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Let's stick together: The role of self-interest and ideological beliefs for supporting a 'solidaristic' health policy in Norway

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ABSTRACT

Previous studies of health system legitimacy have almost exclusively paid attention to patterns of service satisfaction and preference for state involvement. These two dimensions are related to substantial and procedural justice; i.e. the value of a certain policy and the way it is implemented. This study contributes to the research field by focusing on a third dimension that have been little studied so far: the willingness of citizens to contribute on a solidaristic basis. This dimension was captured through three health policy preferences: public healthcare spending willingness, opposition to co-payments and opposition to private health insurance. Building on the literature on welfare state legitimacy, the empirical model distinguished between two sets of predictors to explain individual differences: self-interest and ideological belief. Old age, poor health and poor economy is positively associated with opposition to co-payments for "self-inflicted" diseases, while low education and poor health is positively related to support for more public spending. Increasing age is furthermore positively associated with opposing co-payments and easier uptake of insurance. Liberal-conservative voters are less willing to spend more on healthcare but more willing to increase the use of co-payments and insurance.

1. Introduction

The public support for healthcare systems has traditionally been high in European countries [12,20,24,26,27]. However, due to increasing difficulties in the financing and delivery of health services, the last decades have seen several European countries implementing major changes in their health systems that often combined increases in co-payments and reductions of the benefit package [10,31]. These health policy reforms may presumably undermine the legitimacy of the health system. Previous studies of health system legitimacy have been predominantly occupied with patterns of satisfaction and preference for state involvement [26,38]. This study contributes to the research field by investigating how self-interest and ideology is associated with three dimensions of health policy that have been little studied so far: the preferences for public healthcare spending, co-payments and private health insurance (PHI).

The popular legitimacy of a health system is important for several reasons. The opinions of citizens can be important in shaping health policies, since they are beneficiaries and actors in health systems. They can provide feedback on the quality and responsiveness of services, and may bring legitimacy and accountability to the policymaking process [2,18,27,28]. The literature on health system legitimacy commonly argues that it should be treated as a multi-dimensional concept [26,38]. A first dimension is related to what Rothstein [32] labels substantial justice: the question of whether citizens regard a good to be produced in itself as valuable. In a health system setting, substantial justice thus rests upon the assumption that citizens to some degree endorse the guiding principles on which the system is founded [20]. In Europe, the state has traditionally played an extensive role in regulating the financing, provision and access to healthcare. A major dimension of healthcare legitimacy in the European setting is therefore expressed in the support for state responsibility of healthcare.

Another dimension of health system legitimacy relates to the term procedural justice: that the government is perceived to deliver a service in a fair and impartial way. Hence, this concept presupposes that citizens evaluate positively their government's implementation of healthcare services relative to what was promised [32]. This dimension of legitimacy therefore depends on actual experiences of received care [32]. The study of both dimensions – the preferred role of the state and satisfaction with health-

Abbreviations: PHI, Private health insurance; OR, Odds rato; NHS, National health service; OLS, Ordinary least squares.

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care – is important in order to assess the popular legitimacy of a health system. This is reflected in the earlier research, which has documented different results for the two dimensions: support for state responsibility is generally high across European countries [11,17,24,26,27,38], but the levels of satisfaction are lower and more varied [20,26,27,38].

This study adds to the literature on health system legitimacy by exploring other aspects than the mere support for state responsibility and satisfaction with services. Rothstein [32] also brought up a third issue, which is equally important for the popular legitimacy of institutions: the question of whether citizens believe that their fellow citizens contribute to the program on a solidaristic basis. This dimension concerns the just distribution of burdens: even if they cannot be sure that they will themselves benefit from it, citizens are prepared to support a policy as long as they can be convinced that all (or almost all) other citizens will also contribute to carry it out. Thus, according to Rothstein, the willingness to contribute depends not just on the fulfilment of the requirements of procedural and substantive justice; it also assumes a credible organisation of the *collective* efforts.

The present study therefore investigated this 'solidaristic' dimension of health system legitimacy, by looking at the preferences for public spending, co-payment and PHI. Building on population-based data from Norway, the empirical analysis employed four dependent variables: the willingness to spend more public money on healthcare, the preference for more use of co-payments in public health services, the preference for higher co-payments for treatment of "self-inflicted" diseases, and the willingness to make it easier to take up PHI. Using regression methods, the analysis investigated the role of self-interest and ideology, while also controlling for demographic background.

