

THE INSTITUTE OF ACTUARIES

THE TREATMENT OF DEATHS DUE TO WAR

An extract from notes entitled
 "THE ACTUARY IN WAR"

By "LOAFIA"

THE problem of mortality is not what is or has been the effect of war, but what will be the effect. When the war is over, the mortality experience will be reviewed. Is it merely to reveal the probability of death at each age in war-time, whatever the cause of death? Policies subject to extra premium are excluded from the Continuous Experience to which the offices generally contribute their data. So some policies will be excluded and some will be included which are subject to the same risks because some will be subject to extra premiums and some will not, according to the differences between the conditions of different offices and to the differences even in the same office between the conditions at different times. The safest course will be to ignore the war period, but will not much valuable information be lost? For the present the mortality returns of the offices are being obtained as usual. May there not be something to be gained by recording the deaths and earmarking those due to the war? But if so earmarked, to what exposed-to-risk are they to be related? If to the same total of exposed-to-risk, then the resulting probability will be the probability of death due to war and so will include the probability of the ordinary civilian becoming a combatant and then a casualty, as well as the probability of a civilian becoming a casualty without even first becoming a combatant. Will this be of any value? It is difficult to say, but at least there can be no harm and little extra work in submitting a supplemental list of deaths due to the war. Who is to decide, it will be asked, whether a death is due to the war? In the majority of cases it will be obvious; in other cases the decision may follow prescribed rules; in a small minority it may be difficult, but that number should be so small as not to detract from whatever value the segregation may have. It is reasonable to expect that the Directors of our institutions when reviewing results will ask for

particulars of war claims. If that information is of interest to them and to shareholders and policy-holders in general, is it void of value to the actuary? The return of such deaths will at the very least avoid the criticism in later years that actuaries neglected to obtain certain available information.

ABSTRACT OF THE DISCUSSION

at the Institute, 26 February 1940

Mr G. H. Recknell (Joint Honorary Secretary) read the following communication from **Sir William Elderton**:

"The collection of statistics on the same lines as those followed in peace-time will give the total mortality of the contributing offices during war-time in respect of the policies granted at the normal rates of premium, and the results will be compared for the offices as a whole with a standard table; each office will have its own experience compared with the same standard and can, itself, compare its experience with the mortality it has assumed if it has not worked from the standard table. That is straightforward and, I think, useful.

"A sub-division of deaths into 'war casualties' and other deaths is open to the objection that the exposed-to-risk corresponding to each part is unknown but is also unsatisfactory because of the difficulty in defining a 'war-casualty'. An official list of deaths up to 31 December 1939 has been published and the proportion killed in action was small: how many of the others should be treated as 'war casualties' is unknown and it is uncertain that the death certificates would give a satisfactory guide even after a rigid definition of a 'war-casualty' had been evolved. One definition might be that 'war casualties' are those outside the normal mortality—a definition that would be a good defence for what it has, so far, been decided to do!

"I suggest that actuaries who do not think that the present decision gives what they want should set out (1) a watertight definition of a 'war-casualty', (2) the further particulars to be tabulated, (3) exactly how the information when obtained will be used (a) if available for all offices, (b) if available for a particular office, (4) what problem is to be solved by the information, (5) how (1), (2), and (3) above would have worked in previous wars, (6) whether the omission of cases paying an extra premium is advisable and, if not, to what those deaths are to be related, and (7) whether the deaths from, say, tuberculosis or pneumonia or cancer, if tabulated, would be similarly worth while.

"I object to time being spent in collecting information without considering in advance how it can be used—the collection of statistics merely for collection, and without careful thought of whether the statistics will have a meaning or a use when they have been obtained, is what we have been, or ought to have been, teaching our students to abhor. So far as I

can see at present, the tabulation of 'war casualties' would not solve any war or post-war problem but if, as 'Loafia' observes, there is an unstated problem that might be solved in that way, let him, or someone else who holds the view, set out the whole idea systematically so that it can be discussed."

Mr H. E. Melville said that he could not help feeling that the author had some doubt as to the wisdom of the Council's decision that there should be no attempt made to segregate war mortality from non-war mortality but that merely the aggregate result should be made available. The author did not seem very sure whether an analysis on the lines which he appeared to have in mind would be of any value; but he suggested that an analysis was practicable, and he said that in the majority of cases it would be obvious whether a death was due to the war, and that in other cases the decision might follow prescribed rules.

Personally, he entirely supported what Sir William Elderton had written on the matter. He would be very sorry to try to lay down the prescribed rules for deciding whether a particular death was a war casualty or not. What was to be done, for example, in the case of a man who met his death in the black-out, or in the case of a despatch rider who skidded on icy roads such as had existed in the recent bad weather at home? Would the analysis be any different if the casualty had occurred in France? It was easy to think of other cases where there would be difference of opinion as to how they should be treated.

He did not believe that if an analysis were successfully made which would satisfy everybody the results would be worth anything when they were obtained; he could not see that an analysed table would give actuaries any mortality rates which would enable them to know anything more about the right premium to charge or how to value their liabilities, for, as had already been pointed out, they had no exposed-to-risk to which to apply those war deaths.

The President (Colonel H. J. P. Oakley) said that he had been much interested in the remarks regarding the possibility of tracing war mortality. So far as assured lives were concerned, the data were so unreliable from the point of view of war mortality as seemingly not to warrant the effort to analyse them. Homogeneity was the very soul of their work, and even in peace it was one of

the most difficult factors to secure; but in war, homogeneity was so lessened, if not destroyed, as to lead to the conclusion that for assured lives the period of war was better eliminated. A comparison of the mortality of the whole population in peace and war would afford a better measure of the effect of war on mortality than would any investigation into a section of the people, which would include some and exclude others affected. Yet while war deaths among assured lives, mixed beyond measure in regard to the risks to which they were exposed, in addition to the problem of deciding what was a "war death", might baffle all attempts at analysis, was it possible that hereafter some ray of light might break upon some mind which would pierce the apparently valueless earmarking of war deaths and give occasion for the criticism "If only those people in 1940 had earmarked their deaths!"? It was only in that light that he felt that there might just possibly be something to be gained and nothing to be lost by so doing.