

THE EFFECT OF ASIAN INFLUENZA ON PREGNANCY

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In medicine negative findings are possibly as important as positive ones. Much has been written about virus infections and the effects on the foetus in early pregnancy. An opportunity for studying the effects of the virus producing Asian influenza was afforded when the pandemic reached Cape Town in August and September 1957. It lasted for about a month and was relatively mild, although in many cases patients ran high temperatures. The municipal health department of Cape Town recorded 8 deaths as being due to Influenza.¹

An attempt has been made to assess the effects of this epidemic on pregnancy. The records of the maternity hospitals under the aegis of the University of Cape Town have been studied for 1957, chiefly with reference to the incidence of prematurity, stillbirths, neonatal deaths and antepartum haemorrhage. Also, 315 cases who had influenza in the first 20 weeks of pregnancy are compared with 414 controls. Unless patients were confined to bed for 1 or more days during the epidemic, they were not considered to have had influenza.

COMPLICATIONS

A prospective inquiry into the *abortion rate* during an epidemic is always difficult because so many cases with early pregnancies have not yet sought medical advice, and many are seen for the first time when they abort. At Groote Schuur Hospital the gynaecological wards admitted only emergencies during the peak of the epidemic, and more beds were available at that time for patients who aborted. The number of cases of abortion did not rise during August and September (Fig. 1). Although a few cases were seen in whom abortion occurred in association with influenza, and cause and effect seemed obvious, there was no appreciable rise in the abortion rate. Retrospective inquiry was made about bleeding in 76 cases who had influenza in early pregnancy and it had not occurred in any of these cases.

Among 315 cases who had influenza in the first 20 weeks of pregnancy, there were 3 minor *congenital abnormalities*. Among 414 controls there were 4 minor and 1 major abnormalities. This confirms Campbell's view² that influenza in early pregnancy does not produce congenital abnormality.

In Fig. 2 the monthly *prematurity rate* for 1957 is shown. During this period there were 7,632 deliveries. The incidence of *prematurity* did not rise in August or September. Among 315 cases who had influenza in the first 20 weeks, and the 414 controls, the incidence was 8.8% and 9.5% respectively.

As seen in Fig. 3, the *stillbirth rate* was not raised during the epidemic. In the cases who had influenza in early pregnancy, there were 4 stillbirths in 315 deliveries as compared with 4 in the 414 controls.

As seen in Fig. 4, the incidence of *neonatal deaths* did not rise in August and September. In the early group there were 2 neonatal deaths among the 315 cases who had influenza as compared with 2 in the 414 controls.

There was no increase in the incidence of *accidental haemorrhage* (Fig. 5).

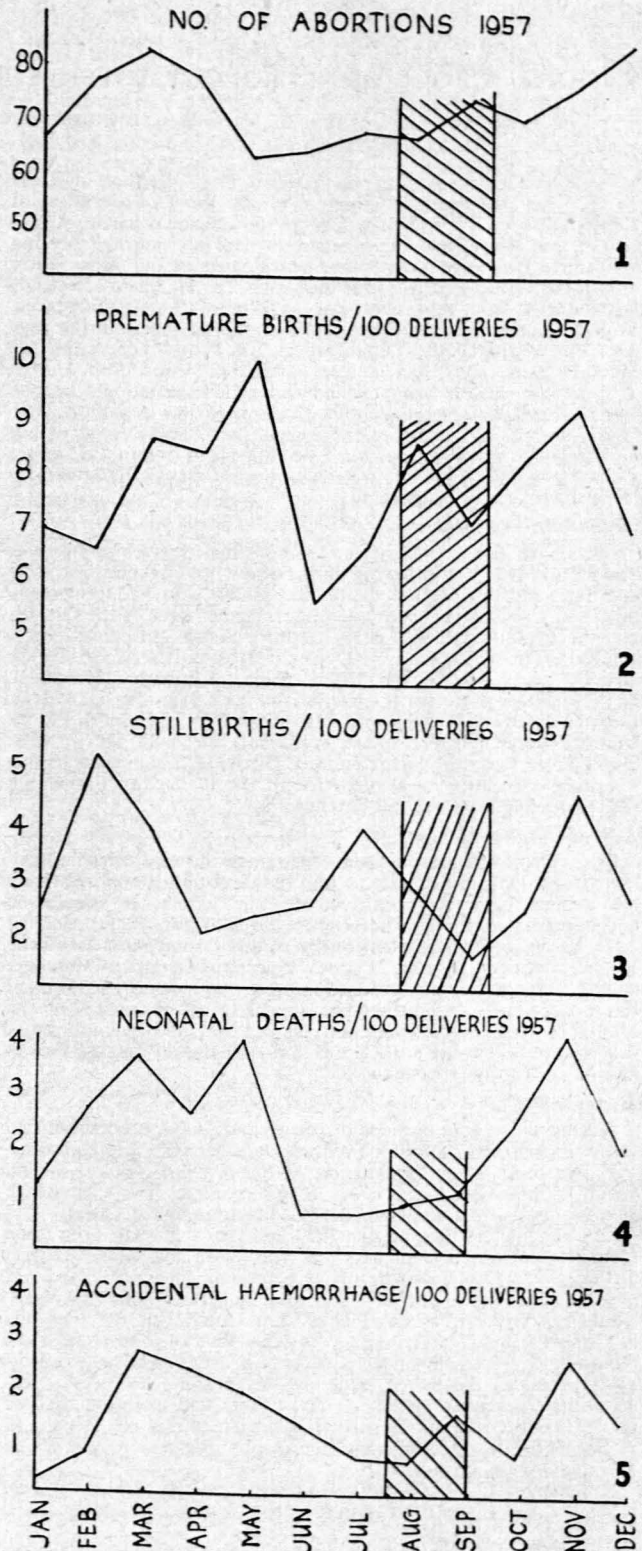
Where the sex of the infant was noted, it is interesting to observe that among cases who had influenza in early pregnancy the ratio of male/female births was 125/155 (i.e. 81 males per 100 females). In the control group the ratio was 216/206 (i.e. 105 males per 100 females).

Conclusions. From the evidence available it would appear that the effects of this epidemic of Asian influenza on pregnancy were negligible.

SUMMARY

The effects on pregnancy of Asian influenza, as it occurred in Cape Town in August and September 1957, were studied, with particular reference to abortions, congenital abnormalities, prematurity, stillbirths, neonatal deaths and accidental haemorrhage. The effects were negligible.

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Figs. 1, 2, 3, 4 and 5.

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REFERENCES

1. Cape Town City Health Department (1958): Personal communication.
2. Campbell, W. A. B. (1953): *Lancet*, 1, 173.