



FACTSHEET 2022

Bangladesh



National Non-communicable Disease Risk Factors

Survey in Bangladesh: according to WHO STEPS approach

Background:

The survey has been conducted for the third time, employing the STEPS approach of the World Health Organization. Its objective was to determine the risk factors of non-communicable diseases in the country. The survey results can serve as the foundation for evidence-based policies and programs intended to reduce the burden of NCDs, as well as to monitor and evaluate future NCD prevention and control strategies in the country. The use of the STEPS approach in the survey ensures that the data collected is comparable with other countries, enabling regional and global benchmarking of NCD risk factors. In general, this survey is a crucial tool for comprehending and dealing with the NCDs burden in the country.

Methods:

Bangladesh carried out a population-based household survey of adults aged 18 – 69 years from November 2022 to January 2023. A multi-stage stratified cluster sampling design was used for representative data. A total 240 primary sampling units (PSU) were selected from 8 divisions, thus 30 PSU per division (15 from urban and 15 from rural). In each PSU 32 households (16 male and 16 female) were selected using systematic random sampling. Every alternate household were selected for male and female household. In each household one male/ female respondents were selected randomly from the eligible members.

The survey data were collected using digital handheld devices. Collected data were sent to the server immediately after the completion of the interview and monitored centrally on a regular basis. Immediate feedback was given to the field team if observed any deviation of the field movement and data collection.

The survey adopted step 1, 2, and 3 approach. Out of 7680 samples, 6987 participated in step 1 and 2 and, 6904 participated in step 3 of the survey. The overall response rate was 93.7%.

Results:

Step 1

Diet: The average daily consumption of fruit and vegetables was 0.4 and 1.9 servings, respectively. The prevalence of inadequate fruit or vegetables consumption (less than 5 servings/day) was 96.2% (Women: 95.7%; Men: 96.7%). Around 37% respondents always or often added salt while eating meal and 13%, always or often consume processed food having high salt.

Physical activity: Survey reported around 20% population doesn't meet recommended level of physical activity and women is higher than men. The average time spent on physical activity per day was found 174 minutes. Around 19.5% not engage vigorous activity.

Tobacco use: Overall 20.1% population smoke tobacco products and 24.8% consume smokeless tobacco products. The prevalence of current tobacco user (smoking or smokeless) among Bangladeshi population was 39.4%.

Alcohol consumption: Overall 0.5% people were current drinker and 93% were lifetime abstainer.

Step 2






Body mass index (BMI): The average BMI of the population was 22.9 kg/m² (Women: 23.6; Men: 22.2). The prevalence of overweight or obese (BMI \geq 25 kg/m²) was 29% and obese (BMI \geq 30 kg/m²) was 5.2%. The average waist circumference (cm) for women was 80 cm and for men was 81 cm.

Raised blood pressure: The prevalence of raised blood pressure (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised blood pressure) was found 23.5% (Women: 23.0% and Men: 24.1%).




Step 3

Raised blood glucose: The average fasting capillary blood glucose (including those currently on medication) was 5.5 mmol/L. The prevalence of raised fasting blood glucose (capillary whole blood value \geq 7 mmol/L) or currently on medication was 9.7% (Women: 10.5% and Men: 8.9%).



