



## 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 visits<sup>1</sup>. Studies have explored the effect of Ramadan on Muslims, but findings have been variable<sup>2,3</sup>. 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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