PRACTICE OBSERVED

Practice Research

Death certification in general practice: review of records

D A BLACK, S J JACHUCK

Abstract

The records of death that had been certified by general practitioners in one practice over 18 years were assessed in the light of the recent joint publications of the Royal College of Physicians and the Royal College of Pathologists. Over this period roughly 30% of the deaths in the practice population occurred outside hospital and a total of 202 certificates were issued.

A review of 282 counterfoils of records of death certification showed that 12 counterfoils (4.8%) had no age and sex mentioned, and three counterfoils did not describe the place of death. The average age at death outside hospital was 71.6 years—the age of women being 75.1 years compared with that of men of 68.2 years. Only 2% of patients had had a necropsy. The common causes of death stated in the certificates were: cardiovascular 41%, carcinoma 35%, respiratory 15%, and stroke 8%. All contributory causes are also mentioned. Ninety seven per cent of the patients were seen after death by the doctors in the practice and 68% had been seen in the two days preceding death.

We emphasise the importance of keeping accurate records of deaths in general practice for audit and research as well as for planning services for terminally ill and recently bereaved patients.

Introduction

The recent joint publication by the Royal College of Physicians and the Royal College of Pathologists on medical aspects of death certification is the first review of this important subject since the publication of the Brodnick report in 1971.¹ Both reports contain recommendations of relevance to the general practitioner, particularly with regard to the accuracy of information contained in the death certificate and its use in medical audit.

Motivated by these reports we decided to review the available records which had been made in our group practice over the years 1964-82. In analysing the data we attempted to identify deficiencies highlighted in the reports and to examine the solutions.

Method

In general practice the only record of death in the practice community, certified by the general practitioners, is the counterfoil in the books of Medical Certificates of Cause of Death, since the medical records of the deceased are not available for review. In our group practice we had records of 262 such deaths, covering the years 1964-82. We extracted the following information from these counterfoils: (a) Age, sex, and date of death; (b) Cause of death, both primary and contributory factors; (c) Place of death; (d) Date last seen alive and name of practitioner who certified death; (e) Referral for further examination (coroner necropsy).

Results and discussion

Although our list size had remained fairly static at around 8000 patients, the average number of deaths certified outside hospital had doubled from 10 patients a year in the first decade to 21 patients a year in the second decade. In the past three years the overall death rate, obtained from the records of the family practitioner committee, had averaged 9.6 per 1000 patients

The joint report of the royal colleges, in affirming this view, calls for an increase in the number of necropsies performed.¹

The death certificate is usually provided by the coroner when the case is referred to him; in certain cases, however, it is the local practice for the general practitioner to issue the certificate after discussing the details with the coroner.

The value of the death certificate as an accurate statement of the cause of death depends on the accuracy of the information contained therein. Increasing the number of necropsies performed on deaths outside hospital would certainly improve the accuracy and the validity of the national mortality statistics. In addition to certifying death, however, the general practitioner also has to counsel the bereaved. Given the available facilities for performing necropsies, increasing the number performed would inevitably lead to delays in funeral arrangements and would adversely affect managing the bereaved. Preventing this delay would require improved pathology services to cope with the increased workload.¹ In the present economic climate and given the pattern of mortality in our study we think that this would not be cost effective.

Conclusion

The significance of the death certificate to the general practitioner may be spelled out as follows:

- (1) It has medicolegal importance.
- (2) It provides a means of auditing the quality of care offered to those who are terminally ill and recently bereaved.
- (3) It provides an account of the pattern of death, the experience needed for the care of the dying, and the supportive services necessary to cope with the demand.
- (4) It could be an important research tool in occupational medicine. It is a pity that the occupation of the deceased is not entered on the death certificate.

The results of this review show that the documentation of death in general practice is deficient in 6% of the counterfoils. Several factors seem to be responsible: (a) Inadequate understanding of the importance of the death certificate; (b) A virtual

lack of training at undergraduate and postgraduate levels in the mechanics of completing the certificate. (c) An absence of meetings in general practice to discuss deaths, which provide a forum not only to reinforce the above but also to review the overall care of the dying.

