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Is current preoperative frailty assessment adequate?

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Article summary

Preoperative frailty predicts adverse postoperative outcomes. Recommendations for preoperative assessment of elderly patients include performing a frailty assessment. Despite the advantages of incorporating frailty assessment into surgical settings, there is limited research on surgical health care professionals' perception and use of frailty assessment for perioperative care. We surveyed local healthcare employees to assess their attitudes towards and practices for frail patients.

Nurses and allied health professionals were more likely than surgeons to agree frailty should play a role in planning a patient's care. Lack of knowledge about frailty issues was a prominent barrier to the use of frailty assessments in practice, despite clinicians understanding that frailty affects their patients' outcomes. Results of this survey suggest further training in frailty issues and the use of frailty assessment instruments is necessary and could improve the uptake of such tools for perioperative care planning.

Commentary

As the baby-boom population ages, increasing numbers of patients aged 65 years and older are presenting with surgical disease. They are at increased risk of prolonged hospital admission². Although age is commonly used to assess surgical risk, it has been well-established that preoperative frailty is more accurate at predicting postoperative outcomes². Frailty is a multisystem syndrome of low physiological reserves resulting in increased risk of adverse events¹. It is increasingly recognized as an important determinant of post-operative complications and recovery. Frailty screening and the implementation of early interventions has been associated with a preserved autonomy and reduced adverse events. Well-designed studies examining comprehensive geriatric assessment in surgical patients have shown improved outcomes, mostly in orthogeriatric populations. A systematic review by the Cochrane collaboration is ongoing to assess the robustness of these findings³. Recommendations developed by the American College of Surgeons National Surgical Quality Improvement Program and the American Geriatrics Society⁴ suggest the use of multiple preoperative assessments, including pre-operative assessment of each patient for frailty. Despite mounting evidence, frailty assessment is not routine surgical practice⁵ and it remains unclear why.

Frailty assessment is not currently well taught to surgeons or surgical nursing staff, and little is known about interdisciplinary surgical healthcare providers' perception of frailty or its role in clinical assessment. We have recently undertaken a survey of our surgical staff at the University of Alberta Hospital to assess their beliefs about frailty, the barriers to frailty assessment, and compared the perspectives across healthcare professions.

In this study, a survey was distributed to all healthcare providers involved in the care of general surgery patient care at our institution. It assessed the attitudes of three subgroups: surgeons, nurses and allied health professionals.

Previous research has found that frailty assessment and management improves patient outcomes in both medical and surgical patients; however, it continues to have low uptake in most surgical settings. We found the highest uptake among allied health practitioners; and frailty assessment remains low outside of allied health professionals. Specifically, surgeons were less likely than both allied health and nurses to use frailty in guiding patient care. A qualitative investigation by Age UK found frailty is viewed as something surgeons ‘know when they see’ yet numerous studies have reported that perceived frailty varies individually and is an inadequate proxy for measured frailty. This suggest that while healthcare professionals, and in particular surgeons, acknowledge that frailty is an important factor in patients’ outcomes, they are overly reliant on their “gut” impression of a patients’ frailty and do not screen for, or manage patients based on their frailty. Furthermore, we identified four key barriers to surgical care for the frail: hospital-specific institutional, health care system, professional knowledge, and patient/family members. These barriers lead to lack of confidence in conducting frailty assessments and inadequate delivery of elder-friendly surgical care.

A number of authors have identified similar knowledge gaps⁵. Successfully addressing these gaps will require awareness of how healthcare professionals navigate significant system complexities and constraints in their provision of care. Given that most health care delivery is based on a single problem-oriented diagnostic model, and healthcare professionals may not be trained to focus on the holistic care of patients, system re-organization around frailty is challenging. Furthermore, frailty is an evolving area of inquiry and consensus has not yet

identified a single optimal tool to identify frailty. That said, the availability of validated and rapidly administered tools permits the use of quick, reliable and easily interpreted frailty assessments in fast-paced surgical environments.

Our survey is limited by a low response rate which raises the risk of response bias and is limited by its single-centre design. There was strong agreement, however, for most items across the health professions and the results were consistent with predicted attitudes of each profession. It is clear that the use of formal frailty assessment tools has not been widely adopted in practice. Much of this may be due to inadequate education surrounding the effect of frailty on outcomes and tools to permit rapid assessment, particularly for surgeons. Creating a program to educate surgeons about the importance of frailty assessment – such as how it can improve their patients care and, most importantly, how to perform a rapid validated assessment – is key to improving uptake. Further research of comprehensive geriatric assessment for surgical patients should also be performed to determine if it is effective outside of orthogeriatric patient populations. Addressing barriers to frailty assessment and high quality care for frail patients could significantly improve care and post-operative outcomes for this vulnerable population.

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