

## **Occupational Health Hazards in Stone Quarry Workers: A Multivariate Approach**

A. Swami<sup>1</sup>, V.P. Chopra<sup>2</sup> and S.L. Malik<sup>1</sup>

<sup>1</sup>*Department of Anthropology, University of Delhi, Delhi 110 007, India*

<sup>2</sup>*Department of Human Biology, Hamburg University, Hamburg, Germany*

**KEYWORDS** Malis. Stone Dust. Exposure. Rajasthan. Lung Functions. Body Measurements. Rapid Fitness Index

**ABSTRACT** The relationships of cardiorespiratory functions, physical fitness and body measurements with duration of stone dust exposure has been investigated in Malis working in stone quarries of Alwar district of Rajasthan. The exposed group comprised 125 adult males and 125 adult females working actively in different stone quarries in Alwar district. For the control group samples were drawn from pastoral Malis, totalling 250 individuals (125 adult males and 125 adult females). The results of the study delineate that cardiorespiratory functions, physical fitness and some of the body measurements are affected by stone dust exposure. Principal component and discriminant analysis reveal that cardio-respiratory functions and physical fitness are crucial variables in separating the control from the exposed.