At a practical level the following solutions might be considered: (a) Adequate training should be given to all medical students, which would then be reinforced in vocational training. (b) Meetings to discuss deaths should be held and attended by all members of the primary health care team. (c) Certificates should be issued in all cases of death, including those referred to the coroner, and updated with the results of possible findings. Furthermore, all deaths that occur in general practice should be recorded in the practice so that an accurate and complete record of the pattern of death is obtained.

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Generic alternatives in general practice

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Abstract

Using a standard analysis of one month's prescribing in a general practice we showed a potential saving of 8.8% (£883.22) of the net cost of ingredients through substituting exact generic alternatives. Our results confirm the possible reduction in cost of drugs to the National Health Service by the use of generic substitution as suggested in the Greenfield report. Although substitution was theoretically available in most therapeutic classes, two thirds of the potential savings pertained to two classes, preparations acting on the nervous system and preparations acting on the cardiovascular system and

diuretics. Of the prescriptions (31%), with potential generic alternatives, less than three quarters were actually available.

Introduction

The cost of drugs has provoked much discussion both political and professional.¹ Prescribing by approved name (generic prescribing) has been encouraged to reduce cost without detriment in the quality of treatment or loss of the doctor's clinical freedom.

In Northern Ireland the average net cost of ingredient per person per year in 1980 was 28%,² higher than in Britain.³ Arrangements for pricing prescriptions in Northern Ireland are fully computerised and a variety of analyses of their prescribing are available confidentially to general practitioners from the Prescribing Monitoring Unit, Department of Health and Social Security, Northern Ireland.

This study arose from discussions about prescribing with the two general practitioners of an urban general practice

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a year. Thus in our practice deaths outside hospital represented 30% of our total death rate, in keeping with the national mortality statistics.¹

AGE AND SEX (TABLE 1)

The mean age at death was 71.6 years, and 82% of patients had reached their 60th birthday. As expected, the mean age at death of women (75.1 years) was greater than that of the men (68.2 years).¹ There was one report of neonatal death at home and two deaths in early infancy. It was not possible to analyse the results by age and sex in 12 cases because no details were included on the counterfoils.

Despite the unavoidable element of selection introduced, the results agree with those published in other series and the usual major causes of death predominated.¹

PLACE OF DEATH

Details of place of death were included in 259 counterfoils. Most (208) died at home, 42 died in residential care, seven in hospital, one in an ambulance, and there was one sudden death in a social club.

TABLE 1—Contributory causes of death

Cardiovascular disease (n=37)	
Hypertension	10
Heart failure	9
Atherosclerosis	8
Peripheral vascular disease	3
Coronary heart disease	3
Myocardial infarction	1
Stroke (n=3)	3
Respiratory disease (n=49)	28
Pneumonia	18
Chronic bronchitis and emphysema	20
Asthma	1
Chronic nervous system and mental disease (n=16)	6
Dementia	6
Parkinson's disease	1
Alcoholism	1
Depression	1
Arthritis and endocrine disease (n=14)	7
Diabetes	7
Liver failure	1
Obesity	1
Amnesia	1
Hypothyroidism	1
Hypertension	1
Gastrointestinal disease (n=3)	2
Peptic ulcer	2
Cancer (n=87)	52
Melanoma	26
Myocardial infarction	1
Chronic heart failure	1
Atherosclerosis	1
Cor pulmonale	1
Hypertension	1
Rheumatic heart disease	1
Myocarditis	1
Compartment heart disease	1
Cancer (n=87)	37
Lung	37
Stomach	4
Bladder	1
Pancreas	1
Testicular lymphoma	1
Uterus	1
Breast	1
Melanoma	1
Sarcoma	1
Myeloma	1
Bladder	1
Ovary	1
Prostate	1
Respiratory disease (n=39)	29
Pneumonia	9
Chronic bronchitis and emphysema	6
Influenza	1
Chronic heart failure	1
Chronic renal failure	1
Tuberculosis	1

Age and sex not mentioned in 12 cases.

