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Older people's views on how to finance increasing health-care costs

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ABSTRACT
The aims of this paper are to investigate both older people's views about ways in which to finance health-care costs and their willingness to pay for treatment themselves, along with variations in these views by age and gender. The data are from the *Good Ageing in Skåne* (GAS) prospective longitudinal cohort study in Sweden, which involved medical examinations and a survey of living arrangements and socio-economic conditions. For the analysis reported in this paper, 930 GAS respondents aged 60–93 years were invited to participate in an additional structured interview, and 902 (97%) accepted. The sample was divided into the 'young-old' (aged 60–72 years), 'old-old' (78–84 years) and 'oldest-old' (87–93 years). It was found that the participants recommended increasing health-care funding by higher taxes and that they were willing to pay themselves for specific treatments, *e.g.* cosmetic surgery and medication to combat impotence and obesity. Many were also willing to pay privately for cataract surgery, to shorten the wait, although the respondent's financial circumstances associated with this willingness. Significantly more men than women, and of the 'young-old' than of the other two age groups, would pay for cataract surgery. The views of people aged 85 or more years differed from those of the young-old, *e.g.* significantly fewer believed that older people's health care received too little resource. Views about how to finance health care thus differed among the age groups and between men and women.

KEY WORDS – gender differences, health-care rationing, older people, resource allocation.

Introduction

The combination of a growing ageing population, expensive new medical treatments and rising expectations for treatment makes necessary both the repeated re-examination of health-care resource-allocation priorities and

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learning more about the views of the general public (Statens Offentliga Utredningar (SOU) [Swedish Government Official Reports] 2001). Several recent studies have focused on the general population's view of how to finance health care and their willingness-to-pay for treatment (Kinnunen *et al.* 1998; Mossialos and King 1999; Myllykangas *et al.* 1996), but only a few have explored older people's views of how they want to finance health care, despite the fact that they are the most frequent users (Cross *et al.* 2000; Werner and Vered 2002).

There is evidence that adults of all ages would allocate more health-care resources to young people. If this was implemented, old people might be affected when needing surgical and high-cost procedures, *e.g.* cataract surgery or hip replacement. Being old is not, however, an obstacle to surgical treatment (SOU 2001). Until about 10 years ago, surgical treatments entailed danger and above-average levels of pain and handicap for very old people, but there has been rapid change. In Sweden, the number of people aged 75–84 years who receive health care has increased by 25 per cent during the last 10 years, *e.g.* the number of cataract surgeries doubled to 60,000. During 1994–98, the number of coronary-bypass operations among people aged 75–85 years increased from 900 to 1,400, and among those aged 85 or more years, 1,300 received hip replacements in 1998 compared to 500 in 1997 (SOU 2001). In other words, the number in the age group increased by 47 per cent but the number of hip replacements by 160 per cent (Statistics Sweden 2003).

Several studies have described the benefits to older people of this progress. Garellick *et al.* (1998) analysed the 'adjusted quality of life' for older patients following hip replacement and argued that the procedure was cost-effective and that the number of operations on older patients should be expanded. Likewise, the investigation by Schmitz, Welz and Reichart (1998) of whether cardiac surgery was justified for patients in the ninth decade of life found that the results were beneficial. Although they were at greater risk of operative death and surgical complications than younger patients, the majority survived to achieve a length of life comparable to their age peers, and many were able to retain or maintain an independent lifestyle. Apart from the benefits for individuals, the costs to society may be diminished, because the surgery reduced the needs for long-term nursing care and social-services support. Similarly, McKee *et al.* (2005) have shown that older people with kidney failure benefit from transplants and other renal-replacement therapies.

Health economics is increasingly influential in decisions about the allocation of scarce health-care resources (Kobelt 2002). Decision-making is moving away from the responsive accommodation of demand and provision of new therapies (as led by physicians' diagnoses and prescriptions

of appropriate care), and towards comparative analyses of the costs of treatments and evaluations of their outcomes. Since value for money is a central concern in health policy, several steps have been taken to adapt to resource scarcity. Swedish county councils manage local public health-care provision, and to keep to budget, some have recently developed lists of diseases to receive priority treatment (SOU 2001). Other solutions could be increased taxes or requiring patients (or their private insurance policies) to pay for the treatment. Finding out what the public knows and where it stands is one step in improving the quality of the public debate on health-care financing (Kneeshaw 1997).

