## KOREA HYPERTENSION FACT SHEET 2020

The Korean Society of Hypertension

## Korea National Health and Nutrition Examination Survey

| Subjects |  | Adults age 20 years or older / 1998 to 2018 |
| :---: | :---: | :---: |
| Blood pressure classification | Hypertension | (1) Systolic blood pressure (SBP) $\geq 140 \mathrm{mmHg}$, or <br> (2) Diastolic blood pressure (DBP) $\geq 90 \mathrm{mmHg}$, or <br> (3) taking antihypertensive drugs |
|  | Prehypertension | (1) SBP 130-139 mmHg or <br> (2) DBP $80-89 \mathrm{mmHg}$; and <br> (3) not meeting criteria for hypertension |
| Management indices | Awareness rate | Proportion of people with physician diagnosis of hypertension among people with hypertension |
|  | Treatment rate | Proportion of people taking antihypertensives for $\geq 20$ days/month among people with hypertension |
|  | Control rate (among prevalent) | Proportion of people with SBP <140 mmHg and DBP <90 mmHg among people with hypertension |
|  | Control rate (among treated) | Proportion of people with SBP < 140 mmHg and DBP $<90 \mathrm{mmHg}$ among people taking antihypertensives |

## Korea National Health Insurance Big Data

| Subjects | Adults age 20 years or older / 2002 to 2018 |  |
| :--- | :--- | :--- |
|  | Diagnosis | $\geq 1$ health insurance claim for hypertension diagnosis (ICD-10: I10) each year |
| Healthcare <br> utilization | Treatment | $\geq 1$ health insurance claim for hypertension diagnosis and <br> antihypertensive drug prescription each year |
|  | Adherence | Prescription of antihypertensive drugs $\geq 290$ days (80\%) each year |
|  | Blood test | $\geq 1$ serum creatinine test each year |
|  | Urine test | $\geq 1$ routine urinalysis or urine microalbumin test each year |
| Treatment for <br> hypertension | The combination of antihypertensive classes in a prescription; <br> if the regimen is switched, one with the longest duration is selected for a given year. |  |
|  | Antihypertensive <br> drug class | Diuretics (DU; thiazide-related diuretics, loop diuretics), <br> beta-blockers (BB), calcium channel blockers (CCB), <br> angiotensin converting enzyme inhibitors (ACEi), angiotensin receptor blockers (ARB), <br> potassium-sparing diuretics (PSD), Others (OTH; alpha-blockers, vasodilators, etc.) |

## KOREA <br> HYPERTENSION FACT SHEET 2020

## Contents

4 Summary of population statistics
6 Summary of treatment statistics

## Changes in population mean blood pressure and prevalence of hypertension

9 Changes in population mean blood pressure

11 Changes in hypertension prevalence by sex and age

## Changes in hypertension management indices

13 Changes in hypertension awareness rate by sex and age
14 Changes in hypertension treatment rate by sex and age
15 Changes in hypertension control rate (among prevalent) by sex and age

## Healthcare utilization for hypertension

Changes in the number of healthcare users
Changes in co-treatment for dyslipidemia and diabetes
Changes in prescriptions of antihypertensive drugs
Changes in antihypertensive treatment regimen

## Management of hypertension in young adults

Summary of hypertension statistics in young adults
Changes in awareness rate in young adults
Changes in treatment rate in young adults
Changes in adherence rate (among diagnosed) in young adults Changes in adherence rate (among treated) in young adults Current management status in young adults

## Summary of population statistics (age 20+)

12.0 million

| have hypertension | 9.7 million | 9.0 million |  |
| :---: | :---: | :---: | :---: |
|  | $\stackrel{\text { are }}{\text { diagnosed }}$ | $\begin{gathered} \text { are } \\ \text { treated } \end{gathered}$ | 6.5 million |
|  |  |  | are adherent to treatment |
|  | $B-0$ | $\mathscr{O}_{1}$ | \% |

