MEDICAL PRACTICE

For Debate . . .

Superfecundity**Simpson oration: his problem and ours***

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"When I have fears that I may cease to be
Before my pen has gleaned my teeming brain. . ."

The poet, John Keats, wrote this in failing health.¹ In the case of James Simpson one might reflect how much more might he have done had he lived longer than the 59 years of life vouchsafed him. How many more ideas might have sprung from his fertile brain?

Many men, throughout history, achieved greatness because they happened to be in the right place at the right time. Simpson would probably have become great in any epoch so it might be more profitable to compare the problems among which he worked with those of our own day. Hence my choice of the title for this oration.

Background

Those were the days of grand multiparity. He was the youngest of eight children and the seventh son. Nowadays I wonder if he would have been conceived at all, and it is horrifying to think that he might, by present standards, have ended up in the abortionist's bucket and the world would have been the poorer for it. The same might be said of John Wesley, the founder of Methodism, who was 15th in a family of 19, and his brother Charles who was 18th. Even Simpson's famous collaborator in that well-known self-experiment with chloroform in 1847, Matthews Duncan, was the fifth of 11 children.

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It is as well to remember that genius is unique. Genius is not repeatable; there is nothing to suggest that any of Simpson's brothers, given equal opportunity, would have achieved what he did. Genius can indeed be destroyed or distorted but it cannot be created.

James entered the University of Edinburgh at the age of 14 where he began a three-year course in Latin, Greek, mathematics, and philosophy. In other words he had the sort of education that the average medical student of today sadly lacks.

When he turned his studies to medicine he was so repelled by the barbarity and cruelty of an operation—namely, amputation of the breast—which he watched on a fully conscious patient that he very nearly gave up there and then and took to law. I, like many of us here, can recall that famous story of John Brown describing such a procedure on a shepherd's wife called Ailie at the hands of James Syme in the presence of her husband and her dog Rab, who had to be restrained.² It is a story that still moves me greatly. The smell of gangrene and decay in the wards was, in Simpson's own notes, described as "even worse for a medical student to become accustomed to than the scene during the operation itself."

In Simpson's young days doctors had great authority but very little therapeutic power. Now their power is very great but their authority is questioned as never before.

It is not surprising that, with his initial reactions, Simpson chose midwifery. Surgery, at that time, was hardly likely to rival midwifery in Simpson's choice because of its horrifying brutality. Furthermore, the dexterity of the obstetrician mattered as much as or more than the dexterity of the surgeon.

The age of Victorian England and Scotland may have been one of industrial rapacity and expansion at the expense of the poorer and therefore more expendable classes of slave labour, but it was also the age of invention and discovery of great humanitarian awakening of the great romantics in poetry, prose, and music, and of art with the birth of Impressionism. At the same time there was squalor and disease and beauty and new health—a huge convulsion, both ugly and beautiful, culminating in the most terrible of all wars in 1914. Was there ever such an age!

Keats in his *Ode on a Grecian Urn*³ expressed the desire, which all of us must sometimes have felt, that time be made to stand still and

something beautiful crystallised for ever. Timelessness is enshrined in his lines:

"Fair youth, beneath the trees, thou canst not leave
Thy song, nor ever can those trees be bare;
Bold lover, never, never canst thou kiss,
Though winning near the goal—yet, do not grieve;
She cannot fade, though thou hast not thy bliss,
For ever wilt thou love, and she be fair!"⁷

In Simpson's young day Edinburgh was approaching its zenith. Yet at the time of the Reform Bill the Lord Advocate declared in the House of Commons that the Scots "could never be trusted with popular election because they never could assemble without bloodshed."⁴ As for today I prefer to refrain from comment.

Scientific discovery and adventure was largely by individual men, not by commissions or committees. Simpson with his restless ebullience typified the individual contributor to the medicine of his day. I wonder how he would have fared in this age, one-and-a-half centuries later. No advisory committees sat in judgment on him nor in their ignorance, both collective and individual, were they there to prune his estimates, nor frustrate him with a bureaucratic web of words, invoking such well-worn terms as "prevailing financial climate" or of "agreeing in principle" and thereafter doing nothing. True—he was denounced from the pulpit. That at least was healthier and something at which he could fight back and did, rather than trying to grapple with faceless, anonymous obstructionism in high places.

