

Bruce Lo, MD, FACEP
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- P: On days with a certain lunar phase (full moon)**
I: Is the ED utilization rate for lunatics (trauma/psych patients)
C: Compared to other lunar phases (non-full moon days)
O: Associated with a higher volume (and a crappier shift)

Many medical professionals believe in superstition, especially the fact that full moons increase the rate of ED utilization^{1,2}. A recent survey indicated 20% of residents believe in the effect of the full moon³.

Multiple theories exist on the effects of the full moon and the psyche. One theory is sleep deprivation caused by the light of the full moon producing psychosis. Another major theory has to do with the gravitational effects of the full moon on water molecules in the human body. Over 100+ studies exist looking at the relationship between the phases of the moon and medicine. So when you have to go to work on a day with a full moon, should you switch shifts? Should you call in sick? Or should you stay home, lock the doors, and pretend nobody is home?

Study	Type	Study size	Visit Info	Results
Kung et al.	Retrospective (letter)	N=unknown (5 years)	Psych	No difference in visits
McLay et al.	Retrospective	N=8,473 (9 years)	Psych	No difference in admission/visits
Buckley et al.	Retrospective	N=2215	Psych	No difference except women (protective)
Wilkinson et al.	Retrospective	N= 782 (18 years)	Psych	No difference in visits for anxiety/depression (GP)
Maldonado et al.	Retrospective	N=4190	Psych	No difference in suicide rates
Alonso	Retrospective	N= 4 year period	Trauma	No difference in accidents
Laverty et al.	Retrospective	N=246,926 accid (9 years)	Trauma	No difference in accidents/injuries
Rashid et al.	Retrospective	N=184 (20 years)	Trauma	No difference in rate of self-inflicted burns
Coates et al.	Retrospective	N=1444 (1 year)	Trauma	No difference in volume, ISS, admissions
Zargar et al.	Retrospective	N=54457 (13 months)	Trauma	No difference in GCS, ISS, assault, suicide volumes
Thompson et al.	Retrospective	N= 150,999 visits	ED Volume	No difference in volume, admissions

Clinical Bottom Line:

Multiple studies exist that show NO difference in moon phases and trauma/psych patient visits to the emergency department¹⁵. Also there has been no correlation seen with full moon and certain medical conditions (sudden cardiac death¹⁶, AAA rupture²⁰). While there a few studies that show some differences in certain medical conditions with the full moon (seizures¹⁸, strokes¹⁹) these studies suffer from many limitations and have not been reproducible¹⁷. **Bottom Line: Don't worry, when you go to work during a full moon – it'll be just as bad as any other day.**

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