1.1. Determinants of welfare state legitimacy

The literature on welfare state legitimacy commonly distinguishes between two sets of predictors to explain individual differences: self-interest and ideological belief [3,14,16]. The *self-interest* argument departs from the assumption that individual choices are driven by instrumental rationality and the pursuit of individual gain [19,35]. Self-interest is thus seen as the motivational basis for evaluations of public welfare arrangements [26]. The attitudes towards the welfare state will consequently differ between those who are recipients (or at risk of becoming recipients) of welfare services and those who are less likely to receive them [3]. According to this perspective, those benefitting from welfare state programs are expected to display a higher level of welfare state legitimacy than those contributing more than they are consuming.

The typical variables employed to reflect whether an individual benefit from the welfare state or not includes age, health status and socio-economic status, and there is some empirical support for the self-interest argument. Previous studies have documented that welfare state support is related to old and middle age [13,16,29,30,38], poor health [12], low income [4,7,16] and class [6]. However, as noted by Missinne et al. [26], the self-interest argument can be criticised on both theoretical and empirical grounds. While the self-interest theory assumes that individuals are well informed and behave rationally, the reality is that they lack information both about the technical details of the care provided and the medical conditions they might encounter in the future. There is also research that contradicts the self-interest argument: income has been found to be positively associated with support for welfare state provision of healthcare [12], several studies did not find the expected effect from social class [12,38], and there is also less consensus on the position of pensioners [17].

The second theoretical explanation, *ideological belief*, assumes that people's opinions about the desired scope of public welfare provision rest upon their personal political values and beliefs. This argument suggests that the view on the welfare state is rooted in a general and coherent system of political orientations and ideological preferences [9]. The ideological framework is assumed to provide a set of guiding principles for individuals' attitudes on the relationship between the individual, the state and other institutions such as labour markets and voluntary organisations, thereby providing the ideological justification for either supporting or opposing welfare benefits and programs [9,26].

The indicators used in earlier studies to reflect the ideological argument have typically been egalitarianism and ideological position. Individuals who endorse egalitarian values are assumed to be more supportive of public welfare systems and to view large differences as undesirable, and support for this has been documented by several studies [25,26,31]. The role of ideological position has, however, been less explored in healthcare legitimacy research, which according to Missinne et al. [26] may be due to lack of available data. One exception is Gevers et al. [12], who found that a politically left orientation is weakly associated with support for public healthcare.

1.2. Institutional context: the Norwegian health system

The study was performed within the context of the Norwegian health system. The Norwegian health system is tax based and characterised by a predominantly public production of services. The state is responsible for the provision of specialised care through four regional health authorities, and physicians are publicly salaried employees. The healthcare model has traditionally been equity driven, with focus on geographical and social equity. The principle of universality means that all inhabitants shall have the same access to public health services regardless of age, gender, social status or geographic location. Geographical equity is a concern due to the number of low-density rural areas in Norway, while social equity reflects the long history of social democratic thinking.

Norwegian healthcare has been almost continuously under reform during the last 40 years. New Public Management has inspired several of the changes, with emphasis on demand mechanisms and market ideology, such as the introduction of activity-based financing, increased focus on performance indicators and comparable data between hospitals, free choice of hospitals, and more focus on management roles. This development culminated with the hospital reform of 2002, which transferred hospital ownership to the central government, delegated the responsibility for providing hospital services to five (later reduced to four) autonomous regional health authorities, and organised hospitals into health enterprises [22].

2. Materials and methods

The data material for this study is from a survey undertaken in 2014 by SINTEF Research Institute on behalf of The National Union for Heart and Lung Disease (LHL). The sample was drawn from the National Registry, and included 7 500 randomly selected Norwegian citizens (5 000 persons aged 18–75 years and 2 500 persons aged 40–75 years). The purpose of overrepresenting those above 40 years was to secure a large enough sample of health service users. A total of 2688 persons responded, which gives a gross response rate of 36%. Whereas this may cause some concern, it is still uncertain whether a low response rate necessarily results in skewed samples and lower representativeness [15,34]. Furthermore, through comparisons with available population statistics I was able to assess the representativeness of the sample. For more information on the data representativeness, see Ådnanes and Dyrstad [39].

