

Do patients consult the doctor less often than they used to?

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SUMMARY. Analysis of nationally representative surveys of adults and older teenagers has identified a small but steady decrease in consultation rates following the transient increase which occurred after the introduction of the National Health Service. Visiting rates decreased substantially after 1950 but no trend has been identified in attendance rates. However, between 1950 and 1978 visits have represented a decreasing proportion, and attendances an increasing proportion, of all consultations.

Introduction

EVEN before the NHS began there was an interest in studying how often patients consulted their doctor, and since the 1960s the presence of trends in the consultation and home visiting rates has been a controversial subject. In the 1977 James MacKenzie Lecture, Gray (1978) refers to a succession of reports appearing in the late 1960s "confirming a steady and progressive downward trend in the number of home visits to patients," and to "graphs of the total number of home visits to patients showing a trend line pointing steadily downwards."

Much of what is known about this subject is based on selected samples of doctors and, because of the lack of adequate information, the situation regarding the country as a whole is still not completely clear. To help to clarify the issue, this paper describes an analysis of nationally representative data which allows conclusions to be drawn about national average consultation, visiting and attendance rates since the NHS began.

Selected practices

Until recently the main evidence that a change has occurred in attendance and visiting rates since the NHS began consisted of 14 serial recordings compiled by

individual doctors for varying periods between 1949 and 1970 (Royal College of General Practitioners, 1973). It was found that a mean trend reduction of 15 per cent in attendance rate and 60 per cent in visiting rate had occurred within the selected group of practitioners. Although the reliability of the recordings is not in doubt, the analysis is unacceptable as it is statistically invalid and cannot be accepted as an analysis of trend reduction. In 1979 a further series was published (Royal College of General Practitioners, 1979) for selected years between 1961 and 1974. Several of the examples in this study appear to be updated extracts from the series described above. It concludes that most practices experienced a decline in attendance rate, that the greatest falls occurred in the 1960s and that these rates now appear to have flattened out—a statement difficult to justify from the data presented. Some of the recording doctors also observed the falling visiting rate.

We cannot assume that these useful contributions, built up over many years by individuals recording their own experiences, represent the national situation and, as the editor of the Sixteenth Report from General Practice wisely advises, it is not justifiable to generalize from a few self-selected practices (Royal College of General Practitioners, 1973).

National figures

The lack of nationally representative data led to the first and second National Morbidity Surveys (General Register Office, 1962; OPCS, 1974) being used to show a decrease in the national average consultation rate from 3.75 to 3.0 consultations per year between 1955 and 1970 to 1971.

However, the authors of the second survey point out that the doctors taking part were a selected group, and that the decision not to use a random sample was made at an early stage in the design of the Survey. As the National Morbidity Survey was not designed to measure the national average consultation rate it should not be used for this purpose, nor to provide evidence of changes in the consultation rate over the years.

In 1964 Cartwright (1967) used a national random sample to measure how often adults consulted.

Cartwright and Anderson (1979) compared the results of this survey with their own similar but smaller study of 1977. They concluded that consultation rates had fallen very little, from 4.5 consultations per person aged over 21 years per year in 1964 to 4.3 consultations per person aged over 18 years in 1977. The visiting rate has been nearly halved, however; it represented 23 per cent of all consultations by people aged over 21 years in 1964 but only 13 per cent of all consultations by people aged over 18 years in 1977. This publication provides important evidence that the trends experienced by selected doctors have also been experienced nationally.

Two other sources, the General Household Survey and the Survey of Sickness, are very underused as a source of information about the frequency of consulting. The Survey of Sickness originated in 1943, when a close watch was being kept on the nation's health; it was discontinued in 1952 as an economy measure. In conjunction with this survey, in 1952 Gray and Cartwright (1961) undertook an enquiry at the request of the Ministry of Health on behalf of the Committee on General Practice. The Survey of Sickness measured the frequency with which the general practitioner is consulted, but it also included attendances at outpatients in this total. It is fortunate that, during the course of their 1952 enquiry, Gray and Cartwright extracted from the Survey of Sickness the rates for consultations with the general practitioner only. These figures are the only nationally representative rates readily available for the early years of the NHS. They relate to civilian adults aged over 21 years. Because the Survey of Sickness was discontinued in 1952, Gray and Cartwright's figures relate only to February and March of that year; nevertheless, seasonal variation can be allowed for by using data from the Survey of Sickness and from Bradford Hill's enquiry held during 1938 to 1939 (Hill, 1951) into the consultation rate of insured persons. The latter is the best nationally representative source on seasonal variation month by month.

