	73.7	69.1	65.9	50.0
	Level 2	2.2	9.1	16.3	26.3	30.9	34.1	50.0
	Level 3	2.2	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	96.1	92.5	88.9	78.9	65.0	54.8	46.9
	Level 2	3.9	7.5	11.1	21.1	35.0	45.2	53.1
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	Level 1	95.9	91.6	85.3	75.4	68.1	60.5	47.2
	Level 2	3.3	8.4	14.7	24.6	31.9	39.5	52.8
	Level 3	0.8	0.0	0.0	0.0	0.0	0.0	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.8	98.5	98.8	96.6	96.7	93.3	75.0
	Level 2	0.0	1.5	1.2	2.5	3.3	6.7	25.0
	Level 3	2.2	0.0	0.0	0.8	0.0	0.0	0.0
WOMEN	Level 1	100.0	98.1	97.2	98.2	92.5	92.9	75.0
	Level 2	0.0	0.0	2.8	0.0	2.5	7.1	18.8
	Level 3	0.0	1.9	0.0	1.8	5.0	0.0	6.3
TOTAL	Level 1	99.2	98.3	98.3	97.1	95.7	93.1	75.0
	Level 2	0.0	0.8	1.7	1.7	3.1	6.9	19.4
	Level 3	0.8	0.8	0.0	1.1	1.2	0.0	5.6

Cont.

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.8	92.4	86.6	80.2	84.4	75.6	75.0
	Level 2	2.2	7.6	13.4	18.1	13.9	22.2	25.0
	Level 3	0.0	0.0	0.0	1.7	1.6	2.2	0.0
WOMEN	Level 1	94.8	94.3	91.7	86.0	74.4	73.2	56.3
	Level 2	5.2	5.7	8.3	14.0	20.5	26.8	31.3
	Level 3	0.0	0.0	0.0	0.0	5.1	0.0	12.5
TOTAL	Level 1	95.9	93.3	88.1	82.1	82.0	74.4	58.3
	Level 2	4.1	6.7	11.9	16.8	15.5	24.4	30.6
	Level 3	0.0	0.0	0.0	1.2	2.5	1.2	11.1

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	82.2	75.8	67.1	52.1	50.0	37.8	25.0
	Level 2	15.6	24.2	26.8	42.7	45.8	53.3	75.0
	Level 3	2.2	0.0	6.1	5.1	4.2	8.9	0.0
WOMEN	Level 1	81.8	67.9	61.1	42.9	45.0	42.9	31.3
	Level 2	16.9	30.2	36.1	53.6	45.0	52.4	56.3
	Level 3	1.3	1.9	2.8	3.6	10.0	4.8	12.5
TOTAL	Level 1	82.0	72.3	65.3	49.1	48.8	40.2	30.6
	Level 2	16.4	26.9	29.7	46.2	45.6	52.9	58.3
	Level 3	1.6	0.8	5.1	4.6	5.6	6.9	11.1

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	84.1	87.9	86.6	86.3	84.4	81.8	100.0
	Level 2	13.6	12.1	13.4	13.7	15.6	15.9	0.0
	Level 3	2.3	0.0	0.0	0.0	0.0	2.3	0.0
WOMEN	Level 1	81.8	86.8	66.7	75.0	65.0	66.7	64.5
	Level 2	18.2	13.2	30.6	25.0	35.0	33.3	29.0
	Level 3	0.0	0.0	2.8	0.0	0.0	0.0	6.5
TOTAL	Level 1	82.6	87.4	80.5	82.7	79.6	74.4	68.6
	Level 2	16.5	12.6	18.6	17.3	20.4	24.4	25.7
	Level 3	0.8	0.0	0.8	0.0	0.0	1.2	5.7

GREECE

Source: Yfantopoulous, 1999

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	65	53	41	45	29	15	3	251
WOMEN	70	34	40	35	20	13	1	213
TOTAL	135	87	81	80	49	28	4	464

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	86.2	84.2	82.3	79.2	69.7	60.8	49.5
	- Std Dev	11.9	14.5	17.4	17.0	17.9	26.2	13.4
	Median	90	90	89	84	70	61	50
	- 25th	79	75	79	66	60	45	40
	- 75th	98	95	94	90	86	82	59
WOMEN	Mean	84.6	81.5	84.1	64.6	69.2	64.2	40.0
	- Std Dev	14.1	21.1	14.4	20.9	17.9	27.8	.
	Median	90	86	86	70	73	70	40
	- 25th	80	80	80	50	61	48	40
	- 75th	95	93	95	80	80	90	40
TOTAL	Mean	85.4	83.2	83.2	72.7	69.5	62.4	46.3
	- Std Dev	13.1	17.3	15.9	20.1	17.7	26.5	11.0
	Median	90	88	87	79	70	63	40
	- 25th	80	80	79	60	60	46	40
	- 75th	95	95	95	90	80	89	59

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	98.3	91.5	94.9	85.7	75.0	42.9	33.3
	Level 2	1.7	8.5	5.1	14.3	25.0	50.0	66.7
	Level 3	0.0	0.0	0.0	0.0	0.0	7.1	0.0
WOMEN	Level 1	98.2	96.3	94.6	64.7	66.7	76.9	0.0
	Level 2	1.8	3.7	5.4	32.4	33.3	15.4	100.0
	Level 3	0.0	0.0	0.0	2.9	0.0	7.7	0.0
TOTAL	Level 1	98.3	93.2	94.7	76.3	71.7	59.3	25.0
	Level 2	1.7	6.8	5.3	22.4	28.3	33.3	75.0
	Level 3	0.0	0.0	0.0	1.3	0.0	7.4	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	100.0	97.4	100.0	96.4	71.4	66.7
	Level 2	0.0	0.0	2.6	0.0	3.6	21.4	33.3
	Level 3	0.0	0.0	0.0	0.0	0.0	7.1	0.0
WOMEN	Level 1	100.0	96.3	94.6	85.3	73.7	76.9	0.0
	Level 2	0.0	3.7	5.4	14.7	26.3	15.4	100.0
	Level 3	0.0	0.0	0.0	0.0	0.0	7.7	0.0
TOTAL	Level 1	100.0	98.6	96.1	93.4	87.2	74.1	50.0
	Level 2	0.0	1.4	3.9	6.6	12.8	18.5	50.0
	Level 3	0.0	0.0	0.0	0.0	0.0	7.4	0.0

GREECE

Cont.