TABLE 1—Underlying causes of death

Cardiovascular disease (n=107)	
Coronary heart failure	52
Atherosclerosis	26
Cor pulmonale	1
Hypertension	4
Rheumatic heart disease	1
Myocarditis	1
Compartment heart disease	1
Cancer (n=87)	37
Lung	37
Stomach	4
Bladder	1
Pancreas	1
Testicular lymphoma	1
Uterus	1
Breast	1
Melanoma	1
Sarcoma	1
Myeloma	1
Bladder	1
Ovary	1
Prostate	1
Respiratory disease (n=39)	29
Pneumonia	9
Chronic bronchitis and emphysema	6
Influenza	1
Chronic heart failure	1
Chronic renal failure	1
Tuberculosis	1
Stroke (n=21)	1
Other (n=4)	1
Chronic renal failure	1
Tuberculosis	1

CAUSE

Table II gives the primary causes of death for each case, and table III gives the range and frequency of contributory causes (where mentioned). The details include only the accounts of the records available in the practice community not accessible to the general practitioner occur in the following cases: (i) sudden and unexpected deaths referred to the coroner and when no certificate has been issued; (ii) some deaths occurring in hospitals.

DATE LAST SEEN ALIVE AND PRACTITIONER WHO CERTIFIED DEATH

The date when the patient was last seen alive and the name of the doctor who certified the death are important for three reasons. Firstly, they can be taken as a measure of the standard of care offered to terminally ill patients and those who have been bereaved. Secondly, they indicate the frequency of unexpected death in general practice. Finally, they are important in assessing the quality of the information entered on the death certificates.

We found a range of 0-89 days between the date of death and the last contact with the general practitioner. The average interval was 4.7 days. In only nine cases was there an interval of over one month and in all these cases the deaths were sudden and unexpected. Sixty eight per cent of patients were seen after death by the attending doctor or another partner.

FURTHER EXAMINATION

The quality of death certification in England and Wales has been compared favourably with that practised in other countries.¹ Several authors, however, have commented on the discrepancy between clinical and necropsy diagnosis of the causes of death.¹⁻¹⁴

where RJA spent two weeks of his fourth year medical course. Permission was given to us to obtain details from the Prescribing Monitoring Unit of all prescriptions written in the practice in November 1982. The practice has a list of 3327 patients and is in south Belfast in the Eastern Area Board. There is a very high proportion of elderly patients (table 1). Studies of such practices should show maximum savings in the number, type, and duration of medication.¹⁵ We proposed to examine the potential reduction in cost by replacing proprietary preparations, where possible, with alternative generic versions.

TABLE 1—Distribution of elderly people in April 1982. (Source: Central Services Agency)

Age (years)	Northern Ireland	Eastern Area Board	South Belfast	Study practice
65 and over	11.75	12.80	15.08	28.50
75 and over	4.46	5.00	5.96	12.23

Method

With the written permission of the two general practitioners we obtained a standard analysis of their prescribing for November 1982. The month chosen was retrospective to avoid bias by the practitioners. The analysis was by therapeutic class and gave details of all medications prescribed by form strength, quantity, and cost. It also made available the amount and cost per prescription.

The strategy followed by Wade and McDevitt in their assessment of prescribing was adopted, using the *British National Formulary* as an authoritative and acceptable standard.¹⁶ Without altering the quantities

TABLE 1—Comparison of average net cost of ingredients per prescription of study practice with local and national prices

	No. of prescriptions	Total net cost of ingredients per prescription (£)	Average net cost of ingredients per prescription (£)
Study practice Nov 1982	2,425	10,093.00	4.16
Northern Ireland Nov 1982	1,162,365	928,606.04	0.79
Northern Ireland Jan to Dec 1982	1,145,564	478,466.63	0.42
United Kingdom Jan to Sept 1982	231,100,000	716,600,000.00	3.10

*Analysis of prescribing by therapeutic class, Central Services Agency, Northern Ireland.
†Northern Ireland Health and Social Services, Central Services Agency, Annual Report 1982.
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TABLE 1—Study practice: analysis by number of prescriptions, November 1982

