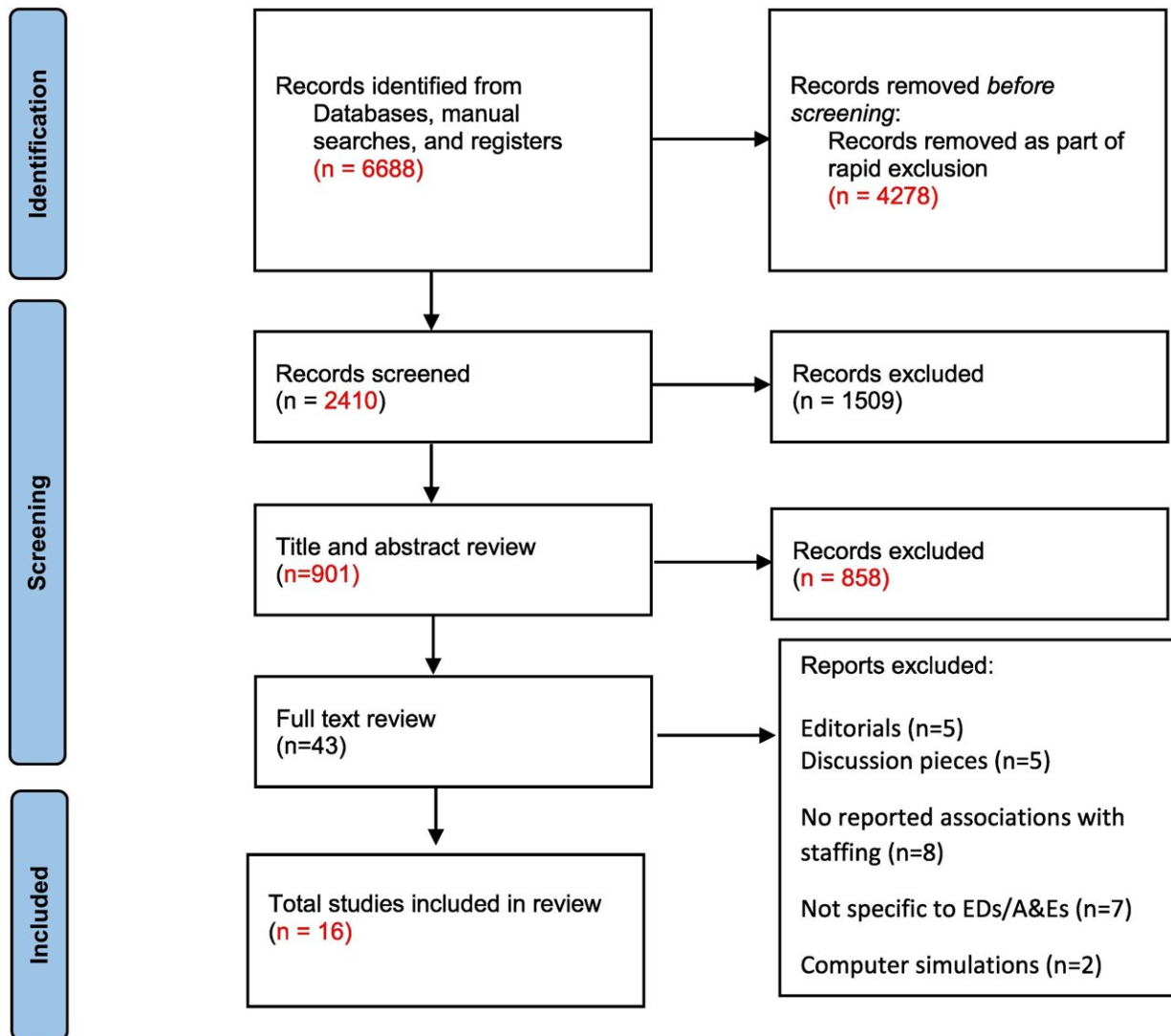


Fewer nurses linked to delayed care and serious outcomes in emergency departments

February 22 2024



PRISMA Flow Chart Page et al. (2021). Credit: *International Journal of Nursing Studies* (2024). DOI: 10.1016/j.ijnurstu.2024.104706

Having fewer nurses on shift in emergency departments is linked to worse outcomes for patients, including heart attacks in the department, according to a new research paper.

The paper found that lower staffing levels in emergency departments were associated with longer waits, patients leaving without being seen, and longer overall stays in the department. Other associated outcomes included delays in receiving medications and treatments and a higher number of cardiac arrests within the emergency department.

The paper, [published](#) in the *International Journal of Nursing Studies*, is just the second review of research evidence on nurse staffing levels in [emergency care](#), with the previous one published back in 2015.

Professor Peter Griffiths from the University of Southampton, a co-author on the paper, said, "Emergency departments around the world are facing increasing pressures due to increasing demand and more complex health problems. At the same time, it is becoming harder to recruit and retain nursing staff.

"The COVID-19 pandemic has had a lasting impact on the well-being of health care workers, and there is an increase in the number of nurses saying they want to leave emergency nursing. This will make it increasingly challenging to staff emergency departments effectively. Our research suggests this could have a range of negative outcomes for patients."

Researchers from the University of Southampton worked with academics in Ireland and Australia to identify 16 studies, the majority of which were conducted in the U.S..

Patients leaving without being seen was the most frequently cited outcome associated with reduced staff levels.

Professor Jonathan Drennan from University College Dublin, lead author of the review, said, "The majority of patients who leave an emergency department without being seen will need to seek health care within 24 hours. Nurses have a key role in making sure patients are seen, both in timely triage assessment and ensuring that care is delivered by key decision makers such as doctors and advanced nurse practitioners, so this outcome is unsurprising."

Length of stay was measured in four studies. As the number of patients increased, this increased nurses' workload, delaying them from processing the next steps in [patient care](#) and leading to a longer length of stay for patients. One study highlighted that this may cause time-sensitive vital sign observations to be missed in crowded emergency departments.

Two studies looked at the association between nurse staffing and the incidents of cardiac arrest and death while waiting in an emergency department. One study suggested that the rate of cardiac arrest increased significantly when ratios were more than nine patients to one nurse. Another found an association between nurse staffing and the probability of death for patients admitted to an emergency department over the weekend with a [heart attack](#).

Professor Jane Ball, also from the University of Southampton, and a co-author on the paper said, "The differences between the studies and limited high-quality research evidence available makes it difficult to draw definitive conclusions. However, it is evident that lower levels of [nurse](#) staffing are associated with delays in the provision of care and serious outcomes for patients."

More information: Jonathan Drennan et al, The association between nurse staffing and quality of Care in Emergency Departments: A systematic review, *International Journal of Nursing Studies* (2024). [DOI: 10.1016/j.ijnurstu.2024.104706](https://doi.org/10.1016/j.ijnurstu.2024.104706)

Provided by University of Southampton

Citation: Fewer nurses linked to delayed care and serious outcomes in emergency departments (2024, February 22) retrieved 11 May 2024 from <https://medicalxpress.com/news/2024-02-nurses-linked-delayed-outcomes-emergency.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--