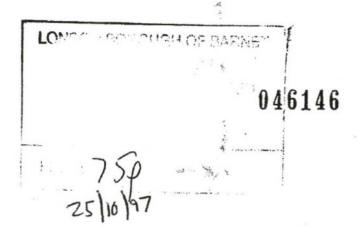
THE ROLE OF MEDICINE

DREAM, MIRAGE OR NEMESIS?

Thomas McKeown



BASIL BLACKWELL · OXFORD

© Thomas McKeown 1979

First published 1979 by Basil Blackwell Publisher Ltd, 108 Cowley Road, Oxford OX4 1JF, England.

Reprinted 1984

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of Basil Blackwell Publisher Limited.

A shorter version of this book was first published as the 1976 monograph of the Rock Carling Series by the Nuffield Provincial Hospitals Trust.

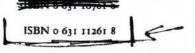




FIGURE 8.11. Tetanus: mean annual death rates: England and Wales.

WHOOPING COUGH

The death-rate from whooping cough in England and Wales (Fig. 8.12) has declined since the seventh decade of the nineteenth century. The effectiveness of treatment is still in doubt, and the more important issue is the contribution of immunization.

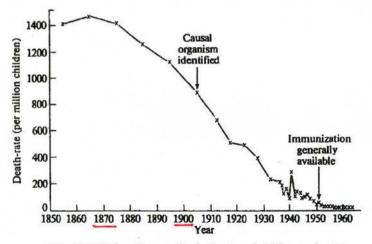


FIGURE 8.12. Whooping cough: death rates of children under 15: England and Wales.



As mortality had fallen to a low level before immunization was introduced, its value must be judged in relation to morbidity, of which the evidence is the trend of notifications. This source is notoriously unsatisfactory, because frequently cases are not notified.

The rate has declined almost continuously since 1950 (Fig. 8.13), although there have been periodic, by former experience relatively small, epidemics. Unfortunately for the purposes of interpretation, immunization tends to be introduced gradually and it is not easy to be certain when it was first used extensively. The Annual Report of the Chief Medical Office suggests that the procedure may not have been in general use until at least a few years after the onset of the decline of notifications. It has also been observed that in Germany, where immunization was not used nationally, notifications decreased.

Opinion, including medical opinion, is still divided over the relative advantages and disadvantages of immunization against whooping cough. A decision is important in practice; but it is not essential for this

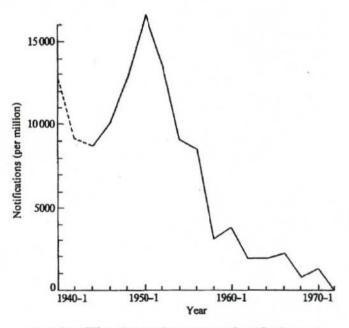


FIGURE 8.13. Whooping cough: mean annual notification rates of children under 15: England and Wales.

analysis, and in concluding that the matter is still open I recall Haldane's remark, that in a scientific paper one can almost gauge the intellectual honesty of the author by the number of phenomena he or she leaves unexplained'.

MEASLES

With some variation in timing, the history of measles has been rather similar to that of whooping cough. The death-rate fell continuously from about 1915 (Fig. 8.14); treatment (of secondary infections) has been possible since 1935; and mortality was at a low level before immunization was used.

Fig. 8.15 shows the trend of notifications. The rate decreased from 1950 to 1956, was more or less constant to 1960, and declined rapidly

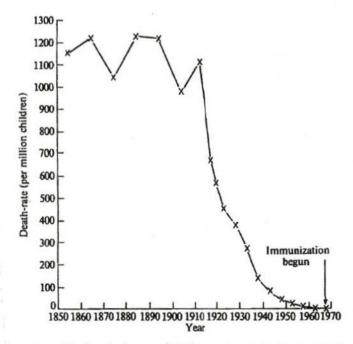


FIGURE 8.14. Measles: death rates of children under 15: England and Wales.

1. Haldane, J. B. S., Science and Life (London: Pemberton, 1968), p. 65.