

〈건강검진코호트DB - Meeting 자료〉

- 6월 13일 Version

〈What TO DO〉

- covariate missing value 처리 관련 선행 연구 조사

〈Share & Result〉

1) “Type 2 Diabetes and Its association with psychiatric disorders in young adults in South Korea” paper

Covariate 목록	반영 여부	Missing value 처리 방법
Smoking status	O	결측이 있는 객체 기록 모두 제외
Exercise frequency	O	
Drinking frequency	O	

- 흡연 / 운동 빈도 / 음주 빈도 관련 covariate가 모두 있으나, 범주형 변수가 아닌 “*heavy alcohol drinker*”, “*current smoker*”, “*regular physical activity*” 즉 binary 변수로 정의함
 - Heavy drinking was defined as weekly alcohol consumption of more than 28 standard drinks (210 g of alcohol) with a calculated alcohol content of 7.5 g of alcohol in 1 standard drink.
 - Regular physical activity was defined as performing more than 30 minutes of moderate-intensity activity at least 5 times a week or more than 20 minutes of vigorous-intensity activity at least 3 times a week.

2) Effects of Blood pressure according to age on end stage renal disease development in patients with Diabetes

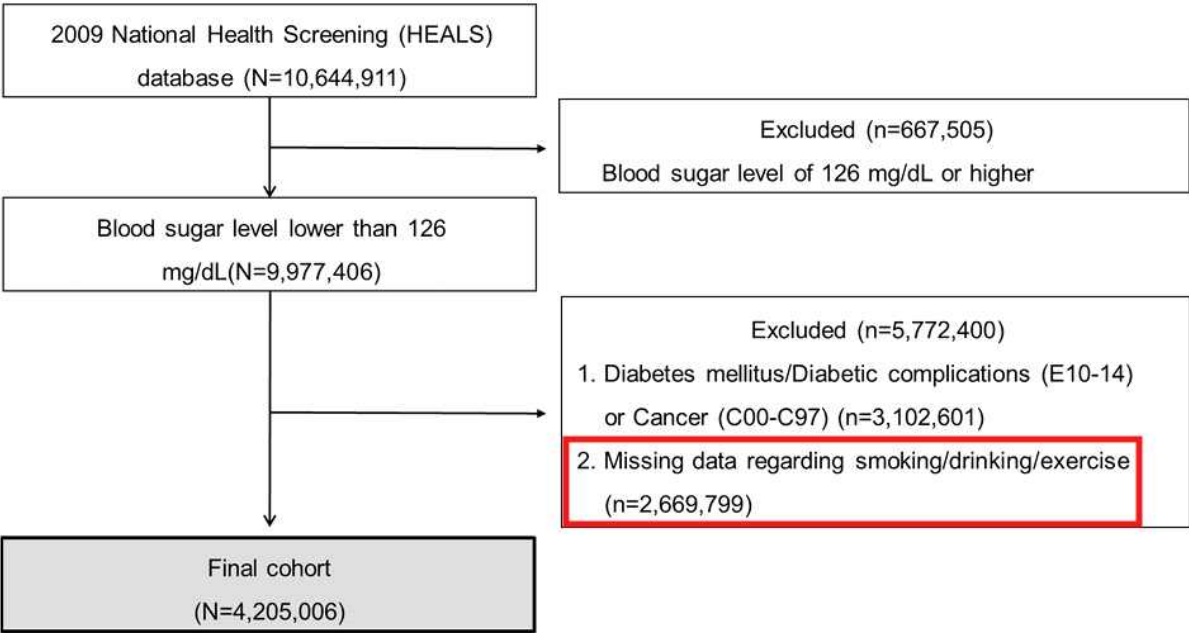
Covariate 목록	반영 여부	Missing value 처리 방법
Smoking status	O	결측이 있는 객체 기록 모두 제외 (모집단 제외 조건)
Exercise frequency	O	
Drinking frequency	X	

3) Incidence and risk factors for Progression to diabetes mellitus : A retrospective cohort study

Covariate 목록	반영 여부	Missing value 처리 방법
Smoking status	O	결측이 있는 객체 기록 모두 제외
Exercise frequency	O	
Drinking frequency	O	

- 흡연 / 운동 빈도 / 음주 빈도 관련 covariate가 모두 있으나, 범주형 변수가 아닌 “*high-risk drinking*”, “*current smoker*”, “*Proper exercise*” 즉 binary 변수로 정의함
 - Current smoking was defined in those who had smoked more than 100 cigarettes in their lives or were currently smoking
 - High-risk drinking was defined as drinking more than 300 mL of alcoholic beverages per day on average.
 - Proper exercise was defined as follows: (1) intensive exercise lasting more than 20min per session and more than three times per week or (2) moderate exercise lasting more than 30 min per session and more than five times per week

[Diagram]



4) U-Shaped Associations Between Body Weight Changes and Major Cardiovascular Events in Type 2 Diabetes Mellitus: A Longitudinal Follow-up Study of a Nationwide Cohort of Over 1.5 Million

Covariate 목록	반영 여부	Missing value 처리 방법
Smoking status	0	결측이 있는 객체 기록 모두 제외
Exercise frequency	0	
Drinking frequency	0	

- 흡연 상태 / 음주 빈도는 범주형 변수이나, 운동 빈도 변수는 “*regular physical activity*”, binary 변수로 정의함.
 - average alcohol intake per day(g/day) was analyzed to evaluate alcohol consumption, and patients were subsequently categorized into non, mild (<30g/day), and heavy (>=30 g/day) drinkers.
 - Regular physical activity was defined as moderate intensity exercise taken for >30min and >=5 days/week or vigorous intensity exercise taken for >20 min and >=3 days/week.

B