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	97.9	97.4	88.1	78.6	46.7	66.7
	Level 2	0.0	2.1	2.6	11.9	21.4	53.3	33.3
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	100.0	96.3	97.3	70.6	73.7	69.2	0.0
	Level 2	0.0	3.7	2.7	29.4	26.3	23.1	100.0
	Level 3	0.0	0.0	0.0	0.0	0.0	7.7	0.0
TOTAL	Level 1	100.0	97.3	97.4	80.3	76.6	57.1	50.0
	Level 2	0.0	2.7	2.6	19.7	23.4	39.3	50.0
	Level 3	0.0	0.0	0.0	0.0	0.0	3.6	0.0

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	95.2	93.9	90.2	81.8	71.4	53.3	66.7
	Level 2	4.8	6.1	9.8	18.2	25.0	46.7	33.3
	Level 3	0.0	0.0	0.0	0.0	3.6	0.0	0.0
WOMEN	Level 1	92.1	92.9	92.1	62.9	50.0	53.8	0.0
	Level 2	7.9	7.1	5.3	28.6	40.0	30.8	0.0
	Level 3	0.0	0.0	2.6	8.6	10.0	15.4	100.0
TOTAL	Level 1	93.7	93.5	91.1	73.4	62.5	53.6	50.0
	Level 2	6.3	6.5	7.6	22.8	31.3	39.3	25.0
	Level 3	0.0	0.0	1.3	3.8	6.3	7.1	25.0

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	95.0	93.8	89.7	85.7	77.8	92.9	100.0
	Level 2	3.3	6.3	5.1	9.5	14.8	7.1	0.0
	Level 3	1.7	0.0	5.1	4.8	7.4	0.0	0.0
WOMEN	Level 1	94.6	92.9	89.2	79.4	83.3	76.9	100.0
	Level 2	3.6	7.1	10.8	20.6	5.6	23.1	0.0
	Level 3	1.8	0.0	0.0	0.0	11.1	0.0	0.0
TOTAL	Level 1	94.8	93.4	89.5	82.9	80.0	85.2	100.0
	Level 2	3.4	6.6	7.9	14.5	11.1	14.8	0.0
	Level 3	1.7	0.0	2.6	2.6	8.9	0.0	0.0

HUNGARY

Source: Szende et al, 2003

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	599	416	498	410	288	207	49	2467
WOMEN	601	470	567	516	433	346	103	3036
TOTAL	1200	886	1065	926	721	553	152	5503

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	83.4	78.9	73.7	67.5	63.2	60.5	52.4
	- Std Dev	13.0	15.4	17.7	20.2	21.0	20.3	21.5
	Median	85	80	80	70	69	60	50
	- 25th	80	70	65	50	50	50	36
	- 75th	90	90	85	80	80	75	70
WOMEN	Mean	82.1	79.0	70.8	65.0	59.3	54.5	53.0
	- Std Dev	14.4	16.1	18.3	18.5	20.2	22.1	21.9
	Median	85	80	75	65	60	50	50
	- 25th	75	70	60	50	50	40	39
	- 75th	90	90	81	80	75	70	70
TOTAL	Mean	82.8	79.0	72.2	66.1	60.9	56.7	52.8
	- Std Dev	13.8	15.7	18.0	19.3	20.6	21.7	21.7
	Median	85	80	75	70	60	54	50
	- 25th	78	70	60	50	50	49	37
	- 75th	90	90	85	80	80	70	70

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	98.3	92.7	87.7	76.1	71.5	56.9	52.1
	Level 2	1.5	6.1	11.1	22.9	27.7	40.6	45.8
	Level 3	0.2	1.2	1.2	1.0	0.7	2.5	2.1
WOMEN	Level 1	97.6	95.2	85.4	70.4	61.9	47.0	35.3
	Level 2	1.8	4.1	13.3	28.6	37.6	51.8	62.7
	Level 3	0.5	0.7	1.3	1.0	0.5	1.2	2.0
TOTAL	Level 1	98.0	94.0	86.5	72.9	65.7	50.7	40.7
	Level 2	1.7	5.1	12.3	26.1	33.7	47.6	57.3
	Level 3	0.3	0.9	1.2	1.0	0.6	1.7	2.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	99.0	98.8	97.1	92.2	91.2	78.4	74.5
	Level 2	0.8	1.0	2.3	6.6	6.3	17.6	21.3
	Level 3	0.2	0.2	0.6	1.3	2.6	4.0	4.3
WOMEN	Level 1	99.8	99.1	96.9	92.2	88.5	78.3	70.0
	Level 2	0.2	0.2	2.9	6.4	10.8	19.0	23.0
	Level 3	0.0	0.7	0.2	1.4	0.7	2.7	7.0
TOTAL	Level 1	99.4	99.0	97.0	92.2	89.5	78.3	71.4
	Level 2	0.5	0.6	2.6	6.5	9.0	18.5	22.4
	Level 3	0.1	0.5	0.4	1.3	1.5	3.2	6.1

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	98.1	95.8	89.9	81.7	78.0	64.0	63.0
	Level 2	1.7	3.4	8.3	15.3	16.5	26.9	28.3
	Level 3	0.2	0.7	1.9	3.1	5.5	9.1	8.7
WOMEN	Level 1	97.5	95.9	88.2	79.5	72.8	60.7	52.5
	Level 2	1.7	3.3	10.5	17.9	23.3	32.9	37.6
	Level 3	0.8	0.9	1.3	2.6	3.8	6.3	9.9
TOTAL	Level 1	97.8	95.9	89.0	80.4	74.9	61.9	55.8
	Level 2	1.7	3.3	9.5	16.7	20.6	30.7	34.7
	Level 3	0.5	0.8	1.5	2.8	4.5	7.4	9.5

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	86.3	78.2	68.1	56.3	50.9	43.3	38.8
	Level 2	13.5	21.3	29.8	42.1	45.0	50.2	57.1
	Level 3	0.2	0.5	2.1	1.5	4.1	6.5	4.1
WOMEN	Level 1	82.1	76.4	57.9	40.4	33.2	30.3	32.7
	Level 2	17.4	22.3	40.3	54.5	57.9	57.7	54.5
	Level 3	0.5	1.3	1.8	5.1	9.0	12.0	12.9
TOTAL	Level 1	84.2	77.3	62.7	47.4	40.2	35.2	34.7
	Level 2	15.5	21.8	35.4	49.1	52.8	54.9	55.3
	Level 3	0.3	0.9	1.9	3.6	7.0	9.9	10.0

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	85.8	78.8	74.7	63.5	63.3	57.5	50.0
	Level 2	13.0	20.0	22.8	34.2	31.5	39.0	45.7
	Level 3	1.2	1.2	2.5	2.3	5.2	3.5	4.3
WOMEN	Level 1	74.4	69.3	60.4	47.7	44.9	46.4	40.0
	Level 2	23.9	27.4	35.8	47.7	45.9	47.0	47.0
	Level 3	1.7	3.3	3.9	4.6	9.2	6.6	13.0
TOTAL	Level 1	80.1	73.8	67.1	54.6	52.2	50.6	43.2
	Level 2	18.4	23.9	29.7	41.8	40.2	44.0	46.6
	Level 3	1.4	2.3	3.2	3.6	7.6	5.4	10.3

