# UNIVERSITY OF OSLO

HEALTH ECONOMICS
RESEARCH PROGRAMME

An inquiry into the size of health charities:

The case of Norwegian patient organisations

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Working Paper 2002: 16







# An inquiry into the size of health charities:

# The case of Norwegian patient organisations

by

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October, 2002, forthcoming in *Journal of Socio-Economics* 

Health Economics Research programme at the University of Oslo HERO 2002

**JEL classification:** D64, D71, I19

**Key words:** health charities, disease characteristics

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## **Abstract**

This paper analyses the extents to which variations in revenues and memberships of health charities – or patient organisations – might be explained by characteristics of the diseases that the organisations represent. After a theoretical discussion it inquires into 45 Norwegian patient organisations. The findings suggest that prevalence, followed by death risk are the most important characteristics of the disease for explaining charity size. There were indications that the status of the disease influenced memberships. Still, the most significant variables to explain revenues are the organisation's age and its memberships. Cross-sectional comparisons gave no indications that public revenues 'crowd out' private donations.

#### 1. Introduction

Most charities aim at working for the benefit of people with a need for some basic goods, e.g. food, shelter, health care, human rights. Those working for people with a given health problem are sometimes referred to as health charities, alternatively; patient organisations. Some patient organisations have lots of revenues and public support, while others are small and not even known by many of the patients they claim to represent. The influence that an organisation might have on health policy depends to a large extent on its size.

The aim of this paper is to inquire into variations in the size of patient organisations, as measured in terms of revenues from private and public sources and in terms of memberships. Previous empirical studies have been concerned with the extent to which health charities are net-revenue maximizers, how the demand for charity donations depend upon price, and the extent to which government funding reduces private charitable giving (see e.g. Posnett and Sandler, 1989; Callen, 1994; Khanna et al, 1995). The approach in this paper reflects the view that revenues and memberships to some extent depend on the disease type that an organisation represent, i.e. that donors choose to signal care for a particular patient group by contributing to their organisation. Thus, in the same way as characteristics of private goods are important for consumer demand (Lancaster, 1966), it is assumed that characteristics of charitable goods may be important for the 'demand for charitable goods'. In the context of health charities, this study represents the first inquiry into the extent to which disease characteristics may explain their size

#### 2. Theoretical context

# 2.1. Motivations for giving

Charitable giving reflects altruism in one form or another. One way of signalling a 'caring externality' in health is through volunteer redistribution in the financing of health care (Culyer, 1991). The choice of health charity through which donations are made may reflect donors' type of altruism; some care more for the handicapped, while others care more for the dyscletics. Hence, for donors who hold clear preferences as to which groups are most deserving, the attributes – or characteristics – of the recipients become important when choosing who to donate to.

In addition to the altruistic utility generated by the recipients' improved well-being, the donor may get utility from the act of giving as such, in that donations to approvable causes give the donor a good feeling, or 'warm glow' (Andreoni, 1989). By making such contributions the donor can 'purchase moral satisfaction' (Kahneman and Knetsch, 1992). The more of the donations which are attributable to warm glow, the more 'impure altruism' is involved. In the case of 'impure altruism', contributions from other people or institutions are not perfect substitutes to volunteer contributions, simply because no warm glow is obtained from such transfers. Contributions from other sources would then 'crowd out' volunteer donations by less than one (Andreoni, 1989). Hence, the more impure the altruism, the lower is the 'crowding out' effect due to other sources of funding, e.g. public subsidies.

Altruism and warm glow represent the main reasons for contributing to charities. The more specific the altruism is, the stronger is the preference for donating to a particular organisation. If the altruism were of a more general nature, then donations to alternative organisations would appear as close substitutes in generating warm glow.

# 2.2. Motivations for how to spend the revenues

The information material on the Norwegian patient organisations indicate that their main objective concerns working to the benefit of the particular patient group. Other stated objectives are of three kinds; to secure the rights and *interests* of the members; to *influence* health policy, and; to *inform* the public about the disease and how it affects patients. Lobbying and information activities are considered as means to the end of benefiting the patients. Following the main objective, the most obvious type of spending would be to channel directly to the people in need. If cure is not possible, money could be spent on various types of care and support, thereby teaching them how to cope and adapt.