Analysis of his genius

His enthusiasm would have made him a great teacher in any subject, since the art of teaching is simply the art of sharing enthusiasm, which is infectious. I cannot help likening him in my mind, in some measure, to that second greatest man in all Christian history—namely, Paul of Tarsus—because of his tireless endurance. Admittedly for him there was no road to Damascus and therein may lie the difference.

He would hardly qualify as a scientist any more than Paul would have, but both were bursting with energy and ideas, an effective combination. He surfed on a great tidal wave that swept obstetrics first as an art and more recently as a science from mediaevalism to its present standing.

"There is a tide in the affairs of men,
Which, taken at the flood, leads on to fortune."⁵

Simpson has been described as essentially a man of action and not a philosopher; a realist, not a theorist.⁶ I would beg to differ with that statement, however, as I do not think that those qualities disqualify him as a philosopher. A superb combination of action and philosophy has been immortalised in El Greco's famous painting, surely one of his greatest, the *Overturning of the Tables of the Money Changers in the Temple*. There is a difference, however, between technology and philosophy. The former merely makes it possible to implement the latter. Therefore, in our age particularly, we must not lose sight of our philosophy, which must guide, inspire, and control our technology.

Beginnings of anaesthesia

"The snares of death compass me round about:
and the pains of Hell gat hold upon me. . ."⁷

So wrote the psalmist. Here lay Simpson's challenge.

The idea of anaesthesia, of course, was not new since Sir Humphrey Davy first discovered the analgesic properties of laughing gas, and the great Faraday had experimented with ether, but it was Morton of Boston who, after experimenting like Simpson on himself, really introduced ether as an anaesthetic agent on 16 October 1846. Surgical anaesthesia was now an accomplished fact, although not accepted; but Simpson seized upon Morton's discovery eagerly and at once applied it to obstetrics.

What is noteworthy is the speed with which he acted, and on 19 January 1847, three months after Morton's demonstration, the first case ever of midwifery in which ether as a general

anaesthetic was used was safely delivered in Edinburgh under his care. Within two months he had already published reports of a series of successful cases.

Simpson, however, was not satisfied that ether was a suitable anaesthetic for midwifery because of the need for its prolonged use, its unpleasantness, and the desirability of inducing analgesia without necessarily complete loss of consciousness and, as is well known, he continued his search for other agents with his own discriminating nose. I am not surprised that he found ether unsuitable, and I can recall an ether induction inflicted upon myself 50 years ago. The sheer horror of the experience lingers on in my memory to this day.

Simpson was no thief of the ideas of others and fully acknowledged that it was Waldie, a native of Linlithgow, then a chemist in Liverpool, who first introduced him to chloroform. He did not claim to be the discoverer of this substance, nor the discoverer of anaesthesia in general. His remarkable feat, however, was to apply it to obstetrics and convince the whole world that the statement in Genesis, "In sorrow thou shalt bring forth children,"⁸ need no longer apply, and in the well-known words of Osler he removed "The curse of Eve" at a stroke.

History recalls that the first delivery under chloroform anaesthesia was that of Elizabeth Mackay, a doctor's wife, who produced a daughter appropriately named Anaesthesia, and thus began a whole new field of medicine.

Such was the speed with which Simpson acted that within six weeks, on 10 December, he read a paper to the Medico-Chirurgical Society in Edinburgh describing the successful use of chloroform in a series of 50 cases.⁹

In winning over the world to a new philosophy towards pain, especially in a prolonged ordeal such as even natural childbirth, Simpson changed the minds and hearts of a whole generation. For this reason he can rightly be acknowledged a practical philosopher.