JAPAN

Source: Tsuchiya et al, 2002

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	40	53	40	54	56	20	2	265
WOMEN	50	55	81	82	52	26	9	355
TOTAL	90	108	121	136	108	46	11	620

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	78.1	81.4	81.3	76.9	78.0	72.8	63.5
	- Std Dev	17.1	12.1	14.7	16.5	17.6	17.2	9.2
	Median	80	80	83	80	80	78	64
	- 25th	70	75	70	70	70	60	57
	- 75th	90	90	90	90	90	80	70
WOMEN	Mean	79.2	78.5	75.8	77.9	78.5	72.3	74.1
	- Std Dev	14.8	17.7	17.2	15.6	14.6	16.9	15.3
	Median	80	80	80	80	80	80	80
	- 25th	70	70	70	70	70	50	65
	- 75th	90	90	90	90	90	80	80
TOTAL	Mean	78.7	79.9	77.6	77.5	78.3	72.5	72.2
	- Std Dev	15.8	15.2	16.5	15.9	16.2	16.8	14.6
	Median	80	80	80	80	80	80	80
	- 25th	70	75	70	70	70	60	57
	- 75th	90	90	90	90	90	80	80

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.5	98.1	100.0	92.6	85.7	75.0	100.0
	Level 2	2.5	1.9	0.0	7.4	14.3	25.0	0.0
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	100.0	98.2	98.8	92.7	92.3	61.5	55.6
	Level 2	0.0	1.8	1.2	7.3	7.7	38.5	44.4
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	Level 1	98.9	98.1	99.2	92.6	88.9	67.4	63.6
	Level 2	1.1	1.9	0.8	7.4	11.1	32.6	36.4
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.5	100.0	100.0	98.1	100.0	95.0	100.0
	Level 2	2.5	0.0	0.0	1.9	0.0	5.0	0.0
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	100.0	100.0	98.8	98.8	96.2	88.5	88.9
	Level 2	0.0	0.0	1.2	1.2	3.8	11.5	11.1
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	Level 1	98.9	100.0	99.2	98.5	98.1	91.3	90.9
	Level 2	1.1	0.0	0.8	1.5	1.9	8.7	9.1
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.5	100.0	97.5	96.3	91.1	85.0	100.0
	Level 2	2.5	0.0	2.5	3.7	8.9	15.0	0.0
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	98.0	100.0	98.8	93.9	92.3	76.9	66.7
	Level 2	2.0	0.0	0.0	6.1	7.7	23.1	11.1
	Level 3	0.0	0.0	1.2	0.0	0.0	0.0	22.2
TOTAL	Level 1	97.8	100.0	98.3	94.9	91.7	80.4	72.7
	Level 2	2.2	0.0	0.8	5.1	8.3	19.6	9.1
	Level 3	0.0	0.0	0.8	0.0	0.0	0.0	18.2

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	90.0	96.2	92.5	87.0	78.6	70.0	50.0
	Level 2	7.5	3.8	5.0	11.1	21.4	30.0	50.0
	Level 3	2.5	0.0	2.5	1.9	0.0	0.0	0.0
WOMEN	Level 1	90.0	89.1	80.2	68.3	73.1	30.8	55.6
	Level 2	10.0	7.3	18.5	29.3	25.0	69.2	33.3
	Level 3	0.0	3.6	1.2	2.4	1.9	0.0	11.1
TOTAL	Level 1	90.0	92.6	84.3	75.7	75.9	47.8	54.5
	Level 2	8.9	5.6	14.0	22.1	23.1	52.2	36.4
	Level 3	1.1	1.9	1.7	2.2	0.9	0.0	9.1

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.5	96.2	92.5	88.9	94.6	85.0	100.0
	Level 2	2.5	3.8	5.0	7.4	5.4	15.0	0.0
	Level 3	0.0	0.0	2.5	3.7	0.0	0.0	0.0
WOMEN	Level 1	90.0	90.9	92.6	95.1	86.5	73.1	88.9
	Level 2	10.0	9.1	6.2	3.7	13.5	26.9	11.1
	Level 3	0.0	0.0	1.2	1.2	0.0	0.0	0.0
TOTAL	Level 1	93.3	93.5	92.6	92.6	90.7	78.3	90.9
	Level 2	6.7	6.5	5.8	5.1	9.3	21.7	9.1
	Level 3	0.0	0.0	1.7	2.2	0.0	0.0	0.0

THE NETHERLANDS

Source: Essink-Bot et al, 1993

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	53	71	38	34	60	73	55	384
WOMEN	60	88	71	69	74	74	31	467
TOTAL	113	159	109	103	134	147	86	851

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	84.4	81.2	82.8	83.9	80.3	79.1	68.5
	- Std Dev	11.2	15.5	13.8	11.4	16.7	17.2	19.7
	Median	85	85	85	85	84	80	70
	- 25th	75	70	75	79	70	70	50
	- 75th	95	95	95	94	95	90	80
WOMEN	Mean	82.5	80.8	83.7	80.3	79.3	79.7	78.1
	- Std Dev	11.3	14.2	15.5	19.1	15.4	15.8	20.1
	Median	80	85	86	89	84	80	80
	- 25th	75	70	76	71	70	65	64
	- 75th	90	91	95	95	90	94	95
TOTAL	Mean	83.4	81.0	83.4	81.5	79.7	79.4	72.5
	- Std Dev	11.2	14.8	14.9	17.0	15.9	16.4	20.3
	Median	82	85	85	86	84	80	79
	- 25th	75	70	75	75	70	70	60
	- 75th	92	92	95	95	91	93	90

THE NETHERLANDS

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	98.6	100.0	97.1	84.5	78.8	55.6
	Level 2	0.0	1.4	0.0	2.9	13.8	21.2	44.4
	Level 3	0.0	0.0	0.0	0.0	1.7	0.0	0.0
WOMEN	Level 1	98.3	100.0	98.6	97.0	94.3	88.7	80.8
	Level 2	1.7	0.0	1.4	3.0	5.7	11.3	19.2
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	Level 1	99.1	99.4	99.0	97.0	89.8	83.9	63.8
	Level 2	0.9	0.6	1.0	3.0	9.4	16.1	36.3
	Level 3	0.0	0.0	0.0	0.0	0.8	0.0	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	100.0	97.4	100.0	91.4	92.5	74.1
	Level 2	0.0	0.0	2.6	0.0	6.9	7.5	24.1
	Level 3	0.0	0.0	0.0	0.0	1.7	0.0	1.9
WOMEN	Level 1	98.3	100.0	98.6	97.0	95.8	89.0	86.2
	Level 2	1.7	0.0	1.4	3.0	4.2	9.6	13.8
	Level 3	0.0	0.0	0.0	0.0	0.0	1.4	0.0
TOTAL	Level 1	99.1	100.0	98.1	98.0	93.8	90.7	78.3
	Level 2	0.9	0.0	1.9	2.0	5.4	8.6	20.5
	Level 3	0.0	0.0	0.0	0.0	0.8	0.7	1.2

Cont.