The General Household Survey (GHS) is a nationally representative survey carried out continuously by the OPCS since 1971. It contains estimates of the national average number of consultations per person per year. It uses age groups which are different from those of the earlier surveys and presents consultation rates in age bands from 15 and over, not 21 and over. However, using GHS and OPCS data for 1971, the consultation rate of people over 21 years has been estimated to be slightly greater (by 5.8 per cent) than that of persons aged over 15.

The results of all the above surveys are shown in Table 1.

National rates

The early years

Consultations

The Survey of Sickness (Logan and Brooke, 1957)

showed that in the early years of the NHS there was an increase in the consultation rate with the general practitioner and at outpatients among two groups. These were women aged 16 to 64 years and men and women aged 65 years and over. The authors concluded that these increased consultation rates were due to people being more willing to consult a doctor when sick than they had been before July 1948. Gray and Cartwright's figures (1961) can also be used to estimate the steady increase in consultations from 1947 to 1949, and to show that by 1950 (a year free of factors known to account for consultation rates being relatively high in certain years), the rate was 15 per cent higher than in 1948.

Consultation rates during the 1970s have been firmly established by the General Household Survey. If the mean annual consultation rate found in 1971 for people aged over 15 years in Great Britain is adjusted to show consultations per person per year for people aged over 21 years in England and Wales, the change in consultation rates between 1950 and 1971 can be estimated; for adults aged 21 years this change is a decrease of 16.3 per cent.

The rate of 5.1 consultations per person per year found during the 1952 enquiry (Gray and Cartwright, 1961) and adjusted to 4.6 consultations per year to allow for seasonal variation, provides evidence that the increase in consultation rate had reached a peak by about 1950 and had begun to decrease by 1952. Table 1 shows that the downward trend in consultation rate was clearly established by 1964. One third of the total decrease between 1950 and 1971 had taken place by then.

Visits

Home visiting shows a substantial downward trend between 1950 and 1971, not only in absolute terms, but also as a proportion of all consultations. Table 1 shows that there was a 44 per cent decrease in visits to adults over 21 in England and Wales between these years. About four-fifths of this decrease had occurred by 1964 and a substantial proportion, possibly a third, had already taken place by 1952.

Attendances

The situation regarding attendance rate is much less clear, and the slight decrease of 1.3 per cent between 1950 and 1971 may be more apparent than real. The assumption that attendances by people aged over 15 in Great Britain indicate attendances by those aged over 21 in England and Wales introduces bias which could account for this difference. Consequently, we must conclude that any change in attendance rates between these years is very small, and that we can neither confirm nor exclude either a small increase or a slight decrease. This problem does not arise with the visiting rate because the difference observed between 1950 and 1971 is substantial.

Table 1. Mean annual rate per person at risk, England and Wales*.

	Consultation	Attendance	Visiting	Visits as percentage of consultations	
1	Mid 1947-Mid 1948	4.02	—	—	
	1948	4.26	—	—	
	Mid 1948-Mid 1949	4.50	—	—	
	1949	4.40	—	—	
2	1950	4.80	3.12	1.68	35.0
3	1952	5.10	3.52	1.58	31.0
4	1952	4.60	3.17	1.43	31.0
5	1955-6	3.75	—	—	—
6	1964	4.50	3.46	1.04	23.0
7	1971	4.02	3.08	0.94	23.4
8	1970-1	3.00	2.49	0.51	17.0
9	1977	4.30	3.74	0.56	13.0
10	1971	3.89	2.98	0.91	23.4
	1972	4.01	3.08	0.93	23.1
	1973	3.68	2.94	0.74	20.0
	1974	3.66	2.93	0.74	20.1
	1975	3.60	1.89	0.71	19.6
	1976	3.40	2.78	0.62	18.1
	1977	3.59	2.95	0.64	17.9
	1978	3.78	3.10	0.68	18.0

*Figures refer to persons aged 21 years and over unless footnotes indicate otherwise.

