



Quarterly NCD Report

A publication of the *Strategic Information and Management Unit*,
Directorate of Non-Communicable Diseases
Ministry of Health
No. 385, Rev. Baddegama Wimalawansa Thero Mawatha,
Colombo 10, Sri Lanka.
Tele/Fax: +94 11 2669599, Email: ncdunit@gmail.com



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Introduction

Healthy Lifestyle Centre based Health Information Management Systems

Surveillance is one of the vital parts of the NCD prevention and control activities of the national program. The information received through the surveillance system is important for the decision making at different levels and to gauge the effectiveness of the intervention in place.

HLC based Health Information Management System (HIMS) consists of a paper-based system as well as an online system. The paper-based HLC-HIMS is well established, and its coverage is 100% i.e., covers the currently functioning 990 HLCs. The cloud-based HLC-HIMS module is currently being established with the assistance of the primary care system strengthening project (PSSP) and Directorate of Health Information and its coverage is around 20% of HLCs.

The paper-based HLC-HIMS consists of registers and returns. All the eligible persons are provided with a personal medical record (H1309 for males and H1310 for females). The first visits are registered in the participants' register (H 1236A for males & H1236 B for females) and subsequent visits are recorded in follow up register (H1237). At the end of every month, HLC staff send the monthly report of activities done for NCD screening (H1239) in duplicate, to MONCD before the 5th of the next month and one is filed at the HLC. At the district level, MONCD gather all the data received from each HLC and prepare the Monthly Summary of NCD screening activities (H1240).

The H1240 is prepared in triplicates and sent under the signature of MONCD and RDHS before the 20th of the following month to D/NCD and PDHS.

The cloud-based HLC-HIMS was introduced to the verifiable hospitals for PSSP. Nearly 200 HLCs have this system established in addition to paper-based system and now in the process of expanding into other HLCs. A SWOT analysis was conducted on existing systems. The strengths of a well-established Paper-based HLC-HIMS: all the HLC staff were well familiar with it, has a coverage of 100% and the Cloud based HLC-HIMS: ability to retrieve the individual level data and ability to carry out cohort monitoring. The weaknesses of the paper-based HLC-HIMS were major data losses at district and National level since only summary statistics are being considered, issues with timeliness, inaccuracy of data and the cloud based HLC-HIMS: need of basic facilities such as a computer and someone with basic computer knowledge as a data entry operator, needs continuous internet supply. Identified opportunities for paper-based HLC-HIMS: ability to overcome its weaknesses by introduction of a hybrid transition excel sheet-based system and cloud based HLC-HIMS: continuous support from the PSSP project for the establishment of the systems and technical support by D/Hi to have tailor made features to match the existing needs. The threats identified for paper-based HLC-HIMS, and its value additions are the continuous commitment of the HLC staff, and for cloud based HLC-HIMS: expansion of the system at the end of PSSP project period.

Prepared by

Dr Sinha De Silva – Senior Registrar in Community Medicine
Dr Vindya Kumarapeli- Director- NCD

QNR Sri Lanka - 2021

Health Message: "In the time of Covid-19, taking care of your heart is more important than ever before".

Screening of eligible participants for chronic NCDs

Screening for chronic NCDs is conducted in healthy lifestyle centers. There are 990 Healthy Life Centers in Sri Lanka with majority of them functioning in primary care institutions. The 35 years and above age group is considered as the target population eligible for screening, which is estimated as 40% of the mid-year population. A total of 40,392 participants were screened during 2nd quarter of 2021 and the estimated mid-year population for the year 2020 was used for the calculations. Table 1 shows the cumulative number of eligible participants screened from the year 2011 to second quarter 2021.

Table 1: Eligible participants screened from the year 2011 to second quarter 2021

Year	Eligible participants screened (%)	Cumulative number of eligible participants screened	Cumulative % of eligible participants screened from the target population ¹
2011	131,144 (2.6 %)	131,144	2.6 %
2012	203,939 (4.0%)	335,083	6.6%
2013	336,446 (6.6%)	671,529	13.2%
2014	383,161 (7.5%)	1,054,690	20.7%
2015	391,260 (7.7%)	1,445,950	28.4%
2016	540,535 (10.6%)	1,986,485	39.0%
2017	493,965 (9.7%)	2,480,450	48.7%
2018	511,438 (10.0%)	2,991,888	58.8%
2019	605,148 (6.9%)	3,597,036	41.2%
2020	321,055 (3.7%)	3,918,091	44.2%
2021 Q1 & Q2	102,486 (1.17%)	4,024,662	45.9%