Results for adults aged 18-69 years		Both sexes	Men	Women
Step 1: Diet				
	• Mean number of days fruit consumed in a typical week	1.6 (1.5 – 1.7)	1.8 (1.6 – 1.9)	1.5 (1.4 – 1.7)
	• Mean number of servings of fruit consumed on average per day	0.4 (0.3 – 0.4)	0.4 (0.3 – 0.4)	0.3 (0.3 – 0.4)
	• Mean number of days vegetables consumed in a typical week	6.2 (6.2 – 6.3)	6.0 (5.9 – 6.1)	6.4 (6.4 – 6.5)
	• Mean number of servings of vegetables consumed on average per day	1.9 (1.8 – 2.0)	1.8 (1.7 – 1.9)	1.9 (1.8 – 2.0)
	• Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	96.2% (95.2 – 97.1)	96.7% (95.4 – 97.9)	95.7% (94.1 – 97.4)
	• Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	37.2% (33.8 – 40.6)	29.6% (25.7 – 33.4)	44.1% (40.1 – 48.1)
	• Percentage who always or often eat processed foods high in salt	13.3% (11.3 – 15.3)	9.1% (7.2 – 11.0)	17.1% (14.0 – 20.2)
Step 1: Physical Activity				
	• Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent) *	19.5% (16.8 – 22.2)	14.6% (12.1 – 17.1)	23.9% (19.0 – 28.9)
	• Median time spent in physical activity on average per day (minutes)	115.7 (30.0 – 270.0)	165.7 (47.1 – 263.9)	77.1 (23.6 – 194.3)
	• Percentage not engaging in vigorous activity	72.1% (69.7 – 74.6)	53.1% (49.4 – 56.9)	89.4% (86.2 – 92.6)
Step 1: Tobacco use				
 	• Percentage who currently smoke tobacco	20.1% (18.5 – 21.8)	41.7% (38.4 – 44.9)	0.5% (0.0 – 1.1)
	• Percentage who currently smoke tobacco daily	19.1% (17.5 – 20.7)	39.6% (36.3 – 42.8)	0.5% (–)
	• Percentage who currently use smokeless tobacco	24.8% (22.6 – 26.9)	24.2% (21.2 – 27.2)	25.2% (22.8 – 27.6)
	• Percentage who currently use smokeless tobacco daily	22.2% (20.2 – 24.1)	20.4% (17.8 – 22.9)	23.8% (21.5 – 26.1)
	• Average age started smoking (years) [For those who smoke tobacco daily]	17.2 (16.9 – 17.5)	17.1 (16.8 – 17.4)	22.5 (15.2 – 19.8)
	• Percentage of daily smokers smoking manufactured cigarettes [For those who smoke tobacco daily]	79.8% (75.8 – 83.8)	80.8% (77.0 – 84.7)	2.6% (–)
	• Mean number of manufactured cigarettes smoked per day [by smokers of manufactured cigarettes]	5.4 (4.9 – 5.9)	5.5 (5.0 – 5.9)	0.3 (–)
	• Percentage who currently consume tobacco in any form	39.4 (37.2 – 41.5)	54.7 (51.5 – 57.9)	25.4 (23.0 – 27.8)
Step 1: Alcohol Consumption				
	• Percentage who are lifetime abstainers	92.8% (91.1 – 94.6)	86.2% (83.1 – 89.4)	98.9% (98.1 – 99.6)
	• Percentage who are past 12-month abstainers	4.3% (3.3 – 5.4)	8.1% (6.2 – 10.1)	0.9% (0.3 – 1.4)
	• Percentage who currently drink (drank alcohol in the past 30 days) alcohol	0.5% (0.2 – 0.9)	1.1% (0.4 – 1.7)	0.1% (–)
	• Percentage who engages in heavy episodic drinking (6 or more drinks on any occasion in the past 30 days among the current drinker)	29.3% (–)	28.1% (–)	59.6% (–)

* For complete definitions of insufficient physical activity, refer to the GPAQ Analysis Guide (<http://www.who.int/chp/steps/GPAQ/en/index.html>) or to the WHO Global recommendations on physical activity for health (http://www.who.int/dietphysicalactivity/factsheet_recommendations/en/index.html)

