

# OVERVIEW OF HYPERTENSION IN SINGAPORE

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## Introduction

Hypertension accounts for 10% of the attendances in the polyclinics and 5% of the attendances in the GP clinics, based on information gathered from one-day morbidity studies in Singapore. It is a risk factor for multiple target end organ damage, namely the heart, eye, arteries, brain and kidneys. Whatever the degree of control that can be achieved, there will be a corresponding reduction of morbidity and mortality.

## Prevalence

The National Health Survey of 1998 provides the necessary information on hypertension and its control in Singapore. As expected, it has a rising prevalence as age advances. The age-specific prevalence showed a marked increase from 40 years onwards (Table 1).

**Table 1: Age-Specific Percentage Prevalence of Hypertension by Gender (1998)**

Age	Male	Female	Total
30-	14.7	5.0	9.9
40-	26.6	18.6	22.7
50-	51.6	47.3	49.5
60-	63.3	65.2	64.3
30-60	30.5	20.0	27.3

Source: National Health Survey, Singapore, 1998.

It is of relevance to note that amongst those 60 years and older, 64 out of 100 individuals will have hypertension. Contrary to what some may think, it is important to treat hypertension even in the older patient.

## Trend

The National Health Survey of 1998 showed that hypertension is on the increase compared to the figures of the 1992 survey. Thus the crude prevalence rose from 22.2% - 27.3%, an increase of 5.1% individuals. Malays registered the largest increase in age standardized rate from 24.7% in 1992 to 32.3% in 1998, a difference of 7.5%. The corresponding figures for the Chinese were 22.3% and 26.0%, an increase of 3.7%. The corresponding figures for the Indians were 20.3% and 23.7%, an increase of 3.4%.

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## Undiagnosed Hypertension

The 1998 survey also showed that across the age group of 30-60 years, 53.0% of individuals (male 57.9% and female 46.6%) were not diagnosed. By ethnic group, the figure was the highest for the Malays namely, 67.3%, followed by the Chinese at 51.2% and the Indians at 43.7%. The majority (93.2%) were mild hypertensives. Nevertheless, this is cause to be concerned.

## Poor Control

Finally, it is also important to point out that in the 1998 National Health Survey, 70% of known hypertensives were not controlled, namely, not meeting the blood pressure control target of 135/85 mmHg. By ethnic group, the percentages of uncontrolled hypertension were 77.0%, 73.2% and 69.0% for Malays, Indians and Chinese respectively,

## Where Do We Go From Here

This overview suggests that there is a great need to get across the message of blood pressure control to our patients. It is well-worth our efforts to tell patients that reducing high blood pressure reduces downstream disease burden from target organ damage. The patient needs to be actively persuaded and continually motivated to keep his or her blood pressure as close to the desired level of 135/85 mmHg as possible. To many family physicians, this could be a new area of work, namely, intensive and effective chronic disease management. Let us start now.

## Take Home Messages

- There is an increasing age-specific rate of people with hypertension with advancing age, especially in those aged 40 years and older. Opportunistic screening for raised blood pressure when the patient visits the doctor is encouraged.
- The trend of blood pressure shows that between the years 1992 and 1998, there is an increase of 5.1% of individuals with hypertension.
- Amongst those between 30-60 years old, hypertension is undiagnosed in 50.3% of them.
- As many as 70% of the blood pressure of known hypertensives are not controlled.
- We need to get the message across to the patient that blood pressure control is vital in reducing target organ damage and will make a difference to the disease burden from hypertension: it is worth the effort.

## REFERENCE

MOH. National Health Survey, 1998. This document is available in full-text downloadable from the MOH website (URL <http://www.moh.gov.sg>).