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LIFE ASSURANCE—SOME MEDICAL ASPECTS

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Why is it that examining proposers for insurance companies is an unpopular task among doctors?—for there can be no doubt that, in the main, this is so. There are several reasons. First, there is the British dislike of forms, especially those that the filler-up thinks he could have arranged much better himself. Then, most doctors like to spend their time seeing and treating their patients; writing notes about them, if they do write notes, they mostly look upon it as an irksome duty. Their reward comes in seeing the results of their work. No such satisfaction is likely to arise from an insurance examination as the examiner is most unlikely to see if his prognosis is justified. But I think the chief reason for the unpopularity of insurance work is that doctors have chosen their profession because they like the job of trying to get sick people well, and to this end they have been trained. If they are a success in practice they have at least as much of their chosen work to do as they can manage, so that examining a presumably fit man, one who at least does not make any complaint of illness, is looked upon as a waste of time and talent. Whether or not the doctor considers he is adequately paid for his trouble does not alter this feeling. Nor should it. The only thing that can alter it is the conviction that life insurance has a very useful place in society, and that the Medical Profession is an essential strut in its fabric. If this belief is established, then examiners will realise it is not only, and not even primarily, the company they are serving, but the public at large, and the examinee in particular. This fact should give a greater interest in the work of insurance examination, but it is bound to remain dull if the doctor's knowledge is confined to receiving a form, seeing a candidate, and putting his report in the post.

The events that lead up to the examination and the examination itself are dealt with elsewhere in this number. There remain to be considered here the forms the doctor fills up and what happens to them when they have been received by the company.

One sometimes hears it said that life insurance companies always play for safety. Such disparagement is stupid. If a man has some significant impairment he is not as good as another man without it, so obviously the two should not pay the same premium. If the Company could afford to take impaired lives at their standard rates, it would mean that their rates were too high, and the first-class lives would be the ones who would suffer.

What the Medical Examination Should Bring Out.

What is wanted of a medical examiner is information that will enable the company to decide on the insurability of a candidate. He is not expected to do the deciding himself. Usually his suggestions are asked for at the end of the medical form, and, of course, great weight is given to them, but the final decision is not his responsibility. And this is only right, for it is not often that he has the special experience required, nor has he other information which may be available to the company. So it comes about that the forms are worded to draw the required information. That this is a difficult matter is clear, for no two companies have the same medical forms, and the variation in some cases is so much that it is hard to believe that they have the same object in view. From the examiner's point of view these forms can be divided into two kinds, bad and worse; but in defence of those who try to draw them up it must be admitted that all doctors are not on the same level of excellence, and some take more guiding than others. Some questions that may seem futile and irritating to the examiner are there to help him get the required information. Take, for example, that seemingly useless question of the duration of the final illness of a deceased parent—if the answer reads "Age at death, 50; Cause of death, Cancer; Duration of illness, one year," then obviously the last part of the question is unnecessary and annoying. But if it reads, "Age at death, 50; Cause of death, Bronchitis; Duration of illness, several years," then, of course, the question of tuberculosis is raised. Note that no dishonesty on the proposer's part is here implied. Many a youngster has the knowledge of tuberculosis in the family kept from him, but he may retain the memory

of an invalid parent with a cough. In such a case the doctor is unlikely to get any more information by further questioning, but the company could ask for a copy of the death certificate. They probably would do so if the proposer were young, and specially if he were under weight. This is merely an example of how important information can come from every question asked in the examination form.

All questions must, of course, be answered with accuracy, and although long descriptions are not expected, a statement like "Pleurisy 1940, 6 weeks," though quite common, is obviously inadequate. It might mean a pain in the chest for a day or two, ten days' convalescence and a month's holiday, or six weeks in bed with a pleural effusion. "Winter cough" may be simply tracheitis following a cold, or the annual few weeks in bed of a chronic bronchitic. Mention of how long in bed is generally a very helpful guide to the seriousness of an illness, and attending doctors' names should be given in case further enquiries are needed.