Scarce resources make the economic evaluation of health-care interventions essential, and appropriate methods are being continuously refined. These evaluations lead to various recommendations and decisions, as about which of alternative treatments should be used, and whether a new technology should be made available (Kobelt 1996). The contingent valuation method (CVM) is a survey-based, hypothesis-led approach to the estimation of the monetary returns of a health technology. One variant of CVM is the willingness-to-pay (WTP) approach, which gives a large role to individuals' preferences. In the Swedish context, WTP means above all the willingness-to-pay for private-sector medical care (very often to avoid waiting for the treatment in the public sector). The WTP method can be used indirectly, with the 'revealed preference' approach, or directly, with the 'expressed preference' or utilisation approach (Klose 1999). With indirect methods, the WTP is revealed by the respondents' expressed trade-offs between the health benefit and its cost, while the direct method uses data on actual usage or demand. The WTP measure can be linked to either observed market behaviour or responses to hypothetical markets (Johannesson 1996).

One study that used the WTP method asked cataract patients aged 50 or more years in Canada, Spain and Denmark, 'Would you be willing to pay x to reduce your waiting time for cataract surgery to less than one month?' (Bishai and Lang 2000). The amounts that the respondents were willing to pay ranged from US$ 24 to 107 per month (national averages, 1992 values). In another study, Cross *et al.* (2000) asked patients with a mean age of 67 years who had undergone primary total hip replacement, and patients with a mean age of 73 years who had had a total knee replacement, if they would have been willing to pay 'something' or 'nothing' for the treatment they had had two to three years earlier. Among the knee-replacement patients, it was found that age was significantly associated with WTP, while among the hip-replacement patients, income was significantly associated with WTP. It was therefore shown that people were willing to pay to avoid waiting lists, and that both age and income influenced their views.

There is evidence that different age groups have different views about how resources should be allocated in health care as between younger and older people (Zweibel, Cassel and Karrison 1993), and moreover that different age groups of older people also have discrepant views. The 'oldest old' (aged 87–93 years) seem to give a higher priority to young people's medical care than the 'old-old' (78–84 years) or the 'young-old' (60–72 years) (Werntoft *et al.* 2005*a*). Given that income influences WTP, and that men's and women's financial situations differ, it is important to learn more about the relationships between income, gender and attitudes to health-care costs.[1] Rising demands for treatment and resource-scarcity raise the prospect of lengthening waiting lists for elective procedures in the public health-care system, which, in turn, may lead to greater demand for privately-financed alternatives. While there is considerable evidence that the health and economic status of older people vary by age and gender, whether these variations affect people's view about how to finance health care is not understood. Both to deepen understanding and to implement the ambition to make health-care resource allocation responsive to the public's and patients' opinions, it is therefore crucial to pay more attention to their views.

Aims, sources and methods

The aim of this paper is to describe and analyse older people's views about how to finance health-care costs and their willingness-to-pay for treatment themselves.[2] The data were collected by the *Good Ageing in Skåne* (GAS) prospective longitudinal cohort study in southern Sweden, an element of the *Swedish National Study on Ageing and Care* (SNAC), which is a large, national, longitudinal study initiated by the *Ministry of Health and Social Affairs*.[3] The GAS project started in January 2001 by compiling from the 'Total Population Register' of *Statistics Sweden* a representative panel of about 2,900 older people. They were randomly chosen from nine birth cohorts (aged 60, 66, 72, 78, 81, 84, 87, 90 and 93 years) in five municipalities. Note that the sampling took every sixth single year-of-age up to 78 years, and a three-year interval thereafter. The data collection involved questionnaires with items on living conditions, education, socio-economic attributes, social network and support, and a medical examination and cognitive tests (Lagergren *et al.* 2004).

For the willingness-to-pay study, 930 GAS respondents were asked over 17 months to participate in an additional structured interview on health-care priorities and costs (henceforth the WTP study). The participants were therefore systematically selected from the randomly-selected main

sample of the GAS project. The participation rate for the first two years of the GAS project was 53 per cent, and the response rate for the supplementary interview was 97 per cent. Twenty respondents were excluded from the WTP study because of cognitive decline or exhaustion after the medical examination and cognitive tests, and eight declined to participate. The remaining 902 respondents (478 women and 424 men) were aged between 60 and 93 years (mean 73 years, standard deviation ± 10). The distribution of men and women corresponded with the gender distribution in the same age groups in the total Swedish population, with the exception that among the 'oldest old' (aged 87, 90 and 93 years), there was an under-representation of women (51 %) compared to the total Swedish population (62 %) (Statistics Sweden 2003). The data collection took place between November 2001 and June 2003. The principal socio-demographic characteristics of the sample are summarised in Table 1.