Table 1
"Do you think society should spend more money on healthcare than at present?".

	N
"Yes, more money than at present"	1122 (43.8%)
"No, the money should be spent more efficiently"	1110 (43.3%)
"No, we need to free up money for new treatment options through cutting down on other health services"	16 (0.6%)
"We spend sufficiently as it is"	81 (3.2%)
"No, we already spend too much money on healthcare"	10 (0.4%)
"Don't know"	224 (8.7%)

2.1. Dependent variables

The main interest of this study was to explore the solidaristic basis for healthcare legitimacy. The analysis employed three dimensions in order to reflect this: willingness to increase public healthcare spending, use of co-payments and PHI. First, *spending willingness* was captured through a question asking the respondents about their preferences for future healthcare expenditure: "Are you of the opinion that we should spend more money on healthcare than now?" (Table 1). This question had the following response alternatives: a) "Yes, more money than now", b) "No, use the money more efficiently", c) "No, one must free up money for new treatments through cutting down on other health services", d) "We spend sufficient as it is", e) "No, we already spend too much on healthcare", f) "Don't know". The analysis employed a dummy-variable with the value of 1 assigned to those who chose a positive response (a) and 0 for those who for different reasons did not want to use more money than now (b-e).

Secondly, *preference for increased use of co-payments* was measured by two different variables (Table 2). One variable assessed the preference for increased use of co-payments in general, and was constructed on the basis of the following statement, with 5-point Likert scales as response format (1 = 'fully disagree', 5 = 'fully agree'): "There should be increased use of co-payments in the public health services". The second variable addressed the preference for a more restricted use, asking about the willingness to use it for illnesses that can be considered as self-induced (1 = 'fully disagree', 5 = 'fully agree'): "There should be higher co-payments for the treatment of 'self-inflicted' diseases (due for instance to smoking)". Since both variables are strongly skewed, they were recoded into dummy-variables with the value of 1 assigned to those responding values 1–2, and 0 for the rest.

Third, *willingness to allow for easier uptake of health insurance* was measured through the following statement in the survey with 5-point Likert scales as response format (1 = 'fully disagree', 5 = 'fully agree'): "People should to a greater extent be allowed to take up insurance that secures them fast treatment when ill". As for the other dependent variables, this was also recoded into a dummy-variable with the value of 1 for those responding values 1–2, and 0 for the rest.

2.2. Self-interest

In line with previous studies of health system legitimacy ([38]; Missine et al., 2013), self-interest was captured through a set of indicators reflecting demographic and socio-economic background. *Age* was measured as a continuous variable, ranging from 16 to 75 years. *Economic situation* is a dummy-variable where the value of 1 was given to respondents who reported their economic situation to be "very poor", "poor" and "satisfactorily", and 0 to those reporting it to be "good" or "very good". Furthermore, *education* was assessed through a dummy-variable where the value of 1 was assigned to respondents with unfinished elementary school, elementary school (up to 9 years) or high school, with higher education (university college/bachelor or university/master or higher) as the reference category. Finally, *health status* was based on a question where respondents rated their own health on a 5-point Likert scale ranging from "very poor" to "very good". I recoded this into a dummy-variable with the value of 1 assigned to respondents who reported the categories 1–3 and 0 for the rest.

2.3. Ideological beliefs

In order to examine the role of ideological beliefs for the attitudes towards the health system, the model included dummy-variables reflecting voting behaviour in the last parliamentary election of 2013. The dummy-variables include the following parties: the Progressive Party (Frp), the Conservative Party (H), the Christian Democratic Party (KrF), the Liberal Party (V), the Agrarian Party (Sp), the Labour Party (Ap), the Socialist Left Party (SV) and 'others' (Andre). The Labour Party served as the reference category in the analysis.

2.4. Controls

The empirical model also included several possible confounding factors for the relationship between self-interest, ideological beliefs and healthcare legitimacy. A dummy-variable for *gender* takes the value of 1 for female respondents, while another dummy-variable captured *non-Norwegian background*, with the value of 1 assigned to those reporting to have been born outside of Norway. Furthermore, it is reasonable to assume that the preferences for public healthcare spending, co-payments and PHI may be a function of one's *experience with and evaluation of the health services*. This was reflected in the model through a question that asked the following, with a 5-point Likert scale as response format (1 = 'very poor', 5 = 'very good'): "All in all, how would you rate the quality of the health services in Norway?". This was recoded into a dummy-variable due to skewness, with response categories 1–3 given the value of 1.