¹ This percentage is calculated from the cumulative number of all eligible participants screened from the year 2011 to 2019. Target population of 40 to 65 age group is calculated from the mid-year population as indicated by 2012 Census (5,089,860) up to 2018. From 2019, target population of 35 years and above group is calculated from the total estimated mid-year population for 2019 calculated based on the Census of Population and Housing 2012 (8,721,200). For 2020, target population of 35 years and above group is calculated from the total estimated mid-year population for 2020 calculated based on the Census of Population and Housing 2012 (8,767,600).

Of the target population, only 0.46 % (40,392) was screened which included 28,647 (66.83%) females and 14,217 (33.17%) of males. Mannar, Batticaloa and Kalmunai were the districts with best coverage.

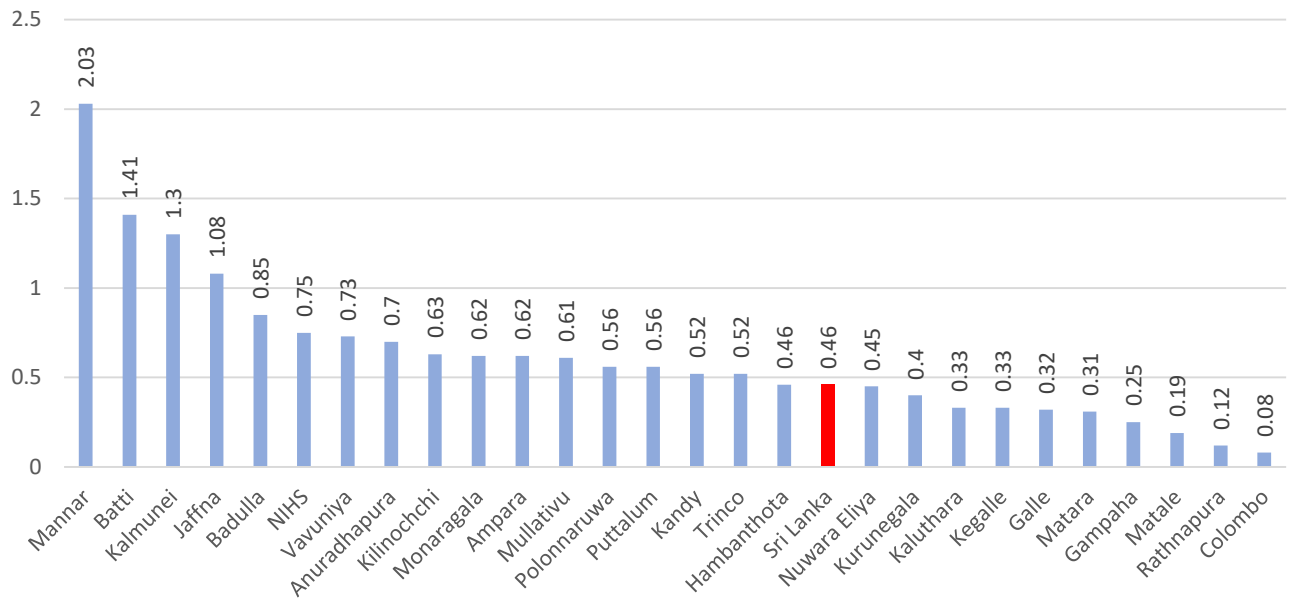


Figure 1: Distribution of percentage of eligible participants screened by district in 2nd quarter, 2021.