Simpson had to fight what were often personal attacks, but the real fight was against those who opposed anaesthesia on medical, moral, and religious grounds. It is not difficult, even in our own day, to comprehend those objections. For one thing the ordeal of pain was thought to have an ennobling effect. From personal experience I can testify that the effect is simply degrading. For another, one can almost hear the surgeons of those days claiming, not without reason, that the introduction of anaesthesia would undermine the need for surgical speed and skill and encourage reckless surgery, much in the same way as antiseptics under Lister's philosophy encouraged a disregard for asepsis.

Religious prejudice was powerful and at about the time of my own birth my father, who was a general practitioner in Cornwall, complained that a labouring Cornishwoman hurled his Junker chloroform apparatus, smashing it in the corner of the room, declaring "God gave me these pains to bear, take your hellish machine away." Looking back on history, part of the church may have been wrong part of the time but the whole Christian church has not been wrong the whole of the time.

One has only to compare the indignation expressed at Simpson's interference with nature in alleviating the pain of childbirth with the storms of emotive abuse that some of us have encountered in our own day with regard to such matters as elective induction of labour, oxytocin acceleration, and epidural anaesthesia, to mention only a few. Nevertheless, Simpson extolled the importance of mind over matter and was ahead of his time, long before Grantly Dick Read and his successors, in encouraging relaxation and deep breathing, thus pre-empting the advocates of natural childbirth by about 80 years.

There is, however, far more to Simpson's achievements than the introduction of obstetrical anaesthesia. In 1840 when he was elected to the chair in Edinburgh the maternal death rate throughout the country was about 10 per thousand. This appalling incidence had only been halved by the mid-1930s when I was first introduced to midwifery. The problems of dystocia even then were still inadequately met. In only one out of every 400 births in Simpson's day was the forceps applied.⁹

Such cases must have been desperate indeed because the operation was accompanied by a 20% mortality.

Simpson's lifelong interest in cross-infection and puerperal fever, and the associated dangers of hospitalism, did not receive the attention it deserved, possibly because of Lister's antiseptic philosophy which, in the long run, may actually have put back the clock for hospital reform and design. His thinking was very much in line with that of Semmelweis, and he was convinced that overcrowding and inadequate ventilation were important factors. He had the idea that lying-in women should be separated in pavilions, with at most two patients in each room, and a concrete memorial to his philosophy is embodied in the name of the famous Simpson Memorial Maternity Pavilion at the Royal Infirmary, Edinburgh.

The Simpson forceps is used to this day but he was also the originator of the concept of vacuum extraction. Thus wrote a contemporary in 1896,⁹ "Simpson adopted obstetrics when it was the lowest and most ignoble of our medical arts; he has left it a science numbering amongst its professors many of the most distinguished of our modern physicians." Colleagues please note.

Simpson faced one set of problems—namely those of painful and hazardous childbirth—only to be faced by new problems. He found, as in every age in this earth's history, that the devil indeed sowed tares among the wheat.¹⁰

Childbirth has now in the average case become more of a social event than a pathological landmark in a woman's medical life history. Our concern is more with the quality than the quantity of life.

Our present problems of fecundity

What would Simpson have done today? His compassion might have made him particularly interested in several problems, especially uncontrolled human fertility. The problems of infertility though very numerous, interesting, and varied, are individual problems and pale to insignificance when compared with the far greater modern problems, both individual and social, of superfecundity. The research effort here is, unfortunately, less than adequate, perhaps because the simplicity and efficacy of the contraceptive pill has diverted the interest that the problem as a whole deserves.

Human reproduction is no longer a matter that can be left to chance. That the sheer fear of an unwelcome pregnancy should influence, even dominate, the lives of so many healthy women is to emphasise the inherent vulnerability of their sex, which no liberation movement can properly neutralise without penalty, since no form of contraception exists that does not exact its peculiar price.¹¹ Abortion, as a long-stop method of contraception, trivialises not only sex but life itself.

Contraceptive techniques and family planning, in so far as they make possible responsible parenthood, are among the great boons of our age but in so far as they facilitate licence and abuse their effect can be socially disruptive.