Therapeutic class	Generic preparations	Generic alternatives		Proprietary preparations only	Total No of prescriptions (n=100)
		Potentially available	Actually available		
Preparations:					
01-02 Acting on the nervous system	17	249	196	202	508
03 Acting on the gastrointestinal system	42	218	15	213	285
04 Acting on the cardiovascular system and diuretics	158	138	138	233	527
05 Acting on the respiratory system	16	41	41	203	260
07 Acting on the urinary system	3	0	0	11	14
08 Acting on the eye	11	118	10	129	150
09 With hormone or antihormone activity	30	23	23	41	93
10 Affecting haemopoiesis and the blood	6	0	0	4	10
11 For the treatment of malignant disease	0	0	0	4	4
12 For nutritional disorders	5	10	10	5	20
13 Affecting allergic reactions	10	23	18	193	226
14 Acting locally on the skin and mucous membranes	10	10	10	10	30
15 Acting on the eye	0	0	0	0	0
16 For immunology	0	44	44	0	44
17, 20, 21 Used in diagnosis, dressings, and appliances	0	0	0	0	0
18 and 19 Disinfectants, antiseptics, and other drugs and preparations	1	0	0	6	13
Unclassified	0	0	0	0	0
Total No (%)	76 (7)	818 (31)	592	138 (5)	2625 (100)

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TABLE 19—Study practice: analysis by cost of prescriptions (£), November 1982

	(1) Generic preparations	(2) Generic alternatives		(3) Potential savings from generic substitution (percentage of therapeutic substances No. 1 to 30)		(4) Percentage contribution to overall savings	Proprietary (1) preparation only	Total cost of all prescriptions (£) (%)		
		(2a) Potentially available	(2b) Not available	(3a) Not available	(3b) Actually available					
01-02	Preparations acting on the nervous system	566	498.82	214.43	285.39	70.38	215.01 (16.8)	24.3	777.96	1 282.54
03	Preparations acting on the gastrointestinal system	930	108.35	20.43	87.72	32.20	55.52 (4.4)	6.3	1134.99	1 253.24
04	Preparations acting on the cardiovascular system and related	295	764.58	93.16	671.42	300.92	770.50 (15.2)	41.9	1660.87	2 428.40
05	Preparations acting on the respiratory system	546	1.91	0	1.91	0.31	1.60 (0.2)	0.2	663.14	670.51
06	Preparations prescribed for immunisation	0	232.90	36.99	196.01	116.16	79.85 (8.5)	9.0	704.66	977.56
07	Preparations acting on the venous and the arterial system	2.04	0	0	0	0	0	0	63.29	65.33
08	Preparations acting on the endocrine system	49.79	288.92	74.13	214.79	100.65	114.14 (20.4)	12.9	221.74	560.45
09	Preparations with hormone or endocrine active	75.23	128.28	58.97	69.29	52.73	16.56 (2.7)	1.9	401.87	605.36
10	Preparations affecting haemopoiesis and the blood	2.64	27.76	21.76	6.00	6.24	-0.24 (-0.2)	-0.03	86.53	116.93
11	Preparations for the treatment of malignant diseases	0	0	0	0	0	0	0	56.52	56.52
12	Preparations for immunisation	4.28	54.84	0	54.84	33.01	21.83 (15.7)	2.5	79.91	139.03
13	Preparations affecting allergic reactions	0	6.36	0.36	0	0	0	0	92.95	99.31
14	Preparations acting locally on the skin and mucous membranes	9.49	43.10	3.01	40.09	41.18	-1.09 (0.2)	-0.1	660.20	512.79
15	Preparations acting on the eye	7.75	18.74	0	18.74	9.20	9.54 (4.7)	1.1	174.96	201.47
16, 17, 18, 19, 20, 21	Preparations for chemotherapy	0	155.00	155.00	0	0	0	0	0	336.32 (3)
19 and 19	Unclassified	6.41	0	0	0	0	0	0	9.27	15.68
	Unclassified									686.56 (7)
	Total No. (%)	181 62 (2)	2330 54 (23)	684 34	1646 20	762 08	883 22		6587 96 (65)	10 093 00 (100)