Basically, the purpose of political lobbying is to generate more revenues, either increase the slice of a given health care budget or get funding from other public sectors. A quite rational behaviour is to increase the spending on political lobbying up to the point where the marginal costs of lobbying equals the expected marginal revenues generated, i.e. behave like a net revenue-maximizing charity (see e.g. Weisbrod and Dominguez, 1986). External information activities have two purposes; to create more understanding in the society which would benefit

their members in terms of less stigma, and second; a marketing activity for getting more private donations.

Some of this literature seems to suggest that the donors consider spendings on fundraising to be waste. When donors are concerned with the output from their money for the recipient patients, costs for fundraising and administration will increase the implicit 'price of giving' (Weisbrod and Dominguez, 1986; Posnett and Sandler, 1989), which in turn would reduce their demand for donations. However, while administrative inefficiency is wasteful, fundraising is by its very definition intended to increase the revenues. Thus, if the donor knows that a fraction of his donation will be spent on fundraising that will generate more revenues, this would *reduce* rather than *increase* her own 'price of giving'. Finally, the organisations would be motivated to allocate their budget in accordance with the guidelines on which any public subsidies are based.<sup>1</sup>

## 2.3. Implications for the choice of variables

The size of an organisation can be measured by its *revenues* or by its *membership*. Naturally, the magnitude of the influence on health policy depends on how much money a pressure group can spend on lobbying, as well as how many voters they have as supporting members. While revenues indicate the degree of *financial support*, the number of members may be a better indicator of *moral support*. Given that the membership fees represent on average only 12.5% of total revenues for the organisations investigated here, one might expect quite different explanations for the variations in *revenues* as compared with *membership*.

As to the choice of independent variables, clearly administrative inefficiency would increase 'the price of the good'. To the extent that this type of waste represents available information among potential donors, it is assumed that administrative inefficiency might explain why some charities are small. While this is fine in theory, information of excess administrative costs can be difficult to obtain, let alone the separation of 'pure' administrative costs from the costs associated with more productive *fundraising* activities such as information, marketing and lobbying. Fundraising has been a variable of much theoretical interest (see e.g. Rose-

<sup>&</sup>lt;sup>1</sup> The Norwegian Ministry of Health and Social affairs decides on the major parts of the organisations' public revenues, which depend on the number of fee-paying members and judgements about the degree of severity and the level of care and support that the organisation provides to the patients.

Ackerman, 1982; Steinberg, 1986). The crucial issue here is whether the *budget share* of fundraising increases with increased revenues.

The age of the organisation is hypothesised to be positively associated with its size. Previous studies (Posnett and Sandler, 1989; Callen, 1994; Khanna et al, 1995) used it as a proxy for reputation and perceived quality of the charity.

Finally, membership and public revenues may be entered as independent variables. The number of members may explain private revenues for at least two reasons; first, members pay membership fees, and second; members are more loyal and have therefore a higher propensity to make additional irregular donations. Furthermore, membership affects the magnitude of government funding. Public revenues may be entered as a variable to explain variations in private revenues. If positive, there is a 'crowding in' effect. If negative, it crowds out private contributions – suggesting the existence of 'impure altruism'.

# Characteristics of the diseases

Six characteristics were chosen as potential determinants for the size of a patient organisation. First, it was hypothesised that the *severity* of the disease is important for people's willingness to contribute (on 'need as ill health', see e.g. Olsen, 1998). This was measured along three dimensions; death risk,<sup>2</sup> disability and pain.<sup>3</sup> Second, the existence of effective treatments may influence the contribution, however, in two opposite ways. If positive, it is a contribution to making needed treatments available, which is associated with 'need as capacity to benefit'. If negative, it is a moral and/or financial compensation for the non-existence of cure for the disease, something which might more reflect 'warm glow' motivated donations. Thus, it is hard to hypothesise the sign of the net-effect of this variable.