Data collection

The health-care prioritisation questionnaire focused on the diseases of old age that are within the scope of feasible treatments.[4] A pilot study revealed that more questions were required on possible ways of financing health care (Werntoft *et al.* 2005*b*). Relevant questions from Mossialos and King (1999) were added, as well as the financial questions used in a Finnish study (Myllykangas *et al.* 1996), and the health-care resource-allocation questions used by Kinnunen *et al.* (1998). Two additional questions were developed by the authors, one about types of treatments that the respondent believes should be paid for by the patients, and the second about how those with cataracts would obtain surgery. It is pertinent that the current waiting time in Sweden for cataract operation on one eye varies from three to 18 months depending on the locality, and the fee at a private clinic is about €1,100 (Swedish National Board of Health and Welfare 2001). To improve the face-validity of the questions, drafts were discussed with various professionals including nurses, physicians and teachers. The final questionnaire had 26 questions, two of which were open-ended and the remainder pre-coded with two to seven response options. The interview comprised the structured questionnaire and an invitation to the respondents to describe their broader responses to, and personal experiences of, questions of general and personal health-care access and funding.[5] A previous report (Ryynanen *et al.* 1999) and the pilot study (Werntoft *et al.* 2005*b*) found that the respondents wished to explain their standpoints on each question at length, partly to satisfy themselves that their replies would not be misinterpreted.

TABLE 1. *Characteristics of the respondents by age and gender*

	Age groups[1]					
	Young-old	Old-old	Oldest-old	Men	Women	Total
	Percentages					
Gender						
Men	50	42	49	100	0	47
Women	50	58	51	0	100	53
Educational level						
Primary, <8 yrs school	52	64	63	55	59	57
Secondary, ⩾8 yrs school	34	31	30	35	31	33
Tertiary, university	14	5	7	10	10	10
Marital status						
Married	71	50	36	73	49	60
Never-married	5	5	5	5	5	5
Widowed	10	38	54	12	33	23
Divorced	11	5	3	7	10	9
Living apart	3	2	2	3	3	3
Access to €1,500[2]						
Yes	86	86	91	93	81	86
No	14	14	9	7	19	14
Economic problems[3]						
Yes	5	4	2	3	6	4
No	95	96	98	97	94	96
Mean (s.d.) age (years)	65 (5)	81 (2)	89 (2)	72 (10)	73 (10)	73 (10)
Sample sizes	528	277	97	424	478	902

Notes: s.d. standard deviation. 1. Age groups: 'young-old': 60, 66 and 72 years-of-age; 'old-old': 78, 81 and 84 years-of-age; 'oldest-old': 87, 90 and 93 years-of-age. 2. Significance of Kruskal-Wallis test statistic for differences between age groups: access to €1,500, $p=0.356$; economic problems, $p=0.453$. 3. Significance of chi-squared statistic for differences between men and women: access to €1,500, $p<0.001$; economic problems, $p=0.042$.

Analysis

For the analysis, the sample was divided into three age groups: the 'young-old' (60, 66 and 72 years old), 'old-old' (78, 81 and 84 years old) and 'oldest-old' (87, 90 and 93 years old). The delimiter of the oldest age group followed Field and Gueldner (2001), who suggested that there is a special need to distinguish the 'oldest-old', aged 85 and more years. According to Levinsky *et al.* (2001), medical expenditure in the last year of life decreases with age, especially for those 85 years and over. To evaluate the differences in the views of men and women and by age groups, the chi-squared test was used for categorical data, and the Mann-Whitney U and the Kruskal-Wallis tests for ordinal data.[6] A multiple stepwise logistic regression analysis was carried out of the factors associated with the alternative responses to the question, 'if you need cataract surgery to be able to see, would you choose *either* to be on a waiting list for 18 months

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('0') *or* to pay €1,100 out of your own pocket to have the surgery at once ('1')?'. The entered independent variables were sex, age and financial resources (having access to €1,500 or not).

