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Ability to pay and equity in access to Italian and British National Health Services

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Background: Equity in delivery and distribution of health care is an important determinant of health and a cornerstone in the long way to social justice. We performed a comparative analysis of the prevalence of Italian and British residents who have fully paid out-of-pocket for health services which they could have obtained free of charge or at a lower cost from their respective National Health Services. **Methods:** Cross-sectional study based on a standardized questionnaire survey carried out in autumn 2006 among two representative samples ($n = 1000$) of the general population aged 20–74 years in each of the two countries. **Results:** 78% (OR 19.9; 95% CI 15.5–25.6) of Italian residents have fully paid out-of-pocket for at least one access to health services in their lives, and 45% (OR 18.1; 95% CI 12.9–25.5) for more than five accesses. Considering only the last 2 years, 61% (OR 16.5; 95% CI 12.6–21.5) of Italians have fully paid out-of-pocket for at least one access. The corresponding pattern for British residents is 20 and 4% for lifelong prevalence, and 10% for the last 2 years. **Conclusions:** Opening the public health facilities to a privileged private access to all hospital physicians based on patient's ability to pay, as Italy does, could be a source of social inequality in access to care and could probably represent a major obstacle to decreasing waiting times for patients in the standard formal 'free of charge' way of access.

Keywords: ability to pay, British National Health Service, equity, Italian National Health Service, out of pocket

Introduction

Equity in delivery and distribution of health care does not *per se* guarantee equality in health and survival. However, an access to health services without economic barriers that could prevent people purchasing the care they need, is an important determinant of health and a cornerstone in the long way to social justice. In 1948 the British National Health Service (NHS) was founded offering to the entire population free medical care. Its funding principles still represent a milestone for current health-care policies in western countries. The NHS was intended to offer a system that was universal, equitable, comprehensive, of high quality, free at the point of delivery and centrally funded.[1]

Thirty years later, in 1978, Italy changed its compulsory social insurance model and funded the first NHS of continental Europe (Servizio Sanitario Nazionale—SSN). While 'there is no documented evidence of a conscious importation of the British NHS model, [...] this may simply reflect the fact that by the late 1970s this model had become part of the patrimony of the international health community'.[2] In fact most authors recognize that the Italian NHS was modelled after the British one.[3]

The aim of this article is to establish whether the Italian and the British NHSs, based on similar rationales (universalism, financing through taxation, regulated access through the central role of the general practitioner, waiting lists), have met their original postulate of equitable access to services, regardless of the residents' ability to pay.

Methods

To measure and compare the prevalence of Italian and British residents who have fully paid out-of-pocket for access to health services (excluding medicines and dental care) that they could have obtained free of charge or at a lower cost from their respective NHSs, we carried out in the two countries a survey in a representative sample of the general population aged 20–74 years.

Trained interviewers from an independent survey company conducted computer-assisted telephone interviews in October–November 2006. A random digit dialling method was used to obtain telephone numbers and contact households.[4] A sample size of 1000 interviews per country was considered adequate to detect meaningful differences in prevalence rates. Data were collected by a standardized questionnaire exploring: (i) the population lifelong prevalence of out-of-pocket access to health services (at least one access, between 1 and 5, more than 5 times) and in the latest 2 years (at least one access); (ii) the nature of services privately paid and the main reason for payment for the last out-of-pocket access; (iii) the degree of tolerance towards waiting lists. Furthermore data on socio-economic characteristics (age, sex, household income), having private

health insurance and subjective health status were also collected.

For the comparative analysis we calculated for each answer and country crude prevalence rates and the significance of the differences was tested by the chi-square test in univariate analysis. Odds ratios (OR) were derived from a multivariate logistic regression model including as covariates relevant respondent characteristics (age, sex, household income, having a private health insurance, subjective health status.

