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Impact of Ramadan on patient visits by a Mobile Healthcare Service in Qatar

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ABSTRACT

Background: Early assisted patient discharge has been implemented in Qatar since 2014 through the introduction of a Mobile Healthcare Service (MHS) with family physicians, nurses, and paramedics doing home visits¹. Studies have explored the effect of Ramadan on Muslims, but findings have been variable^{2,3}. This research aims to study and quantify any effects of the Holy month of Ramadan, and other important Muslim Religious events, on MHS operations.

Methods: Operational data was gathered and analyzed for the weeks of Ramadan, Eid Festivals, and 'Normal' working weeks, over 10 months in 2015, using descriptive statistics.

Results: 5,863 interventions were extracted and grouped by time durations. The number of interactions per day ranged from 1 to 38, with the median gradually increasing throughout the duration of this study. Ramadan showed an average of 19 visits/day; Eid al Fitr: 16 visits/day; Eid al Adha: 20 visits/day. During Ramadan, call numbers often returned to zero at some point between 16:00-19:00 hrs, which corresponded to Iftar (breaking fast). There are outlying values in the weekly distribution, including a high number on the Sunday of Eid al Adha when many employees returned to work.

Conclusion: Despite several possible confounding factors, Ramadan and other Holy events and holidays appear to affect the MHS demand. Although not statistically significant, a decrease in workload over the duration of Ramadan and Eid al Fitr was noticed. There is an approximately tri-modal distribution of interactions across all days, presumably reflecting the high proportion of patients requiring Intra-Venous antibiotics at set intervals and the effect of meal breaks. There is a marked dip between 11:00-12:00 hrs on Fridays, likely corresponding to Friday prayers. However, it is not clear how generalizable the observations are to other similar services in the Gulf countries or other Muslim populations.

Keywords: Ramadan, Service Provision, Early Supported Discharge, Home visits, Mobile Doctor Healthcare Service

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Ethical approval/IRB statement: This study was approved by the Hamad Medical Corporation Medical Research Center as a Quality Improvement project (Reference #15381/15).

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