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	90.6	90.0	86.8	82.4	75.9	64.7	44.4
	Level 2	9.4	7.1	13.2	14.7	22.4	30.9	42.6
	Level 3	0.0	2.9	0.0	2.9	1.7	4.4	13.0
WOMEN	Level 1	98.3	86.2	89.7	78.3	80.3	80.6	80.0
	Level 2	1.7	12.6	7.4	13.0	18.3	11.1	12.0
	Level 3	0.0	1.1	2.9	8.7	1.4	8.3	8.0
TOTAL	Level 1	94.7	87.9	88.7	79.6	78.3	72.9	55.7
	Level 2	5.3	10.2	9.4	13.6	20.2	20.7	32.9
	Level 3	0.0	1.9	1.9	6.8	1.6	6.4	11.4

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	75.5	77.1	71.1	58.8	50.0	43.5	35.8
	Level 2	24.5	22.9	28.9	38.2	48.3	53.6	58.5
	Level 3	0.0	0.0	0.0	2.9	1.7	2.9	5.7
WOMEN	Level 1	88.1	81.4	72.9	60.9	54.2	53.4	56.7
	Level 2	11.9	17.4	24.3	34.8	44.4	45.2	40.0
	Level 3	0.0	1.2	2.9	4.3	1.4	1.4	3.3
TOTAL	Level 1	82.1	79.5	72.2	60.2	52.3	48.6	43.4
	Level 2	17.9	19.9	25.9	35.9	46.2	49.3	51.8
	Level 3	0.0	0.6	1.9	3.9	1.5	2.1	4.8

THE NETHERLANDS

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	79.2	71.8	81.6	79.4	82.5	67.1	67.9
	Level 2	20.8	26.8	15.8	20.6	14.0	31.4	26.4
	Level 3	0.0	1.4	2.6	0.0	3.5	1.4	5.7
WOMEN	Level 1	90.0	85.1	90.0	87.0	85.9	81.4	86.7
	Level 2	10.0	12.6	10.0	13.0	12.7	18.6	13.3
	Level 3	0.0	2.3	0.0	0.0	1.4	0.0	0.0
TOTAL	Level 1	85.0	79.1	87.0	84.5	84.4	74.3	74.7
	Level 2	15.0	19.0	12.0	15.5	13.3	25.0	21.7
	Level 3	0.0	1.9	0.9	0.0	2.3	0.7	3.6

NEW ZEALAND

Source: Devlin et al, 2000

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	74	100	110	100	102	61	27	574
WOMEN	95	138	154	144	114	79	29	753
TOTAL	169	238	264	244	216	140	56	1327

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	81.6	81.6	82.6	80.6	79.8	76.8	73.0
	- Std Dev	13.2	14.2	13.4	17.2	16.3	19.0	20.2
	Median	81	85	85	85	80	80	77
	- 25th	72	75	77	70	70	63	60
	- 75th	94	90	90	94	91	95	89
WOMEN	Mean	82.4	83.5	83.4	83.0	80.9	75.3	62.1
	- Std Dev	12.6	12.9	13.9	16.6	16.3	16.1	19.8
	Median	85	85	88	90	88	80	60
	- 25th	75	78	80	78	73	70	50
	- 75th	90	92	93	95	90	90	80
TOTAL	Mean	82.0	82.7	83.0	82.0	80.4	76.0	67.3
	- Std Dev	12.9	13.5	13.7	16.8	16.3	17.4	20.5
	Median	85	85	85	87	85	80	70
	- 25th	75	76	78	75	70	70	50
	- 75th	90	90	90	95	90	90	80

NEW ZEALAND

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	94.4	89.7	90.0	84.7	71.1	46.7	51.9
	Level 2	5.6	9.3	10.0	15.3	28.9	51.7	48.1
	Level 3	0.0	1.0	0.0	0.0	0.0	1.7	0.0
WOMEN	Level 1	95.7	90.4	91.5	78.2	73.9	55.8	20.7
	Level 2	4.3	9.6	8.5	21.8	25.2	44.2	75.9
	Level 3	0.0	0.0	0.0	0.0	0.9	0.0	3.4
TOTAL	Level 1	95.2	90.1	90.9	80.8	72.6	51.8	35.7
	Level 2	4.8	9.4	9.1	19.2	26.9	47.4	62.5
	Level 3	0.0	0.4	0.0	0.0	0.5	0.7	1.8

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	99.0	97.2	91.8	91.8	89.7	88.9
	Level 2	0.0	0.0	2.8	8.2	8.2	6.9	11.1
	Level 3	0.0	1.0	0.0	0.0	0.0	3.4	0.0
WOMEN	Level 1	97.8	98.5	99.3	96.5	95.4	95.9	63.0
	Level 2	2.2	1.5	0.7	3.5	4.6	4.1	29.6
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	7.4
TOTAL	Level 1	98.8	98.7	98.5	94.6	93.7	93.2	75.9
	Level 2	1.2	0.9	1.5	5.4	6.3	5.3	20.4
	Level 3	0.0	0.4	0.0	0.0	0.0	1.5	3.7

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	91.7	91.8	88.2	81.6	66.3	55.0	50.0
	Level 2	8.3	7.1	10.9	17.3	32.7	41.7	46.2
	Level 3	0.0	1.0	0.9	1.0	1.0	3.3	3.8
WOMEN	Level 1	90.3	87.5	85.6	79.0	72.5	61.5	17.2
	Level 2	9.7	12.5	14.4	20.3	27.5	38.5	72.4
	Level 3	0.0	0.0	0.0	0.7	0.0	0.0	10.3
TOTAL	Level 1	90.9	89.3	86.7	80.1	69.6	58.7	32.7
	Level 2	9.1	10.3	12.9	19.1	30.0	39.9	60.0
	Level 3	0.0	0.4	0.4	0.8	0.5	1.4	7.3

