Progress report of physical activity study among middle school students in Beijing

Huanhuan Hu[1], Jiali Duan[2], Takashi Arao[3]

[1]Lab of Exercise Epidemiology, Graduate School of Sport Sciences, Waseda University

[2]Institute of School Health, Beijing Center for Diseases Control and Prevention

[3]Lab of Exercise Epidemiology, Faculty of Sport Sciences, Waseda University

The objectives of this study were to: 1) determine the levels of physical activity (PA) 7th to 9th grade students participated in during physical education (PE) classes in Beijing; 2) measure the PA opportunities in and out of school. For part 1 (PA levels during PE classes in schools), 4 school districts were selected from 16 districts. Five middle schools were sampled from each selected school district; Six PE classes from each sampled school were observed; Accelerometers were worn by 5 students at each class. PA is objectively measured using accelerometer and converted to counts per minute, and time spent in moderate-vigorous PA (minutes per class). For each student observed, a trained interviewer directly entered into a notebook computer the student's sex, activity intensity, type of activity, whether the student was "on task" or "off task," and instructional mode. For part 2 (PA opportunities in and out of school), a questionnaire survey was conducted in 8 junior high schools (4 in rural areas, 4 in urban areas). A total of 1800 questionnaires were distributed. The questionnaire includes: 1) Physical activities in and out of schools; 2) Health behaviors (smoking and alcohol drink), nutrition knowledge and food preference; 3) Students' Attitudes Toward PE Scale and EQ-5D health questionnaire. The primary outcome is to elucidate the PA levels among PE classes and PA environments for junior high school. The results will be used for future research concerning methods of increasing children's activity and improving the efficiency and effectiveness of PE classes.