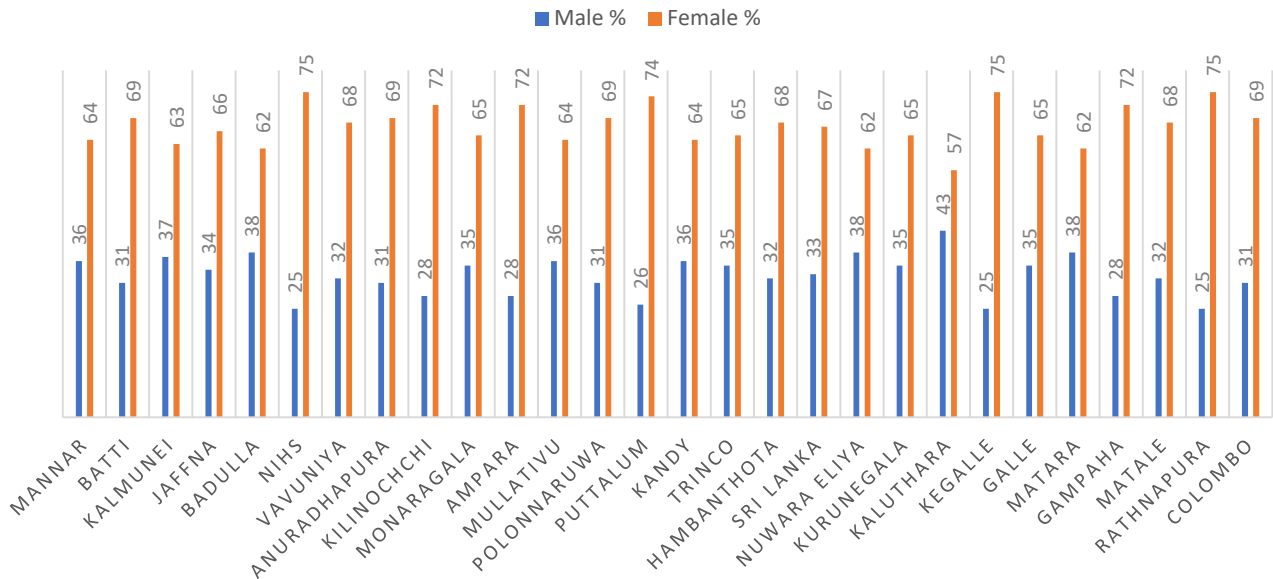


Figure 2: Distribution of percentage of eligible males and female participants screened by district in 2nd Quarter of 2021

Screening for risk factors

Tobacco Smoking²

Out of the total eligible population screened, 7.67% (n=3,289) were tobacco smokers. From the eligible male population screened, 3,202(22.52%) were tobacco smokers while among the eligible female population screened, only 87 (0.30%) were tobacco smokers.

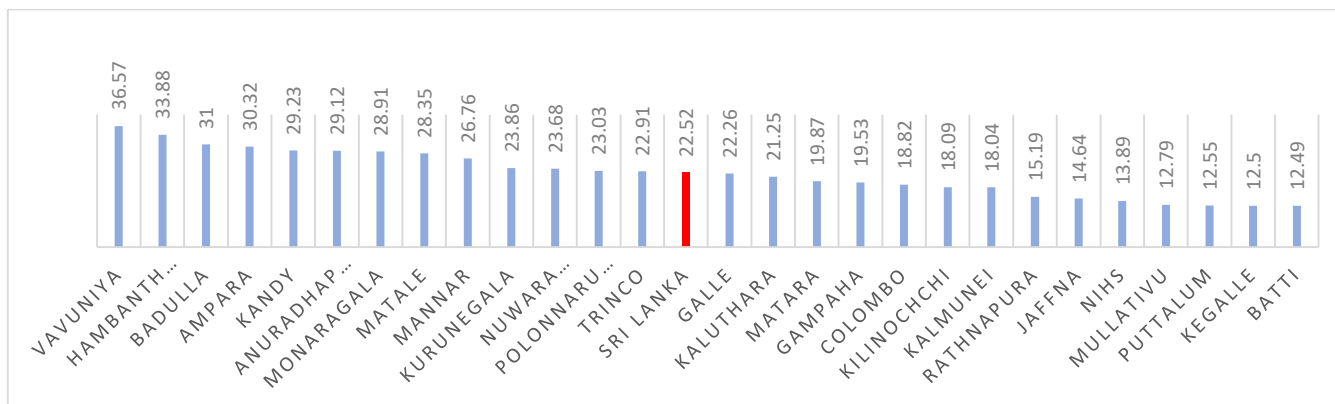


Figure 3: Distribution of percentage of male tobacco smokers among the total eligible male population screened by district in 2nd quarter 2021

Chewing betel (with tobacco or arecanut)³

Among the eligible population screened, 6,901 (16.10%) chew betel (with or without tobacco) while 4,092 (28.78%) males and 9.81% (n=2,809) females chew betel among the respective eligible populations screened.