Results

Financing health-care costs

The most popular options for financing increased health-care costs were higher general taxation (35 % of respondents) and higher taxes on alcohol and tobacco (37 %), while only a few respondents agreed that there should be higher patient fees or more private health insurance (Table 2). Three per cent of the respondents gave unprompted options, their suggestions including lower salaries for politicians, fewer administrative staff, and less immigration. Eighty-six per cent of the respondents thought that cosmetic surgery ought to be paid for by the patients themselves, and 63 per cent thought the same about medication to treat impotence and obesity. Seventy-five per cent agreed with the statement, 'If a disease has an effective treatment, the patient should be treated regardless of the expense', 62 per cent agreed that no more cuts should be made in health care, and 58 per cent agreed that expensive treatments in elder care should be subsidised (Table 3). When asked if particular services received too many resources, the percentage who agreed varied between one and 42 per cent, but the only service so nominated by more than a few respondents was drug-addiction treatment. There was some support for the views that health-care administration had excessive resources and that health education, elder care, end-of-life-care, hospital care and psychiatric care too little (Table 4).

Differences by age

Age had an impact on older people's views about the financial questions. For instance, more of the 'young-old' than the 'oldest-old' believed that cosmetic surgery ought to be paid for by the patients and that medication for impotence or obesity should be paid for privately (Table 2). Table 3 shows that five of the seven proffered statements about the criteria for health-care funding produced highly significant differences in the level of agreement by age group. The oldest-old respondents thought, more than the other respondents, that people who were rich or who had caused the diseases themselves should pay for their treatment privately, and a comparatively low percentage agreed that effective treatment should be given regardless of expense (Table 3). The higher the age of the respondent, the less was the agreement that there was a need for more resources for all

TABLE 2. *Older people's responses to financial questions by age group and gender*

Question and responses	Age groups[1]			Gender		
	Young-old	Old-old	Oldest-old	Men	Women	Total
	Percentages					
If you needed cataract surgery, whichwould you choose?						
To be on a waiting list for 18 months	32	47	37[2]	28	45[3]	37
To pay €1,100 and get the surgery at once	68	53	63	72	55	63
How should increasing health-care costs be financed?[4]						
Higher general taxation	36	31	39[2]	45	25[3]	35
Higher taxes on alcohol and tobacco	32	43	46	24	49	37
Reduction of social expenditure	14	11	6	12	13	12
Higher patient fees	7	7	3	5	8	7
Private health insurance	7	6	6	9	3	6
Other ways	4	2	0	5	2	3
Which of these treatments should be paid for privately?[5]						
Cosmetic surgery, *e.g.* nose, breast or scar reduction	93	78	70	46	54	86
Intra-venous feeding (IVF)	39	44	45	51	49	42
Pharmaceutical treatment against impotence or obesity	68	65	51	45	55	63
Dental services	19	25	33	44	56	22
Industrial-health services	20	16	19	50	50	19
Prosthetic hip joint (hip replacement)	2	6	11	38	62	4
Hearing aid	8	13	20	42	58	11
Sample size	528	277	97	424	478	902

Notes: Missing values range from 3 to 15 per cent of the samples. 1. Age groups: 'young-old': 60, 66 and 72 years-of-age; 'old-old': 78, 81 and 84 years-of-age; 'oldest-old': 87, 90 and 93 years-of-age. 2. Kruskal-Wallis test statistic for one-way analysis of variance of differences between the three age groups: cataract surgery, $p<0.001$; financing health-care costs, $p=0.074$. Mann-Whitney U-test as *post hoc* test, $p<0.017$. 3. Significance of chi-squared statistic for differences between men and women, $p<0.001$. 4. Based on Mossialos and King (1999). 5. More than one treatment could be chosen.

services except child care and health education, and the greater the agreement that too much was spent on health-care administration (Figure 1).

Differences by gender

There was a constant pattern in the differences between men and women concerning the financing of health-care costs, but this must be related to their differential economic situation. Fewer women than men had access to €1,500, even though men and women declared approximately equally

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TABLE 3. *Respondents' opinions about health-care costs by age groups and gender*