Discussion

We investigated the potential saving of generic substitution as proposed in the Greenfield report. By adhering to strict criteria for generic alternatives the clinical judgment of the prescribing general practitioners was not questioned. In the study practice only 7% of prescriptions were for generic preparations. This is substantially less than the figure in the Greenfield report of 20%, for 1980, though the source of this figure is obscure. As far as can be accurately estimated it is greater than the Northern Ireland figure of 4.6%, for November 1982, (personal communication, Central Services Agency, Northern Ireland). There seems to be a downward trend in the level of generic prescribing. Dunlop, Henderson, and Inch, after a survey of 17 301 prescriptions in 1949, inferred that a 7% level of generic prescribing was becoming unsatisfactory.¹ Other reported levels of generic prescribing include Wade and McDevitt 13%, to 24% in 1965,² Parish and Austin 20.4% in 1970,³ Department of Health 15% for England in 1977,⁴ while Marsh's exemplary level of 29%, in 1980 could hardly be considered typical.⁵

Almost a third of all the prescriptions had generic alternatives potentially available but only 72% of these generic alternatives were actually available at the time of this study. Generic alternatives were readily available in all the therapeutic classes except preparations acting on the respiratory system, preparations affecting allergic reactions, and preparations for immunology. At present, generic prescribing and generic substitution seem to be limited options in some therapeutic classes. Within the therapeutic classes the option is limited too—for example, 41% of those generic alternatives not available are preparations acting on the nervous system and include such medications as chlorazepoxide and temazepam.

We believe that commercial factors have emerged in response to the low level of generic prescribing and now limit the availability of generic preparations. Wholesalers respond to commercial pressures by maintaining only a limited range of preparations.

Despite the low level of generic prescribing, interest continues because it is considered desirable and there are obvious potential savings. These savings are particularly apparent in certain

therapeutic classes such as preparations acting on the nervous system and preparations acting on the cardiovascular system and diuretics.

The potential saving from generic substitution for the study practice in November 1982 was 8.8% of the total net cost of ingredients. The prescribing costs of the study practice are high (table II). Nevertheless, an overall saving of this order would decrease the cost of general practice prescribing in Northern Ireland by up to £2m a month or £3m a year. The results of this study support the contention in the Greenfield report that substitution by pharmacists of alternative generic versions could result in savings to the National Health Service. No incursion on doctor's clinical freedom would occur.

We thank Dr H McGavock of the Department of Health and Social Security Prescribing Unit and Mr R McMullan and staff at the Central Services Agency for their help in providing and printing the information used in this study.

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Interesting GPs of the Past

Archibald Cleland: c1700-71

ROGER ROLLS

Archibald Cleland was born at the beginning of the eighteenth century, being a descendant of an old established Lanarkshire family. There is still a town of Cleland, nowadays an industrial community but at one time a picturesque country village. Archibald's father, Alexander, who owned the Cleland estate, was married to Margaret, half sister of William Hamilton, a King's Counsellor at Lincoln's Inn, whom Walpole described as "the first Scot who ever played at the English bar and, as it was said of him, should have been the last."¹

Medical education

Archibald began his medical career as an apprentice to an Edinburgh surgeon, James Robinson, with whom he stayed for five years.² In 1720 he set out for London, a slow and hazardous journey along highways whose surfaces were as treacherous as the highwaymen who frequented them. He enrolled as a dresser at St Thomas's Hospital and must have met William Cheselden (1688-1752) whose skills as a lithotomist still gain the admiration of today's urologists.

For aspiring surgeons it was Paris, not London, which was the greatest centre of surgical tuition in the early eighteenth century, and Cleland left St Thomas's to spend two years there, attending courses in anatomy, surgery, and midwifery. He gained clinical experience in the huge charitable hospitals of Paris, including the Hôtel Dieu with its 1200 beds. These hospitals had several purposes, young surgical students who worked at the hospital during the day but did not live in. Ward rounds occurred daily and began at 5.30 am. The main task of the externs was to help their seniors (at various levels in the hospital hierarchy), do wound, set blood, and perform minor surgery on the hundreds of sick patients.

Surgeon in the south seas

In 1723 Cleland returned to London and applied for a job with the South Sea Company. Each year the company sent a 600 ton trading ship between England and the West Indies which carried a cargo of spices, cocoa, cinchona bark, sugar, and slaves. The company required a surgeon for its ship and Cleland secured the post after having been required to satisfy the examining surgeons at St Bartholomew's Hospital of his competence.³

The company employed several surgeons of whom some were stationed at their factories in Caribbean ports. Cleland was dispatched to Vera Cruz. Factory surgeons were expected

to act as general practitioners to the company's employees. They had to visit the black slaves each day "taking particular care of the sick and preserving them in the best manner."⁴ Each surgeon was expected to keep notes of his practice and submit them periodically to the company. He was also expected to be on his best behaviour, to avoid gambling and excesses of drink, and on no account to offend Roman Catholics.