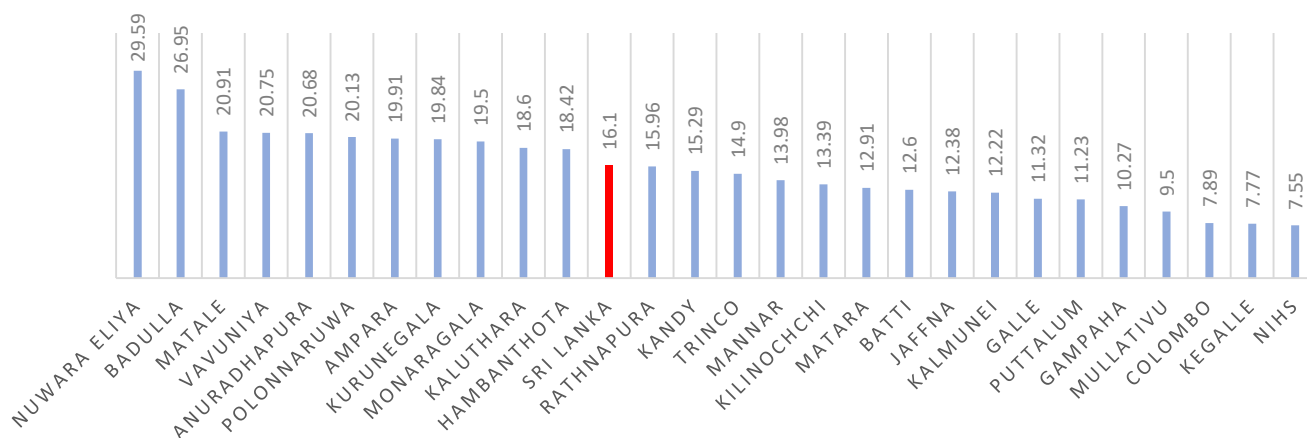


Figure 4: Distribution of percentage of participants chewing betel with tobacco or arecanut among the eligible population screened in 2nd quarter, 2021

² All current tobacco smokers and those who have quit tobacco smoking less than a year before the assessment were considered as tobacco smokers. Since tobacco smoking among females was very low, the percentage of male smokers out of the eligible males screened is described to prevent the underestimation of the prevalence of smoking where the majority of screened were females

³ Current betel chewers (with tobacco or arecanut) and those who have quit betel chewing within a year of the assessment were considered as betel chewers

Alcohol use⁴

Of the eligible population screened 12.11% (n=5,191) were alcohol users. There were 0.27% (n=76) female and 35.98% (n=5,115) male alcohol users among the respective eligible populations screened.

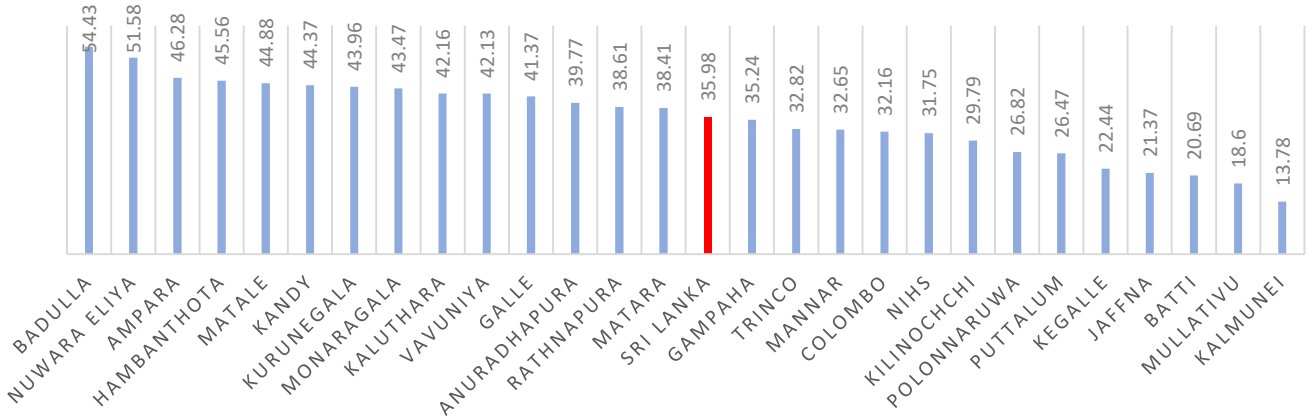


Figure 1: Distribution of percentage of male alcohol users among the eligible males screened by the districts in 2nd quarter, 2021

Overweight⁵ and obesity⁶

Of the eligible population screened 9,535 (22.49%) and 4,760 (11.23%) were found to be overweight and obese respectively. Prevalence of obesity was 7.37% (n=1,042) among males and 13.15% (n=3,718) among females screened.