Contrary to the general belief, companies try to keep their forms as short as they can, and many questions are left to the examiner's initiative. It is assumed that he will look out for such things as frequency in older men, dyspepsia or sweats in those who have lost weight; that, if he cannot suggest a cause for fainting attacks, he will give an account of their circumstances; that if he feels unable to give a precise diagnosis of a murmur he will describe it fully. Such things and many others are expected of the examiner, the most important of all being a few words describing the proposer's build and appearance, and what sort of man he is. In giving this he can be assured that he is reporting not merely to a lay company, but to another doctor, for all cases that raise medical points are referred to the company's principal physician.

Enough has been said to show that far more questions are left unasked than actually appear on the form, as it is realised that a really helpful report does not consist of "yes" or "no" in answer to innumerable questions. Generally speaking, the reports received are good, and many are excellent. Sometimes an examiner misses a point. If he does the company may write to him again, and they usually obtain the courteous co-operation that should exist between colleagues.

No American companies have branches in this country, but several Canadian ones have, and a word must be said about the forms they use. They are much fuller than those of the English companies, and are designed to obtain statements of fact rather than opinions. It must be admitted that many of them are exceedingly cumbersome documents, full of print, and very little space for writing, but most of the questions can be answered by "Yes" or "No," or by figures. The Canadian companies follow the custom used in the United States of depending very much on the "Medical Impairments Ratings Book." This consists of tables in which the extra mortality is given for most impairments. The forms they use are designed so that the medical committee can fit each case into a group represented in one or more of these tables, and then calculate the mortality rating. As the ratings book is based on a great mass of data it might appear that this is the only sensible way of assessing an insurance risk; but when, as often happens, it is found impossible to fit such an infinitely varying creature as a human being into anything so simple as a table or a combination of tables, then the book, at best, can only be used as a guide. Thus, a common and straightforward case of a heavy man who has a high blood pressure and a bad family history of cardiovascular disease cannot be properly assessed by this method alone. If we looked him up in the tables, we might find each of these three points represented by an extra mortality of 20 per cent, 50 per cent, and 20 per cent respectively, but the risk would not be covered by an extra mortality of 90 per cent because all these adverse features point in the same direction, yet the book gives no clue as to what else should be done. However, this is not the place to go into the question of how much of the risk should be estimated and how much calculated. The well-tried method used in this country is largely that of estimation, and it has not been found wanting.

The Contribution of the Proposer's Private Doctor.

Often the company needs the help of the proposer's own doctor, but, needless to say, he is never consulted without his patient's written permission. The chief requirements for his assistance are given elsewhere; here we will only consider those occasions when it is thought wise to write to him after the medical examiner's report has been received. The examiner may report some past illness which, not unnaturally, he cannot diagnose properly as all the evidence is absent except the patient's statement. In such a case the man's own doctor is applied to, and, in addition to filling up the "Private Medical Attendant's form," he will probably be asked

special questions on behalf of the company's physician; thus a doctor-to-doctor relationship can be presumed which is a great help.

The private medical attendant's form is much shorter than the medical examiner's. It should be filled up as exactly as possible, e.g. "Blood Pressure normal" is not nearly so helpful as a precise figure. The severity and duration of an illness should be stated, and the date, as will be seen later, is most important. A doctor's knowledge of the nature of his patient gives valuable information that cannot be had in any other way. At the end of a long list of attendances for headache, flatulence, fibrositis, palpitation, and so on, it is a comfort to read that the patient is an introspective man who worries about himself unduly.

Examination of the Medical Evidence by the Company's Actuary and Doctor.

The company's principal physician sees the papers of all cases that show any medical problem. Of these papers those of the medical examiner and the private medical attendant are usually by far the most important. If the examination has been made in some large town, the chances are that the examiner's work will already be well known, but if it has been made in a smaller place it may be the first that particular doctor has made for the company. It is most important, therefore, to get some idea of the quality of the examiner. His very first examination may provide a clue. He may pass a man who is grossly overweight, especially if he is on the heavy side himself. But that does not matter much; the height and weight are given on the form; these with the girth of chest and abdomen furnish a fair guide to the man's build, although it is very helpful to have some added descriptive comment. If everything else in the examination is satisfactory a variation of ± 20 per cent of the model weight is allowed.