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	81.9	74.5	70.9	53.6	45.4	31.7	40.7
	Level 2	16.7	24.5	28.2	42.3	50.5	63.3	59.3
	Level 3	1.4	1.0	0.9	4.1	4.1	5.0	0.0
WOMEN	Level 1	76.4	73.3	66.9	54.2	45.5	38.5	20.7
	Level 2	22.5	25.2	32.5	45.1	51.8	59.0	69.0
	Level 3	1.1	1.5	0.7	0.7	2.7	2.6	10.3
TOTAL	Level 1	78.9	73.8	68.6	54.0	45.4	35.5	30.4
	Level 2	19.9	24.9	30.7	43.9	51.2	60.9	64.3
	Level 3	1.2	1.3	0.8	2.1	3.4	3.6	5.4

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	84.7	85.7	87.2	78.4	75.5	80.7	76.0
	Level 2	15.3	13.3	12.8	19.6	23.5	19.3	24.0
	Level 3	0.0	1.0	0.0	2.1	1.0	0.0	0.0
WOMEN	Level 1	83.9	77.0	74.7	82.3	72.9	71.8	55.6
	Level 2	16.1	23.0	24.0	16.3	26.2	28.2	40.7
	Level 3	0.0	0.0	1.3	1.4	0.9	0.0	3.7
TOTAL	Level 1	84.2	80.7	79.9	80.7	74.1	75.6	65.4
	Level 2	15.8	18.9	19.3	17.6	24.9	24.4	32.7
	Level 3	0.0	0.4	0.8	1.7	1.0	0.0	1.9

SLOVENIA

Source: Prevolnik Rupel and Rebolj 2001

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	82	53	63	57	36	29	4	324
WOMEN	116	90	60	59	45	37	11	418
TOTAL	198	143	123	116	81	66	15	742

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	83.9	79.4	77.8	69.4	67.8	65.0	45.0
	- Std Dev	13.1	15.0	18.7	20.7	16.3	17.9	20.4
	Median	87	80	80	72	70	65	38
	- 25th	75	77	70	60	60	50	31
	- 75th	95	85	90	85	80	80	66
WOMEN	Mean	85.2	82.5	79.6	72.4	66.7	61.4	47.7
	- Std Dev	14.0	16.5	18.1	21.7	17.8	19.7	15.9
	Median	90	89	80	80	70	60	45
	- 25th	80	76	70	60	50	50	40
	- 75th	95	95	94	90	80	71	60
TOTAL	Mean	84.6	81.4	78.7	70.9	67.2	63.0	46.9
	- Std Dev	13.6	16.0	18.3	21.1	17.0	18.9	16.5
	Median	90	85	80	79	70	60	40
	- 25th	80	77	70	60	59	50	35
	- 75th	95	90	90	89	80	75	60

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	95.1	81.1	65.1	52.6	41.7	37.0	25.0
	Level 2	4.9	17.0	34.9	47.4	58.3	63.0	75.0
	Level 3	0.0	1.9	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	96.6	87.6	76.7	61.0	40.0	25.0	9.1
	Level 2	3.4	12.4	23.3	37.3	60.0	72.2	90.9
	Level 3	0.0	0.0	0.0	1.7	0.0	2.8	0.0
TOTAL	Level 1	96.0	85.2	70.7	56.9	40.7	30.2	13.3
	Level 2	4.0	14.1	29.3	42.2	59.3	68.3	86.7
	Level 3	0.0	0.7	0.0	0.9	0.0	1.6	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	98.8	92.5	88.9	75.4	80.6	63.0	50.0
	Level 2	1.2	5.7	11.1	24.6	19.4	33.3	50.0
	Level 3	0.0	1.9	0.0	0.0	0.0	3.7	0.0
WOMEN	Level 1	98.3	88.8	95.0	79.7	77.8	63.9	27.3
	Level 2	1.7	11.2	5.0	18.6	22.2	33.3	72.7
	Level 3	0.0	0.0	0.0	1.7	0.0	2.8	0.0
TOTAL	Level 1	98.5	90.1	91.9	77.6	79.0	63.5	33.3
	Level 2	1.5	9.2	8.1	21.6	21.0	33.3	66.7
	Level 3	0.0	0.7	0.0	0.9	0.0	3.2	0.0

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	82.9	69.8	68.3	57.9	55.6	48.1	25.0
	Level 2	17.1	28.3	31.7	36.8	44.4	51.9	75.0
	Level 3	0.0	1.9	0.0	5.3	0.0	0.0	0.0
WOMEN	Level 1	86.2	79.8	75.0	59.3	37.8	32.4	9.1
	Level 2	13.8	18.0	25.0	35.6	62.2	62.2	81.8
	Level 3	0.0	2.2	0.0	5.1	0.0	5.4	9.1
TOTAL	Level 1	84.8	76.1	71.5	58.6	45.7	39.1	13.3
	Level 2	15.2	21.8	28.5	36.2	54.3	57.8	80.0
	Level 3	0.0	2.1	0.0	5.2	0.0	3.1	6.7

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	70.7	60.4	60.3	42.1	36.1	22.2	25.0
	Level 2	28.0	34.0	36.5	52.6	63.9	77.8	75.0
	Level 3	1.2	5.7	3.2	5.3	0.0	0.0	0.0
WOMEN	Level 1	76.7	65.2	50.0	32.2	31.8	18.9	9.1
	Level 2	22.4	33.7	50.0	61.0	68.2	78.4	81.8
	Level 3	0.9	1.1	0.0	6.8	0.0	2.7	9.1
TOTAL	Level 1	74.2	63.4	55.3	37.1	33.8	20.3	13.3
	Level 2	24.7	33.8	43.1	56.9	66.3	78.1	80.0
	Level 3	1.0	2.8	1.6	6.0	0.0	1.6	6.7

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	70.7	60.4	77.8	57.9	52.8	66.7	50.0
	Level 2	26.8	39.6	20.6	40.4	47.2	33.3	50.0
	Level 3	2.4	0.0	1.6	1.8	0.0	0.0	0.0
WOMEN	Level 1	73.3	64.0	71.7	47.5	53.3	47.2	36.4
	Level 2	26.7	33.7	28.3	45.8	44.4	52.8	63.6
	Level 3	0.0	2.2	0.0	6.8	2.2	0.0	0.0
TOTAL	Level 1	72.2	62.7	74.8	52.6	53.1	55.6	40.0
	Level 2	26.8	35.9	24.4	43.1	45.7	44.4	60.0
	Level 3	1.0	1.4	0.8	4.3	1.2	0.0	0.0

SPAIN

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	315	216	201	221	183	110	45	315
WOMEN	323	241	247	201	223	154	61	323
TOTAL	638	457	448	422	406	264	106	638