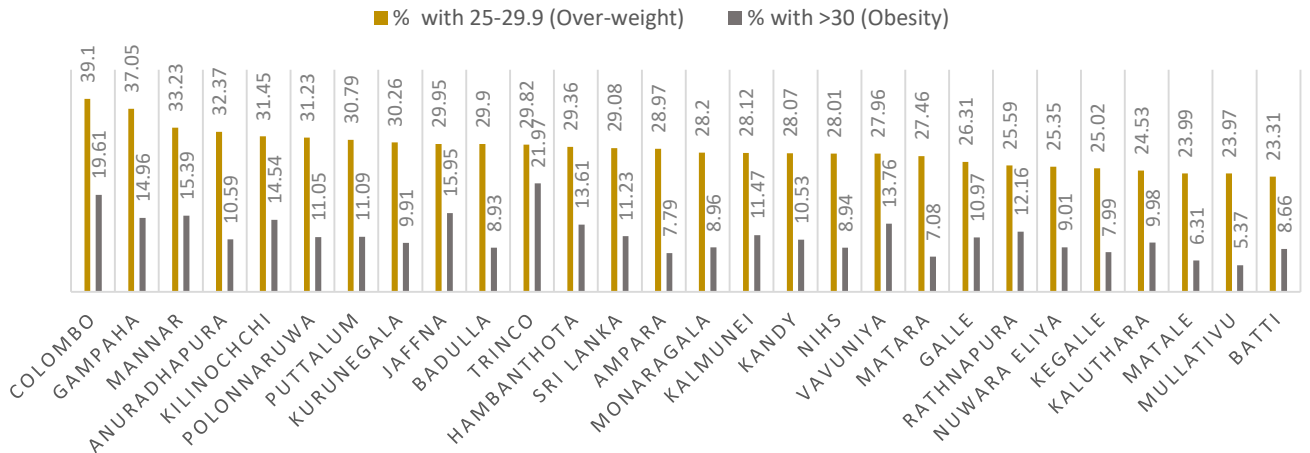


Figure 2: Distribution of percentage of participants with overweight and obesity among the eligible population screened by districts in 2nd quarter, 2021

⁴ Current alcohol users and those who had quitted alcohol use within a year of the assessment were considered as alcohol users. Since alcohol usage among females was very low, the percentage of male alcohol users out of the eligible males screened is described to prevent the underestimation of the prevalence of alcohol use where the majority of screened were females

⁵ BMI between 25 to 29.9 kg/m² was considered as overweight

⁶ BMI of 30 kg/m² or above was considered as obese

High Blood pressure⁷

Of the eligible population screened, 7,585 (18.12%) had hypertension. Among the eligible participants screened 20.16% (n=2,797) males and 17.11% (n=4,788) females had high blood pressure.