It is the blood pressure reading that leads one to doubt an examiner's ability more often than anything else. I have seen such figures as 185/90, 140/110, and even 130/120 recorded without remark, and with the suggested category of a "first-class life" in each case, so I feel I will be forgiven for mentioning the matter. Under such circumstances the only thing to do is to have the man re-examined by someone else. Less gross errors are more difficult to deal with. 154/90 passed without comment makes one wonder if the blood pressure has been taken carefully enough. If the examiner thought this was within normal limits he might have passed his first rather hurried reading, but if he realised the truth that at any age anything over 150 systolic or 100 diastolic is too high, he would have been more careful and leisurely over the proceedings. How hardly does "100 plus the age" die! Indeed, according to the Medical Impairments Ratings Book there is a sufficient extra mortality to need an increased premium when the systolic pressure has reached 138 or diastolic 94 in lives of under 50; the figures are 144 and 97 for those over 60. From middle life onwards the prognosis weakens enormously for every few millimetres increase in pressure. This is not a matter of opinion, it is a matter of fact based on thousands of records. A doctor's personal experience in a thing of this sort is of no value. It is of no import how many patients he may have in his practice with blood pressures of 200 or more who have not yet had their strokes, the fact remains that no one with a systolic pressure consistently and materially above the figures given is an average life. True, the prognosis of a hypertensive often deteriorates if his pressure falls, but this is of no consequence in the context as a person of this type is almost certainly uninsurable. Should a proposer's blood pressure be above the upper limits of the normal range, but not so high as to make it necessary to decline him, further readings may be asked for another day. If the examiner has not thought the figures high, this is sometimes resented, and occasionally it may be as well to get another doctor to take some readings, or if possible to get the proposer to see the company's physician. A very difficult factor in these cases is nervousness. Usually, skilfully applied reassurance is all that is needed, but occasionally a proposer is so obviously nervous that it seems almost futile to take his pressure. Then one has to decide if it is merely the medical examination that is making him nervous, or if he re-acts in the same way to other strains; for clearly such a re-action, if frequent, is not good. Those who are lucky enough not to have had any illness often show nervousness under examination, presumably because doctors are such strange beings to them, or because they fear something unpleasant may be disclosed.

It is not often that any notice is taken of a low blood pressure unless there is reason for thinking there has been a recent and considerable drop, in which circumstance the case may be postponed a few months.

Having in a few sentences tried to dispose of the difficult problem of blood pressure, let us return to the question of common shortcomings in the examination. Another frequent failure

is that the doctor does not say whether or not there is a perforation in those with a history of otorrhoea, so he is probably asked to see the proposer again—an annoying waste of time for all concerned.

So far we have only spoken of those errors which no capable doctor ought to make. There is another part of the form which is sometimes badly filled up because, so I believe, the examiner does not understand its significance. This is the family history. Not realising its importance, he is inclined to accept what the proposer says, or to copy the details from the proposal form. Thus, in an application for whole life insurance for a man aged 50 it may be stated by the medical examiner that both parents died in the early 60's of "old age." The expectation of life at 50 is $23\frac{1}{2}$ years. If 63 is old age, then the proposer has to survive ten years of sheer decrepitude before he reaches his allotted span. When we add to this the innumerable other methods of dying that may come a man's way between 50 and 73 it is plain that no company could survive the present premium rates with such a standard for old age. Other undesirable and insufficient terms appear under "Causes of death" such as "Change of Life," "Grief" and "Shock." If examiners would only believe that there is some point behind every question asked by insurance companies, such terms would soon disappear. They would press the proposer for further details, and if there was no satisfactory result they would state that the cause of death was unknown. Not much attention need be paid to the cause of death of parents over seventy, nor to infant brothers and sisters.

