criteria will deny a significant proportion of children the opportunity of cure without resort to laparotomy.

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Girl meets boy; boy meets girl; and measles

'Are males weaker or do their sisters talk too much?' The title of a 1983 paper¹ seems to suggest a certain facility for de Bono-style lateral thinking.² Peter Aaby, an epidemiologist from Copenhagen, has been studying patterns of measles transmission in various parts of Africa including the Gambia, Guinea-Bissau, Senegal, and Kenya and has noticed that measles is more severe if contracted from somebody of the opposite sex. A paper in the *Lancet* (Peter Aaby, 1992;340:388-91) gives data from a study done in a rural area of Senegal between 1983 and 1986. The case fatality rate (CFR) for measles was highest at the age of 2 years at which age the CFR for boys was 12% and for girls 15%. Children infected within a household were twice as likely to die as children infected from outside the household (CFR 8% v 4%) presumably because of heavier exposure. Cross sex transmission was more dangerous than same sex transmission. Boy to boy transmission was associated with a CFR of 4.0%. CFRs (relative risk [95% confidence interval]) for other modes of transmission were: girl to girl 5.8 (1.4 [0.6 to 3.4]), boy to girl 11.4 (2.8 [1.4 to 5.7]), and girl to boy 12.9 (2.9 [1.4 to 6.0]). The effect of cross sex transmission was greater if infector and infectee both lived in the same household (ate together), or hut (sleeping quarters) rather than just in the same compound. A study of twins in Guinea-Bissau showed a higher mortality when they were of different sex (relative risk 1.47 [1.14 to 1.90]),³ and in a case-control study the older sibling nearest in age was of the opposite sex in 74% of children who died of measles and in 46% of controls. In a different part of Senegal families with two children were studied.⁴ Measles mortality was greater in children with a sibling of different sex (relative risk 1.81 [1.17 to 2.82]).

What is the explanation for this strange observation? It does not appear to be a peculiarity of life in Senegal as a similar phenomenon has been observed in other parts of West Africa, in East Africa, and in early twentieth century Copenhagen. It may not be specific to measles as the author claims to have data showing that it may apply to chickenpox but not to whooping cough. The most likely theory is that cross sex transmission involves a bigger dose of virus, although there is no evidence from observed behaviour patterns in children of this age of closer cross sex contact. The alternative possibility, that the virulence of the virus is in some way increased by passage through the cells of somebody of the opposite sex, would presumably pose a much greater challenge to microbiological theorists and is therefore more interesting but less probable.

ARCHIVIST

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