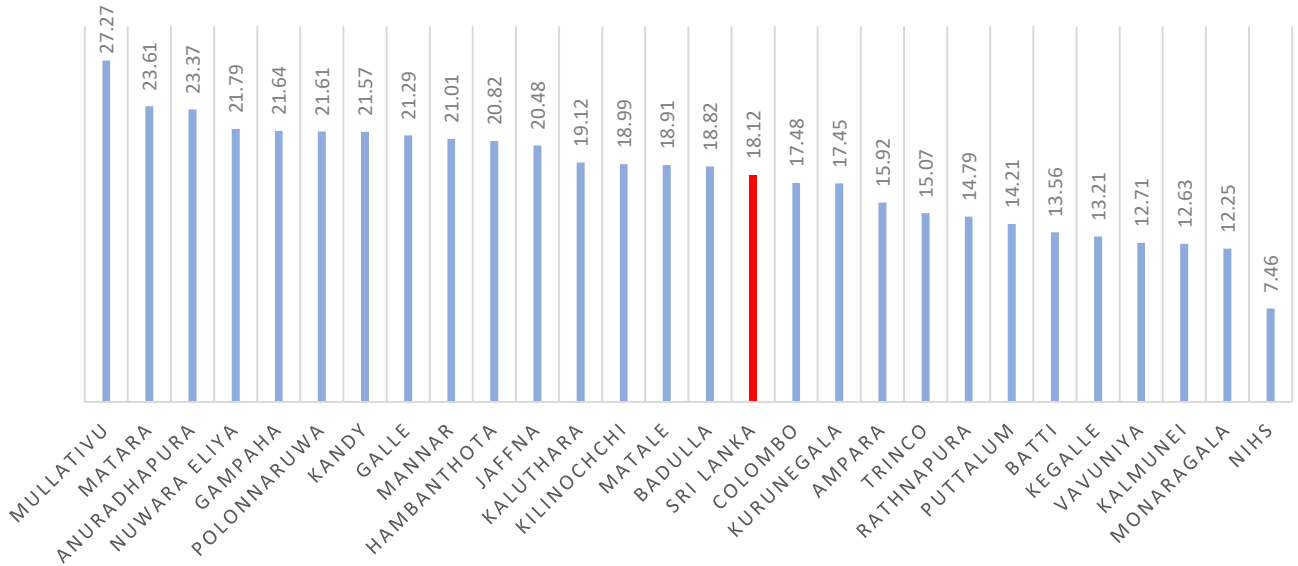


Figure 7: Distribution of percentage of participants with high blood pressure among the eligible population screened by districts in 2nd quarter, 2021

High blood sugar⁸

Of the eligible population screened, 5,268 (11.66%) had high FBS (Fasting Blood Sugar) or RBS (Random Blood Sugar) values. Among the participants screened 11.28% (n=3,402) females and 12.44% (n=3,402) males had high blood sugar values.

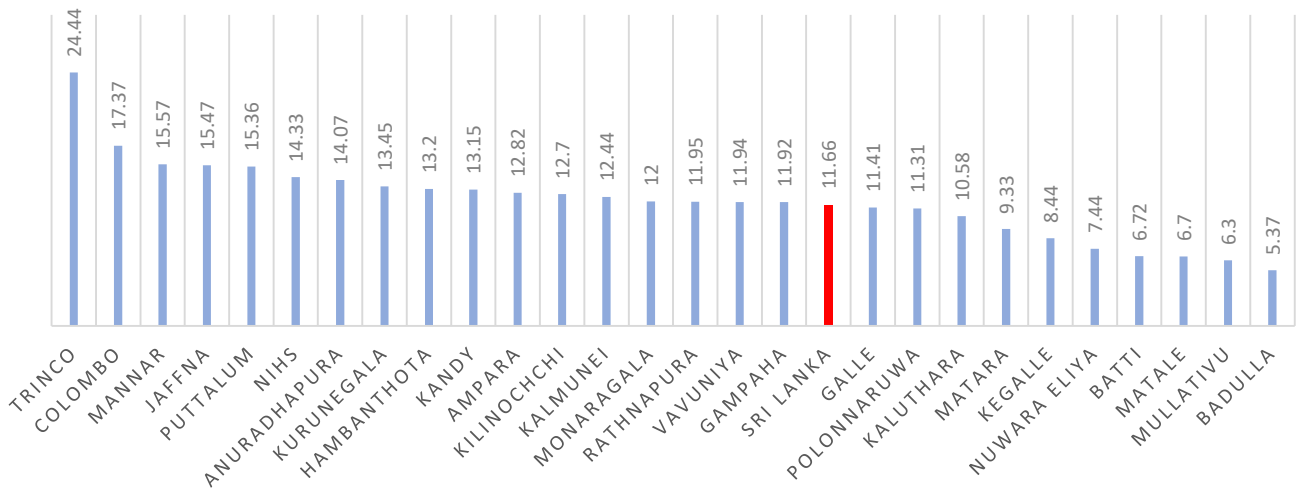


Figure 3: Distribution of percentage of participants with high blood sugar among the eligible population screened by districts in 2nd quarter, 2021

⁷ Blood pressure of $\geq 140/90$ mmHg was considered as high blood pressure

⁸ FBS values ≥ 126 mg/dl or RBS values ≥ 200 mg/dl were considered as high blood sugar values