### Chapter 6

# Inter-Relational Dynamics of Various HR Aspects in High Altitude Illness Attrition

#### Ajeya Jha

https://orcid.org/0000-0003-0491-5008
Sikkim Manipal Institute of Technology, Sikkim Manipal University, India

#### **Ajay Dheer**

Sikkim Manipal Institute of Medical Sciences, India

#### Vijay Kumar Mehta

Sikkim Manipal Institute of Medical Sciences, India

#### Saibal Kumar Saha

Sikkim Manipal Institute of Technology, Sikkim Manipal University, India

#### **ABSTRACT**

The adverse health effects of high altitude are of considerable importance since they may seriously interfere with working efficiency of an organization that is actively involved with inescapable duties. The objective of the current study is to explore inter-relational dynamics of various HR aspects in HAIA. The HR aspects included are job delay, poor team, motivation, less leave, high working hours, poor decision making, personal stress, family stress, personal discomfort, uncertainty, poor relations, health, accidents, quality and performance. A decision-making trial and an evaluation laboratory have been used to explore the inter-relation dynamics of various factors of HR. The results indicate that personal stress has the highest impact priority which is followed by poor performance, poor team and motivation. Uncertainty, less leave, and high working hours has the least impact priority. It is also found that high working hours, less leave and poor health are the major causes whereas decrease in motivation and poor quality of work are the major results.

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#### INTRODUCTION

High altitude (HA), with its attendant hypobaric hypoxia and cold, results in certain stresses to the human body. To overcome these adverse effects of the environment, certain physiological changes occur which, if successful, leads to acclimatization of the individual. Failure, on the other hand leads to the various maladies of high altitude. Apart from hypoxia and cold, other factors at HA which could affect performance and lead or contribute to illness include low humidity, solar and ultraviolet radiation. However, hypoxia remains the single most important challenge to the system and is responsible for the various life-threatening problems have become compounded and new problems have arisen.

Mountains cover one-fifth of the earth's surface. 38 million people live permanently at altitudes ≥2400 m, and 100 million people travel to high-altitude locations each year. Skiers in Aspen, religious pilgrims to Lhasa, trekkers and climbers to Kilimanjaro or Everest, and personnel employed at high-altitude locales are all at risk of developing illnesses. High Altitude illness is likely to occur above 2500 m but has been documented even at 1500–2500 m.

The adverse health effects of high altitude are of considerable importance since they may seriously interfere with working efficiency of an organization that is actively involved with inescapable duties. Organisations operating in high altitude, on induction from the plains, the manifestation of various forms of altitude related ailments leads to considerable attrition of manpower i.e. high altitude illness attrition (HAIA). The significance is amplified further because of the fact that human efficiency also reduces considerably at higher altitudes. These occur with increase in the altitude because of decrease in atmospheric pressure resulting in decreased availability of oxygen.

Workplace attendance and its converse absenteeism are complex multi-dimensional issues involving the interaction and subtle interplay between worker, employer, workplace, social, societal and economic factors.

Disease and illness are rarely discussed in most models of workplace absenteeism, yet they form the bulk of the cause and provide a legitimate explanation for much of its occurrence. Many of these factors are prevalent in society and are open to interventions in the public arena as well as the workplace. For example, the workplace can be a vehicle for the amplification of public health messages dealing with cigarette smoking, drug and alcohol use, diabetes and influenza for mutual benefit. Thus, illness related leave might be unfairly considered unavoidable from a workplace or medical perspective.

High altitude deployment in large numbers is common for the armed forces and organizations building roads, rail lines, bridges, tunnels and power projects and other infrastructures. Mountains along with rivers, ocean and desert have served as borders of two countries. Pyrenees separate France and spain, Jura mountains separate France and Switzerland, Himalayas separate India and China, Tian Shan Mountain separate China and Kirgizstan, Altai mountains separate Mongolia and China, Hkakabo Razi mountains separate China and Myanmar, Mount Fitz Roy separates Chile and Argentina and so on. Warring neighbors is an age-old phenomenon and therefore mountains around the world have been the key regions where armed forces have been deployed. Armed forces need infrastructures for quick movements and hence roads, bridges and tunnels have to be built on large scale. This necessitates the deployment of a large personnel on mountains where weather is harsh and living conditions tough.

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