Third, it was believed that status – or the social acceptance – of the disease might also work in either way. On the one hand people can show political correctness by being a supportive member to a socially acceptable disease type. Alternatively, one can compensate for this additionally depriving attribute of the disease by (secretly) giving money. Lastly, it was simply expected that the higher the prevalence of the disease, the bigger is the organisation.

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<sup>&</sup>lt;sup>2</sup> Death risk is important in that patient charities receive income in bequests from, and in donations from friends and relatives of, people who have died from the relevant disease.

<sup>&</sup>lt;sup>3</sup> The disability and pain variables were merged in the analysis by using the average score on each dimension as judged by the expert panel.

More specifically, Table 1 shows the variables with their four levels as they were presented to the panel that assessed the organisations in this way.

### Table 1 about here

#### 3. Material and method

In a complete annotation of Norwegian organisations (Hallenstvedt and Trollvik, 1993), we found 60 that represent patients with a specified disease or people with a specified health problem. To each of these 'patient organisations', a letter was sent in which we explained the purpose of the study and asked for the annual report or information about main sources of revenues as well as expenses. After reminders and telephone inquires, only 21 organisations had provided useful information. The Ministry of Health and Social affairs was then contacted from whom we gained access to the balance accounts of patient organisations that receive government funding. From this data source we got the required information on 24 additional organisations. The remaining 15 (out of 60) organisations had not provided sufficient specification of the different cost items needed here and were therefore excluded.

Most organisations had different practices regarding the definition of cost items, i.e. which types of expenses belonged under which item. After a very careful inquiry into each balance account, it became clear that for most organisations could costs related to information and lobbying not be separated out from administration and running expenses. Such items were therefore aggregated to one, which were termed 'fundraising'. This was in order to distinguish such costs from the more direct activities for patients; 'patient support' that are intended to improve the overall wellbeing for the patients they are representing. The remaining costs; such as financial costs, insurance premiums, fees, losses, miscellaneous expenses were categorised as 'other expenses' (on average 10% of total costs).

A list of the 45 organisations together with a description of the characteristics (as shown in Table 1) was handed out to a panel consisting of three professors of medicine (covering the fields of general medicine, epidemiology, public health) all of whom had wide clinical

<sup>&</sup>lt;sup>4</sup> A requirement for such subsidies is that the balance account (signed by a certified accountant) is provided as well as a statement of the number of members who have paid the annual membership fee.

practice. By the use of a 1-4 scale they were asked to make their reflective judgements by giving a value on each of the six listed dimensions for each organisation before a consensus meeting was to be held.

## 4. Empirical specifications and results

First, a narrow model sought to explain private revenues (1A) and public revenues (2A); by 1) the age of the organisation, 2) the share of the budget spent on fundraising, and 3) the number of members. Also, the membership-variable was run against the first of these two independent variables (3A). As a preliminary, however, we had tested for the possibilities of 'crowding out' or 'crowding in' effects by including  $\ln Y_{pub}$  as an independent variable in (1A), as well as in a simple model with only  $\ln Y_{pub}$  to explain variations in private revenues. In the first case, the coefficient of  $\ln Y_{pub}$  was -0.008 (t = -0.171) and in the other +0.013 (t = 0.089), i.e. there were *no* indications of any relationship between these two sources of revenues – the 'crowding' went neither out, nor in! Therefore, in the following, we seek to explain variations in private and public revenues quite independently of each other, however, with the same sets of independent variables.

Also, preliminary to the analyses as presented in Table 2, we had included an alternative variable to  $\ln fr$  in the models in order to test for the hypothesis that donors are informed about how the organisation divide their budget between fundraising ('fr') and patient support ('ps'). We got positive signs of the  $\ln fr/ps$  –coefficients which suggests that donors and members are *uninformed* by this budget split. Alternatively, this might have suggested that they are more in favour of increasing the share on fundraising than on patient support – something that we believe is unlikely.

