PARA MONTE

ADAM SAVORY MEMORIAL FUND
ALTITUDE AWARENESS CHARITY

Relevant Altitude Research

The effect of sleep quality in Sherpani Col High Camp Everest.

There are an increasing number of hikers travelling to Everest, and the adverse physical effects high altitude environments can have on individuals acclimatised to low altitudes can be life threatening. This study was conducted to determine the effect of sleep quality in Sherpani Col High Camp Everest (5,700m). Eight healthy experienced climbers participated over 7 days. The climbers recorded their daily sleep quality by questionnaire one hour after waking up. Levels of perceived exertion, heart rate and oxygen saturation of blood were also recorded. After 12-hrs post waking, climbers were questioned again of how tired they felt. On analysis of the data, no statistical significance was found between successive days spent at altitude and change in sleep quality or exertion perception.

Past studies have shown that sleep quality and perceived exertion may be affected by the extreme hypoxic environment and daily hike/climb. However, this study did not find a statistical significance for these factors. Differences in heart rate and blood oxygen saturation over the seven-day study were found to have statistical significance. A limitation of this study is the small number of participants (8), and so further research is recommended.

Statistical significant differences in heart rate and blood oxygen saturation were found depending on the day of the camp. Despite previous study findings, no statistical significance was found between successive days spent at altitude and change in sleep quality or exertion perception.

Voutselas, S., Stavrou, V., Zouridis, S., Vavougios, G., Gourgroulianis, K. I., Voutselas, V., 2019. The effect of sleep quality in Sherpani Col High Camp Everest. *Respiratory Physiology & Neurobiology. 269 (103261)*

a.r.u. School of Psychology and Sport Science

Raising Awareness about Altitude Illness

Environmental Extremes Lab

Email: info@para-monte.org Twitter: @Para_Monte Website: www.para-monte.org