In 1726 Cleland was transferred to Cartagena (Colombia) where he fell foul of a skirmish between the British and Spaniards and was taken prisoner. Somehow he escaped to Jamaica, where he established himself as a general practitioner and obstetrician.

From regiment to Royal Society

Whether on account of ill health or a desire to return home Cleland left Jamaica in 1732 and sailed for England. On his return he visited Bath to take the waters⁵ and secured a job as surgeon to General Wade's regiment, the 3rd Dragoon Guards.⁶ During his eight years with the regiment it never once engaged in fighting,⁷ and Cleland found time to develop several novel instruments which he demonstrated before members of the Royal Society. These included a catheter facilitating suprapubic lithotomy, a candle-powered illuminator for inspecting ear drums, instruments for eye surgery, and a vacuum tube for correcting the retracted tympanic membranes of soldiers whose drums had been blown inwards by the force of nearby explosions (see figure 1).⁸ The most sophisticated hydro-therapeutic gadget that Bath could muster was a hand pump used to douche particular parts of a patient's body.

While he was still with Wade's regiment, Cleland worked out a detailed plan to modernise the bathing facilities in Bath and went as far as obtaining the patronage of the Prince of Wales before submitting his designs to the city corporation.⁹ Despite this, they were turned down even though Cleland offered to build at his own expense. The Scots physician George Cheyne, who was residing in Bath at this time, later wrote to Cleland suggesting that his plans had not been approved because of jealousy and mean spiritiveness on the part of city councillors, most of whom were apothecaries and surgeons.¹⁰ But Cleland was not to be daunted that easily and in 1741 he resigned from the army and set up practice in the city.

Opportunities at Bath

Cleland's first experience of Bath had been as a patient and he was not impressed by what he encountered. The baths had changed little since Elizabethan times and "discreet persons of all ages, sexes, and conditions were promiscuously admitted into an open bath affording little or no shelter from the inclemencies of the weather."¹¹ The most sophisticated hydro-therapeutic gadget that Bath could muster was a hand pump used to douche particular parts of a patient's body.

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Above the shoulders, below the neckline

When the Bath General Hospital opened in May 1742 Cleland applied to become one of the assistant surgeons. Despite his considerable experience, the rules of the hospital required that surgeons should have served seven years apprenticeship, whereas he had served only five.¹¹ Fortunately for Cleland, the poet Alexander Pope sent a glowing testimonial to the chairman of the selection committee, Ralph Allen, describing the surgeon as "careful, diligent, and able" and, despite objections by Jerry Pierce the senior surgeon, Cleland secured the post on 24 June 1742.

Cleland had been on the staff of the hospital little over a year when he was shocked to learn that an inquiry would be held to investigate charges of indecent practice brought against him by two women patients at the hospital.¹²

The inquiry took place on 21 September 1743 when Cleland appeared before a court of 17 governors. He was accused of professional misconduct on account of evidence brought against him by two women patients at the hospital, Mary Hudson and Mary Hook. They claimed that he had performed repeated vaginal examinations and had looked the door of the room to prevent any nursing staff entering while he was performing these "dubious" operations. Cleland did not deny that he had performed the examinations and justified them on clinical grounds. Hudson was suffering from hysteria and he wished to confirm that the uterus was "the seat and cause of this and her other complaints." Things did not go well for Cleland. Witnesses told of another patient, Sarah Appleby, who had received similar treatment from Cleland, including vaginal lavage with mineral water and had subsequently died.

(a) Catheter for suprapubic lithotomy developed by Dr Cleland. (b) Illuminator powered by a candle for inspecting ear drums. (c) Three instruments for eye surgery. (d) Vacuum tube for correcting retracted tympanic membranes. (e) Instrument for catheterising the euthasian tube.