The second set of models (1B)-(3B) used the characteristics of the diseases as the only independent variables. Lastly, the third set of models included both types of independent variables (1C)-(3C). Table 2 shows the beta-coefficients (and t-values).

#### Table 2 about here

As to (1A) in the first column of Table 2, we note a strong correlation between membership and private revenues; a 10% increase in membership gives 9.8% increase in private revenues.

In the light that membership fees represent on average only 14% of all private revenues, this suggest that subscribing members generate irregular donations from themselves and/or that their mere size represents a signal to the public of an important organisation to which nonmembers would donate. Interestingly, when membership was deleted among the independent variables, 'fundraising' came to be positively associated with private revenues;  $\ln fr = .918$ . Model 3A suggests that the higher the share of the budget spent on fundraising, the more members will an organisation attract. (Fortunately), model (2A) shows that more fundraising does not give a pay-off in terms of more public revenues. In this model, the lnM-coefficient is much weaker than in model (1A), which reflects the fact that public revenues follow a positive but strongly diminishing association with membership.<sup>5</sup>

The models on characteristics of the diseases (1B)-(3B) indicate that this set of variables is most important for determining variations in memberships. The only statistically significant characteristic is 'prevalence'. To give an interpretation of its economic significance, it involves ( $e^{2.021}$  =) 7.5 times higher private revenue for each increment in the level of prevalence (see Table 1). As to the disease characteristics 'death risk' and 'status', while not statistically significant by a two-tailed test, their coefficients point in the hypothesised directions for explaining variations in private revenues and membership.

In the third set of models, most coefficients on the characteristics-variables are naturally reduced. In model 1C only 'death risk' appear to have some importance. Interestingly, model 2C suggest that public revenues may be of a compensatory type; when effective treatments do not exist, the higher are public revenues, and, though very weak; when 'status' is low, there is a tendency for slightly more public revenues. In the membership model 3C, 'prevalence' remains statistically significant, and 'status' still points in the hypothesised direction.

Lastly, the following observations in the above models made us add a fourth model for explaining variations in private revenues. The main reason was the strong association between membership and private revenues in model 1A. Second, the disease characteristics were more important in explaining variations in membership than in private or public revenues (R<sup>2</sup> and the F-values higher for 3B than for 1B and 2B), and third, the influence of membership remained at the same level in 1C as compared with 1A although the disease

<sup>&</sup>lt;sup>5</sup> In organisations with fewer than 500 members, public revenues were 76% of total revenues, while in organisations with more than 2.500 members, public revenues were 21% of total revenues.

characteristics had been included. Therefore, in model 1D, the residual of model 3B was entered as an independent variable, i.e. the variance in **m**embership which is *not* explained by the **d**isease **c**haracteristics,  $\ln R_{\text{M-DC}}$ . The results of model 1D suggest that, even after the variation in membership that would be explained by disease characteristics, the remaining variations in membership is still a very strong determinant for private revenues.

#### 5. Discussion and conclusion

In attempting to explain variations in the size of health charities, the current study has inquired into the potential relevance of some key characteristics of the diseases of people that these organisations represent. As compared with earlier models in this literature, this shift in focus reflects our view that potential donors are better informed about the attributes of the good on which they may signal altruistic preferences, than they are about the 'price of giving' to the alternative charities. Those models that have considered the implicit 'price of giving' to be important for explaining variations in private donations implicitly assume that potential donors know how charities divide their budgets between 'administrative waste' and doing good for their patients. While the public might be aware of extreme cases and react by giving more or less donations, 6 in general it is hard to imagine how donors would have sufficient information on the relative administrative efficiency of alternative health charities.