Finally, since the data contains information about the geographic location of the respondents, a fixed effects-model was es-

Table 2
Willingness to use more out-of-pocket payments and private insurance in healthcare.

	1 = "Fully disagree"	2	3	4	5 = "Fully agree"	N
"There should be increased use of co-payments in the public health services"	1363 (52.6%)	519 (20.0%)	448 (17.3%)	146 (5.6%)	117 (4.5%)	2593
"There should be higher co-payments for the treatment of "self-inflicted" diseases (due for instance to smoking)"	857 (32.7%)	504 (19.2%)	529 (20.2%)	409 (15.6%)	321 (12.3%)	2620
"People should to a greater extent be allowed to take up insurance that secures them fast treatment when ill"	655 (25.2%)	494 (19.0%)	805 (31.0%)	342 (13.2%)	300 (11.6%)	2596

Table 3
Descriptive statistics.

Variables		N
More healthcare spending (yes = 1, no = 0)	0: 1122 (48.0%) 1: 1217 (52.0%)	2339
Oppose use of co-payments (yes = 1, no = 0)	0: 1882 (72.6%) 1: 711 (27.4%)	2593
Oppose co-payments for "self-inflicted" diseases (yes = 1, no = 0)	0: 1361 (51.9%) 1: 1259 (48.1%)	2620
Oppose easier uptake of private health insurance (yes = 1, no = 0)	0: 1954 (75.3%) 1: 642 (24.7%)	2596
Poor economic situation (yes = 1, no = 0)	0: 1556 (58.8%) 1: 1092 (41.2%)	2648
Poor health (yes = 1, no = 0)	0: 1947 (77.2%) 1: 576 (22.8%)	2523
Low education (yes = 1, no = 0)	0: 1251 (48.3%) 1: 1337 (51.7%)	2588
Age	Mean: 52.85 Min.: 16 Max.: 75 St. dev.: 13.97	2668
Voted Labour party (Ap) (yes = 1, no = 0)	0: 1670 (71.1%) 1: 679 (28.9%)	2349
Voted Conservative party (H) (yes = 1, no = 0)	0: 1709 (72.8%) 1: 640 (27.2%)	2349
Voted Progressive party (Frp) (yes = 1, no = 0)	0: 2084 (88.7%) 1: 265 (11.3%)	2349
Voted Christian-democratic party (Krf) (yes = 1, no = 0)	0: 2218 (94.4%) 1: 131 (5.6%)	2349
Voted Agrarian party (Sp) (yes = 1, no = 0)	0: 2257 (96.1%) 1: 92 (3.9%)	2349
Voted Liberal party (V) (yes = 1, no = 0)	0: 2236 (95.2%) 1: 113 (4.8%)	2349
Socialist Left party (SV) (yes = 1, no = 0)	0: 2257 (96.1%) 1: 92 (3.9%)	2349
Voted other parties (yes = 1, no = 0)	0: 2250 (95.8%) 1: 99 (4.2%)	2349
Did not vote (yes = 1, no = 0)	0: 2211 (89.9%) 1: 238 (10.1%)	2349
Gender (female = 1, male = 0)	0: 1160 (46.0%) 1: 1362 (54.0%)	2522
Non-Norwegian (yes = 1, no = 0)	0: 2409 (90.4%) 1: 257 (9.6%)	2666
Poor rating of health services (yes = 1, no = 0)	0: 2185 (83.0%) 1: 448 (17.0%)	2633

timated with a set of dummy variables representing each of the 19 counties (with Oslo as reference category). This estimation procedure allows a control for possible variation in the dependent variables due to geographical variation, which could be related to capacity-, access- and resource issues.

Descriptive statistics for all the variables are presented in Table 3. Given that several of the independent variables in the model may be highly correlated, there is a potential concern for imprecise estimates due to large variance, but collinearity tests uncovered no such problems (not reported here).