Results

To reach the sample size of 1000 representative respondents in each country a total of 1422 residents were contacted in Italy and 1484 in UK giving response rates of 70 and 67%, respectively. Missing values for the main variables of interest are <2%, while income is characterized by a sizable fraction of individuals who refused to answer the question, respectively 46% for UK and 28% for Italy. In order to reduce potential biases when performing logistic regression analyses we verified whether values for income were missing at random with respect to questions 1 and 2 of table 1. Since this condition was satisfied for both questions, we proceeded by performing logistic regressions including also the variable income with missing values as covariate.

Table 1 shows that, in the course of life, 78% (OR 19.9; 95% CI 15.5–25.6) of Italian residents have declared having fully paid out-of-pocket at least one access for health services they could have obtained free of charge or at a lower cost from the SSN, and 45% (OR 18.1; 95% CI 12.9–25.5) have fully paid for more than five accesses. The corresponding figures for UK are 20 and 4%. Access to medicines and dental care was explicitly excluded from our analysis. Considering only the last 2 years, about 61% (OR 16.5; 95% CI 12.6–21.5) of Italians had at least one private out-of-pocket access to health care versus 10% for UK.

The prevalence according to type of the latest fully privately paid services, and according to the reasons for purchasing them out-of-pocket is shown in table 2. Regarding the nature of the services, having a medical examination by a specialist (39%; OR 12; 95% CI 8.7–16.6) and performing a diagnostic test (29%; OR 13.4; 95% CI 9–19.8) were the most demanded services in Italy, while having a surgical procedure (5.2%; OR 0.43; 95% CI 0.25–0.72) and a specialist examination (5%) rated at the top in UK. In both countries, despite significantly differences in the prevalence of type of services privately paid, about two thirds of reasons for paying out-of-pocket the access to care is to avoid waiting times.

Table 3 shows the residents' opinions on waiting lists in their respective countries. Italians are more intolerant than Britons [84% (OR 6.6; 95% CI 5.3–8.2) consider the national situation as a major problem versus 46% for UK)]. The latter seem to be more resilient since 41% (OR 0.18; 95% CI 0.14–0.23) feel that the present waiting times are acceptable (versus 11% in Italy).

Discussion

Standardized comparisons between Italy and UK confirm the huge differences in prevalence rate of residents declaring having paid out of pocket between the two countries for services which they could have obtained free of charge or at a lower cost from their respective NHS. Since covariates in the regression models do not play an important role (income included) in explaining these differences in prevalence rates, other factors should be considered, in particular specific national policies addressing the problem of waiting lists to access to elective health services.

The British NHS has chosen a model 'designed to exploit the dynamics of the market (increasing the range of choice for the patient, 'pay by results', competition) but not to create a market in health care',[5] to boost the efficiency of the system. A negotiation has been conducted with the private sector for the complementary offer of elective surgical services,[6] keeping the access for all NHS patients free, thus decreasing waiting lists significantly (from 1999 to 2005 the number of patients on waiting lists of ≥6 months was reduced by 85% and of those on lists of <6 months by 2%).[7] A comparative analysis among five countries published in 2007 has shown that England has achieved the most sustained improvement in reducing waiting times.[8] It is also important to point out that inside NHS facilities private practice could be conducted only with prior agreement of the employer and under strict criteria and conditions.[9] More concretely, the significant part of the private practice, almost exclusively used by individuals covered by private health insurance, is carried out by consultants outside NHS facilities.

Italy does not have a national administrative database on waiting times but according to data produced annually by an influential official association of patients (Tribunale dei diritti

Table 1 Prevalences of Italian and British residents who declared having fully paid out-of-pocket, in the course of life or in the last 2 years, one or more private accesses to medical services (adults aged 20–74 years; *N* = 1000 in each country)