Question and responses	Age group differences[1]				Gender differences			Total
	Young-old	Old-old	Oldest-old	p[2]	Men	Women	p[3]	
	Percentages within group				*Percentages within group*			*% in group*
Expensive procedures for older people should not be subsidised by public money								
Agree	6	9	22	<0.001	9	8	0.898	9
No opinion	28	39	44	A B C	33	33		33
Disagree	66	52	34		58	59		58
If patients have caused their disease themselves, they should pay for treatment								
Agree	18	36	42	<0.001	23	29	0.049	26
No opinion	47	41	43	A B	45	45		45
Disagree	35	23	14		32	26		29
Rich people should pay for their treatment								
Agree	7	14	31	<0.001	9	14	0.012	12
No opinion	29	42	39	A B C	32	36		34
Disagree	64	44	30		59	50		54
If a disease has an effective treatment, the patient should be treated regardless of expense								
Agree	79	70	64	0.002	72	76	0.346	75
No opinion	18	27	35	A B	25	21		23
Disagree	3	3	1		3	3		3
No more expenditure cuts should occur in health care								
Agree	65	60	54	0.034	57	67	<0.001	62
No opinion	22	30	31		26	25		25
Disagree	13	10	15		17	8		13
If two types of treatment exist, the cheaper should be chosen even if less effective								
Agree	5	5	4	0.535	8	2	<0.001	5
No opinion	39	44	45		47	36		41
Disagree	56	51	51		45	62		54
Money is spent on unnecessary things in health care								
Agree	26	36	24	0.007	32	26	0.070	28
No opinion	47	47	50	A C	44	51		48
Disagree	27	17	26		24	23		24
Sample sizes	(528)	(277)	(97)		(424)	(478)		(902)

Notes: Age groups: 'young-old': 60, 66 and 72 years-of-age; 'old-old': 78, 81 and 84 years-of-age; 'oldest-old': 87, 90 and 93 years-of-age. 2. Significance of Kruskal-Wallis test statistic for one-way analysis of variance of differences between the three age groups, with Mann-Whitney U statistic with reduced critical level of significance ($p<0.017$) as *post hoc* test. A, B and C indicate significant differences between specific age groups: A, young-old and old-old, B, young-old and oldest-old; C, old-old and oldest-old. 3. Significance of chi-squared statistic for differences between men and women.

that they did not have financial problems (Table 1). Men preferred raising general taxes and more of them thought that the health-care budget was spent on unnecessary things, while women preferred raising taxes on alcohol and tobacco and thought that cuts in health-care expenditure had been sufficient (Table 2 and 3). Women were also more likely to have disagreed with the statement, 'if two treatments exist, the cheaper should be chosen even if it is less efficient', and more likely to agree

TABLE 4. *The respondents' evaluation of the current level of resources for 10 health-care specialisations and for health-care administration*

Service	Respondents' evaluation			
	Too little	Enough	Too much	Total
	Percentages			
Health education	76	23	1	100
Elder care	75	24	1	100
End-of-life care	67	31	2	100
Hospital care	66	33	1	100
Psychiatric care	57	40	3	100
Dental service	57	42	1	100
Primary health care	50	48	2	100
Drug addict care	47	35	18	100
Health-care information	44	55	1	100
Child care	33	65	2	100
Health-care administration	22	36	42	100

Note: The question asked was: 'Does service x receive too little, sufficient or too much resource?'.

that psychiatric care, drug addict care, elder care and end-of-life care received 'too little' resource (Table 3 and Figure 2).