3. Results

The results from the multivariate analyses are presented in Table 4. Given that the dependent variables are dichotomous, the model was estimated via logistic regression. The estimates in the table thus express the odds ratios (OR) for expressing a solidaristic basis for healthcare legitimacy (i.e., high spending willingness, opposition to more co-payments in general and for 'self-inflicted diseases' in particular, and opposition to easier uptake of PHI). The models were estimated as fixed effects with dummy-variables for each of the counties in order to control for possible geographical variation (estimates for county dummies not presented in the table).

Starting with spending willingness, the results provide partial support for the self-interest argument. Those with poor health are more likely to favour more public spending on healthcare (OR = 1.42, $p < .00$). The same relationship applies to education: respondents with elementary or high school also have a higher probability of preferring more public spending (OR = 1.72, $p < .00$). The results furthermore lend support to the ideological argument: as could be expected, those who voted the Conservative Party in the 2013 election have a lower spending willingness than those in the reference category (Labour Party), with an estimated odds ratio of 0.75 ($p < .03$). The same relationship also seems to apply for the Liberal Party voters, although the estimate failed to reach statistical significance at the conventional level (OR = 0.67, $p < .09$).

Turning to the second dimension of what I have here termed the solidaristic basis of healthcare legitimacy, this was captured through two different variables reflecting opposition to increase co-payments. The first variable assessed the opposition to general use of co-payments, and the results are reported in the second column of Table 4. The estimates suggest that the self-interest argument is less relevant in this context, as only age is positively associated with opposition to co-payment (OR = 1.02, $p < .01$). Ideological disposition, on the other hand, appears to play a more important role, given that the analysis returns significant negative estimates for two of the four parties at the liberal-conservative end of the political spectrum, Conservative and Christian democratic voters, with odds ratios amounting to.64 ($p < .00$) and 0.57 ($p < .02$), respectively. Again the results indicate a similar prefer-

Table 4
The role of self-interest and ideological beliefs for views on public healthcare spending, co-payments and private health insurance. Estimated via logit regression. Odds ratios with 95% CI in parenthesis.

	(1) Spend more public money on healthcare than now	(2) Oppose co-payments in public health services	(3) Oppose co-payments for treatment of "self-inflicted" diseases	(4) Oppose easier uptake of PHI
Self-interest:				
Poor economic situation	1.16	1.17	1.29**	1.08
	(0.94–1.44)	(0.93–1.46)	(1.06–1.58)	(0.88–1.32)
Poor health	1.42**	1.20	1.47**	1.00
	(1.12–1.12)	(0.92–1.57)	(1.17–1.86)	(0.79–1.26)
Low education	1.72**	1.18	1.17	.87
	(1.40–2.11)	(0.95–1.47)	(0.96–1.42)	(0.71–1.06)
Age	1.00	1.02**	1.01**	1.01**
	(0.99–1.00)	(1.01–1.02)	(1.01–1.02)	(1.01–1.02)
Ideological beliefs:				
Socialist left party (SV)	1.00	1.46	1.33	1.59
	(0.60–1.65)	(0.81–2.62)	(0.83–2.12)	(0.98–2.59)
Agrarian party (Sp)	.88	.95	1.15	1.04
	(0.51–1.51)	(0.53–1.68)	(0.70–1.89)	(0.63–1.71)
Liberal Party (V)	.67	.64	.63*	.59*
	(0.42–1.07)	(0.40–1.02)	(1.037–2.472)	(0.39-0.91)
Christian-dem. party (Krf)	.85	.57*	.52**	.71
	(0.55–1.33)	(0.37-0.90)	(0.34-0.80)	(0.47–1.08)
Conservative party (H)	.75*	.64**	.76*	.35**
	(0.58-0.96)	(0.49-0.84)	(0.59-0.97)	(0.28-0.46)
Progressive party (Frp)	1.00	.79	.71*	.40**
	(0.71–1.41)	(0.54–1.14)	(0.51-0.99)	(0.29-0.56)
Others	.52*	1.32	.69	1.09
	(0.31-0.88)	(0.73–2.39)	(0.43–1.11)	(0.68–1.75)
Did not vote	.96	79	1.15	.65*
	(0.63–1.44)	(0.51–1.22)	(0.77–1.70)	(0.44-0.96)
Controls:				
Gender	1.35**	1.38**	1.66**	1.11
	(1.11–1.64)	(1.12–1.69)	(1.38–1.99)	(0.92–1.34)
Non-Norwegian	.88	.64*	.58**	.64*
	(0.58–1.32)	(0.43-0.96)	(0.39-0.85)	(0.44-0.95)
Poor rating of health services	1.27	1. 11	.90	.96
	(0.97–1.66)	(0.83–1.47)	(0.70–1.17)	(0.74–1.25)
Intercept	.68	1.04	.38**	.62*
N	1788	1962	1984	1966
Nagelkerke R square	.06	.05	.07	.09