Indicator	Crude prevalence rate [*N* (%)]			OR[a]	95% CI (min–max)
	Italy	UK	*P*-value (chi-square test)		
***Question 1*: Excluding medicines and dental care, have you ever fully paid out- of- pocket for your medical care, for example medical examinations, diagnostic services, therapies, surgical interventions, rehabilitation, etc., that you could have obtained free of charge or at a lower cost within your national health service?**					
Yes	783 (78.3)	196 (19.6)	<0.001	19.914	15.493–25.598
[Yes 1–5 times]	[336 (33.6)]	[155 (15.5)]	<0.001	3.157	2.510–3.972
[Yes >5 times]	[447 (44.7)]	[41 (4.1)]	<0.001	18.144	12.904–25.512
No private access	204 (20.4)	788 (78.8)	<0.001	0.053	0.042–0.068
Did not remember or refused	13 (1.3)	16 (1.6)	–	–	–
***Question 2*: And was any of this medical care within the last 2 years?**					
Yes	606 (60.6)	98 (9.8)	<0.001	16.454	12.615–21.462
No private access	376 (37.6)	885 (88.5)	<0.001	0.069	0.054–0.089
Did not remember or refused	18 (1.8)	17 (1.7)	–	–	–

a: OR include terms for age, sex, household income, having a private health insurance and subjective health status (UK = reference value 1)

Table 2 Prevalence according to the nature of latest service fully paid out-of-pocket and according to the reasons for purchasing them privately (adults aged 20–74 years; $N = 1000$ in each country)

Indicator	Crude prevalence rate [*N* (%)]			OR[a]	95% CI (min–max)
	Italy	UK	*P*-value (chi-square test)		
***Question 1*: Thinking about the last time you fully paid out-of-pocket for private medical care, which of the following did you pay for? If it was more than one service, please indicate the main one you paid for**					
Diagnostic test	278 (28.7)	31 (3.1)	<0.001	13.358	9.018–19.786
Medical examination by a specialist (excluding a gynaecologist)	388 (38.8)	50 (5.0)	<0.001	12.041	8.744–16.581
Gynaecological examination[b]	42 (8.1)	4 (0.7)	<0.001	12.274	4.336–34.739
Surgical intervention	23 (2.3)	52 (5.2)	<0.001	0.426	0.250–0.723
Something else (e.g. physiotherapy)	29 (2.9)	48 (4.8)	0.021	0.597	0.367–0.971
No private access	204 (20.4)	788 (78.8)	<0.001	0.053	0.042–0.068
Did not remember or refused	36 (3.6)	27 (2.7)	–	–	–
***Question 2*: And thinking about the last time you fully paid out- of-pocket for medical care, what was the main reason why you decided to pay?**					
To have the medical investigation, examination or test as quickly as possible	493 (49.3)	124 (12.4)	<0.001	7.834	6.155–9.970
To be able to choose a particular doctor or hospital	194 (19.4)	14 (1.4)	<0.001	18.206	10.371–31.960
I was not aware that the SSN/NHS could provide the same service free or at lower cost	25 (2.5)	6 (0.6)	<0.001	3.908	1.598–9.557
Other	71 (7.1)	45 (4.5)	0.013	1.457	0.980–2.166
No private access	204 (20.4)	788 (78.8)	<0.001	0.053	0.042–0.068
Did not remember or refused	13 (1.3)	23 (2.3)	–	–	–

a: OR include terms for age, sex, household income, having a private health insurance and subjective health status (UK = reference value 1)
b: Prevalence in women

Table 3 Opinion of Italian and British residents on waiting times in their respective countries (adults aged 20–74 years; $N = 1000$ in each country)

Indicator	Crude prevalence rate [*N* (%)]			OR[a]	95% CI (min–max)
	Italy	UK	*P*-value (chi-square test)		
***Question*: Generally speaking, which of the following statements comes closer to how you feel about waiting lists in your country?**					
They are a big problem	844 (84.4)	459 (45.9)	<0.001	6.573	5.272–8.195
They are acceptable	109 (10.9)	410 (41.0)	<0.001	0.184	0.144–0.234
They are almost non existent	28 (2.8)	50 (5.0)	0.033	0.508	0.310–0.834
None of these	19 (1.9)	20 (2.0)	0.869	0.883	0.430–1.613
Did not remember or refused	0	61 (6.1)	–	–	–

a: OR include terms for age, sex, household income, having a private health insurance and subjective health status (UK = reference value 1)