Methodologically, administrative inefficiency is hard to identify and measure based on secondary data from the account balance. The type of classification of costs which was possible after a very careful inquiry into each organisation's balance account was the split between 'fundraising' activities (administration, marketing, lobbying, running expenses) and direct 'patient support'. This split had no influence in determining revenues. However, it had some influence on membership: The higher the share on 'fundraising' – which includes administration and running expenses, something which clearly *increases* 'the price of giving' – the more members are there in Norwegian patient organisations. The positive sign of the ln*fr/ps*-coefficient suggests that members are *uninformed* about how these organisations allocate their revenues between 'fundraising' and 'patient support'.

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<sup>&</sup>lt;sup>6</sup> The charity for the blind in Norway experienced reduced donations after the media had disclosed their administrative waste. The Norwegian cancer charity has emphasised their low administrative costs in some fundraising information material.

Our study supports previous findings that the *age* of a charity is important for its size. It was a consistently significant variable in all models reported in Table 2.

The new set of variables introduced in this paper deals with the characteristics of the diseases that the organisations represent. The most significant of these variables for the size of a patient organisation is the *prevalence* of the disease. There were indications that the *death risk* of a disease was positively associated with private donations, and that the *status* of a disease was positively associated with membership. Interestingly, the characteristics of the diseases related to disability and pain ('need as ill health') or the availability of effective treatments ('need as capacity to benefit') were not associated with private revenues nor with membership. However, public revenues were higher for those disease types where treatments were not possible, something which indicate that public subsidies are of a compensatory kind.

We identified six disease characteristics that were thought to be important to potential supporters of health charities, and then had an expert panel measure each disease that the charities represent by the use of a 1-4 scale. Certainly, we acknowledge that this measurement is a preliminary attempt, and would welcome future studies to use more in depth assessments of these and other disease characteristics by a wider expert panel. A quite different approach would be to ask members and donors why they support particular health charities, and have them state which disease characteristics are most important for their willingness to contribute.

#### **References:**

Andreoni, J., 1989. *Giving with Impure Altruism: Application to charity and Ricardian Equivalence.* Journal of Political Economy 97, (6).

Bennett, J.T., DiLorenzo, T.J., 1994. Unhealthy Charities: Hazardous to our health and wealth. *Basic Books*, New York.

Callen, J.L., 1994. *Money donations, volunteering and organizational efficiency*. Journal of Productivity Analysis 5, 215-228.

Culyer, A.J., 1991. *The normative economics of health care, finance and provision*. Oxford Review of Economic Policy 5 (1).

Hallenstvedt, A., Trollvik, J., 1993. Norske organisasjoner. *Universitetsforlaget*, Oslo.

Kahneman, D., Knetsch, J.L., 1992. *Valuing Public Goods: The Purchase of Moral Satisfaction*. Journal of Environmental Economics and Management 22, 57-70.

Khanna, J., Posnett, J., Sandler, T., 1995. *Charity donations in the UK: New evidence based on panel data*. Journal of Public Economics 56, 257-272.

Lancaster, K., 1966. A new approach to consumer theory. Journal of Political Economy 74, 132-157.

Olsen, J.A., 1998, *Theories of justice and their implications for priority setting in health care*, Journal of Health Economics 16, 625-639.

Posnett, J., Sandler, T., 1989. Demand for charity donations in private non-profit markets, the case of the UK. Journal of Public Economics 40, 187-200.

Rose-Ackerman, S., 1982. *Charitable giving and excessive fundraising*. Quarterly Journal of Economics 97, 193-212.

Rose-Ackerman, S., 1986. Do government grants to charity reduce private donations?, in Rose-Ackerman, S. (Ed), The economics of non-profit institutions: Studies in structure and policy. Oxford University Press, New York.

Steinberg, R., 1986. Should donors care about fundraising?, in Rose-Ackerman, S. (Ed), The economics of non-profit institutions: Studies in structure and policy. Oxford University Press, New York.

Weisbrod, B.A., Dominguez, N.D., 1986. *Demand for collective goods in private non-profit markets: Can fundraising expenditures help overcome the free-riding behavior?* Journal of Public Economics 30, 83-95.