## Summary of population statistics (age 20+)



29\%
have hypertension


67\%
are aware


63\%
are treated


47\%
are controlled

## Summary of treatment statistics (age 20+)

Among 9.0 million adults treated for hypertension, \%

Among 3.7 million adults on monotherapy, \%


## Summary of treatment statistics (age 20+)

Among 3.9 million adults on dual therapy, \%

Co-treatment for dyslipidemia and diabetes among 9.0 million adults treated for hypertension, \%


KOREA
HYPERTENSION
FACT SHEET
2020

## Changes in population mean blood pressure and prevalence of hypertension

Changes in population mean blood pressure
Changes in hypertension prevalence
Changes in hypertension prevalence by sex and age

## Changes in population mean blood pressure

## 118/76

116/76 mmHg (age 20+, age-standardized) $119 / 77 \mathrm{mmHg}$ (age 30+)
117/77 mmHg (age 30+, age-standardized)
Year 2018


# Changes in hypertension prevalence 

$29 \%$
24\% (age 20+, age-standardized) 33\% (age 30+)
28\% (age 30+, age-standardized)
Year 2018

## Changes in hypertension prevalence by sex and age



KOREA
HYPERTENSION FACT SHEET
2020

## Changes in hypertension management

Changes in awareness rate by sex and age
Changes in treatment rate by sex and age
Changes in control rate (among prevalent) by sex and age
Changes in control rate (among treated) by sex and age

## Changes in awareness rate by sex and age



## Changes in treatment rate by sex and age



## Changes in control rate (among prevalent) by sex and age



## Changes in control rate (among treated) by sex and age



KOREA
HYPERTENSION
FACT SHEET
2020

## Healthcare utilization for hypertension

Changes in the number of healthcare users Changes in co-treatment for dyslipidemia and diabetes Changes in prescriptions of antihypertensive drugs Changes in antihypertensive treatment regimen

## Changes in the number of healthcare users (age 20+)



## Changes in co-treatment for dyslipidemia and diabetes (age 20+)



## Changes in prescriptions of antihypertensive drugs (age 20+)



Changes in prescriptions of antihypertensive drugs (age 20+)


## Changes in antihypertensive treatment regimen (age 20+)

Among 3.7 million adults on monotherapy, \%


Among 3.9 million adults on dual therapy, \%


## Changes in antihypertensive treatment regimen (age 20+)

Among 1.2 million adults on triple therapy, \%

Other combinations

*Triple=three of the ACEi/ARB, CCB, DU, or BB
${ }^{\dagger}$ OTH=alpha-blockers, vasodilators, etc.

KOREA
HYPERTENSION FACT SHEET 2020

## Management of hypertension in young adults

Summary of hypertension statistics in young adults
Changes in awareness rate in young adults
Changes in treatment rate in young adults
Changes in adherence rate (among diagnosed) in young adults
Changes in adherence rate (among treated) in young adults
Current management status in young adults

## Summary of hypertension statistics in young adults (age 20-39)

| With hypertension (A) | Age 20-39 (x1000 persons) |  |  | Total (age 20+) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,266 |  |  |  | 12,140 |
| With <br> prehypertension (B) |  | 3,387 |  | 10,536 |  |
| *Seeking medical care (C) | 307 |  |  | 9,689 |  |
| Adherent to treatment (D) | 104 |  | 6,506 |  |  |
| Not seeking medical care (A - C) | 959 | 2,451 |  |  |  |
| Nonadherent to treatment (A - D) | 1,162 |  | 5,634 |  |  |

* $\geq 1$ health insurance claim for hypertension diagnosis (ICD-10: I10)


## Changes in awareness rate in young adults



## Changes in treatment rate in young adults



## Changes in adherence rate (among diagnosed) in young adults



## Changes in adherence rate (among treated) in young adults



## Current management status in young adults



## Current management status in young adults