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	82.3	79.6	78.3	75.5	72.0	70.3	66.8
	- Std Dev	13.9	16.6	16.5	18.8	18.4	18.5	17.7
	Median	82	80	80	80	75	70	70
	- 25th	75	70	70	70	50	58	50
	- 75th	90	90	90	90	90	81	80
WOMEN	Mean	81.8	78.2	77.7	70.7	68.9	68.4	63.5
	- Std Dev	14.4	19.2	16.9	19.7	19.6	18.9	23.7
	Median	80	80	80	75	70	70	60
	- 25th	75	70	70	50	50	50	50
	- 75th	90	90	90	85	80	80	80
TOTAL	Mean	82.0	78.9	78.0	73.2	70.3	69.2	64.9
	- Std Dev	14.2	18.0	16.7	19.4	19.1	18.7	21.4
	Median	80	80	80	80	70	70	70
	- 25th	75	70	70	60	50	50	50
	- 75th	90	90	90	90	80	80	80

SPAIN

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	96.8	97.2	95.0	85.1	77.6	75.5	44.4
	Level 2	2.9	2.8	5.0	14.9	22.4	24.5	55.6
	Level 3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
WOMEN	Level 1	97.8	93.8	94.3	81.1	69.1	64.3	55.7
	Level 2	1.9	6.3	5.7	18.4	30.5	35.1	41.0
	Level 3	0.3	0.0	0.0	0.5	0.4	0.6	3.3
TOTAL	Level 1	97.3	95.4	94.6	83.2	72.9	68.9	50.9
	Level 2	2.4	4.6	5.4	16.6	26.8	30.7	47.2
	Level 3	0.3	0.0	0.0	0.2	0.2	0.4	1.9

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	98.4	99.1	99.0	96.8	97.3	96.4	77.8
	Level 2	1.3	0.5	1.0	2.7	2.7	2.7	20.0
	Level 3	0.3	0.5	0.0	0.5	0.0	0.9	2.2
WOMEN	Level 1	99.7	100.0	99.6	98.5	94.2	90.3	82.0
	Level 2	0.3	0.0	0.4	1.5	5.8	9.1	13.1
	Level 3	0.0	0.0	0.0	0.0	0.0	0.6	4.9
TOTAL	Level 1	99.1	99.6	99.3	97.6	95.6	92.8	80.2
	Level 2	0.8	0.2	0.7	2.1	4.4	6.4	16.0
	Level 3	0.2	0.2	0.0	0.2	0.0	0.8	3.8

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	95.2	95.4	91.5	86.4	86.9	90.9	73.3
	Level 2	4.1	4.2	8.0	11.3	12.6	8.2	24.4
	Level 3	0.6	0.5	0.5	2.3	0.5	0.9	2.2
WOMEN	Level 1	97.2	94.6	93.1	85.1	78.9	71.4	59.0
	Level 2	2.5	5.4	6.5	14.4	20.2	26.0	31.1
	Level 3	0.3	0.0	0.4	0.5	0.9	2.6	9.8
TOTAL	Level 1	96.2	95.0	92.4	85.8	82.5	79.5	65.1
	Level 2	3.3	4.8	7.1	12.8	16.7	18.6	28.3
	Level 3	0.5	0.2	0.4	1.4	0.7	1.9	6.6

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	82.9	79.2	78.6	72.9	66.1	59.1	55.6
	Level 2	16.5	18.5	19.9	24.4	29.5	37.3	35.6
	Level 3	0.6	2.3	1.5	2.7	4.4	3.6	8.9
WOMEN	Level 1	83.6	77.9	68.4	58.2	49.3	54.5	50.8
	Level 2	16.1	18.8	28.3	35.8	42.2	38.3	32.8
	Level 3	0.3	3.3	3.2	6.0	8.5	7.1	16.4
TOTAL	Level 1	83.2	78.5	73.0	65.9	56.9	56.4	52.8
	Level 2	16.3	18.6	24.6	29.9	36.5	37.9	34.0
	Level 3	0.5	2.9	2.5	4.3	6.7	5.7	13.2

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	90.2	88.4	88.1	85.9	92.3	92.7	80.0
	Level 2	9.5	10.7	10.0	13.2	7.7	7.3	17.8
	Level 3	0.3	0.9	2.0	0.9	0.0	0.0	2.2
WOMEN	Level 1	85.0	80.8	79.8	74.0	74.9	71.9	75.4
	Level 2	14.6	17.5	19.4	20.5	21.5	20.9	16.4
	Level 3	0.3	1.7	0.8	5.5	3.6	7.2	8.2
TOTAL	Level 1	87.6	84.4	83.5	80.2	82.7	80.6	77.4
	Level 2	12.1	14.3	15.2	16.7	15.3	15.2	17.0
	Level 3	0.3	1.3	1.3	3.1	2.0	4.2	5.7

SWEDEN

Source: Björk et al, 1999; Burström et al, 2001
Tables are based on pooled data from two studies

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	313	380	346	372	237	215	81	1944
WOMEN	277	304	296	333	226	182	41	1659
TOTAL	590	684	642	705	463	397	122	3603

EQ VAS[†] – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	85.3	87.2	83.9	82.2	83.0	84.2	.
	- Std Dev	12.7	14.0	12.5	18.3	16.7	12.8	.
	Median	86	90	85	88	89	88	.
	- 25th	80	80	75	76	79	70	.
	- 75th	95	98	95	96	95	96	.
WOMEN	Mean	83.3	89.8	79.8	84.3	80.4	71.7	.
	- Std Dev	17.8	10.8	18.9	18.2	19.4	21.0	.
	Median	90	92	80	90	85	75	.
	- 25th	75	85	70	80	70	55	.
	- 75th	95	99	95	98	95	90	.
TOTAL	Mean	84.3	88.5	81.9	83.2	81.8	76.9	.
	- Std Dev	15.5	12.5	16.0	18.2	17.9	19.0	.
	Median	90	90	85	90	89	80	.
	- 25th	79	85	75	80	75	60	.
	- 75th	95	99	95	96	95	95	.

† EQ VAS ratings have been calculated using data from the study by Björk et al only
(N_{men} = 264, N_{women} = 270, N_{total} = 534).