1. Estimate of annual rates based on the Survey of Sickness. Derived from Gray and Cartwright (1961).
2. Found during Survey of Sickness. Gray and Cartwright (1961).
3. Annual rate based on recordings made in conjunction with the Survey of Sickness during February and March 1952 (Gray and Cartwright, 1961)
4. 3 adjusted to allow for seasonal variation. Visiting rate based on proportion of all consultations dealt with by visits during February and March 1952.
5. First National Morbidity Survey (but see comment in text on p. 99). All age groups combined.
6. Cartwright (1967).
7. Estimated rates for persons aged over 21 years in England and Wales based on consultation rates in Great Britain being reduced by 2.4 per cent to allow for difference in consultation rate between Great Britain and England and Wales (GHS, 1971), and being increased by 5.8 per cent to allow for different age group. Proportion visited is taken as being same as for persons over 15 years in Great Britain. Derived from *The General Household Survey*.
8. Second National Morbidity Survey (but see comment in text on p. 99). All age groups combined.
9. Cartwright and Anderson (1979).
10. 1971-1978 figures derived from OPCS, *The General Household Survey*. Persons age 15 years and over (Great Britain).

The 1970s

The attendance, visiting and consultation rates have been calculated from the findings of the General Household Survey, and each rate has been expressed as a percentage of the 1971 value (Figures 1 to 6). This has the advantage of showing both relative changes over time between rates of dissimilar magnitude and annual changes in each rate. However, comparison of rates observed in 1971 and 1978 alone is of limited value when looking for trends throughout this period, as no attention is paid to the values observed during the intervening years. In order to overcome this limitation and to make use of all the data available, the slope of the least squares regression line (the line which would fit best the points on a graph of the actual rates) has been determined and the estimated average change during the seven-year period has been expressed as a percentage of the 1971 rate (Table 2).

Changes in rates—all ages

Figure 1 and Table 2 indicate that the visiting rate has shown much greater relative change than the other rates. The average decrease since 1971 is substantial (36.1 per cent); the average decrease in consultation rate

Table 2. Average change in rate between 1971 and 1978 as percentage of 1971 rate—Great Britain.

Age group (years)	Consultations (%)	Attendances (%)	Visits (%)
15 and over	-9.2	-1.1	-36.1
15-44	-7.6	-0.8	-53.7
45-64	-1.0	+8.6	-38.9
65-74	-17.5	-11.5	-28.5
75 and over	-29.3	-19.8	-34.9

Source: derived from *The General Household Survey*.

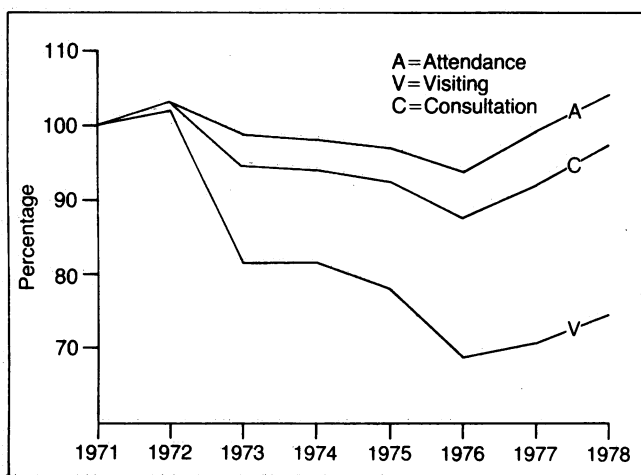


Figure 1. Attendance, visiting and consultation rates as percentage of corresponding rates in 1971. Great Britain, all those aged 15 years and over. Source: derived from The General Household Survey.

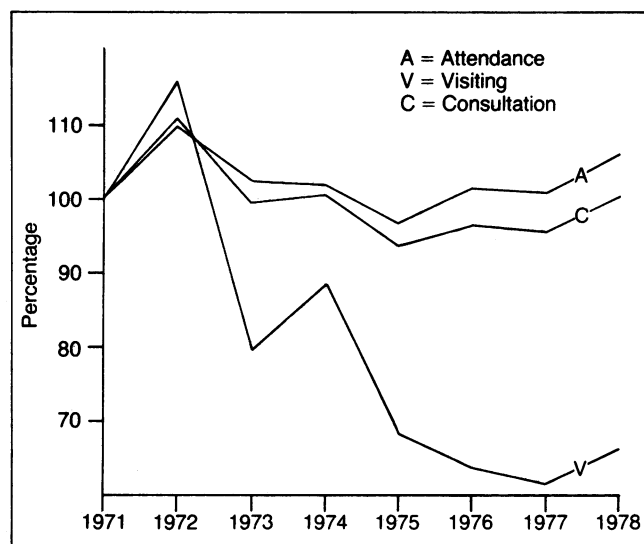


Figure 2. Attendance, visiting and consultation rates as percentage of corresponding rates in 1971. Great Britain, all those aged 15-44 years. Source: derived from The General Household Survey.

