Review of: "Length of stay of patients in Acute Medicine Units at the Royal Hospital, Sultanate of Oman in one month"

Amos M. Yinnon[1]

1 Shaare Zedek Medical Center

Potential competing interests: No potential competing interests to declare.

Title of manuscript: Length of stay in acute medicine units at the Royal Hospital, Sultanate of Oman in one month.

Authors: Dr Redha Al Lawati, Adil Al Lawati

Summary of manuscript: The authors examine the mean length of stay of 524 admissions over one month in an evidently newly established Acute Medical Unit (AMU). Mean length of stay was 4.5 days (range several hours to 70 days). The authors compare their data with published data from acute medical units from several other countries, and conclude that their results are similar to those from other countries.

The following are my comments regarding this manuscript and the important issue of AMU:

First, the authors are to be commended on their wish and effort for self-examination. Acute Medical Units (AMU) are obviously more costly than general medical wards in terms of personnel and monitoring equipment. Therefore, it is mandatory that senior staff of the unit (or the administration in charge of the hospital), make efforts to evaluate the cost-effectiveness of newly developed (as well as existing) facilities and services.

Second, although the authors quote the Royal College of Physicians' definition of acute medical units, there seems to be a wide range of services provided by these units. In some hospitals, the AMU provides a higher ratio of nurse-per-patient than in the general medical wards as the single distinguishing feature of the AMU. In other AMUs, there is state-of-the-art monitoring equipment, similar to intensive cardiac care units. Some AMUs provide invasive ventilation and hemodialysis, other don't. In summary, I would suggest that the authors dedicate a paragraph in the Methods section to describe the services provided by their AMU, including the number of beds, ratio of nurses, presence of monitoring equipment, and medical services that are potentially provided.

Third, the authors selected quite appropriately the length of stay (LOS) as their main outcome marker. As LOS ranged from several hours to seventy days, it would be helpful to add the standard deviation (±SD) to the Mean stay. If possible, consider adding the Median LOS: both the Standard Deviation and the Median stay would provide better inside on the true length of stay, as several outliers (e.g., staying 70 days) artificially increase the Mean LOS. An additional relevant outcome marker could be in-Unit as well as in-hospital survival, to be considered for a follow-up study.

Forth, when comparing duration of admission of the AMU in one hospital with results from other hospitals, it is obviously relevant to present basic demographic and clinical characteristics. E.g., if their AMU has an older or more severely ill case mix than that of a comparator hospital, that could reflect positively on the efficiency and cost-effectiveness of their Unit.

A minor comment refers to the References, which should preferably be standardized. Some show first names, other only initials; some names are in capital letters while other show only the first letter of names in capitals. In addition, some journal names are abbreviated while others are spelled out. Some references show the issue number, other do not.

Regarding references, there are several recent relevant publications on the issue of AMU, e.g.,

1. Van Galen LS et al. Acute medical units: the way to go? A literature review. Eur J Int Med 2017; 39: 24-31
2. Harhara T, et al. Development of an acute medical unit to optimize patient flow and early discharges in a tertiary care hospital in the United Arab Emirates. BMC Health Services Research 2022; 22: 1447.

Thank you very much for the opportunity to review this interesting and important manuscript.