# Table 1: The characteristics of the diseases that the organisations represent

	risk; as compared to normal life expectancy 1 – no increase in risk of death 2 3
	4 – very large increase in risk of death
	<b>lity</b> ; measured as the patient's physical, psychological and social ability to function 1 – no reduction in ability to function 2 3 4 – strongly reduced ability to function
	neasured as the degree of pain and discomfort  1 – no pain  2  3  4 – very much pain
compar	le treatments; measured as the degree of health improvements which are possible as red with a no-treatment profile  1 – treatments are non-existing  2  3  4 – complete cure is possible
stand p	; a judgement of the social acceptance of the disease, and the patient's propensity to public  1 – very low social acceptance ('closet-patients')  2  3  4 – very high social acceptance
	ence; the proportion of the population that might feel familiarity with the disease $1-<1\%$ $2-1-4\%$ $3-5-10\%$ $4->10\%$

Table 2: Explaining variations in the size of patient organisations

Model	1A	2A	3A	1B	2B	3B	1C	2C	3C	1D
	$ln Y_{priv}$	$\ln Y_{pub}$	ln <i>M</i>	$\ln Y_{priv}$	$\mathrm{Ln}Y_{pub}$	$\ln\!M$	$\ln Y_{priv}$	$\ln Y_{pub}$	$\ln\!M$	$\ln Y_{priv}$
Constant	5.497 <sup>A</sup> (11.955)	10.122 <sup>A</sup> (20.982)	6.186 <sup>A</sup> (14.121)	8.513 <sup>A</sup> (3.633)	12.007 <sup>A</sup> (8.406)	2.739 (1.391)	6.019 <sup>A</sup> (6.403)	11.136 <sup>A</sup> (13.122)	3.556 <sup>B</sup> (2.084)	11.876 <sup>A</sup> (29.250)
Age	0.024 <sup>A</sup> (2.945)	0.040 <sup>A</sup> (5.437)	0.082 <sup>A</sup> (5.781)				0.024 <sup>A</sup> (2.718)	0.039 <sup>A</sup> (5.231)	0.054 <sup>A</sup> (3.858)	0.077 <sup>A</sup> (5.3.10)
ln fr	-0.224 (-0.958)	0.036 (0.147)	1.165 <sup>B</sup> (2.313)				-0.256 (-1.036)	-0.021 (-0.081)	0.793 <sup>C</sup> (1.740)	0.507 (1.081)
ln M	0.981 <sup>A</sup> (14.515)	0.326 <sup>A</sup> (4.419)					0.977 <sup>A</sup> (11.405)	0.353 <sup>A</sup> (4.370)		
In R <sub>M-DC</sub>										0.683 <sup>A</sup> (4.137)
Death risk				0.579 (1.598)	0.103 (0.450)	0.309 (1.015)	0.224 (1.607)	0.006 (0.049)	0.114 (0.428)	
Disability and pain				-0.619 (933)	-0.174 (-0.431)	-0.375 (-0.674)	-0.286 (-1.133)	-0.133 (-0.607)	-0.306 (-0.636)	
Treatments exist				0.013 (0.029)	-0.219 (-0.781)	0.095 (0.244)	-0.074 (-0.422)	-0.271 <sup>C</sup> (-1.796)	0.124 (0.370)	
Status				0.551 (1.123)	0.070 (0.266)	0.546 (1.324)	-0.106 (-0.550)	-0.171 (-1.031)	0.476 (1.311)	
Prevalence				2.021 <sup>A</sup> (4.881)	0.972 <sup>A</sup> (3.805)	1.811 <sup>A</sup> (5.206)	0.058 (0.285)	0.048 (0.275)	1.177 <sup>A</sup> (3.464)	
Adj. R-Sq	0.919	0.773	0.434	0.394	0.208	0.430	0.914	0.774	0.579	0.647
F	166.489	49.745	17.869	5.545	3.255	7.633	59.564	19.391	9.636	27.918
N	45	44	45	45	44	45	45	44	45	45

A significant at 1% B significant at 5% C significant at 10% Two tailed