Results for adults aged 18-69 years		Both sexes	Men	Women
Step 2: Physical Measurements				
	• Mean body mass index - BMI (kg/m ²)	22.9 (22.8 – 23.1)	22.2 (22.0 – 22.5)	23.6 (23.3 – 23.9)
	• Percentage who are overweight (BMI ≥25 kg/m ²)	28.9% (27.0 – 30.7)	22.5% (20.1 – 25.0)	34.9% (32.3 – 37.5)
	• Percentage who are obese (BMI ≥30 kg/m ²)	5.2% (4.5 – 5.9)	2.4% (1.7 – 3.2)	7.8% (6.6 – 9.0)
	• Average waist circumference (cm)	-	80.5 (80.0 – 81.1)	79.6 (78.7 – 80.4)
	• Mean systolic blood pressure- SBP (mmHg), including those currently on medication for raised BP	122.5 (121.6 – 123.4)	124. (123.8 – 125.8)	120.4 (119.1 – 121.6)
	• Mean diastolic blood pressure- DBP (mmHg), including those currently on medication for raised BP	79.7 (79.2 – 80.3)	80.4 (79.6 – 81.1)	79.2 (78.5 – 79.9)
	• Percentage with raised BP (SBP ≥140 and/or DBP ≥90 mmHg or currently on medication for raised BP)	23.5% (21.7 – 25.3)	24.1% (22.0 – 26.2)	23.0% (20.6 – 25.4)
	• Percentage with raised BP (SBP ≥140 and/or DBP ≥90 mmHg or currently on medication for raised BP) who are not currently on medication for raised BP	16.8% (15.2 – 18.5)	19.5% (17.3 – 21.8)	14.2% (12.3 – 16.2)
Step 3: Biochemical Measurements				
	• Mean fasting blood glucose, including those currently on medication for raised blood glucose (mmol/L)	5.5 (5.4 – 5.6)	5.5 (5.3 – 5.6)	5.6 (5.5 – 5.7)
	• Percentage with impaired fasting glycaemia as defined below (capillary whole blood value ≥6.1 mmol/L and < 7 mmol/L)	10.3 (9.0 – 11.6)	10.1 (8.3 – 11.9)	10.5 (9.1 – 11.9)
	• Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose (capillary whole blood value ≥7 mmol/L)	9.7 (8.5 – 10.9)	8.9 (7.6 – 10.2)	10.5 (8.8 – 12.1)
	• Percentage with impaired fasting glycaemia as defined below (capillary whole blood value ≥ 5.6 mmol/L and < 6.1 mmol/L)	14.6 (13.1 – 16.2)	15.1 (13.1 – 17.1)	14.2 (11.9 – 16.5)
	• Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose (capillary whole blood value ≥6.1 mmol/L)	20.0 (18.1 – 21.9)	19.0 (16.5 – 21.4)	20.9 (18.6 – 23.3)
Cardiovascular disease (CVD) risk				
• Cardiovascular disease (CVD) risk Percentage aged 40-69 years with a 10-year CVD risk ≥ 30%, or with existing CVD**		16.6 (14.6 – 18.6)	12.5 (10.6 – 14.5)	20.8 (17.4 – 24.3)
Summary of combined risk factors				
– Current daily smokers		–	Overweight (BMI ≥25 kg/m ²)	
– < 5 servings of fruits & vegetables per day		–	Raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	
– Low level of activity				
• Percentage with none of the above risk factors		1.3 (0.7 – 1.9)	1.3 (0.3 – 2.3)	1.4 (0.6 – 2.1)
• Percentage with three or more of the above risk factors, aged 18 to 69 years		21.8 (20.0 – 23.5)	25.8 (23.3 – 28.2)	18.1 (16.1 – 20.2)
• Percentage with three or more of the above risk factors, aged 25 to 44 years		21.9 (19.8 – 24.0)	26.1 (22.7 – 29.5)	18.4 (16.1 – 20.7)
• Percentage with three or more of the above risk factors, aged 60 to 69 years		33.4 (27.6 – 39.1)	35.6 (28.4 – 42.7)	31.0 (23.0 – 38.9)

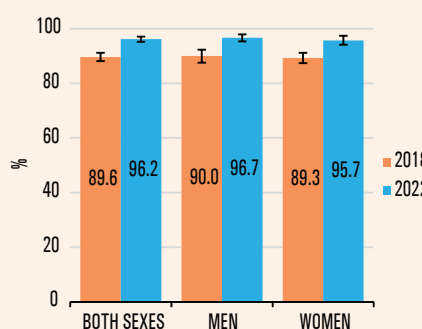


FIGURE 1: Percentage who ate less than 5 servings of fruit and/or vegetables on average per day.

COMPARISON FACTSHEET

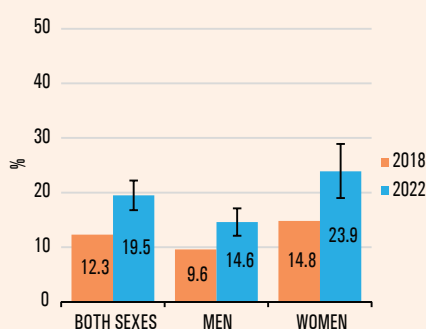


FIGURE 2: Percentage with insufficient physical activity (defined as < 150 minutes of moderate-intensity activity per week, or equivalent)*.

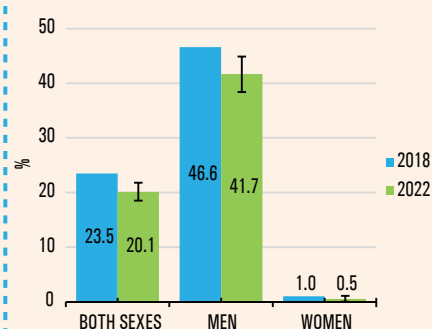


FIGURE 3: Percentage who currently smoke tobacco.

