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Reply to Joseph et al.

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Joseph et al comment about the rate of multidrug resistant (MDR) Gram-negative bloodstream infections (GNBSI) rates in Nottingham decreasing between 2007 and 2016.[1] I agree that the overall burden of GNBSIs in England is dominated by relatively susceptible rather than MDR strains; my review did not state the opposite.[2] When referring to susceptible GNBSIs, Joseph et al comment that 'prevention and control measures as yet remained undefined' and cite a recent study to support their statement.[3] Actually, the latter study was about MDR bacteria. It remains plausible that antibiotic exposure, which I highlighted as an important potential intervention to achieve the ambition to reduce healthcare-associated (HA) GNBSI in England, can affect the risk of infection caused by both MDR and relatively susceptible strains.[4]

I agree with Joseph and colleagues that it remains unclear about whether or not currently recognised factors associated with GNBSIs are truly causal in nature.[1] Nevertheless, these are important potential starting points to determine how we can reduce patient risk for GNBSI. The ambition to reduce (HA) GNBSIs is a patient safety issue, and so opportunities to intervene should not be lost, as stated in recent national guidance.[5] This is particularly pertinent as we learn more about how best to reverse the recent epidemiological trends of infections that are associated with excess morbidity, mortality and hospital length of stay.[6] For this reason, I believe that the presence of a healthcare associated 'risk factor' is enough to assume that the GNBSI is HA. It is not true, as stated by Joseph et al, that there is currently no guidance available to start to tackle (antibiotic susceptible) GNSBIs reduction targets. Multiple potential interventions are available.[5] The challenge is to ensure these are optimally implemented by IPC teams and to monitor available surveillance data (and local audit data) to determine their effectiveness.

Conflict of interest statement

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