

CORRESPONDENCE.

To the Editor of the Journal of the Institute of Actuaries.

VACCINATION.

SIR,—The following table, giving the comparative results of the mortality from small-pox in London at three different periods, may be of interest to the readers of Mr. Burrigge's valuable paper on vaccination.

Mortality from Small-pox in London.

Quinquennial Periods	Number of Deaths by Bills of Mortality	Annual Average	
1799-1803	7,762	1,552	
1809-1813	5,297	1,059	
1819-1823	3,390	678	
Year	Population of London	Deaths from Small-pox Average of Quinquennium	Mortality per 100,000
1801	958,863	1,552	162
1811	1,138,815	1,059	93
1821	1,378,947	678	49

Jenner's first publication on the subject was in 1798. It may, therefore, be fairly assumed that in 1801, when the first census was taken in England, the entire population of London was unvaccinated. In 1811, the period of the next census, a portion of the population would have been vaccinated, probably a small portion only. But in the next ten years the practice materially increased, so that in 1821, the date of the succeeding census, the proportion of the vaccinated must have been much greater. For the purpose of comparing the number of deaths with the population, the average number of the deaths in quinquennial periods has been taken, as particular years are sometimes subject to epidemics of disease.

The result, it will be observed, is that the number of deaths from small-pox per 100,000 of the population in London was, in 1801, 162; in 1811, 93; and in 1821, only 49.

This simple statement furnishes, I think, conclusive evidence of the marked diminution in the mortality from small-pox by the introduction of the practice of vaccination.

Yours obedient Servant,

ARTHUR H. BAILEY.

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