is very much less (9.2 per cent). Attendance rate has shown virtually no average change (1.1 per cent).

A further important finding is that the visiting rate has remained low despite the fact that the consultation rate in 1978 is very close to the rate in 1971. This indicates that the observed decrease in visiting is a real decrease and is independent of the consultation rate. This suggests that during this period there was a trend in the proportion of consultations dealt with by visits. A test for trend in linear proportion (Armitage, 1971) has been applied to the data and confirms that such a trend exists, but only among people of working age. The presence of a downward trend in the proportion of all consultations dealt with by visits among the whole population examined is attributable to the influence of this trend among working people of working age (Table 3).

Changes in rates—by age group

The results in Table 2 and Figures 2 to 5 show that all age groups experienced a substantial downward trend in visiting rate. People aged over 65 years also experienced, on average, large downward changes in attendance and consultation rate, especially people aged over 75 years.

The situation is quite different for people of working age, especially older people in this age group, whose consultation rate changed much less markedly. The downward trend in attendance rate for people over 65 years contrasts with the very small decrease in attendance rate for people aged 15 to 44 years and the increase experienced by people aged 45 to 64 years.

Discussion

The conclusion drawn from this analysis—that visiting rates have fallen substantially—is in agreement with the work of the authors reviewed. The finding that attendance rate has exhibited no evidence of a secular trend is novel, although the author of the later Royal College of General Practitioners (1979) publication points out that attendance rate now appears to have flattened out; an important point of agreement. Cartwright and Anderson (1979) do not specifically discuss attendance rate but the rates derived from their findings indicate an

Table 3. Percentage of all consultations dealt with by visits—Great Britain.

	Percentages								Test for trend in linear proportion
	1971	1972	1973	1974	1975	1976	1977	1978	
15-44	13.1	13.5	10.3	11.5	9.4	8.4	8.4	8.5	(p<0.05)
45-64	20.1	17.7	15.6	15.5	14.4	14.6	12.5	12.9	(p<0.05)
65-74	35.1	35.4	35.1	30.1	33.7	33.3	31.9	30.5	NS
75 and over	62.9	66.3	62.9	63.9	63.3	58.3	60.8	62.4	NS
15 and over	23.4	23.1	20.0	20.1	19.6	18.2	17.9	18.0	(p<0.05)

Statistical significance accepted if p is equal to or less than 0.05.

increase from 3.5 attendances per year in 1964 to 3.7 in 1977. A possible explanation of this disagreement lies in the fact that in 1977 Cartwright and Anderson estimated consultation rate to be greater and the proportion of visits to be fewer than did the OPCS. The presence of a long-term tendency for consultation rates to have decreased moderately over the years is consistent with the work of the authors reviewed and, interestingly, the changes in consultation and visiting rate during the late 1940s and early 1950s described above may also be seen in some of the longer series mentioned earlier (Royal College of General Practitioners, 1973).

A word of caution is necessary. The technique used to detect the presence of an overall trend during the 1970s has limitations, and the regression line on which the calculations are based is influenced by the fluctuation in rates. The information available is limited to mean annual rates, and in the absence of more detailed statistical information the technique is an appropriate way of analysing the overall situation, even though small changes must be interpreted cautiously. It is important to note that in 1978 the consultation rate of people over 15 years of age was nearly as high, the attendance rate greater and the visiting rate substantially less than in 1971. The relatively high values observed in 1978 weaken the argument that there has been a clearly defined downward trend in consultation rate for the past 30 years. Although further surveys will be necessary before the issue can be clarified, the question must be raised as to whether or not consultation rates may be levelling off, at least among people of working age.

