

The Changing Incidence of Twinning in Scotland in 1939-1968

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The rate of twinning, both MZ and DZ, as determined by the Weinberg formula, remained fairly static in Scotland up to 1958, when it fell (Fig. 1), due to a fall in the DZ twinning rate. These figures are based on the returns from the Registrar General for Scotland.

As age has a marked influence on the incidence of twinning, it was thought that the difference might be due to a reduced number of older women having babies. However, this does not seem to be the whole answer (Fig. 2). The most marked change would be expected in the women over 35, but this did not occur. It was not possible to look at other factors such as parity, social class and height in the figures for Scotland. The details of all births in the City of Aberdeen are known because of the very high hospital delivery rate, and more detailed studies have been made on the twinning rates for Aberdeen.

These figures, again, showed that from 1959 onwards there was a fall in the twinning rate in Aberdeen and this was due to the fall in the number of DZ twins. The fall in incidence occurred both in primigravidae and in multigravidae (Tab. I), and more in older than in younger primigravidae (Tab. II), but there was little difference by age in the fall in multigravidae (Tab. III).

Another factor which is related to the incidence of twinning is the height of the mother. This, in turn, reflects the social class, as tall women are more commonly from the upper, and small women from the lower social classes. The rate of twinning in Aberdeen was highest in the tall women before 1954 (Tab. IV). The rates in all women fell from 1954 onwards, but most dramatically in the tall women. The rates from 1959 onwards show very little difference according to height.

In DZ twinning in Aberdeen the highest rate was in the tall women until 1959 onwards, when the rate fell to about the same as in medium and small women (Tab. V). The rate in small women has not changed since 1949. It seems that most of the fall in the rate of DZ twinning can be accounted for by the fall in tall and medium sized women, but particularly in the tall women. The rate has almost halved in 1964 to 1968 compared with 1949 to 1953. This is also reflected in the social class figures.

There is *no* evidence to suggest that the fall in the incidence of twinning in Scotland is due to any lowering of nutrition standards because the fall occurs in tall