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	97.4	96.5	93.8	89.2	83.3	70.6	56.4
	Level 2	2.6	3.5	6.2	10.3	16.2	28.9	43.6
	Level 3	0.0	0.0	0.0	0.5	0.4	0.5	0.0
WOMEN	Level 1	98.9	97.3	93.2	89.4	82.9	74.2	51.2
	Level 2	1.1	2.3	6.8	10.3	17.1	24.7	48.8
	Level 3	0.0	0.3	0.0	0.3	0.0	1.1	0.0
TOTAL	Level 1	98.1	96.9	93.5	89.3	83.1	72.2	54.6
	Level 2	1.9	3.0	6.5	10.3	16.7	27.0	45.4
	Level 3	0.0	0.1	0.0	0.4	0.2	0.8	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	100.0	98.9	99.1	97.6	98.7	98.6	91.0
	Level 2	0.0	0.5	0.9	2.2	0.9	1.0	6.4
	Level 3	0.0	0.5	0.0	0.3	0.4	0.5	2.6
WOMEN	Level 1	99.3	99.3	98.3	98.2	99.1	92.7	80.0
	Level 2	0.4	0.3	0.7	1.8	0.9	5.6	17.5
	Level 3	0.4	0.3	1.0	0.0	0.0	1.7	2.5
TOTAL	Level 1	99.7	99.1	98.7	97.9	98.9	95.9	87.3
	Level 2	0.2	0.4	0.8	2.0	0.9	3.1	10.2
	Level 3	0.2	0.4	0.5	0.1	0.2	1.0	2.5

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	96.8	94.2	90.9	87.1	89.3	89.4	77.2
	Level 2	2.6	4.2	7.1	10.2	9.0	9.6	17.7
	Level 3	0.6	1.6	2.1	2.7	1.7	1.0	5.1
WOMEN	Level 1	98.2	96.0	92.9	90.9	93.7	89.3	79.5
	Level 2	1.1	3.6	5.1	6.0	5.4	7.3	15.4
	Level 3	0.7	0.3	2.0	3.0	0.9	3.4	5.1
TOTAL	Level 1	97.4	95.0	91.8	88.9	91.4	89.4	78.0
	Level 2	1.9	4.0	6.1	8.3	7.2	8.6	16.9
	Level 3	0.7	1.0	2.0	2.8	1.3	2.1	5.1

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	67.4	63.1	58.3	51.4	34.1	42.2	25.6
	Level 2	31.9	34.7	38.5	44.0	62.5	52.1	70.5
	Level 3	0.6	2.1	3.3	4.6	3.4	5.7	3.8
WOMEN	Level 1	76.4	70.9	61.9	54.1	41.3	39.8	32.5
	Level 2	22.9	28.1	34.4	41.1	57.0	56.3	62.5
	Level 3	0.7	1.0	3.7	4.8	1.8	4.0	5.0
TOTAL	Level 1	71.6	66.6	60.0	52.6	37.6	41.1	28.0
	Level 2	27.7	31.8	36.6	42.6	59.8	54.0	67.8
	Level 3	0.7	1.6	3.5	4.7	2.6	4.9	4.2

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	64.1	69.5	70.0	68.1	65.9	71.8	61.5
	Level 2	34.3	28.6	29.1	29.2	32.3	27.3	38.5
	Level 3	1.6	1.9	0.9	2.7	1.7	1.0	0.0
WOMEN	Level 1	73.5	76.9	74.8	75.2	74.1	74.0	62.5
	Level 2	25.1	22.1	23.5	23.6	25.5	23.2	37.5
	Level 3	1.5	1.0	1.7	1.2	0.5	2.8	0.0
TOTAL	Level 1	68.5	72.8	72.3	71.5	69.9	72.8	61.9
	Level 2	30.0	25.7	26.5	26.5	29.0	25.4	38.1
	Level 3	1.5	1.5	1.3	2.0	1.1	1.8	0.0

UNITED KINGDOM

Source: Kind, 1998

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	287	301	247	205	212	170	47	1469
WOMEN	387	383	298	258	267	238	95	1926
TOTAL	674	684	545	463	479	408	142	3395

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	87.3	86.7	85.4	82.9	78.9	76.5	70.7
	- Std Dev	13.9	13.8	14.7	67.3	18.1	17.7	18.6
	Median	90	90	90	90	85	80	78
	- 25th	80	80	80	70	70	70	58
	- 75th	98	95	95	92	93	90	85
WOMEN	Mean	86.9	85.9	84.8	80.0	80.5	74.5	73.3
	- Std Dev	13.8	15.2	16.1	18.1	16.9	19.0	18.1
	Median	90	90	90	85	85	80	75
	- 25th	80	80	80	70	75	60	60
	- 75th	97	96	95	95	94	90	90
TOTAL	Mean	87.0	86.2	85.1	81.3	79.8	75.3	72.5
	- Std Dev	13.8	14.6	15.5	46.8	17.5	18.5	18.2
	Median	90	90	90	86	85	80	75
	- 25th	80	80	80	70	70	65	60
	- 75th	98	95	95	95	93	90	88

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	94.8	92.0	90.7	74.1	65.4	66.5	54.3
	Level 2	5.2	7.7	8.5	25.9	34.6	33.5	45.7
	Level 3	0.0	0.3	0.8	0.0	0.0	0.0	0.0
WOMEN	Level 1	95.8	92.4	88.9	81.3	74.9	55.7	37.9
	Level 2	4.2	7.6	11.1	18.7	25.1	44.3	62.1
	Level 3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	Level 1	95.4	92.2	89.7	78.1	70.7	60.2	43.3
	Level 2	4.6	7.6	9.9	21.9	29.3	39.8	56.7
	Level 3	0.0	0.1	0.4	0.0	0.0	0.0	0.0

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	99.0	98.0	96.0	93.7	92.9	92.4	89.1
	Level 2	1.0	1.7	4.0	6.3	6.6	7.1	10.9
	Level 3	0.0	0.3	0.0	0.0	0.5	0.6	0.0
WOMEN	Level 1	99.2	98.7	95.6	95.7	95.5	92.8	81.1
	Level 2	0.8	1.3	4.0	4.3	4.5	7.2	17.9
	Level 3	0.0	0.0	0.3	0.0	0.0	0.0	1.1
TOTAL	Level 1	99.1	98.4	95.8	94.8	94.3	92.6	83.7
	Level 2	0.9	1.5	4.0	5.2	5.5	7.1	15.6
	Level 3	0.0	0.1	0.2	0.0	0.2	0.2	0.7

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	91.6	92.7	90.7	75.0	71.1	75.3	58.7
	Level 2	7.7	6.3	7.3	18.6	24.2	20.0	34.8
	Level 3	0.7	1.0	2.0	6.4	4.7	4.7	6.5
WOMEN	Level 1	94.5	90.3	87.9	80.6	78.6	72.6	54.7
	Level 2	5.2	9.1	11.1	19.0	19.5	23.6	40.0
	Level 3	0.3	0.5	1.0	0.4	1.9	3.8	5.3
TOTAL	Level 1	93.3	91.4	89.2	78.1	75.3	73.7	56.0
	Level 2	6.3	7.9	9.4	18.8	21.6	22.1	38.3
	Level 3	0.4	0.7	1.5	3.0	3.1	4.2	5.7