Figure 3. Attendance, visiting and consultation rates as percentage of corresponding rates in 1971. Great Britain, all those aged 45–64 years. Source: derived from The General Household Survey.

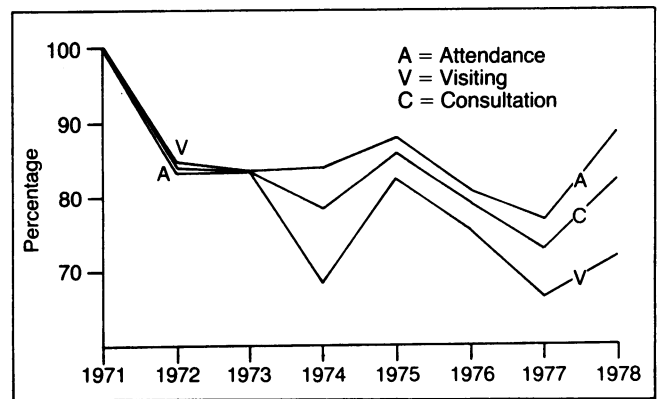
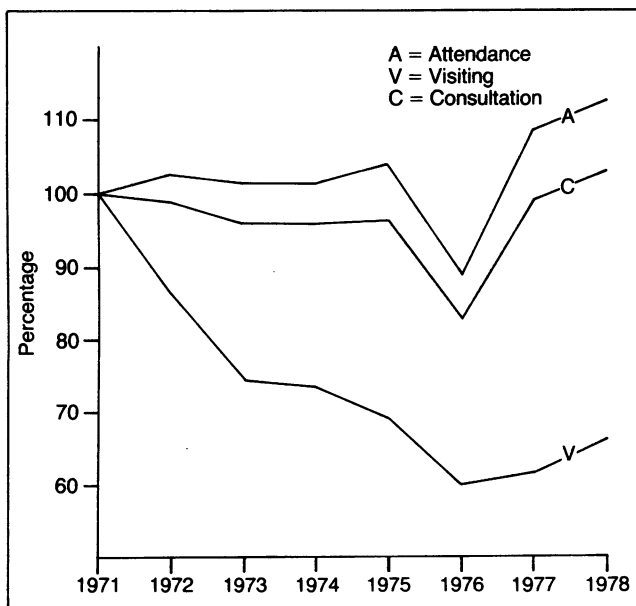


Figure 4. Attendance, visiting and consultation rates as percentage of corresponding rates in 1971. Great Britain, all those aged 65–74 years. Source: derived from The General Household Survey.

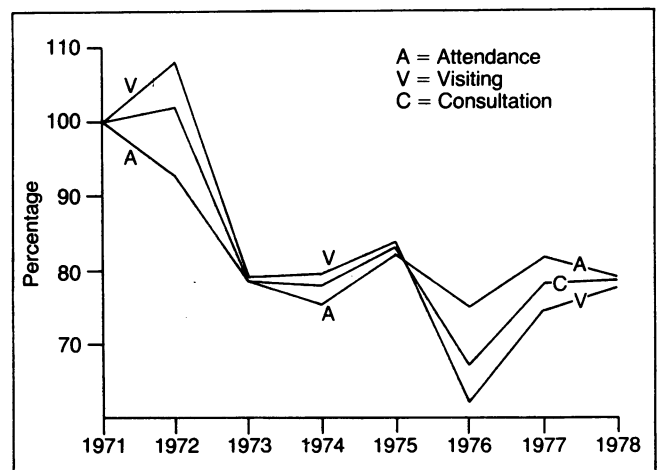


Figure 5. Attendance, visiting and consultation rates as percentage of corresponding rates in 1971. Great Britain, all those aged over 75 years. Source: derived from The General Household Survey.

The long-term trends identified during the 1950s and 1960s have, for persons over 21 years in England and Wales, continued on average during the 1970s. Consultation rate is estimated (see Table 1, footnote 7) to have decreased by 18 to 24 per cent between 1950 and 1978, and visiting rate by 58 to 64 per cent during this period. No change of an important magnitude has been identified in attendance rate between 1950 and 1978.