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Cleland tried to defend himself by maintaining that the complaints had been trumped up by women who were little more than common prostitutes. He produced a statement from a physician who knew of Mary Hook, testifying she was of ill repute. The governors suggested that Cleland had tried to bribe Mary Hook's mother into persuading her daughter to retract the accusations against him.¹³ After considering all the evidence the 17 governors were unanimous in their judgments. Cleland's actions amounted to "indecent practice" and the majority (13 to 4) voted for his dismissal from the staff of the hospital. Despite this smear on his career, Archibald Cleland remained in private practice in Bath at least until 1754. He attempted to clear his name by publishing various pamphlets and letters attesting his worth and integrity and his case was championed by the novelist Tobias Smollett, himself a medical practitioner.

At some point after 1754 Cleland, who by now had bought himself an MD degree from Aberdeen University,¹⁴ left Bath for London. He died abroad in 1771, though his whereabouts at this time are not recorded.¹⁵ His wife died three years later in Westminster.¹⁶ Archibald Cleland seems to have been a man of considerable ingenuity with a flair for design. Unhappily his talents became overshadowed by the smears and accusations which surrounded his dismissal from hospital. Was Cleland genuinely guilty of improper behaviour or was he the victim of professional jealousy which exaggerated some indiscretions yet well intentioned clinical examinations? We shall never know. But the case illustrates the vulnerability of men doctors then, as now, to accusations levelled by women patients undergoing vaginal examinations. After Cleland's trial one of the governors said that if he were a

surgeon he would demur examining any lady "above the shoulders and below the neckline."

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Diary of Urban Marks: 1880-1949

Then I heard that John had obtained a man called Jarvis who was said to be on leave from the army for six months. This man was obtained through the British Medical Association. I heard a good deal of Jarvis when I returned home. It appears that he walked into the BMA offices at London and said that he was a captain in the Canadian Medical Corps. He had been invalided from France and had been given leave of absence for the above stated period. He thought that he would like to do locum work in the country since he was not so incapacitated as to be useless and would be helping the country in replacing another medical man. This happened just as Groves was leaving and as Puntun had applied to the headquarters for a locum, Jarvis was sent down here. No questions were asked by the BMA, nor were any credentials asked for. On the Canadian army list appeared the name of Captain Jarvis, and it was not until a good deal later that it was found that our Jarvis was impersonating the original. It was then discovered that our Jarvis was a private in the medical corps and had no qualification whatever except what he knew of medical matters from his travels.

Once located here, Jarvis as I must call him although I never knew his real name, proceeded to bluff things out. He was a captain in the army most of the time. On the surgery couch he spread a white cloth on which were displayed all the instruments I possessed among which were numerous dental forceps. On one occasion Mr Filcroft, a dentist, came in to see him and remarked on the goodly collection of dental instruments. Jarvis denied that they were such and said that they were bone forceps. Filcroft merely smiled and wondered what sort of a man Puntun had managed to get hold of.

On the first night he was here he told May that he never kept his bedroom door locked and suggested that he should do the same.

Poor May was terrified out of her wits and complained to John about this. But John thought May was very hysterical and took no notice. But in fair play to John, I must remark that he had justification for his attitude. May was very highly strung naturally and had several brothers with John about money matters while John was trying to save money for me. Furthermore, he had gone to a lot of trouble in trying to keep my practice together and he was not therefore anxious to keep on changing the men in charge. John himself was working very hard since there was a lot of legal work in connection with men who were in the army or had been killed while on active service. I cannot blame John, but when the facts were known he was the first to take the blame to himself. Jarvis went merely on quacking his way through the medical work and making May's life a hell. She was terrified of him. He could eat a portulacous steak for his meal at midday. He never held a morning surgery and went out about two in the afternoon on his rounds. Even then he did only a few visits. If people sent on Monday morning Jarvis might visit them on the following Friday. In the circumstances it was perhaps a good thing for the patients since they had more chance of living than if Jarvis attended to them. In the surgery he had an open book of prescriptions from which he copied. He did actually attend a confinement and after the baby was born kissed the mother while under chloroform. I suppose that even his conscience pricked him at such a serious time, and this was his method of expressing his relief at the mother's safety. On another occasion he tried to cauterise a woman patient who simply kicked him in the crutch. Jarvis promptly collapsed against the bookcase in the surgery and the lady walked out. It was with great grief that she told me the story some years afterwards.