

CORRECTION

Ball, F. and Sirl, D. (2013). Acquaintance vaccination in an epidemic on a random graph with specified degree distribution. *J. Appl. Prob.* **50**, 1147–1168.

For an all-or-nothing vaccine, there is an error in the formulae for the probability generating functions $f_{\bar{B}_i}(s)$ and $f_{B_A}(s)$ in Section 4.4 of the above paper. The vector $\mathbf{h}_i^B(s)$ should be defined as

$$\mathbf{h}_i^B(s) = (1 - p_{ij}^B + p_{ij}^B s_j, j = 1, 2, \dots, 6),$$

where p_{ij}^B is the probability that, when constructing the susceptibility set, a type- j potential offspring of a type- i individual actually joins the susceptibility set.

For a nonrandom vaccine, p_{ij}^B is simply the probability p_{ji}^I that a given type- j individual infects a given type- i neighbour (as in the paper). In the all-or-nothing case for $j = 3, 6$, p_{ij}^B is the infection probability p^I . For $j = 1, 2, 4, 5$, we need the vaccine of the type- j individual to fail (as in the forward process) and then the type- j individual to infect the type- i individual; so $p_{ij}^B = (1 - \varepsilon)p^I$. It follows that, for all $i, j = 1, 2, \dots, 6$,

$$p_{ij}^B = \begin{cases} p_{ij}^I & \text{all-or-nothing vaccine,} \\ p_{ji}^I & \text{nonrandom vaccine.} \end{cases}$$

This is in contrast to the paper where, using this notation, it was stated erroneously that $p_{ij}^B = p_{ji}^I$ for both vaccine action models.

The only numerical results in Section 5 of the paper which use an all-or-nothing vaccine are those presented in Figure 2 and those referred to in the final paragraph of that section. The above correction has no discernable effect on any of those results.