Let us assume that the company's actuary and physician who investigate these reports have full confidence in the examiner, as, happily, is usual. Generally, they come to a decision on the basis of his report as it stands. Sometimes amplification is necessary. If this is in the medical history, the proposer's doctor can be written to; if it is in the family history, copies of the death certificates can be obtained. Occasionally some extension is needed to the examination itself. We have seen that further blood pressure readings may be required. Possibly it will be desirable for the man to be seen again in a week or two to see if some rhonchi have cleared; if the urine contains albumen or sugar, or is of too low specific gravity, further investigation will be needed. In the latter case, the matter is simple. If there is albumin, one or more further specimens must be seen, and at least one microscopic examination made, except in cases of simple orthostatic albuminuria. If sugar is present, either a sugar tolerance curve is asked for straight away, or if the quantity is small another sample of urine, taken after a carbohydrate meal, is examined. If this shows no sugar the previous finding will probably be ignored. If any such further investigations are needed, when they are finished the papers will again be considered.

The Company's Decision.

Life assurance depends upon the absolute honesty of the proposer. If any discrepancies come to light during the examination of the papers, they will frequently be due to carelessness or forgetfulness, but occasionally there is evidence of deliberate withholding or falsifying of information. When this happens the only safe thing to do is to decline the proposer outright.

Most cases can clearly be accepted as first-class lives, and a few must obviously be declined. There remains the very interesting intermediate group which the company's actuary and doctor consider in committee. We are not here concerned with the extra risk of certain occupations or climates, but only those that arise from purely medical causes in the proposer's personal history, his family history, or his present condition. In some of these the extra risk is so small that it may be decided to take them at ordinary rates, in some it may be so large that the case will have to be declined, others can be taken with an extra premium or with some limitation in the type of policy. There will be a few on which no decision can be made at the time, and these will have to be postponed to see how they progress.

Strictly speaking, medical risks are of three kinds, decreasing, stationary, and increasing, but as stationary risks are so exceptional we need only consider the first and last:

Decreasing risks.—These are usually due to the lengthening of the time since a significant illness. Thus a history of a duodenal ulcer is a decreasing risk, as the more years that elapse without symptoms the less the chances of recurrence. A man who has an active or a very recently active ulcer would have to be postponed. If he has had 2 years without symptoms he might pay an extra of plus 7 years—(i.e. the premium would be that of a man 7 years older), if there were 5 years freedom, the extra might be plus 4 years, if 10

years, of freedom, the extra risk would be so small that he could be taken at ordinary rates. Most histories of illness are decreasing risks. Let us consider pleurisy as another but a more complicated example. In addition to the lapse of time, great attention is paid to the details of the illness, to the family history, and to the proposer's weight. Earlier I have said that a deviation of ± 20 per cent from the model weight is not considered, but that is in cases where there are no other abnormalities. With a history of pleurisy anything below average weight would have to be noted, whereas 15 per cent, 20 per cent, or even 25 per cent over might well be considered a favourable factor. Tubercular family histories by themselves also represent a decreasing risk. Thus, a man aged twenty, of average weight, who had lost a young parent from phthisis, would need an extra premium, but if he were thirty he could be taken as an average life. With more than one case in the family the risk is, of course, greater.

Increasing risks.—With the single important exception, mentioned above, of tubercular family history, nearly all risks considered in relation to advancing age are increasing risks. Their number is legion. The risk of cancer increases up to the age of about sixty-five. A risk of recurring bronchitis, of hyperpiesis, of myocardial degeneration, and a host of other death-dealing diseases, increases with age. But all these risks are covered by the ordinary premium, and it is only where some special tendency can be detected that an extra premium has to be paid. Regarding the risk of cancer, a loading is sometimes called for if there is a very strong family history. If there is some unexplained loss of weight or suggestive symptoms of recent date, a case is often postponed for a year to see if anything develops. Only in the most exceptionally favourable circumstances can anyone be considered who has a personal history of cancer.

Assessing a special liability to cardiovascular disease is one of the most important of the doctor's responsibilities to the company. He might find clues in the medical history, family history, or the examination. No one can be considered who has had angina, coronary thrombosis, or any kind of stroke. A history of unexplained giddiness or dizziness is a matter of moment from middle life onwards. The family history is of great importance; a parent who died at or under the age of 60 of any cardiovascular catastrophe is quite sufficient to warrant an extra premium for a whole life assurance. Heavy weight and a thick-set build are significant, even a border-line blood pressure becoming an adverse feature in the presence of any other suggestive points. If from any of these signs it is decided that there is an extra risk of cardiovascular disease, then that extra risk is one that increases as years go on.

