



KAP ON EXTREME ALTITUDE AND COLD ADAPTATION

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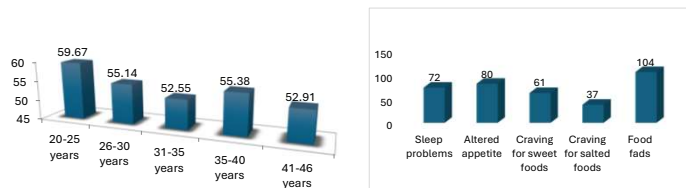
INTRODUCTION: EXTREME ALTITUDE

- Extreme-altitude battlefields are the World's highest, coldest, all-weather, permanent battlefields exclusively existent in the Himalayas
- Toughest theatre of defensive mountain warfare in the present deployment of World forces
- Extreme-altitude battlefields pose environmental, psychophysiological, infrastructural, logistic and ergonomic challenges which question soldier's adaptability and force-efficiency due to isolation, monotony, intimidating environment and terse health effects
- Soldier's comprehensive adaptability in extreme-battlefields is of paramount importance in ensuring force-preparedness
- For the ground soldier, extreme battlefields demand unflinching physical ability, mental agility, military training and group cohesiveness for successful military operations.
- Battle-inoculated soldier faces extreme stressors in the absence of familial and societal support systems.
- Knowledge, attitude and practices (KAP) of soldiers on extreme altitude battlefield assessed through personal interview technique

MATERIALS AND METHODS

- 125 healthy, acclimatized, mountain trained, male soldiers staying above 4570 m/15000 ft for at least 30 days in winter season on an extreme-altitude battlefield
- Cross sectional research- Personal interview on a proforma

RESULTS



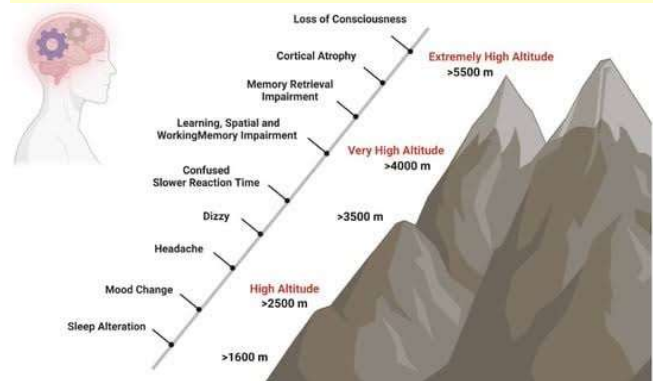
DURATION OF STAY

- All 125 were healthy, acclimatized, mountain and extreme-altitude battlefield trained male soldiers, mean age 29 ± 6 years
- Mean military service 10 ± 6 years
- Mean extreme altitude stay 55 ± 23 days
- 81% married, 80% parents
- All were knowledgeable about extreme altitude risks
- All valued extreme-altitude battlefield training and acclimatization
- 52% soldiers worried about home and family
- Troop-commanders affirmed about preventive healthcare practices
- HAPE Bag ensued dramatic improvement in absence of oxygen
- 30% consumed tobacco and 7% consumed alcohol

PHYSIOLOGICAL ISSUES

DISCUSSION AND CONCLUSION

- Extremely tough living conditions and low resource settings make research work highly implausible
- Research conducted in winter months above 5500m/ 1800 ft
- 70° C, movement, communication, logistic and aviation capabilities were severely paralyzed by inclement weather
- Environment remained monotonous, isolated and intimidating
- Soldiers stayed in fuel-heated poorly ventilated shelters/tents
- Dried/canned food and snow-melted water
- Outreach programs were difficult and discouraging
- Staged-graded acclimatization protocols
- Acclimatization not effective beyond 5500 metre or 18000 ft
- A soldier forms an independent fighting unit
- Soldier is a command responsibility, and a national obligation
- Battlefield care has a direct correlation with KAP of soldier
- Extreme-altitude battlefield stressors are beyond control
- Soldiers need to be trained to accept situations
- Policy and implementation interventions required
- Behavioural and human resource interventions required
- Infrastructure and communication interventions
- C5ISR- Command, Control, Communication, Computers, Combat Systems, Intelligence, Surveillance, Reconnaissance



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