Thus it can be seen that patients consult at the surgery as often as they ever did, but consultations at home are very much fewer. Nonetheless, home visiting is still an important aspect of general practice; 18 per cent of face-to-face consultations with people aged over 15 years are at home; for the whole population, including children, almost one face-to-face consultation in five (18.5 per cent) was a home visit in 1978. In 1978 the overall demand for consultations is estimated to be

much the same as during the year before the National Health Service began and is only one-fifth less than in 1950, a time of peak demand. This is not a great change when one considers the tremendous social changes and the developments in primary care and practice organization which have taken place since the last war.

Two further points need to be made. This analysis is of consultations where doctor and patient meet, and does not take into consideration other aspects of workload such as repeat prescriptions. The rates discussed are the mean annual rates, and reviews of this subject indicate that wide variation exists around the average values, not only between (Royal College of General Practitioners, 1973, 1979; Billsborough, 1979), but also within practices (MacDonald and MacLean 1971).

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Health centre planning

The Department of Health has recently issued a circular [HC(80)6] which includes the following:

1. The twin objectives of bringing community health services closer together, particularly general medical practitioners and primary care nurses and of improving primary health care facilities are supported. It is also recognized that health centres may have an important role to play in improving services in especially deprived areas such as inner cities. It is felt, however, that previous guidance—consolidated in HC(79)8—placed too much emphasis on the building of health centres and may have led authorities and doctors to consider drawing unnecessarily on authorities' allocations of capital, and increasing unnecessarily the number of publicly owned premises.
2. Authorities have already been told that they need no longer achieve a minimum spend on health centres from their capital allocations. Powers are being taken to enable the General Practice Finance Corporation to buy and lease back surgery premises to general medical practitioners as well as to give mortgages, thus widening the options open to general medical practitioners wishing to work from better premises.
3. Each area health authority is now asked to review, with the help of its family practitioner committee, all schemes for health centre building that are planned or under consideration (except those that have already gone out to tender) on the basis of the following criteria:
 - a) Is the scheme clearly supported by the doctors who would have a place at the health centre? If the answer is uncertain, the scheme should be discontinued. (The only exception would be where a health centre is considered essential to attract practitioners into an area of actual or potential shortage.)
 - b) Will the scheme make a marked improvement in the existing standards of primary health services, particularly where there are areas of population hitherto deprived of satisfactory services?
 - c) Has the authority considered the possibilities open to doctors of improving premises or services by

their own efforts assisted by improvement grants (available from family practitioner committees) or by the General Practice Finance Corporation and the Department's cost rent scheme? Authorities should consider whether these possibilities would not be preferable, in appropriate circumstances, as conserving NHS capital for other purposes.

- d) Are the facilities proposed a *reasonable*, rather than *ideal*; level of provision and of appropriate size to achieve the intended improvement of service both in terms of standard of provision and range of services, taking account of both medical and nursing needs? Services other than general medical and nursing services (and pharmacy where local pharmacists have so opted) should only be provided where they are inadequately provided or housed elsewhere . . .

It is recognized that exceptions to criteria b) and c), and perhaps d), may be unavoidable where cancellation or delay to a scheme which is already at a late stage of planning would be unacceptable on grounds of good faith, or would cause great difficulties in housing services by any other means.

Coronary artery bypass surgery in stable angina pectoris

This progress report on the prospective randomized study of the effect of coronary bypass surgery on prognosis presents the results of a three-year follow-up for all patients as well as the results of those followed up for three to five years. The 768 patients studied were men aged under 65 with mild to moderate angina pectoris, at least two-vessel disease, and good left ventricular function. Three hundred and seventy-three patients were randomized to medical treatment and 395 patients to surgical treatment. Although 69 'medical' patients were subsequently operated on and 27 'surgical' patients were not operated on they were not excluded from the analysis, and the group randomized to coronary bypass surgery was compared with the group randomized to no surgery. The policy of surgery was associated with significantly better five-year survival than that of no surgery, the rates being 93.5 per cent and 84.1 per cent respectively. The subgroups of patients with left main disease (92.9 per cent v. 61.7 per cent five-year survival) and three-vessel disease (94.9 per cent v. 84.8 per cent) benefited most from the policy of surgery. Symptomatic improvement, consumption of beta-adrenergic blocking agents, and exercise performance were also significantly better for the surgical group than for the medical.

Source: European Coronary Surgery Study Group (1980). Prospective randomized study of coronary artery bypass surgery in stable angina pectoris. Second Interim Report. *Lancet*, 2, 491-495.

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