6.1. ** $p < .01$, * $p < .05$.

ence for Liberal party voters, but the relationship is not significant at the conventional level (OR = 0.64, $p < .06$).

The relevance of both self-interest and ideology becomes even more evident when looking at the co-payments for 'self-inflicted' diseases. First, reporting one's economic situation as poor is associated with opposition to increased use (OR = 1.29, $p < .01$). For health status we find the same relationship: those of poor health are more likely to oppose such co-payment, with the odds ratio amounting to 1.47 ($p < .00$). Also the estimate for age corroborates this pattern: the higher the age, the less willingness to allow co-payments for 'self-inflicted' diseases (OR = 1.01, $p < .00$). The ideological patterns observed for general use of co-payments are further strengthened in the case of a more restricted use: respondents who voted for one of the four liberal-conservative parties have significantly lower probabilities than Labour Party voters of opposing more co-payments for 'self-inflicted diseases'. The estimated odds ratios range from 0.76 for the Conservative Party voters to 0.52 for Christian Democratic voters.

As for the third and final dimension, the preference towards PHI, only age of the self-interest variables returns a significant estimate, and reflecting the patterns observed so far: increasing age is associated with a higher probability of opposing easier uptake of such insurance (OR = 1.01, $p < .01$). For the ideological factors, both the Conservative party and the Progressive party voters are as expected more positive towards such insurance.

For the controls, we observe that female respondents are more solidaristically inclined than males, as they have a significantly higher probability of preferring more public spending and being against both types of co-payments. The pattern is the opposite for non-Norwegian respondents: they are more positive towards increased use of general co-payments and for "self-inflicted" diseases, as well as easier uptake of PHI.

4. Discussion

This paper departs from the argument that a population's disposition towards public healthcare spending, co-payments and PHI forms an important and hitherto little explored dimension of health system legitimacy. Given that the overall fiscal sustainability of many health systems is under increasing pressure, this dimension will only become more important in the years to come. The increasing financial burden of governments have normally been met by various combinations of reduced benefits, higher taxes and increased efficiency. Several attempts of excluding services from the benefit package have been tried, but has shown to be politically costly. Also, allowing people to purchase certain services outside of the public health care sector, thereby risking to create a two-tier system, has generally not been regarded as a desireable policy for healthcare. User charges have been implemented in some areas, but typically with extensive exemption schemes to secure equity in utilisation. In many public, tax-based systems this has therefore led either to a slow implementation of new technologies or to certain types of rationing [23].

While most health care in Europe is still publicly funded, the role of the private health sector is increasing. Understanding the citizens' preferences in this regard is important for policy purposes. If individuals that opt out from public healthcare is unwilling to finance services that they do not use, an increasing use of private

healthcare may be accompanied by a decrease in the support, and willingness to pay taxes, for the public sector. Such a 'secession of the wealthy' could thus lead to lack of 'voice' and taxpayer discontent, ultimately causing the evolution of a two-tiered health system, with a 'poor service for the poor' [5].

Previous studies on healthcare legitimacy have focused on satisfaction with services and preference for state involvement (e.g., [11,17,20,24,26,38]). Building on this literature, the present study suggests that health policy preferences for public spending, co-payments and insurance are strongly related to both self-interest and ideological beliefs. First, people of old age and of poor health and economy oppose higher co-payments for "self-inflicted" diseases, while those with low education and poor health support more public spending. Increasing age is furthermore associated with opposition to higher co-payments and easier uptake of PHI. Second, liberal-conservative voters are less willing to spend more public money on healthcare but more willing to increase the use of co-payments and insurance.