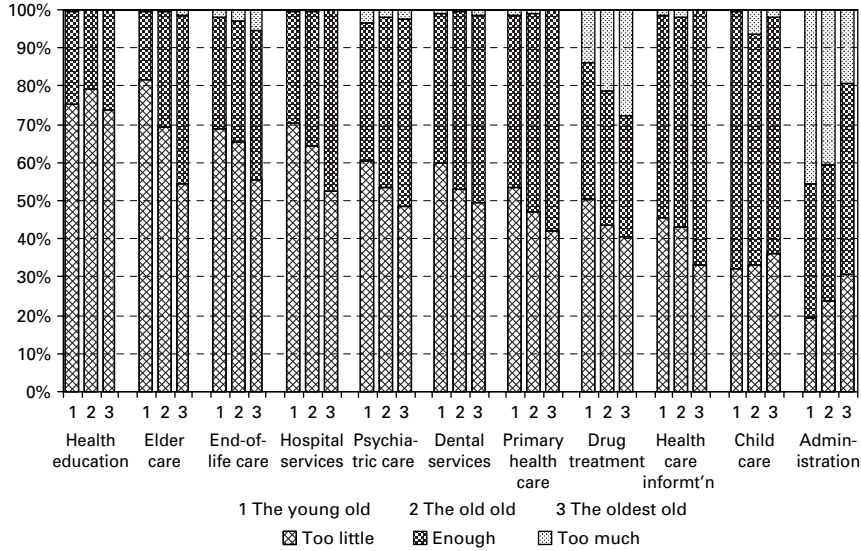
Willingness-to-pay

Most (63 %) respondents were willing to pay €1,100 to have cataract surgery at once instead of being on a waiting list for 18 months. There were however differences related to age and gender, with more 'young-old' than 'old-old' people and more men than women willing to pay for private treatment (Table 2). The differentials were confirmed by the multiple logistic regression, which found that the factors significantly associated with willingness-to-pay €1,100 for cataract surgery were being male (odds ratio (OR) 1.65) and having access to €1,500 (OR 4.4). Belonging to the 'old-old' age group (reference category the 'young-old') was significantly and negatively associated with willingness-to-pay (OR 0.53).[7]

Discussion

Limitations of the study

Several aspects of the study's methodology should be considered when interpreting the results. A majority (53 %) of those invited to participate in the GAS sample declined (although the response rate at the second step was 97 %). Although the sample for the GAS project was randomly chosen within age cohorts, people with multiple disabilities, dementias and severe



Note: The views about the spending level on Elder Care of the 'young old' were significantly different from those of both the 'old old' and the 'oldest old' at $p < 0.001$ (see endnote 6). The views about spending on administration of the 'oldest old' were significantly different from those of both the 'old old' and the 'young old' at $p < 0.017$.

Figure 1. The respondents' evaluation of the current level of resources for 10 health care services and health-care administration by age group.

communication difficulties were most prone to decline participation (even though interviews in their own homes were offered to those who were unable to attend the health-care centre). A different selection effect may have arisen from the incentive of a free medical examination. The voluntary nature of participation was clearly stated before the interview started, and 20 who appeared too frail or exhausted were not asked to participate. The common selection bias in surveys of older people is that the sample over-represents a healthy subset (Trimble *et al.* 1994). This probably applies to the GAS project as well as to the prioritisation study. There is thus a risk that the results do not represent the views of older people who are frail and have severe diseases.

The validity of the willingness-to-pay (WTP) method has been questioned, and there are different views about how best to ask the questions, about what information must be provided to enable the respondents to make a rational decision, and the effect of socio-economic attributes (Johannesson 1996; Johannesson, Johansson and Soderqvist 1998; Miller, Rossiter and Nuttall 2002; Olsen 1997). Cookson (2003) argued that when asked to consider an intervention in isolation, people stipulate much higher amounts than for the same intervention when it is presented as one of several options.[8] Johannesson *et al.* (1998) have argued, however, that there

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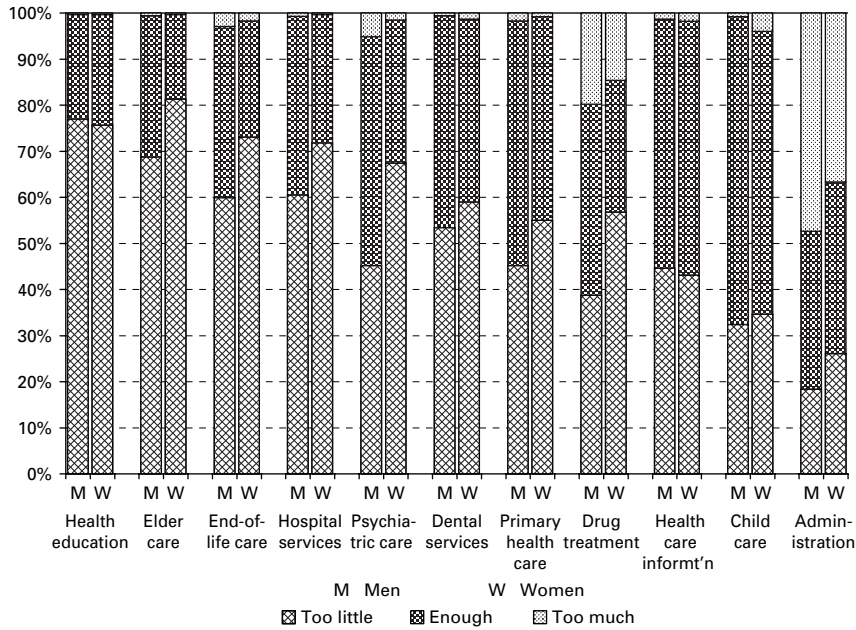

Figure 2. The respondents' evaluation of the current level of resources for 10 health care services and health-care administration by gender.

are good reasons for confidence in the method, and Olsen (1997) has shown that the problem of over-valuation can be reduced through careful design. The reason for using cataract surgery as the example treatment was that, although the number of cataract operations in Sweden has grown, the waiting list is still the longest for any treatment (Swedish Association of Local Authorities and Regions 2002). In this study, the WTP method seemed to be useful when investigating older people's views of how to finance health care, and the results are consistent with those of Bishai and Lang (2000).

