

This is the fourth investigation which has been undertaken by the Manchester Unity into the sickness and mortality experience of the members. The three previous investigations were made by the late Mr. Henry Ratcliffe, Corresponding Secretary of the society. The first was from returns obtained with difficulty from lodges as to their experience during the years 1846-48, and included members who had passed through 621,561 years of life and experienced 6,058 deaths and 609,112 weeks of sickness. The second dealt with the experience of the years 1856-60, and included 1,006,272 years of life at risk, 11,962 deaths, and 1,324,202 weeks of sickness.

The third investigation dealt with the experience of the members for the years 1866-70, and included 1,321,048 years of life at risk, 16,680 deaths, and 1,975,033 weeks of sickness. This experience being the largest ever collected by any person or society, was made the foundation of a series of tables dealing with the experience in a variety of aspects, and these tables enjoyed a wide and well-deserved reputation for a number of years not only in Great Britain but also in the colonies as the best available exhibits of friendly-society experience, and hence as the most suitable for estimating the future assets and liabilities of fraternal organizations.

With the passing of the years, however, and changes in the social habits and sanitary conditions of the people, the national health has been affected and also the liability which a member brings on a friendly society. These changes viewed from a national standpoint must be regarded as in the main beneficent and conducive to a reduction in the rate of mortality. But, as has been well said by one writer, "in friendly-society work a favourable cause may produce an unfavourable result—in other words, the increase in the average duration of life may mean, and usually does mean, an increase in the sickness liability which has to be met by the society."

Accordingly it was made apparent on successive valuations that while the average duration of life was longer the average amount of sickness was greater than the expectation by the standard tables, irrespective of occupation risks. The necessity for some revision of the standard tables was thus becoming evident when, in 1896, the publication of a report by the late Mr. William Sutton, F.I.A., Actuary to the Friendly Societies Registry Office, of the experience of registered friendly societies during the years 1876-80 immediately brought the subject into prominence. The average rate of sickness at every age was shown by such experience to be distinctly greater than that disclosed by any pre-existing tables.

After deliberating on the whole subject the Manchester Unity, at the annual meeting in 1898, resolved that the Directors be instructed to proceed with the tabulation of the sickness and mortality experience of the five years 1893-97. The arduous labour of conducting the investigation was, as already stated, intrusted to Mr. Alfred W. Watson, who, in pursuance of the resolution arrived at by the society, issued the necessary returns to the lodges in September, 1898. In March, 1900, Mr. Watson read before the Institute of Actuaries a paper outlining the scheme of operations which evoked the warm admiration and approving encouragement of his professional seniors, who, having a thorough knowledge of the complexity of the subject, had a due appreciation of the magnitude of the undertaking.

As the completed results were submitted to the annual meeting on the 1st June, 1903, it will be seen that the tabulation and analysis have been carried through and presented to the society in an almost inconceivably brief space of time. The investigation comprised the facts relating to 819,716 individuals; the number of years of life exposed to the risk of death was 3,180,378; the number who died was 39,061; and the number of weeks of sickness experienced was 7,022,438. The extent of this data will be best understood by comparing it with other important tabulations of sickness and mortality during recent years as follows:—

		Ancient Order of Foresters, 1871-75.	Registered Friendly Societies, 1876-80.	Manchester Unity, 1866-70.	Manchester Unity, 1893-97.
Exposed to risk (death)	.. .. .	1,302,166	1,653,085	1,321,048	3,180,378
Deaths	.. .. .	15,815	23,011	16,680	39,061
Weeks of sickness	.. .. .	1,769,035	3,141,320	1,975,033	7,022,438

Concerning the above, Mr. Watson remarks: "It will be observed that, so far as concerns the numbers of facts included, the new experience of the Manchester Unity is conspicuous. Whilst weight of numbers is not necessarily (after a certain point has been passed) a criterion of reliability, certain advantages in this respect may be claimed for the present investigation. In the first place the magnitude of the data rendered it possible to give effect to a comprehensive scheme for the division of the experience without incurring the risk of reasoning from an inadequate number of observations, and in the second place, the investigation includes a sufficient body of data referring to the older ages to vest its results as to these ages with an authority which has been hitherto unattainable. This will be made clear by the following comparison of the years of life 'exposed to risk of death' at the ages from seventy upwards, in the several experiences named above:—

Ancient Order of Foresters, 1871-75	...	...	6,849 years.
Registered Friendly Societies, 1876-80	...	...	25,990 years.
Manchester Unity, 1866-70	...	...	10,507 years.
Manchester Unity, 1893-97	...	...	74,720 years."

It will be seen from the above that the new experience is three times as large as the late Mr. Sutton's tabulation; seven times as large as the Manchester Unity experience 1866-70; and nearly times as large as Mr. Neison's Forester's Experience 1871-75.