DEATH TRANSFERS AND CORRECTED DEATH-RATES.*

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A COUPLE of years ago, circumstances directed my attention to the fact that a considerable number of deaths over the country were not accounted for in the official death-rates of any of the Local Authorities in the country, namely, the deaths of persons belonging to particular towns or districts which occurred during the temporary residence of these persons beyond these towns or districts. In the case of public institutions, such as poorhouses and lunatic asylums, directly connected with particular districts, although situated beyond these districts, there was, or ought to have been, no great difficulty. Even in these cases, in some instances, no particular effort was made to obtain returns of the deaths occurring in these institutions. But many persons died away from home—in hospitals, in nursing homes, at health resorts, etc., of which the officers of the Local Authorities to whose districts they belonged had no knowledge. Such deaths were omitted from the vital statistics of the districts in which they occurred as well as from the returns of the districts to which they belonged. The deaths of tramps and other persons of unknown antecedents were sometimes included in the returns of the districts in which they occurred, and sometimes were not.

I brought the matter before the Society of Medical Officers of Health, with a view to arranging some method of "death transfers" which would obviate the leakages referred to. Obviously, the most efficient arrangement would have been one whereby the Registrar-General would have required the local registrar of deaths to enter in his register and returns, in each case in which the person deceased was not usually or normally resident in the district, the "usual" or "former" residence of the person. The Registrar-General would cause transcripts of such entries to be transmitted to the registrars of the districts to which the persons belonged, and those registrars would enter them in their statutory returns to the Local Authority of those districts. The matter was taken up by the Society, which approached the Registrar-General on the subject without result. The Society then entered into communication with the Local Government Board on the subject, and the final result was that the Board issued to all the medical officers of

* From Dr. Munro's Annual Report for 1906.

health in the country model transfer forms, upon which they instructed those officers to communicate to the officers of outside districts the deaths of persons belonging to those districts, which might occur in public institutions or otherwise in their own districts. It was arranged that the deaths of tramps, or persons without a known "place of residence," should be accepted by the local authorities of the districts in which the deaths occurred.

I adopted this system in my report for last year, thereby raising the death-rate by '670 per thousand in the Upper District and '552 in the Lower District, as compared with former years. The thorough-going adoption of this system in this report has the effect of adding '280 to the death-rate of the Upper District and 1'216 in the Lower District.

Another reform in the comparative statement of death-rates remains to be accomplished, that is what is known as "the correction of death-rates for the sex and age distribution of the population." At nearly all ages, the death-rate of females is lower than that of males.* And between the ages of five and fifty-five the death-rate per thousand living at each age period, in both sexes, is lower than the death-rate for all ages. It follows that if in the population of any district there is an excess in the proportion of females and of persons at ages between five and fifty-five, that district will have a lower death-rate, apart from the hygienic conditions of the district, than a district less highly favoured in the sex and age distribution of its population. A method has been devised whereby a factor can be calculated which, applied to the gross death-rates of districts, serves to abolish the fallacies attaching to the comparison of the gross death-rates of districts having populations of different sex and age distribution. I am of opinion that the Registrar-General should furnish this factor of correction to the Local Authority of each district in the country. As the result a good deal of trouble, including a reference to the last census returns in the custody of the Registrar-General, I have calculated the factors of correction for the Upper and Lower Districts of the county. That for the Upper District is a *plus* factor, showing that the sex and age distribution of the population there is somewhat favourable to a low death-rate; while the factor for the Lower District is a *minus* factor. The factors for the districts are, respectively, 1'0562 and '9940. Multiplying the gross death-rates of the districts for 1906, as set forth below, by these factors, we find that the "corrected death-rate" for the Upper District is 12'276; that for the Lower District, 14'790. These death-rates are strictly comparable with the death-rates of any district in Scotland to which the factor of correction has been applied.

* At all age periods except 10-20 years, when it is fractionally less.