

ADS Position Statements

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Life Insurance and Diabetes

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LIFE INSURANCE AND DIABETES MELLITUS

There is considerable concern within the diabetes community about the difficulties in and the expense of obtaining life insurance. It is widely believed by diabetic subjects that there is discrimination and that the statistics used to quantitate extra-mortality ratings (see later) are outdated and do not reflect the benefits, both real and anticipated, of modern day diabetes management. Thus some people are being denied insurance to which they feel entitled and others are being charged annual premiums which are perceived as being unfairly high relative to non diabetic subjects. Despite this, the improved life expectancy for persons with diabetes, along with "consumer pressure", is starting to lead to more liberalised approaches by many Insurance Companies.

Since diabetes represents a heterogeneous group of disorders with disturbed glucose metabolism rather than a single disease, the condition presents difficulties for the insurance underwriter. However, it would be unusual these days for a proposal for pure life insurance (i.e. with the sum insured being payable on death or on survival to a specified date), to be declined-solely on the grounds of the proposer's diabetes. Usually cover can be offered on some terms. An example of the data that are used to assist underwriters and actuaries is the study by Goodkin and Wooloch (Trans Assoc. Life Ins. Med Directors 1968, LXI: 211-36), concerning a 20 year follow up of insured diabetics.

The study showed:

1. Mortality declines progressively with increasing age at the time of diagnosis;
2. Mortality increases with increased duration of the disease until the fifteenth year, after which it flattens out;
3. Mortality rates are much higher with the same duration of the disease in Type I than in Type II diabetes.
4. The age at onset of diabetes is the most significant factor in mortality with the highest ratios at age 14 and under;
5. Poor control shows two and a half times the mortality of the relatively well regulated group;
6. Those people treated with diet alone or diet and medication show a much lower mortality ratio than those with Type 1 diabetes.
7. The underweight diabetic shows a higher mortality than does the standard or overweight diabetic;
8. The presence of albuminuria is an extremely unfavourable prognostic sign.

However, there are many more recent publications which are of relevance to the Life Insurance industry and these have been summarised by Borch-Johnsen in the Danish Medical Bulletin (36:336-348 1989).

The data in general relate to the relative mortality rate (RMR) so as to consider the improved state of health in the population at large and thus correct for the "expected number of deaths" over a period of time. The major findings are:-

1. Over the past fifty years, persons with IDDM have experienced a fifteen to thirty year increase in life expectancy and their RMR has decreased by forty per cent.
2. The RMR of male and female patients is identical (contrary to earlier studies looking at crude mortality rates).
3. The difference between the life expectancy of the diabetic and non-diabetic individual at the same age decreases progressively with increasing age at diagnosis.
4. The RMR decreases after thirty years of diabetes duration resulting in a "bell-shaped" relationship between diabetes duration and RMR. The absolute mortality rate increases dramatically after fifteen years of IDDM duration whereafter it remains at a rather constant level for twenty five to forty five years of diabetes duration then it is proportional (but at a higher level) to that of the general population.
5. The development of persistent proteinuria (>500mg per day) appears to be a good prediction of the prognosis and is most likely the explanation for the bell shaped relationship between diabetes duration and RMR. Patients not developing proteinuria had a low RMR which was independent of age, diabetes duration and age at diagnosis. The median life expectancy, after the onset of persistent proteinuria, was seven years (excluding treatment with renal transplantation).
6. The prevalence of proteinuria is less than 5 per cent at ten years of diabetes duration, 15-25 per cent at 20-35 years of duration and it then declines to 9-20 per cent after more than 40 years duration. The maximal incidence of proteinuria is found after 16-20 years, declining to a constant level of less than 1 per cent after 25-35 years of diabetes.
7. The incidence of proteinuria has reduced by 30-50 per cent from 1933 to 1972.
8. 50-70 per cent of persons with IDDM do not develop proteinuria despite more than 40 years of diabetes duration. Male sex and low age at diagnosis both involve an increased risk of developing proteinuria.

9. Poor metabolic control and perhaps cigarette smoking are risk factors for the development of proteinuria. Hypertension appears not to be a risk factor, but a concomitant increase in blood pressure and urinary albumin excretion ratio may signify a trend towards the development of proteinuria.
10. In summary, the dominant factor leading to the reduced life expectancy of persons with IDDM is the development of diabetic renal disease diagnosed by the presence of persistent proteinuria (>500mg/day). Patients not developing persistent proteinuria have a low RMR and thus a near-normal life expectancy whereas the median life expectancy after the onset of proteinuria is only seven years (excluding renal transplantation). Over the past 50 years, IDDM patients have experienced a 15 to 30 year increase in life expectancy and their RMR has decreased by 40 per cent.

Before assessment of the proposal from a diabetic proposer, comprehensive medical information is obtained by the insurance company. This normally consists of:-

- a) A diabetic questionnaire completed by the applicant regarding the history and management of the condition;
- b) A detailed report from the attending physician regarding the date of diagnosis, type of diabetes, the nature of treatment and the patient's response to treatment; and
- c) A report on a current medical examination.

For larger sums insured, more comprehensive medical information may also be requested prior to assessment.

The following factors would cause the underwriter "concern" when considering a proposal for life insurance:-

1. Childhood onset of diabetes.
2. Duration since diagnosis of diabetes of less than one year.
3. Evidence of poor control of the condition.
4. Evidence of a lack of conscientiousness on the part of the patient in managing his condition.
5. Presence of any existing diabetes-related complications.
6. Presence of any additional medical or lifestyle risks.
7. Inadequate documentation of the medical history.