There may be a future in unisoning a patient against conception by her husband but not against the rest of the male population in case of possible remarriage and the desire for a second family, but psychological sequelae of such treatment would be natural. There is quite enough in modern marriage these days to sensitise a woman against her husband without adding biological factors as well.

Whenever man separates any natural function from its intended objective penalties inevitably occur. For example, we eat food to replace lost calories and supply energy for activity and tissue repair. We eat to live, but if we live to eat then obesity and cardiovascular disease is our lot. We drink to replace fluid loss. Alcoholism is the penalty of excess. The natural and intended consequence of sexual activity is pregnancy and motherhood. Much of today's social evil results from the deliberate misalignment of cause and effect by means that can hardly be called natural.

It is a part of the Christian-based philosophy of our civilisation

that mankind, and womankind too for that matter, have, by the exercise of freewill, the power of choice in all fields of personal activity. Responsibility for the exercise of that choice has been our challenge since earliest biblical times. For the choice to be genuine it must, so far as possible, be unfettered by external circumstances. What is needed is the means for exercising that choice, which can not only achieve the object of planning parenthood, but will also, by its very nature, enrich relations between a man and his wife that marriage may indeed be nurtured in its sacramental significance. This was indeed the substance of Pope Paul's encyclical *Humanae Vitae*.¹² I must make it clear however that I am not a Roman Catholic but only a mere Episcopalian.

If, in fact, we are approaching the state of a sexually amoral society, as many would have us believe, it is not altogether surprising that sections of our profession would prefer non-involvement and, like the Levite on the road to Jericho, pass by on the other side.¹³ That is only one stage less than aiding and abetting the thieves who left their victim half dead. Most of us would wish something better for our own children.

Puritanism may indeed have become something of a nasty word, and the mention of chastity outmoded, but the real hypocrites of today are the middle-aged of our own generation. To quote the book of Proverbs, "There is a generation that are pure in their own eyes, and yet is not washed from their filthiness."¹⁴

Population out of control

Simpson lived in an expansionist society. Today opportunities are diminishing and restrictions multiplying. The work of men capable of working is no longer wanted. We are now enslaved by our own consumptive technology. Clearly a state of disequilibrium, between population and the world's fossilised fuel resources, has already arisen. The one thing that apparently is not wanted in any country in the world today is people, unless they happen to be tourists with lots of money. More and more of the world is closed even to missionaries, because of the spread of an atheistic type of communism.

If everyone on this earth, with its present resources, is to get his fair share, be he African, Israeli, Briton, Chinaman, or Turk, then quite clearly there is not going to be enough to go round, and the situation can only get worse as mankind squanders what he already has.

To meet the needs of people, you need people. Simpson's problem is today reversed, or perhaps it would be better to say "inverted." In a country such as ours, with a stagnating economy and a stagnant trend in population growth, the situation of stalemate is all too likely. One has only to observe the increasing average age of railway workers on any major railway station to realise what a policy of reducing the staff by "natural wastage" means in terms of unemployment among the more youthful—a dangerous situation, favouring an increase in the crime rate.

To Malthus¹⁵ the recommended remedy was what he called "moral restraint," neither of which words has sufficient viable meaning today. Yet responsible parenthood is the only course open to individual mankind if pressures towards genocide, including geriatricide, as well as abortion, are not going to overwhelm us for lack of an intelligent alternative as individuals. Malthus was ignorant of ovulation, or the reproductive cycle, and his recommendation has mainly historical value.

By present trends, the underprivileged of the Third World and also those with scruples about the destruction of life, be they Muslim or Catholic, Hindu or Orthodox Jew, will have the children of the next generation, and, as said in the Beatitudes, the meek shall inherit the earth.¹⁶

It is interesting to recall that in 1849 a certain Dr Sharpey wrote to Simpson, "What is to become of our redundant population? The sanitary folk on the one hand keeping folks from dying and you, with your chloroform and other 'contraps' smoothing the road into this world; it would be like the

threatened glut of gold and reduce the value of honest people. . . ."¹⁷

Although bearing in mind that each single citizen of the developed and privileged West consumes 20 times as much as his underprivileged Asian brother or sister, I am not competent to state the case for zero population growth or ZPG as they call it in the United States. As a doctor I naturally tend to think in terms of individual benefit rather than the interests of our human species as a whole.