COMPARISON FACTSHEET

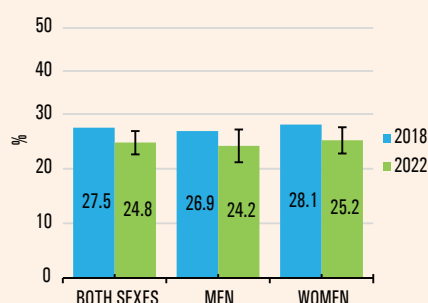


FIGURE 4: Percentage who currently use smokeless tobacco.

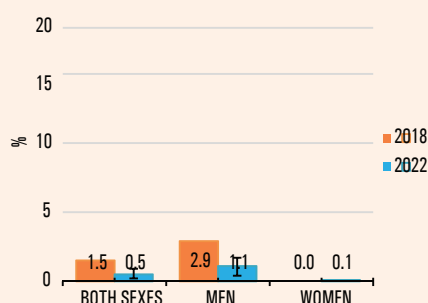


FIGURE 5: Percentage who currently drink (drank alcohol in the past 30 days) alcohol.

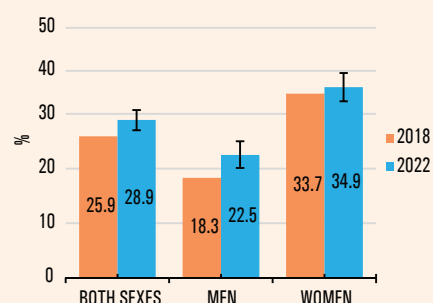


FIGURE 6: Percentage who are overweight (BMI ≥ 25 kg/m²)

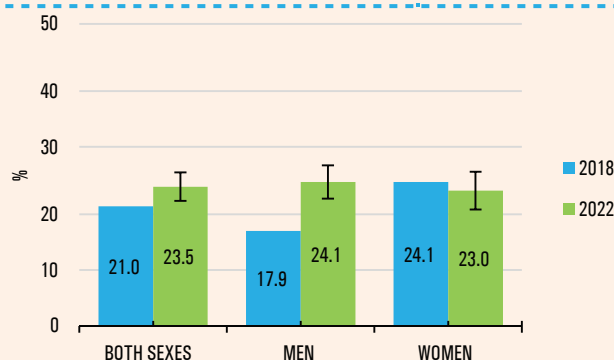


FIGURE 7: Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)

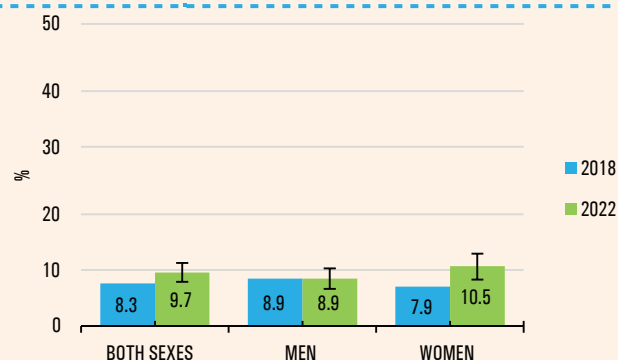


FIGURE 8: Percentage with raised fasting blood glucose as defined below or currently on medication for raised blood glucose

POLICY RECOMMENDATIONS

1. The prevalence of smoking (both smoking and smokeless tobaccos) has shown reduced prevalence compared to 2018 survey. All other risk factors like the prevalence of obesity/overweight, insufficient vegetables and fruits and insufficient physical activity have increased since 2018.
2. The prevalence of both hypertension and impaired fasting glucose has increased compared to 2018. The increased prevalence of Hypertension is more observed in males and the prevalence of Impaired fasting glucose was more observed in Females.
3. The widespread socio-economic influences of continuing COVID epidemic (2020-2022) and related limited NCD prevention and control activities during the epidemic could have contributed to difference in prevalence of the risk factors and diseases.
4. Multidimensional and multilateral collaborative health promotion interventions required through mass media, campaigns, and school curricula to raise public awareness of the risk factors of non-communicable diseases.
5. Current activities of Tobacco cessation/control should be intensified and provision for access to fruits and vegetables throughout the year should be improved.
6. In addition to health promotion interventions, physical environment conducive to physical activity in both urban and rural areas and at workplace should be improved.
7. Screening programs for HTN and DM should be increased in all health care facilities in the country. Patient education and counseling for control of these conditions would be important.
8. NCDC program should procure drugs based on the prevalence of these diseases and access to care provision for these diseases.
9. Introduction of Digital monitoring and surveillance system could improve the coverage, care and follow up of the cases.

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