4. On the Variations of the Fertility and Fecundity of Women according to Age. By Dr J. Matthews Duncan.

This paper was divided into four parts. In the first part it was shown:—

- 1. That the actual, not the relative, fertility of our female population, as a whole, at different ages, increases from the commencement of the child-bearing period of life until the age of 30 is reached, and then declines to its extinction with the child-bearing faculty.
- 2. That the actual fertility is much greater before the climax, 30 years, is reached, than after it is passed.
- 3. That at least three-fifths of the population are recruited from women not exceeding 30 years of age.

In the second part it was shown:-

- 1. That comparative fertility increases gradually from the commencement of the child-bearing period of life until about the age of 30 years is reached, and that then it still more gradually declines.
- 2. That it is greater in the decade of years following the climax of about 30 years of age than in the decade of years preceding the climax.

In the third part it was shown:---

- 1. That the fecundity of the mass of wives in our population is greatest at the commencement of the child-bearing period of life, and after that epoch gradually diminishes.
- 2. That the fecundity of the whole wives in our population included within the child-bearing period of life is, before 30 years of age is reached, more than twice as great as it is after that period.
- 3. That the fecundity of the wives in our population declines with great rapidity after the age of 40 is reached.

In the fourth part it was shown:-

- 1. That the initial fecundity of women gradually waxes to a climax and then gradually wanes.
 - 2. That initial fecundity is very high from 20 to 34 years of age.
- 3. That the climax of initial fecundity is probably about the age of 25.