If any of the following complicating factors (for example), are present, the assessment rating would become more severe and in some cases may even result in the proposal for insurance being declined:-

1. Evidence of renal disease, including proteinuria
2. Evidence of diabetic retinopathy
3. Hypertension
4. Cardiovascular disease
5. Excessive alcohol intake
6. Cigarette smoking
7. Obesity
8. Evidence of peripheral neuropathy
9. Unfavourable family history, particularly relating to early deaths from cardiovascular and/or renal disease.

For an adult diabetic, the best acceptance terms are offered for diabetes of short duration (e.g. less than 10 years), provided none of the unfavourable factors mentioned above are present. In addition, generally speaking, the later the age of onset the more favourable the ratings will be. The insurance companies note that insurance premiums generally increase with age and that advancing age often gives rise to other medical complications which may further limit insurance availability and that therefore "early purchase is important".

Problems with life insurance for people with diabetes is a worldwide problem, but some countries seem to have come to grips with them better than Australia. The changes reflect improved diabetes therapy and prognosis and the German experience is that the age of the patient at the time of diagnosis, the type of treatment, the state of metabolism and patient compliance are the main factors determining the risk for life insurance. The German Diabetes Association has energetically pushed for better insurance for its members. In Denmark, all life insurance companies are regulated and thus are not permitted to compete for policies. An official Board makes decisions on all such policies and decides sub-standard risks individually. The age at diagnosis, the current age, the type of diabetes and the presence of persisting proteinuria are the major factors influencing decisions.

The Life Insurance Federation of Australia states that the terms to be offered to diabetics, as for all lives proposing for insurance, are based on available statistical evidence supplemented by the considered judgement of medical experts, underwriters and actuaries. Each proposal is treated strictly on its own merits and in accordance with the underwriting policy of the individual company concerned after due consideration of the evidence gathered at the time. Each company could differ to some degree in its ratings, although the

assessment criteria would generally not vary. The National Mutual Life Association states:- "It needs to be borne in mind that it takes some time for both favourable and unfavourable developments in treatment, diagnosis, survival rates etc. to be reflected in the terms offered'. In addition it should be emphasised that underwriting rules represent only part of the underwriting process and that differences in policy and competitive factors will often result in different offers being made from different insurance companies on proposals for the same diabetic client.

PRACTICAL EXAMPLES

The life insurance industry rates normal life expectancy as 100 per cent. All discussion for loadings on premiums occurs in terms of extra-mortality, a mathematical concept giving a shortened life expectancy, and it is described in terms of 100 per cent, 200 per cent, 300 per cent and so on. In practical terms for some policies, particularly if they are of long duration, an extra mortality rating of 100 or 200 percent does not mean a very heavy financial impost. But at the other end of the scale the older individual, wanting a policy for say 10 years, would find an extra mortality rating of 200 per cent a considerable increase in the standard premium.

Example 1

A 30 year old individual with Type 1 diabetes with none of the unfavourable features as tabulated above. The second rating for this person would be about + 300 percent extra-mortality. But if there were no denigratory features at all, and there was obvious evidence of good compliance and regular supervision by appropriate physicians, that rating could drop as low as 200 per cent. On the other hand any suggestion of fluctuating control, tendency to hypertension, minor background retinopathy etc. could push the extra-mortality up to 500 per cent or more.

Example 2

A 45 year old with Type II Diabetes. If the diagnosis was simply the result of a routine check, and if there was no associated hypertension, hyperlipidaemia, or any other significant factor, the rating in extra-mortality might be only + 75 per cent. Quite obviously, depending on associated findings, the rating could increase, but if the degree of carbohydrate intolerance was such as to only just warrant the diagnosis of Diabetes Mellitus and if the remainder of the examination in competent hands were faultless, that rating might come down to + 50 per cent.

CONCLUSIONS

It can be concluded that insurance cover for people with diabetes is generally available and that the terms offered will vary according to a number of criteria. There is no reason to expect that an otherwise healthy person with well-controlled diabetes could not be insured albeit with significantly increased premiums. Even though insurance companies are taking a more enlightened view towards the issuance of life insurance many still encounter difficulty or much higher rates of coverage if they have diabetes. Diabetes Australia can play a significant role in reducing the financial discrimination towards the insurance of people with diabetes by:

1. Aggressively lobbying insurance companies emphasising improved outlook with recent advances in management, the increasingly liberal attitude being taken in many overseas countries and perhaps even the “carrot” of increased business in such a competitive industry. The data of Borch-Johnsen (see page 2) are particularly relevant;
2. People with diabetes or “diabetes-prone” categories should be advised to get insurance as early as possible; and
3. Those with diabetes should look at the possibility of obtaining job positions that include group insurance or join groups that might get them more favourable consideration.
It is recognised that advances are taking place in Australia and the recent successful negotiation between Diabetes Australia - N.S.W. and the Morgan Employee Benefits P/L is a step in the right direction.

As for the person with diabetes, it is clear from the guidelines issued by insurance companies that there are a number of relevant factors over which they have significant control. These include:-

1. Excessive alcohol intake
2. Cigarette smoking
3. Control of hypertension
4. Obesity
5. Conscientiousness with respect to management of the diabetes
6. The presence of any additional “medical or lifestyle risks”.

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