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

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Abstract

Acute Medical Units around the globe were established to provide better service for their patients and help in improving the health care system. we have run a key performance indicator to examine the length of stay of patients admitted to Acute Medical Units at Royal Hospital, Sultanate of Oman in one month starting from 2019, 22nd of December – 2020, 18th of January.

The method of the key performance indicator was to go through all admission during the period mentioned and look for their length of stay at the AMUs. The average LOS of the patients was 4.5 days. Royal Hospital had similar length of stay to other places around the world.

Introduction

Royal college of physicians has defined acute medical units (AMU) as “dedicated facility within the hospital that acts as the focus for acute medical care for patients who have presented as medical emergencies to the hospital or who have developed an acute medical illness while in hospital” [1]. There are a lot of countries that adapted the system of AMUs as integrated patient care other than United Kingdom (UK), such as Australia, Ireland, and other parts of Europe [2].

It was noticed as well by multiple investigators that admission rates around the globe increased as there is increment in the number of emergency presentation especially by elderly patients, which lead to having patients admitted in different and scattered wards where less observation and care were given to patients and this was the reason behind initiating AMUs around the globe [3][4].

The main objectives of initiating AMUs were to deliver clinical serviced by a consultant physician for 24 hours and for seven days a week. Other than that, to have multidisciplinary team approach and deliver quality standards patients care. To investigate these objectives, some studies were done to assess the quality of care delivered by AMUs and they used some indicators such as mortality rate, length of stay (LOS), patient and staff satisfaction and readmission rates [2].

It was noted in some of the literatures that establishment of AMU was associated with reduction in mortality and a reduction in LOS in hospital when it was compared to other systems [5]. In St James’s Hospital in Ireland, it was reported

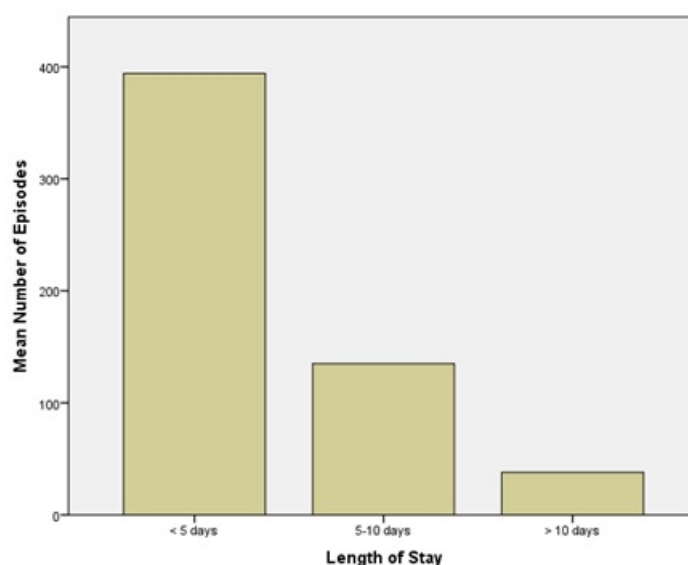
that LOS of patients admitted under AMU was 5 days compared to 6 days for patients admitted under other specialties, and in Stobhill Hospital, Scotland the average LOS reduced from 7.12 days to 4.5 days after initiating AMUs [3][4]. The length of stay in The Chelsea and Westminster Hospital showed that LOS of patients after introducing AMUs had decreased from 8.6 in June to July 2006 and 9.3 October to November 2005 to 7.8 days for October to November 2006 [6].

Methods

We have investigated the LOS of patients in the AMUs at Royal Hospital; a major tertiary hospital in Sultanate of Oman in one month starting from 2019, 22nd of December – 2020, 18th of January.

Results

524 episodes of admissions were in this period, the average LOS of the patients was 4.5 days. The minimal length of stay was few hours and the maximum LOS was 70 days. The LOS of 390 episodes was ≤ 5 days and the length of stay of 18 episodes (3.4%) was for ≥ 15 days, Graph 1 shows the details.



Graph 1.

Discussion

This report aims at investigating one of the markers of the efficacy of AMUs at Royal Hospital, Sultanate of Oman, as it has been stated in the literatures. The average LOS at AMUs at Royal Hospital was 4.5 days. In a tertiary care hospital in Australia it was found that the LOS at their AMU was 5.7 days [7]. In another study it was noted that the average LOS was reduced from 4.1 to 3.8 days after introduction of AMUs [8]. In a 12-year study done in Dublin, Ireland, they concluded that

that the LOS at their AMUs was 7.6 days [9].

In a tertiary care hospital in Australia, then found that the average LOS of patients in AMU is 5.15 days in comparison to 5.66 days before establishing those units [10]. It is observed that our average LOS at Royal Hospital is similar to and maybe better than other international places, for example in St James' Hospital, Dublin, after the introduction of AMU [11], the LOS reduced from 7 days to 5 days, whereas the LOS at the Royal Hospital is 4.5 days.

The main reason of longer length of stay in the 3.4% of episodes was because of ICU admission or the patients had multiple medical issues during the stay, hence, contributed to the long LOS.

Conclusion

In conclusion, establishment of Acute Medical Units around the globe helped to decrease the Length of Stay of admissions and the Royal Hospital had similar length of stay to other places around the world.

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