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	83.6	81.3	76.0	58.5	50.2	49.4	45.7
	Level 2	16.4	16.7	21.5	34.6	43.6	44.1	43.5
	Level 3	0.0	2.0	2.4	6.8	6.2	6.5	10.9
WOMEN	Level 1	84.2	80.2	72.5	54.5	56.6	40.1	36.8
	Level 2	15.3	18.5	23.8	40.9	38.2	51.5	52.6
	Level 3	0.5	1.3	3.7	4.7	5.2	8.4	10.5
TOTAL	Level 1	83.9	80.7	74.1	56.3	53.8	44.0	39.7
	Level 2	15.8	17.7	22.8	38.1	40.6	48.4	49.6
	Level 3	0.3	1.6	3.1	5.6	5.6	7.6	10.6

UNITED KINGDOM

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	89.5	84.7	84.2	74.1	74.4	82.9	82.6
	Level 2	9.4	14.0	13.4	23.4	22.3	12.9	15.2
	Level 3	1.0	1.3	2.4	2.4	3.3	4.1	2.2
WOMEN	Level 1	84.2	80.9	78.9	71.7	70.0	68.8	71.6
	Level 2	15.1	18.3	19.8	25.2	27.3	29.5	28.4
	Level 3	0.8	0.8	1.3	3.1	2.6	1.7	0.0
TOTAL	Level 1	86.5	82.6	81.3	72.8	72.0	74.7	75.2
	Level 2	12.6	16.4	16.9	24.4	25.1	22.6	24.1
	Level 3	0.9	1.0	1.8	2.8	2.9	2.7	0.7

ZIMBABWE

Source: Jelsma, 2003

Number of respondents

AGE GROUPS	18-29	30-39	40-49	50-59	60-69	70-79	80+	TOTAL
MEN	313	380	346	372	237	215	81	1944
WOMEN	277	304	296	333	226	182	41	1659
TOTAL	590	684	642	705	463	397	122	3603

EQ VAS – Mean + Standard Deviation and Median + Percentiles

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Mean	83.0	81.7	77.9	79.0	79.9	65.2	.
	- Std Dev	16.1	14.3	19.5	16.5	12.2	17.7	.
	Median	90	84	84	84	80	60	.
	- 25th	72	70	70	68	80	50	.
	- 75th	96	92	92	91	86	76	.
WOMEN	Mean	81.2	78.6	75.8	72.8	64.1	58.3	.
	- Std Dev	17.4	16.7	18.9	19.8	17.1	15.5	.
	Median	88	80	80	76	58	66	.
	- 25th	70	70	60	50	50	40	.
	- 75th	96	90	90	90	80	72	.
TOTAL	Mean	81.8	79.8	76.6	75.1	70.5	61.5	.
	- Std Dev	16.9	15.9	19.1	18.8	17.0	16.2	.
	Median	90	80	80	80	78	65	.
	- 25th	70	70	62	60	50	50	.
	- 75th	96	91	90	90	82	72	.

ZIMBABWE

Cont.

MOBILITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	96.0	94.2	89.4	85.5	88.9	50.0	.
	Level 2	4.0	5.4	10.6	14.5	11.1	50.0	.
	Level 3	0.0	0.4	0.0	0.0	0.0	0.0	.
WOMEN	Level 1	92.3	91.9	83.8	65.9	42.3	28.6	.
	Level 2	7.7	7.9	16.2	34.1	57.7	57.1	.
	Level 3	0.0	0.2	0.0	0.0	0.0	14.3	.
TOTAL	Level 1	93.6	92.8	85.8	73.4	61.4	38.5	.
	Level 2	6.4	6.9	14.2	26.6	38.6	53.8	.
	Level 3	0.0	0.3	0.0	0.0	0.0	7.7	.

SELF-CARE – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	96.2	98.2	90.5	92.7	94.4	100.0	.
	Level 2	3.8	1.5	9.5	7.3	5.6	0.0	.
	Level 3	0.0	0.4	0.0	0.0	0.0	0.0	.
WOMEN	Level 1	97.5	97.9	98.0	94.3	80.8	57.1	.
	Level 2	2.4	2.1	2.0	5.7	19.2	28.6	.
	Level 3	0.2	0.0	0.0	0.0	0.0	14.3	.
TOTAL	Level 1	97.0	98.0	95.3	93.7	86.4	75.0	.
	Level 2	2.9	1.8	4.7	6.3	13.6	16.7	.
	Level 3	0.1	0.1	0.0	0.0	0.0	8.3	.

USUAL ACTIVITY – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	93.5	90.6	81.2	87.3	94.4	83.3	.
	Level 2	6.5	8.7	17.6	10.9	5.6	16.7	.
	Level 3	0.0	0.7	1.2	1.8	0.0	0.0	.
WOMEN	Level 1	92.2	89.3	85.0	73.6	42.3	42.9	.
	Level 2	7.4	10.2	15.0	24.1	57.7	42.9	.
	Level 3	0.3	0.5	0.0	2.3	0.0	14.3	.
TOTAL	Level 1	92.7	89.8	83.6	78.9	63.6	61.5	.
	Level 2	7.1	9.6	16.0	19.0	36.4	30.8	.
	Level 3	0.2	0.6	0.4	2.1	0.0	7.7	.

PAIN / DISCOMFORT – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	79.9	74.3	63.5	61.8	61.1	33.3	.
	Level 2	17.2	23.9	29.4	38.2	38.9	50.0	.
	Level 3	2.9	1.8	7.1	0.0	0.0	16.7	.
WOMEN	Level 1	71.6	69.5	61.7	39.8	30.8	14.3	.
	Level 2	25.1	25.6	28.6	52.3	57.7	71.4	.
	Level 3	3.3	4.9	9.7	8.0	11.5	14.3	.
TOTAL	Level 1	74.7	71.3	62.3	48.3	43.2	23.1	.
	Level 2	22.2	25.0	28.9	46.9	50.0	61.5	.
	Level 3	3.2	3.7	8.8	4.9	6.8	15.4	.

ZIMBABWE

Cont.

ANXIETY / DEPRESSION – Percentage (%) reporting each level of problem

AGE GROUPS		18-29	30-39	40-49	50-59	60-69	70-79	80+
MEN	Level 1	77.2	72.5	63.5	60.0	44.4	16.7	.
	Level 2	19.6	23.2	25.9	32.7	44.4	66.7	.
	Level 3	3.2	4.3	10.6	7.3	11.1	16.7	.
WOMEN	Level 1	73.5	69.6	53.6	51.7	34.6	71.4	.
	Level 2	20.3	24.8	27.5	33.3	57.7	14.3	.
	Level 3	6.3	5.6	19.0	14.9	7.7	14.3	.
TOTAL	Level 1	74.9	70.7	57.1	54.9	38.6	46.2	.
	Level 2	20.0	24.2	26.9	33.1	52.3	38.5	.
	Level 3	5.1	5.1	16.0	12.0	9.1	15.4	.