I have differentiated between increasing and decreasing risks in this manner so as to show how a proposer can be helped by adopting different kinds of policy. In a risk that increases with age, clearly the sooner the contract is ended, the better the terms that the company can offer. A young man of thirty with well compensated mitral stenosis could not be taken for whole life assurance. The expectation of life at 30 is 41 years, and what chance would there be of his living to 71? None, or rather none that makes life insurance for him a practical proposition. But the company might offer him a twenty-year endowment, for his chance of reaching 50 is reasonable, and does not vary so much from the average that the difference cannot be covered by a fairly substantial extra premium. Let us take a less severe example of an increasing risk. Suppose a man aged forty has a slight extra liability to cardiovascular disease which warrants an extra of plus six years for whole life assurance. He would only need an extra of plus three years for an endowment at 65, or he could be taken at ordinary rates for an endowment at 60.

For decreasing risks, shortening the term of policy is clearly no great help, as it does not cut out the period of maximum risk from the medical point of view. As the risk is greatest in the early years, it does not matter so much whether a man of twenty with a tubercular family history, or recent osteomyelitis, has a whole life policy or an endowment maturing at age sixty. But this extra risk during the early years can be covered by a lien. A lien of 40 per cent running off in 20 years would mean that if a man died in the first year the company would pay only 60 per cent of the sum insured, and this would increase by 2 per cent each year, so that if he died any time after 20 years he would receive the full sum, or, in other words, when he was 40 he would have a policy at ordinary rates.

In some conditions a company will restrict the policy to an endowment at sixty because

they have not sufficient statistics to justify accepting a risk for an indefinite term. Not many years ago anyone who passed sugar was declined. Now, if the sugar tolerance curve shows him to have renal glycosuria a man would probably be accepted for a policy running up to age sixty at ordinary rates. Many companies think there is not yet enough evidence to show what happens to such cases in later years, so there would be a good deal of guesswork if they were to be offered a policy for the whole of life.

Assessing proposers of 60 and upwards present rather special considerations. Such men, for at that age it is nearly always a man, are likely to do one of two things. Either they go on working till they drop in their traces, or they are going radically to change their method of living before long. In addition to the medical details it is useful to find out something about the type of man. If he has not any interests besides his work he will either go on working longer than he should, or he will gradually decline and become a victim of that very common cause of death, boredom perhaps—complicated by a cerebral thrombosis. Further, with advancing years, an ache here or a twinge there may remind a man that his machinery is beginning to creak, and he may wonder if he has much longer in which to increase provision for his dependants. In such a circumstance life assurance has obvious attractions. This is not meant to imply that such a man deliberately seeks insurance because he knows his health is failing, but simply because his feelings make him realise that he has passed his zenith. Such forebodings do not disturb a perfectly fit man who may well consider that he is still in his prime at sixty. Thus it is doubtful if a fair average of good lives present themselves for insurance at this age. The expectation of life at 60 is longer than is generally realised, 16 years, which does not leave any latitude for a company to deal with those who have turned or who are turning the corner. Nor is it easy to deal with such lives by rating. The assessment of the extra risk is exceedingly difficult, and the heavier the risk the less chance the company has of forming an average. Also the selection is bound to be slightly against the company because the final decision of whether the contract is made lies with the proposer. If a hundred sub-standard men were offered policies, each with a three years' rating, those who thought they were lucky would accept, i.e. those who felt they were on the downward slope; many of the others might refuse a rated policy. So at these more advanced ages the general rule is to accept only good lives at the normal rate, and to decline the others.

Difficulties that May Arise Through an Adverse Decision by the Company.

