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Nurses: an underused, vital asset against drug-resistant infections

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Title: Nurses, an underused vital asset against drug-resistant infections

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Murray et al (2022)¹ consolidate the evidence on the burden of drug-resistant infections (DRI), highlighting key pathogens and their unjust distribution worldwide, which demands a multifaceted, planetary response.

The success of this response would benefit from an interprofessional approach which formalises the involvement of nurses, the largest and often most trusted health workforce, yet underutilised against DRIs. Although the nursing shortage threatens their contribution in AMR and activities to meet SDGs, expanding AMS nursing practice may future-proof healthcare provision allowing medical specialists to focus on complex DRIs.

Regardless of the increasing nurses prescribing antimicrobials, or their influence on prescribing as 'knowledge brokers'², at least three of the strategies by Murray et al –IPC, vaccination, and minimise use in humans— have substantial input of nurses. Addressing infections has historically been embraced by nurses, with many infections as nursesensitive outcomes. However, the value of nurses in stewardship should not be just centred on clinical work. Nurses are involved across the entire health economy and are excellent to promote self-care, salutogenesis and foster health literacy of AMR through effective communication and education. Nursing leadership and activism have been robust advocating for improvements on determinants of infections³.

Further nursing action in AMS requires closing gaps in education⁴ and awareness, competencies⁵, and stewardship models which recognise the nursing contribution. Additionally, AMS nursing research could profit from investment to achieve its full benefit. The planetary threat of DRIs should encourage the inclusion of nurses in the global response, eager as they are to embrace their potential.

Authors' contributions

ECS: conceptualisation, writing of original draft, review & editing; JB, MC, RG, FG, EM, JM, VN, RO, MCP, BdT, MBV: writing – review & editing

Conflict of interest statements

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References

- 1. Antimicrobial Resistance Collaborators. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. *Lancet*. 2022;399(10325):629-655.
- 2. Gotterson F, Buising K, and Manias E. Nurse role and contribution to antimicrobial stewardship. An integrative review. *Int Journal Nursing Studies*, 2021;117.
- 3. Rosa WE, Hannaway CJ, McArdle C, et al. Nurses for Health Equity: Guidelines for Tackling the Social Determinants of Health. WISH (2021).
- 4. Castro-Sánchez E, Drumright LN, Gharbi M, et al. Mapping Antimicrobial Stewardship in Undergraduate Medical, Dental, Pharmacy, Nursing and Veterinary Education in the United Kingdom. *PLoS ONE*. 2016;11(2): e0150056.
- Courtenay M, Castro-Sánchez E, Gallagher R, et al. Development of consensusbased international antimicrobial stewardship competencies for undergraduate nurse education. J Hosp Infect. 2019;103(3):244-250. doi: 10.1016/j.jhin.2019.08.001.