Abortion as a demographic policy is certainly effective, as already instanced in Hungary, but as a method of controlling fertility it is unacceptable to all but the sophisticated minority who themselves have escaped the sponge holder or the curette (and more is the pity).

Outside the field of infectious diseases in public health, gynaecology is the first fully clinical branch of medicine to be subjected to political or lay pressure. It may not be the last; and the recently worsening image of the medical practitioner in the eyes of the public, both in the United Kingdom and the United States, may bring forces to bear on our profession that I fear. Obviously geriatric medicine is likely to be next on the list, as society grows increasingly anxious about its resources to meet the material standards of living that it now demands. Genetics and psychiatry are not far behind, as life becomes more expensive in one sense and cheaper in another.

The latest directives from higher authority in our health service put a premium on sterilising or contraceptive procedures independent of medical indications, even though undertaken as normal hospital practice already paid for by the government. I could not believe my eyes when I read of this arrangement, whereby a gynaecologist, for example, might earn as much as £22 for performing a laparoscopic sterilisation, which he would have done in any case on his operating list; £8 for inserting an IUCD; and all manner of extra payments to all manner of extra people, all to be taken out of the overall allocation to each area health board or authority, naturally at the expense of other departments and staff. The sum, in the case of the Glasgow area, is £100 000. On closer inquiry I found that one local consultant had claimed over £1400 in three months—better than a distinction award—and no pay freeze either.

Now I know no department which, at the present time, is not desperate for funds to improve the service to its patients. To see double payment going to a small fraction of clinicians, at the expense of equally deserving clinicians in other fields, even though limited in overall extent, smacks of pest control. Zero population growth may be a realistic objective but the price of achieving it may infringe professional integrity.

It must be without precedent in the history of the British Civil Service for payment to be made twice for the same service which would, in any case be given, and, on the face of it, one can draw only one of two conclusions: either this is a deliberate attempt to sabotage all fringe benefits, by the principle of *reductio ad absurdum*, or those in authority have simply taken leave of their senses. There at once springs to mind the encounter that Alice in Wonderland had with the Cheshire Cat and the Mad Hatter's Tea Party.¹⁸ In a more sinister way, I might suggest that this may simply be a tactical thin end of the wedge to encourage abortion on non-medical grounds in National Health Service hospitals by means of an insulting financial carrot. If that were the case it could only be another step on the slippery slope towards the elimination of the unproductive or the undesirable. Controlled reproduction, even under licence, is not too fantastic an end-point in a society increasingly given over to accepting control by pressure group.

Abortion as a means to an end

Evil is self-generating and self-perpetuating. It is never lawful, even for the gravest of reasons, to do evil that good may come of it.¹⁹ It should be an objective of modern family planning to make wholesale abortion an unnecessary anachronism, but it

is a strange paradox of modern alleged thought that the quality of life can be improved by cultivating a disregard for it in others, including the unborn. I have a Viking son-in-law who, besides being a doctor, happens to be an experienced mountaineer and huntsman. In the course of a gynaecological appointment he stated, with a trace of Scandinavian wit, that he did not like to kill anything that he could not eat. Abortion, however, is only the end-point in an unhappy or unfortunate situation, which was better prevented in the first place. It represents the visible tip of a mainly submerged iceberg of unhappiness, misfortune, or misguidance. Surely this is what really matters. Unrestricted abortion will simply worsen the underlying deterioration in people's civilised respect for each other.

Every young girl has the right to expect a faithful and loving partner to help with her nest. To encourage irresponsible relationships, with abortion on demand as the ultimate escape from reproductive responsibility, is to play into the trotters of the male chauvinist pig.

