## **International Time Activity Pattern Study**

Comparison of time-location pattern of undergraduate university students of Asian countries: The Pakistan component

**Department:** Community Health Sciences

Project Sponsors: Graduate School of Public Health, Seoul National University, South Korea

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**Principal Investigator (International):** Dr Kiyoung Lee **Principal Investigator (Pakistan):** Dr. Asaad Nafees **Co-Investigators:** Dr. Muhammad Masood Kadir,

Dr. Adeel Ahmed Khan, Dr Tanzil Jamali (Residents/post-graduate trainees)

## **Summary:**

Time-location data are often required to adequately characterize different human exposures (e.g., air pollution, noise pollutions, exposure to hazardous chemicals etc.) and identify important locations where exposures are occurring. Time-location patterns of Western country populations have been studied extensively. However, time-location patterns of Asian populations are limited and may have different patterns from Western countries. Traditional methods of reporting the time-location such as diary methods have many limitations and the accuracy is questionable. Global Positioning System (GPS) technology offers promising and innovative methodologies for human time-location studies. When the signals are received from the specially coded satellites, GPS receivers could compute position, velocity, and time. The GPS receivers do not emit any harmful signals and receive the satellite signals. This study will assess the time-location pattern in a sample of undergraduate university students (n = 50) using GPS technologies. Study participants are requested to carry a GPS receiver for 24 hours on a weekday. The GPS receivers used in this study are smaller than a regular cellular phone in size. Participants will be recruited from selected institutions based on purposive sampling after taking informed consent. The total time period spends at indoor, outdoor and transportation/moving will be calculated participants. Further, time-location pattern of undergraduate university students will be compared across 10 other countries where this study will be conducted with same protocol and same type of GPS receivers.

## **Objectives:**

- 1. To assess the time-location pattern in a sample of undergraduate university students.
- 2. To compare the time-location pattern of undergraduate university students from 10 other Asian Countries.