

UCLA Nurse Blood Pressure Study

CHL5222 Final Project (Group C)

Study description

The UCLA Nurse Blood Pressure Study collected information from registered nurses in the Los Angeles area between 24 and 50 years of age on blood pressure (BP) and potential factors that contribute to hypertension. This information includes family history, and whether the subject had one or two hypertensive parents, as well as a wide range of measures of the physical and emotional condition of each nurse throughout the day. Researchers sought to study the links between BP and family history, personality, mood changes, working status, and menstrual phase.

The first BP measurement was taken half an hour before the subject's normal start of work, and BP was then measured approximately every 20 minutes for the rest of the day. At each BP reading, the nurses also rate their mood on several dimensions, including how stressed they feel at the moment the BP is taken. In addition, the activity of each subject during the 10 minutes before each reading was measured using an actigraph worn on the waist.

Data dictionary

See next page.

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## Warning in styling_latex_scale(out, table_info, "down"): Longtable cannot be
## resized.
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Table 1: Data dictionary for nurse study

variable_name	variable_description
AGE	Age in years
DAY	W: Workday or NW: Non-workday
DIA	Diastolic blood pressure (mmHg)
FH123	Family history of hypertension (NO: no family history, YES: 1 hypertensive parent, YESYES: both parents hypertensive)
HAP	Self-rating for level of happiness on a 5-point scale, with 5 being the strongest level of happiness and 1 being the weakest
HRT	Heart rate (beats per minute)
MNACT5	Activity level (frequency of movements in 1-minute intervals, over a 10-minute period)
PHASE	Menstrual phase (F: follicular—beginning with the end of menstruation and ending with ovulation, or L: luteal—beginning with ovulation and ending with pregnancy or menstruation)
POSTURE	Position during BP measurement—either sitting, standing, or reclining
SNUM	Unique subject identification number
STR	Self-rating for level of stress on a 5-point scale, with 5 being the highest level of stress and 1 being the lowest
SYS	Systolic blood pressure (mmHg)
time	Time in minutes from midnight
timepass	Time in between measurements in minutes beginning with 0 at time point 1

timept	Measurement occasion (approximately 50 for each subject)
TIR	Self-rating for level of tiredness on a 5-point scale, with 5 being the strongest level of tiredness and 1 being the weakest

Research question

What are the factors that are associated with higher systolic blood pressure?