Older people's views

The services regarded as receiving too little funding were those which were significant to older people themselves, such as end-of-life care and elder care. In contrast, the respondents thought that health-care administration and drug-addiction treatment received too much funding. Their views might reflect a long-running debate in Sweden about the inadequate resources for elder care, but if the question about resources for psychiatric care had been put in 2005, it might be that more respondents would have agreed that this service was under-funded, because several tragic episodes had received wide publicity. On the other hand, it might be that people

pay little attention to things they have not experienced themselves or have not been in touch with for a long time, which might explain their lack of support for drug-addiction services and their view that child-care was adequately resourced.

The prevailing view was that the increased costs of health care should be financed by public expenditure, and alternatives such as higher user-charges were not approved. On the other hand, a majority of the respondents stated that they were willing to pay a substantial sum to avoid being on a waiting list. These views are in a way contradictory, but indicate that when it comes to a person's own health-care treatment needs, many are prepared to pay privately. The results also showed that a majority thought that costly treatment should be made available to older people and be subsidised. The respondents in our study, however, had less liberal views than the 1,200 Finnish participants aged 18–70 years who were asked similar questions by Myllykangas *et al.* (1996). Among them, 89 per cent were in favour of giving older people costly treatment (75 % in this study), and 76 per cent thought that expensive examinations or treatments for older people should be subsidised by public funds (58 % in this study). One reason for the differences could be that the oldest person in the Finnish study was 70 years-of-age, corresponding to the youngest age group in our study, who also proved to have more liberal opinions than the older age groups. The Finnish study was 10 years ago, when the debate about prioritisation in health care had just begun (*cf.* SOU 1995). Subsequently, the financial strains on the public health-care system have increased. It is clearly important to examine people's attitudes and views on resource allocation and social policy issues in their temporal and social contexts. Despite the differences in reported public opinion between the Finnish and our studies, both samples wanted resources to be allocated regardless of the patients' ages and the expense of the treatment.

It is important not to view older people as homogeneous as there are great differences by age and socio-economic background. Views about how to finance health care differed by age group, which could be explained by the different contexts in which they have lived. The youngest age group, for example, was the most willing to pay to have cataract surgery, although most respondents in all age groups reported that they had the amount of money that the surgery would cost. The older age groups were also less willing to spend their money on medical treatments, which might be a cohort rather than an age effect. The eldest age group experienced relatively harsh early lives, being born around the First World War and forming their own families around the Second World War, both periods of austerity which encouraged parsimony and saving. The importance of cohort differences among pensioners in Paris has recently

been demonstrated by Cribier (2005), and is consistent with Wilson's (1997) findings from interviews with people aged 75 or more years in London, that older people's spending was strongly influenced by normative or cultural constraints, and that rather than spend on themselves, they preferred to give to their children and grandchildren.

The age-group differences of views and priorities might also of course be the result of an ageing effect. Heikkinen's (2004) interviews with 90 year-olds in Finland showed that they tended to criticise society or other people less than when they were younger. Baltes and Baltes (1993) described this effect as an adaptation to the situation of being very old, and Erikson and Erikson (1997) saw advanced old age as a time for reflecting upon one's own life and its place in a larger scheme that, depending on the person's earlier experiences, may resolve into a sense of satisfaction and pleasure or one of disappointment and failures. Differences in older people's health-care prioritisation views can therefore be associated with both 'cohort' and 'ageing' effects, with an overall tendency for the oldest to be more content with life and more restrained in recommending increased public expenditure.