Whereas the role of political beliefs appears rather unambiguous, with liberal-conservative voters being consistently less solidaristically inclined than social democratic voters, the relationships for self-interest beg more attention. Age seems to be the most contributing factor for having a solidaristic orientation, together with poor health. This should not be surprising, since the consumption of health services increases with age and health problems. However, in addition to the self-interest argument, the strong role of age may also reflect a point often made in research on electoral turnout; that younger voters tend to be less socialised into having an interest for politics and seeing the importance of the collective problems that the welfare state solves. These are the experiences typically obtained with adulthood and the need for childcare, healthcare and other welfare services, having to pay taxes, etc. [1]. A similar argument is found in the concept of 'generation me': empirical evidence from the USA suggests that today's emerging adults have shifted their values away from intrinsic (community, affiliation) concerns and toward extrinsic (money, fame, and image) concerns (e.g., [36,37]). The consequences of this more individualistic culture is lower empathy, less concern for others, and less civic engagement (e.g., interest in social issues, government, and politics). Studies based on European data also indicate similar generational shifts in areas related to invidualism [21,33].

The present study adds to the research field in several ways. First of all, while several studies have investigated attitudes towards the welfare state in general or towards redistribution, there is a lack of studies focusing on the health system. There are several reasons why separate studies of the health system are warranted in the context of welfare state legitimacy. Health care is by far the largest area of the welfare state. Furthermore, the health system delivers specific and direct services that are limited in time, as opposed to many other welfare services that consist of various forms of economic transfers. Second, this study investigated dimensions of healthcare legitimacy that have been little explored, but which are of major significance for the future legitimacy of the welfare state: public spending willingness, use of co-payments and uptake of PHI. Finally, very few previous studies of welfare state legitimacy – or health system legitimacy in particular – have employed data from the last 15 years. The market-orientated health reforms in many countries the last couple of decades may presumably have had impacts on the public's evaluation of the health system and consequently the preferences for health policy. Using Norway as case, this study adds to the research field by utilising data gathered after this era of 'big reform'.

There is off course the question of whether the results reported here can be expected to hold in other institutional contexts. The social health insurance systems found in continental Europe are characterised by welfare programmes more differentiated according to status. In such a setting, co-payments and PHI are probably not so controversial and can therefore be expected to be less related to self-interest and political beliefs. We should therefore show caution in generalising the findings to other settings than NHS systems; i.e. the countries belonging to the family of tax-funded integrated single-payer hospital systems, with publicly owned hospitals. First and foremost, we should expect the findings to apply to the Nordic countries, where the political culture has traditionally been based on broadly social democratic policies, with health systems built on the principle of universality: that all inhabitants should have the same access to health services, irrespective of social status or geographic location. This strong emphasis on equity has been combined with a tradition of decentralisation, which thereby distinguishes the Nordic countries from the more centralised tax-based system of the UK [23].

The study has some possible limitations that should be noted. First, there are some possible methodological concerns worth noticing. By dichotomizing continuous variables we risk the loss of explanatory power. As a robustness test, OLS regression models were therefore also estimated with variables on original form and logarithmic transformations to correct for the skewness. The results remained about the same (not presented here), and if anything they only strengthened the patterns observed in the logistic regressions.

Secondly, some may question the reliability of self-rated health as a measure of health status. However, self-rated health has proved to be a consistently reliable predictor of mortality, and even though variation between population subgroups has been documented, self-rated health often exceeds the reliability of more objective measures [8].

Finally, while the data was collected in 2014, I would maintain that they are still highly relevant. If anything, the support for more choice, competition and private actors in healthcare has probably only increased since the data was collected. For instance, recent surveys have shown that half of the Norwegian population agrees that private health services are necessary in order to meet the future demand for healthcare. Furthermore, the number of Norwegians with health insurance have increased from 380.000 in 2014 to 650.000 in 2020. One could therefore speculate whether more recent data would only strengthen the results documented here.

5. Conclusion

Ageing populations and changes in the composition of population health pose major challenges for health systems across the world. There is also considerable concern over the inefficiency of health services, given the little evidence of significant improvement in health outcomes despite increasing health spending. This study indicates that the young, healthy and well-off are less willing to contribute to the public health system, preferring instead more private responsibility and financing. A policy of allowing for such a development may thus increase the already social inequalities in health, since it is the disadvantaged and less privileged that would suffer the most from it. However, such a policy change would require a substantial shift in attitudes that seems unlikely in the present political climate.

Declaration of Competing Interest

None.

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