Perinatology and fetal medicine are making rapid strides, providing one of the best and most exciting fields in modern medicine, and yet how illogical, at the same time, to seek to salve the almost unsalvable and discard the healthy but unwanted. Even the law of today may recognise the right of a baby to intact health, whether born or unborn, but not to life itself.

An alternative

It would be pointless hypocrisy to rail against an evil without conscientiously attempting an alternative solution. It may well be said that only ignorance simplifies decisions, and absolute ignorance simplifies absolutely.

Our knowledge of ovulatory events in the human female is still distressingly inadequate and these need further study, not by the week, nor even by the day, but possibly even by the hour. And here in all fairness I must quote from *Humanae Vitae*, since far fewer have read it in its entirety and full context than have simply swallowed the disparaging press reports that greeted this publication. "Married love, therefore, requires of husband and wife, full awareness of their obligations in the matter of responsible parenthood, which today, rightly enough, is much insisted upon, but which at the same time, should be rightly understood." And, further, "if, therefore, there are reasonable grounds for spacing births arising from the physical or psychological condition of husband or wife, or from external circumstances, the church teaches that then married people may take advantage of the natural cycles imminent in the reproductive system, and use their marriage at precisely those times that are infertile, and in this way control birth, a way which does not in the least offend the moral principles which we have just explained."¹²

Today's challenge

The Pope fully recognised that the recent evolution in human society has resulted in changes that have provoked new questions. And he throws out a challenge to medical science that cannot be ignored. "It is supremely desirable, and this was also in the mind of Pope Pius XII, that medical science should, by the study of natural means, succeed in determining a sufficiently secure basis for the chaste limitation of offspring. In this way scientists, especially those who are Catholics, will by their research, enable the truth of the church's claim that there can be no contradiction between two divine laws, that which governs the transmitting of life and that which governs the fostering of married love." And later on he challenges doctors that they should "regard it as an essential part of their skill to make themselves fully proficient in this difficult field of medical knowledge."

The fact that obedience to this exhortation has, at present, an unacceptably high failure rate is a challenge not to abandon this approach but to improve our knowledge and technique.

It is one thing to recognise the need for something. It is quite another to do something about it. There are literally millions of people, both men and women throughout the world, who respect human life, and these must be catered for. Their problem is just as great as those who take a more casual view; and it deserves help that does not conflict with their standards. This then is my excuse for presenting to you, in all humility, my attempts to study the events surrounding, precipitating, or consequent upon human ovulation. Given the necessary knowledge, it should be possible to extend the safe period throughout the menstrual cycle for all but an acceptably brief part of it, when precautions against conception can be responsibly undertaken.

Already our knowledge of the biochemistry of ovulation is rapidly extending, but so far it is only useful in retrospect. Because of expense, complexity, and time it cannot yet give the warning of imminent ovulation that is needed. My personal reaction to the problem is, therefore, to seek an instantaneous electronic method, based upon the haemodynamic circulatory rearrangements which, one assumes, must accompany the intense local activity associated with the final ripening of the Graafian follicle and its dehiscence into the ampullary end of the Fallopian tube. In all the hundreds of laparoscopies that I have undertaken, I have very occasionally observed the close application of the fimbriae of the tube to the ovarian cortex and recognised that I was witnessing at least a part of the ovulatory process. Alas, my laparoscope camera was never available at the critical moment.

Collaterally with hormone profile studies (fig 1) in absolutely normal, fertile women, there is a need to study the circulatory changes in the pelvic viscera. This I am seeking to do by means of a simple prosthesis managed by the patient herself (fig 2), in the tips of which are mounted sensitive thermistors. On correct insertion of the prosthesis, these thermistors come to lie automatically at the tops of the lateral vaginal fornices (fig 3). What one is studying is not the actual temperature, because that is the same all over the pelvis, but the rate of heat transference through

FIG 2—Vaginal prosthesis before insertion. Thermistors are mounted in tips.

FIG 3—Prosthesis after insertion and tips located in lateral vaginal fornices.