The differences between men and women should be understood in the light of their different life experiences and health-care needs (generally higher among women). The *Good Ageing in Skåne* survey findings indicate that women were more likely than men to think that most health services needed more resources, while men offered more radical opinions about how to finance health-care spending. The women were also less willing to pay for cataract surgery and less ready to pay higher taxes, which was consistent with their less favourable financial situation (as in the Swedish population: see Statistics Sweden 2003). On average, of course, women live longer and experience more illness and disability than men (Guralnik *et al.* 1997), which makes them more dependent on public health-care. This could also be one reason why women showed a harsher attitude towards the rich and those with lifestyle-related diseases. The gender differences in attitudes should also be seen in the light of Gilligan's (1977) suggestions: first that women's concerns are more centred on care and responsibility-for-others than men's, and that many feel caught between self-care and concern-for-others; and secondly, the hypothesis that men and women make distinctive moral judgements, with men mainly referring to justice and women mainly to care or wellbeing (Gilligan, Ward and Taylor 1996). A previous paper showed that the women in the GAS study were keener than men to prioritise older people in health-care spending (Werntoft *et al.* 2005*a*). Overall, the differences in men's and women's views about health-care resource allocation clearly reflect differences in their personal circumstances and health- and social-care needs in old age.

The findings show that to avoid waiting, many older people in Sweden who have the money are willing to pay for needed treatments; a majority of the respondents replied that they were willing to pay privately to have cataract surgery. One must, however, allow the possibility that when the question is put as a future or hypothetical possibility, the level of agreement is inflated as compared to the prevalence of those who would act in this way if they had the treatment need. Bishai and Lang (2000) similarly found that their informants in Canada, Denmark and Spain were willing to pay to shorten the time they were on a waiting list for treatment. Thorslund, Bergmark and Parker (1997) emphasised that the coming cohorts of pensioners will probably be more affluent than today's pensioners and therefore more willing to pay fees privately, and pointed out that if fees were raised to match the real costs of therapies and services, they would only be accessible to the most affluent. If this happened, health care would be dependent on people's ability to pay, a radical change of principle for Swedish health and social care. When formulating future health-care resource-allocation strategies, it remains most important to take into account the substantial inequalities in older people's material circumstances and needs by gender and age.

Conclusions

The findings of this study are partly contradictory, in that older people agree that the established publicly-financed health-care system should be allocated additional funds as well as being willing to pay themselves for treatments to circumvent delay. Opinions and priorities are most certainly moulded by the contemporary characteristics of society and the lifecourse experiences of each birth cohort (which limits the predictive value of the findings). It is reiterated that when developing future resource-allocation models and health-care service priorities, the variation in older people's needs and resources must be carefully taken into account. Since politicians have not articulated the processes by which their priorities and strategies are formulated, giving close attention to older people's views would be a first step in developing creative and practical strategies for health-care resource-allocation decisions.

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NOTES

1 According to the *Statistical Yearbook of Sweden* (Statistics Sweden 2003), the mean income of women aged 65 or more years is about 60 per cent of that of men of the same age.

2 Another paper has reported an analysis of the respondents' views about health-care prioritisation in general (Werntoft *et al.* 2005*a*).

3 The *Swedish National Study on Ageing and Care* (SNAC) was initiated and is financially supported by the Ministry of Health and Social Affairs, Sweden, and is being conducted by a consortium of county councils, municipalities and university departments. It is a longitudinal study with two elements: a wide ranging survey of a large sample of people aged 60–93 years, and a study of health care and social services for people aged 65 or more years. There are four study sites: Kungsholmen, Stockholm; Nordanstig, Gävleborg County; Karlskrona, Blekinge County; and five municipalities in the Region of Skåne: Eslöv, Hässleholm, Osby, Malmö and Ystad. For more details, visit www.snac.org.

4 The survey procedures and questionnaire design followed best practice as set out by the *Swedish Parliamentary Priority Commission* (SOU 1995), and adhered specifically to three ethical principles: the protection of human dignity, solidarity (implying that resources should follow needs), and cost-efficiency. The study was approved by the Research Ethics Committee of Lund University (LU 744-00).

5 Registered nurses were trained as interviewers and carried out the interviews, which lasted from 20 to 60 minutes.

6 The Mann-Whitney U-test was used as a *post hoc* test to identify differences between age groups, with a reduced p (<0.017) to reduce the risk of falsely accepting 'chance' differences (Bland and Altman 1995).

7 The 95 per cent confidence intervals for the three reported odds ratios were respectively 1.22–2.23, 2.85–6.81 and 0.38–0.74. The Hosmer-Lemeshow test for goodness-of-fit statistic for the model was $\chi^2 = 1.39$ (5 degrees of freedom, $p = 0.93$).

8 An alternative method is a bidding game that resembles an auction, where a first bid is made to the respondents and is either accepted or rejected. Depending on the answer, the bid is then lowered or increased until the respondents' maximum willingness to pay is reached, often depending on the economic status of the respondent (Kobelt 2002).

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