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Le calcul l'a conduit à la formule:

$$N = \frac{K E^{1.06} P^{0.30}}{R^{0.40}}$$

"Bases of calculations for personal accident insurance" by KOPPE, Germany. Jubilee book of the "Württembergischer Versicherungsverein", Stuttgart, 1958

As a contribution to the 50th Anniversary of his company the author publishes the results of his detailed enquiries into mortality and disability from accidents, based upon the personal accident business of the company for the years 1954-56.

Mr. Koppe's intention is not only to present statistics but also to show to what an extent the probabilities:-

- of death from an accident;
- of becoming permanently invalid from an accident in the sense of the general insurance conditions;
- of suffering a permanent disability calculated as per 100% are dependent on age and sex of the insured person.

With respect to accidental death of males it was found, for example, that the death cases arising from work and road accidents amounted to about 80% of the total number, 1/3 of all accidental deaths being caused by motorcycles. From a summary of all accidental death cases it is shown that until the age of 35 years the course of the total figures is mainly influenced by road accidents and above all by motorcycle accidents.

As to accidental disability it is found that 2/3 of the cases are due to accidents at work as far as males are concerned. As compared with accidental death cases the proportion of road accidents is much less. This may be due to the fact that accidents at work are occurring more frequently but do not lead to such heavy consequences as road accidents. Furthermore, among the latter, the accidents caused by motorcycles again dominate and amount to 2/3 of all cases.

Apart from motorcycle accidents, the work and road accidents are found to be more or less independent of age. What is interesting is how much the disability of females is influenced by other causes, whereas the often heard opinion of the dangerous household work cannot be supported any more according to the author's statements.

The most useful results of these enquiries are summarised into tables from which important conclusions can be drawn and from which interesting comparisons with social accident insurance experience can be made. Furthermore, they will provide a more accurate basis for premium calculation.

H. A.

Contribution à l'etude de l'assurance individuelle-maladie par M. Boris Nolde. Bulletin de l'Institut des Actuaires Français, Décembre 1957

L'assurance contre la maladie, pratiquée individuellement, tend à prendre en France, depuis quelques années, un développement important. Mais des bases techniques solides font encore défaut. Ces bases peuvent être trouvées dans l'expérience allemande qui a donné lieu à des études très poussées du 82 REVIEWS

risque, études ayant permis, notamment, d'aboutir à une formule générale pour le calcul des primes et réserves mathématiques.

Malgré les difficultés d'une transposition de données necessairement complexes d'un pays à un autre, l'auteur estime que les découvertes acquises en Allemagne, notamment l'existence d'une "fréquence fondamentale" commune à tous les tarifs, et ne dépendant que de l'âge et du sexe et d'un "paramètre de fréquence" propre à chaque tarif, doivent être retenues, ainsi que la méthode d'investigation elle-même, qui s'est révélée fructueuse.

L'article fournit quelques données numériques au sujet des primes et réserves, et se termine par un essai d'évaluation de la réserve globale pour risques croisants en pourcentage de l'encaissement, dans l'hypothèse d'une production constante.

Etude d'Ordre Statistique et Nosologique par M. René Risser. Bulletin de l'Institut des Actuaires Français, Septembre 1957

Cette étude comprend trois parties:

- 1°—étude de l'assurance longue maladie dans la région parisienne de 1946 à 1954. L'analyse porte sur les nombres de malades admis et sortis par guérison, invalidité, décès ou extinction des droits.
- 2°—étude de statistique médicale établie par la Caisse Centrale de Sécurité Sociale de la Région Parisienne. Elle porte principalement sur : tuberculose, cancer, affections cardiaques et vasculaires, maladies de l'appareil respiratoire et maladies de l'appareil génital féminin.
- 3°—Rappel des résultats obtenus en matière d'assurance longue maladie par les Actuaires Suédois et Suisses. P. D.

Principles for Administration Control in Insurance Companies. Summarised by the author, Börje Möller, Stockholm.

The purpose of this study and the problems covered.

In the autumn of 1953 the Business Research Committee of Swedish Insurance Companies (FFN) published "A Standard Plan of Accounts for Swedish Insurance Companies". The plan dealt chiefly with financial accounting, i.e. the recording of the contacts of an insurance company with the outside world. This, however, is only one part of a company's internal activities. Others are the recording and control of the sacrifice of means of production in its different sections for the performance of various functions and services. With this in view the Committee felt that further investigation was required to throw more light on the main principles governing various costing methods and on the internal accounting of costs and revenues which provides the basis for all costing.

Following a general introductory stage, the investigation was limited to the problems involved in the consecutive administration control of departments and branches of insurance by top management and department managers. By restricting the investigation to consecutive control only, it was possible to exclude various types of occasional calculation. Many of the points made, however, are of course also applicable to occasional calculations.