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Letters to the Editors

Non-technical Skills in Surgery: A Pending Subject[☆]

Habilidades no técnicas en cirugía: una asignatura pendiente



To the Editor,

We have read with great interest the publication by Berner and Ewertz¹ on the importance of non-technical skills (NTS) in today's surgical setting.

We have recently reported the results of a survey at our hospital about the perception of medical students, residents and specialists in General and Digestive Surgery about their knowledge of human factors and NTS.² These results demonstrate that 60% of the respondents were unaware of the definition of 'human factors'; however, 77% considered them the cause of adverse events (AE) in the workplace, either occasionally or frequently. 'Errors in communication' was defined by 37% as the most frequent contributing factor in witnessed AE, and 71% believed that NTS were as important as technical skills. Finally, 85% of those surveyed showed interest in receiving feedback on their NTS.

Although the study of human factors, NTS and the role they play in the operating room have been known for decades,³ their relevance has gained importance in recent years, a fact that is reflected in the growing number of publications.^{4–7}

In this context, the *Cirugía Segura* ("Safe Surgery") program,⁸ headed by the AEC and promoted by the Spanish Ministry of Health, Consumption and Social Welfare, has included NTS guidelines and their contribution to patient safety within its educational curriculum for surgical professionals. This content can also be consulted in their published manual.⁹

Like the authors,¹ we believe that education in NTS, knowledge and surgical skills, as well as the understanding of human factors, enable surgeons to provide patients comprehensive care and contributes to the development of a safe surgical environment.

However, we understand that this type of teaching should be included in standard training, not only of specialists being trained in surgery, but also of medical students as part of their education, and it is already being offered at certain teaching

hospitals.^{5,6} This will undoubtedly be useful for medical professionals in performing their duties in multi- and interdisciplinary environments, which is typical of different healthcare scenarios in our country.

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Discrepancies in the Analysis of Frequency, Type of Complications and Costs of Outlying Patients in General and Digestive Surgery[☆]



Discrepancias en el análisis de la frecuencia, tipos de complicación y costes económicos en los pacientes ectópicos de cirugía general y digestiva

Dear Editor,

We have read with interest the article published by the authors Gómez-Rosado et al.¹ We applaud the authors for their initiative, but we wanted to make a few comments.

With their objective, we believe it is essential to obtain the complications and costs with as little bias as possible. However, for the calculation of complications, the authors used the Minimum Basic Data Set (MBDS), which records the complications during admission (secondary diagnoses) indicated on the discharge report. In a retrospective study, it does not appear that the MBDS adequately reflects all of the complications, and for instance nausea, atelectasis, poorly controlled pain, etc. should be included.² Our team has verified, for example, that the average postoperative cost varied from a patient without complications to a patient classified as Clavien Dindo grade I increased from €758.64 to €1106.97, respectively, in the case of appendectomy and from €379.33 to €755.55 in the case of cholecystectomy.³

In their study, 9% of patients had complications. In the prospective study of 1850 consecutive patients treated in a surgery unit, we observed that 27.7% presented complications. More specifically, the percentages were 10.7, 22.6, 63.5 and 71.4% in minor, moderate, major and major+ surgery, respectively.⁴ As we have previously argued, we believe that complications should be collected prospectively from specifically created forms, medical progress records and nursing notes. Follow-up should be extended to 90 days.⁴ Despite this, there are biases that cannot be eliminated.⁴ We have verified that, when calculating the Comprehensive Complication Index on the discharge report,⁵ which takes into account all the complications, physicians err in 19% of the global series

and 51% when only analyzing patients with complications.⁶ Impartial external auditing would be a solution.

The authors paired the subjects by Diagnosis-Related Groups (DRG); however, the difference in the number and severity of complications of a DRG with complication and/or comorbidity compared to another DRG can be very important. They should not be used for the purpose of this study. In addition, relying on the MBDS can lead us to assign a DRG without complications to patients who have had them.

It does not seem correct to calculate the expense according to aggregate costs by DRG in spite of the corrections carried out. This calculation does not fit the reality of a specific patient, which is what the paper aims to do (differentiate the results in outlying versus non-outlying patients). We believe that the hospitalization and re-admission costs, if any, should have been considered for at least 90 days. From the perspective of the hospital, these costs should include hospital stays, medication, lab work, radiology tests, radiological and/or endoscopic interventions and re-operations as a result of complications. In addition, if the expense for postoperative complications is considered, all preoperative costs and the operation itself should be excluded.³ We should not continue calculating the morbidity of the procedures or costs with such unreliable tools.

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