del malato) and published by the public National Agency for Regional Health Services, waiting times seem to be longer compared to Britain.[10,11] In fact reducing queues is for citizens the major problem to solve, according to the regular surveys carried out on public perception of the Italian SSN.[12] To understand the huge prevalence of Italians who have declared having chosen a fully private access to health services it is essential to go back to 1999. In that year the left wing government tried to regulate the private practice traditionally present in the Italian system, but this legitimated and finally gave a significant impulse to the parallel private access within the public service. To all public hospital physicians were given the right to practice freelance within the NHS (*intramoenia* = inside the walls), thus creating a 'private privileged way' of access (without waiting lists or only short ones and with a higher standard in comfort) for people willing to pay for the whole service out-of-pocket.[13] This regulation together with long waiting lists seems to explain the higher prevalence of Italian residents—compared with the UK—who declared paying fully out-of-pocket for services which could have been obtained free of charge or at a lower cost with the 'standard way'of access to the Italian NHS. This also highlights an important problem regarding solidarity and equity of access within the public health system in Italy between the residents willing (or induced) to pay and those who are not.

Avoiding queues by paying and thus receiving, without waiting time, the same medical service by the same physician working inside the same public hospital, while 'standard' patients of the Italian NHS wait for months, seems hard to justify from an equity point of view,[14] in particular when politicians do not miss opportunities to remind that 'equity of access for every citizen' is a cornerstone of the Italian NHS.

The inequity of access can be further demonstrated by the fact that the prevalence of residents in Italy who declared paying for services fully out-of-pocket remains non-significant across the three levels of household income distribution (low 74.2%; medium 81.3%; high 78.2%; $P = 0.25$). This, in turn, means that there is no cross-subsidization from wealthy households to poorer ones.

It follows that in Italy having long waiting lists could be functional for physicians to keeping and promoting the 'private privileged way' for access to the public health system. Even worse, it can be speculated that for patients not willing to pay out-of-pocket for the privileged access, the waiting lists will not tend to decrease (or they will do so more slowly) due to the precedence given to those who

benefit from priority access to services. The available information—though scanty—seems to suggest, in fact, a generalized increase in waiting times in Italy as mentioned in the annual reports of the official association of patient 'Tribunale dei Diritti del Malato—Cittadinanza Attiva'.[15]

Considering the results of this comparative analysis it seems urgent that in Italy evidence based health service researches will be focused (i) on the relationship between the right given to all public hospital physicians to practice free ('intramoenia') and the length of waiting lists and (ii) on new organizational models allowing the patient a fair and equitable access to public hospital physicians for elective services.

Italian hospital doctors have an average income of 50% less than their colleagues in UK.[16] Giving to all hospital doctors the right to practice freelance within the SSN and allowing them to earn extra money with patients paying out-of-pocket has prevented Italy from increasing salaries. The Italian public debt is since many years much above the Gross Domestic Product, Italy has partially transferred this charge to patients without considering their ability to pay.

A more general conclusion of this analysis could be that even in countries with formal universal access to health care but characterized by long waiting lists, opening the public health facilities to a privileged private access to all hospital physicians based on patient's ability to pay could be a source of social inequity and could probably represent a major obstacle to decreasing waiting times.

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Key points

- It was suspected that 'out-of-pocket' payments were made both in Italy and the UK to obtain healthcare that could be obtained free of charge from their respective NHSs, but the extent of the prevalence of residents having fully privately paid was unknown.
- It was also suspected that the particular approach introduced in Italy to shorten waiting lists (opening the public health facilities to a privileged private access to all hospital physicians based on patient's ability to pay) led to inequalities.
- We show that there is a large difference between the UK (where the prevalence of residents having paid out-of-pocket were for the last 2 years of 10%) and Italy, where 61% of a sample of 1000 residents have declared having fully paid for at least one access (78% in their lives).
- The problem in Italy seems to be related to private treatment within public facilities.
- We conclude that social inequalities still persist in access to healthcare that are particularly large in Italy.

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