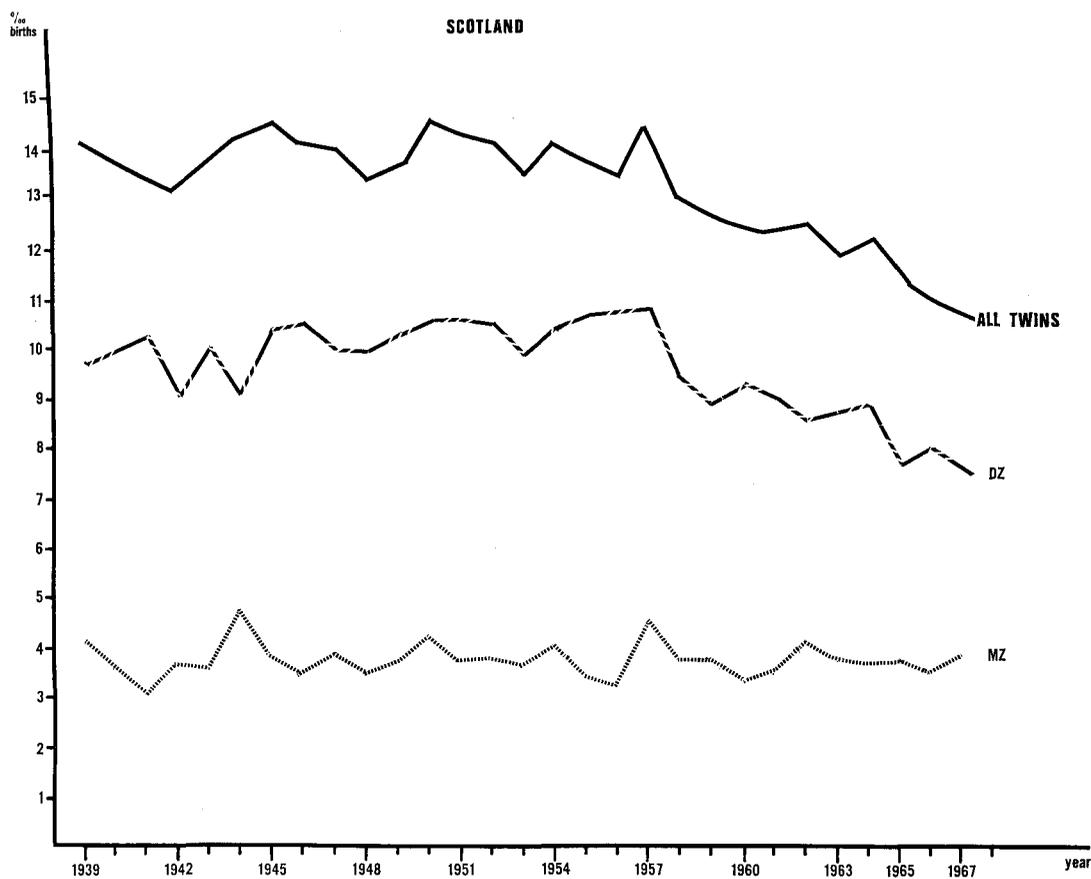
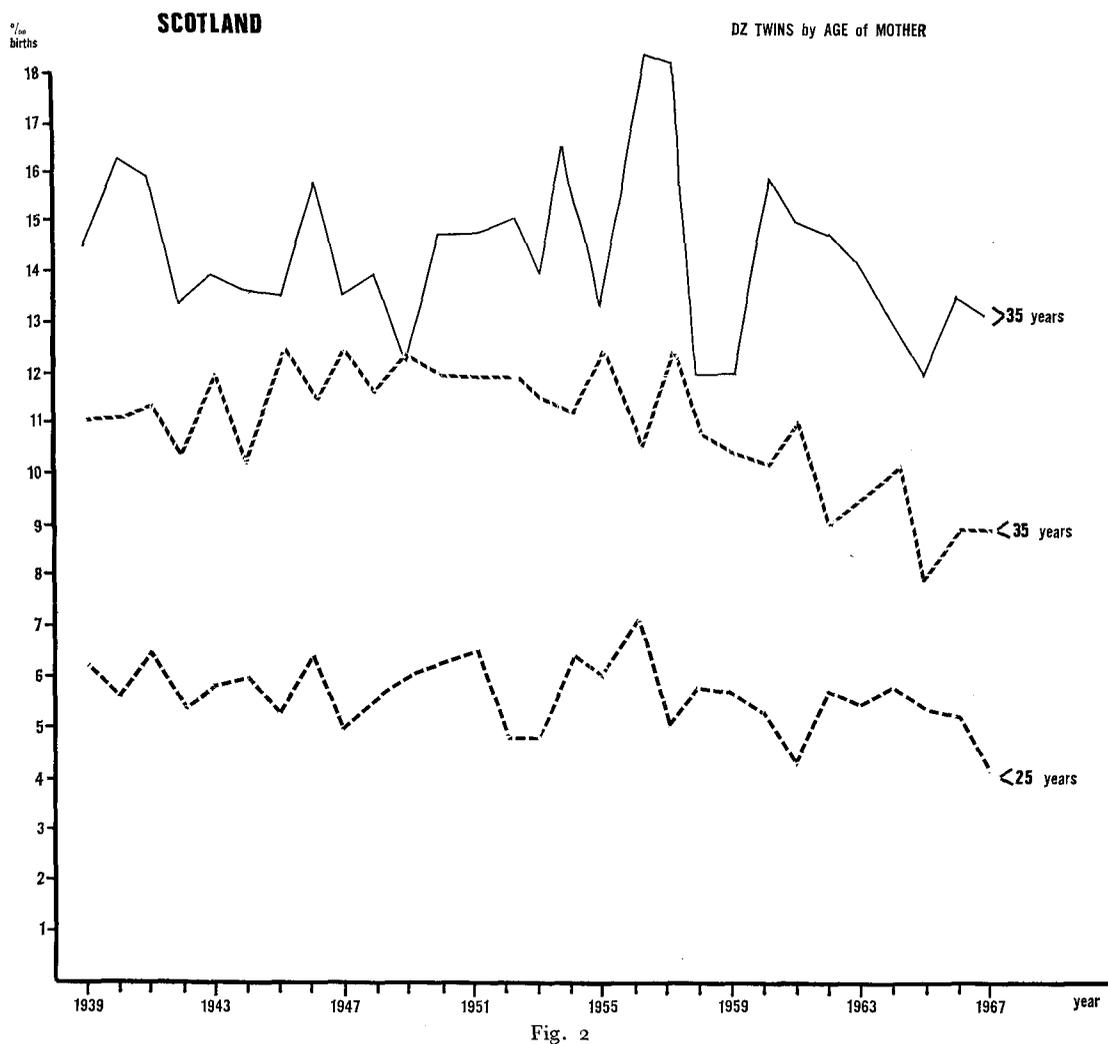


Fig. 1

Tab. I. Rate of DZ twinning in Aberdeen city by parity in 1949-1968

	Primigravidae	Multigravidae	All
1949-1953	8.0	10.1	9.4
1954-1958	9.2	9.6	9.4
1959-1963	7.2	7.3	7.3
1964-1968	5.4	8.0	7.2



**Tab. II. Rate of DZ twinning in Aberdeen city
in primigravidae by age in 1949-1968**

	Under 25 years	Over 25 years	All
1949-1953	6.6	10.2	8.0
1954-1958	7.2	14.8	9.2
1959-1963	8.9	3.6	7.2
1964-1968	5.2	6.4	5.4

Tab. III. Rate of DZ twinning in Aberdeen city in multigravidae by age in 1949-1968

	Under 25 years	Over 25 years	All
1949-1953	6.1	11.4	10.1
1954-1958	6.1	10.8	9.6
1959-1963	2.7	9.3	7.3
1964-1968	4.7	9.7	8.0

Tab. IV. Rate of twinning in Aberdeen city by maternal height in 1949-1968

	Tall	Medium	Small
1949-1953	20.1	15.2	14.8
1954-1958	14.0	13.1	12.0
1959-1963	11.9	11.3	12.7
1964-1968	12.8	11.7	9.0

Tab. V. Rate of DZ twinning in Aberdeen city by maternal height in 1949-1968

	Tall	Medium	Small
1949-1953	10.6	9.5	8.9
1954-1958	10.6	8.5	8.0
1959-1963	6.3	7.2	8.1
1964-1968	7.4	5.4	8.9

women and in older primigravidae both of whom are found more commonly in the upper social classes. The fall is not due to a falling birth rate, as the birth rate in Aberdeen remained static until 1964, when it began to fall. This was later than the start of the fall in the twinning rate. More detailed studies into the relationships between age, parity and social class are being made to try to determine the cause of the fall in the *incidence* of twinning in Scotland.

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