There are many occasions when a doctor thinks that it will be bad for his patient to hedge him about with anxieties and restrictions. To stop eating this or doing that may bring but doubtful help to a man with slightly raised blood pressure, a degree of benefit which can easily be outweighed by the anxiety of the knowledge that all is not well, or by the irritation of restriction. So for the patient's sake the doctor probably tells him he is quite all right. Again, in cases of old tuberculosis or other past disease the doctor may think it proper to assume an optimism which he knows to be unreasonable, believing undiluted hope to be far better medicine than fear combined with some treatment of uncertain virtue. We are all continually re-assuring our patients and encouraging them to believe they are better than they are. Comes a day when a life assurance policy is declined or rated. What then? I often say to myself when such a decision has to be taken by my office, "I wonder if this will make it awkward for the doctor," but I am comforted by the thought that the man's doctor is probably his trusted adviser of many years whose word will easily gain the day against the decision taken by some unknown people in an office.

When I am hit myself by this particular boomerang, and a patient whom I have re-assured as being in sound health asks me why he should have been rated or declined there is usually anger in his voice, not against me, but the insurance office. One can often smooth things out by saying that Insurance Companies must work on the experience of large numbers; they cannot think of an individual as such, but only as a member of certain large groups. However, a doctor can treat and consider every patient as a separate being.*

The question may be raised of whether the man should try his luck with another insurance office. The answer requires some consideration. If in my judgment it has been a question of touch and go, or if I think the company has been wrong, then I might advise him to try again. But if I know myself to have been a liar in my patient's interest, then I must discourage

* At least, at the time of writing, he is still able to do so.

any further attempts at insurance by all the means in my power. His confidence in me is indeed a poor thing if it will not survive one contrary view, and in such a circumstance the sooner he sought another doctor the better, but repeated opinions adverse to mine would be bound to bring about my downfall. That in itself does not matter, but, remember, it was to benefit the patient that the truth was withheld, and now through repeated unsuccessful attempts at insurance, the mask is off, and he sees himself as an unfit man.

The attitude of Insurance Companies to private doctors is often misunderstood. They are, as a rule, anxious to share any medical information that may have come their way. If a patient goes to his doctor saying he has been rated up or declined for life assurance, and the doctor does not know why, he is at perfect liberty to write to the company, who will willingly give him the reason, usually through their own principal physician; but they will certainly refuse to tell the proposer himself. In this refusal they recognise that it is for the doctor to decide whether much or little shall be made of what has been found. That will depend on many things, the patient's temperament, occupation, family circumstances, and so on, that are known only to the private doctor, but above all it will depend on whether or not any treatment will help.

Usually people only seek their doctor's advice when they feel ill. They seldom go for overhauls, pure and simple, so it often happens that a company tumbles on some symptomless condition that could only be found by routine examination—a proceeding to which the public are singularly disinclined to submit themselves, if they can possibly help it. Sometimes it is this trivial matter of a medical examination that prevents a man from making very necessary provision for his wife and family. Is it fear, or what? or is it just because he can't be bothered?

THE EXAMINATION FOR LIFE ASSURANCE

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Introduction.

The medical examination of a candidate for life assurance may be carried out by the company's chief medical officer at its head office, or by a practitioner nominated for that purpose by the insurance office. The former will see many cases during the year and will devote all or a large part of his time to life assurance work, whereas such work will only form a small part of the general practitioner's daily task. Unless there is some special reason for asking the candidate to attend at the chief office for examination, the choice of examiner is generally dictated by the convenience of the candidate. For reasons set out in this paper, it is beholden to the practitioner to examine all such cases with care and circumspection.

The Form of Report.

The form on which the report is made varies with different offices. The printed form, however, is merely intended as a framework on which to build the report, and any replies should be amplified if, by so doing, a clearer picture is obtained. Definite answers should be given; if the answer is merely yes or no, it should be written so, and not indicated by a tick or stroke which may mean anything. What is wanted in the report is a clear picture of the person's family history, past history, present condition, build and temperament, together with a careful account of any deviations from normality, even though such deviations do not appear to be affecting the health. As an example, consider the question of underweight and overweight; such a person may appear in perfect health at the examination, yet it is known that this overweight is an increasing liability with advancing years, and that there is an increased risk of an earlier death as compared with those of normal weight. Similarly, with the tall, underweight adolescent, there is a greater risk of developing tuberculosis than in those people of a normal build. Thus, in these cases, although they may be in good health, there is an added risk from