FIG 1—Levels of gonadotrophins and gonadal steroids in a normal menstrual cycle.

the material in which the thermistors are embedded and which, in itself, will depend upon local blood flow in the immediate vicinity. The problem, thereafter, becomes straightforward. The thermistors are simply incorporated in a Wheatstone Bridge circuit that becomes unbalanced in the event of any circulatory change on either side. What we are looking for is something on the "do-it-yourself principle," instant in its results, aesthetically acceptable, and simpler than the correct insertion of a diaphragm pessary. Collateral biochemical proof of the validity of these observations may take a few years to obtain, quite apart from constant improvements in apparatus design, but pending a result obtainable, perhaps in the next half century, with something on the Dextrostix principle, it is the best that we can hope for yet. So far I am only in a position to state that I am not yet discouraged and hope that others may succeed in this type of approach when, and if, I myself fail. My target is the multitude of conscientious married women who take their responsibilities of parenthood seriously and whose families deserve every kind of maternal protection to maintain the security of family life that Christian moral philosophy has upheld for centuries.

Simpson would have attacked this burning problem of our own day with the same perception and vigour with which he faced his own, although his method of approach would probably have been different.

Conclusion

Simpson did not live long enough to lecture or to speak badly, or worse, to be unaware of his deteriorating ability. He died before his successes could turn to ashes in his mouth, before he had had enough of the world, and the world enough of him.

When work has become an established habit, when one has become a workaholic, how then does one pull out? Simpson had

no such challenge to face. Unlike those of us who have lived to retirement he did not have to face the possibility of a useless and decrepit old age. He died metaphorically with his boots on, in the full flood of activity, in so far as his cardiac state would allow. He died having unearthed a multitude of problems, some of which he solved and some of which have outlived him but his work lives on to this day and the honour which is his due is not forgotten.

He became progressively more devout with the years in the best Presbyterian sense of the word, and his spiritual development appears to have been enhanced, rather than embittered, by the tragic early deaths of several of his children to whom he was devoted.

Man goeth to his long home.²⁰ So far as this world is concerned, only the greatest creative artists and only the greatest religious leaders can hope to live on to posterity. Simpson was not only a great man, he was a good man. He loved his neighbour as himself, rich and poor alike, although he kept some healthy hate for his adversaries. He also loved God and may well have found the answer to that famous question: "Master, what shall I do to inherit eternal life?"²¹

I thank Dr R J Pepperell for figure 1 and Mr J Devlin of the department of medical illustration, Queen Mother's Hospital, for his help.

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General Practice Observed

Twelve months of deputising: 100 000 patient contacts with eighteen services*

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Summary

An analysis of a 1-in-5 sample of nearly 500 000 patient contacts with 18 deputising services showed considerable variation in the way calls were handled. Telephonists, usually working on shifts including at least one operator who was a trained nurse, handled, without sending a deputy, between 3% of new calls at one service and 19% at another. In one service, 19% of visits were made by deputies who were general practitioners; in another, 78%. At least 42% of patients visited by one service were apparently seen within one hour; 74% by another service.

*With the co-operation of Air Call Ltd, through Dr M J Ognall, Deputising Service Director, BMA Deputising Services, Tavistock Square, London.

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The proportions referred to hospital varied from 9% to 16%.

The use of deputising services continues to grow; there is as yet no substantiated evidence of shortcomings in the care they provide. The possibility of reviewing the activity of the services, with the use of such indices as those described, might enable present limitations on their use to be lifted.

Introduction

General practitioner deputising services now operate widely in Great Britain. By 1970 it was estimated that they handled about half the general practitioners' night calls in one English city,¹ and in 1972 28% of all general practitioners in England and Wales were using them.²

It is not known whether deputising services differ appreciably from one another in the ways they are manned and how they respond to calls. From April 1974 to March 1975 some of these differences were explored through an analysis of a one-in-five sample of all 500 000 records of patient contacts with 18 deputising services. Thirteen of the services studies were supervised by the British Medical Association, but the management arrangements of the remaining five were similar.