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URBAN-RURAL DIFFERENCES IN DEMAND FOR FRUITS AND VEGETABLES IN BANGLADESH: THE DEMOGRAPHIC AND HEALTH FACTORS

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Abstract

Insufficient consumption of fruits and vegetables (FV) is responsible for various chronic diseases. In today's rapidly urbanising society, many Bangladeshi adults in both urban and rural areas do not consume enough servings of FV. The present study attempts to examine demographic and health factors associated with consumption of FV among urban and rural dwellers in Bangladesh. Data derived from the National STEPS Survey for Non-communicable Diseases Risk Factors (n = 8,164) were used for in-depth analyses. The relationships between consumption of FV and demographic, and health factors were examined using linear regression. Many urban and rural dwellers did not consume adequate FV. Men consumed less FV compared to women. Education levels were positively associated with FV consumption. Being diagnosed with hypertension was correlated with reduced consumption of FV, whereas there was a positive relationship between having diabetes and FV intake. However, age, marital status and employment status were not significantly associated with consumption of FV. In conclusion, various demographic and health factors play an important role in determining FV consumption among Bangladeshi adults across urban and rural areas. These findings identified the groups that called for attention of the policymakers in formulating efficient measures to improving FV consumption.

Keywords: demographic factors, fruits, health, urban-rural areas, vegetables

INTRODUCTION

A healthy dietary lifestyle is clearly seen as one of the primary drivers of long-term positive health outcomes. Diets comprising a large amount of FV not only provides plenty of dietary fibre but also various micronutrients, which have consistently been shown to have desirable effects on health, most notably, reduction in the risk of cancers and cardiovascular diseases (He et al., 2006; Lock et al., 2005). As such, the World Health Organization (WHO) suggests that adults of all age groups should consume at least five servings of FV per day, which is equivalent to 400 grams (Hall et al., 2009). Although the health benefits of FV intake are widely recognised and documented, demand for FV is often affected by demographic traits, health factors, lifestyles and geographic location (Yen & Tan, 2012). The increase in the price of fresh and nutrient-dense foods along with the reduction in the costs of processed foods are seen as the main culprits of low FV intake nowadays.

In many countries across the globe, a vast array of the populations do not incorporate enough servings of FV in their diets, despite the implementation of various policies directed toward promoting consumption of FV (World Health Organization, 2023). This could be one of the reasons that explains increasing prevalence of chronic diseases. Bangladesh is one of the lower-middle income countries in Asia that experiences a fast transition in epidemiology. Its health burden has been dominated by non-communicable diseases rather than infectious diseases. Cardiovascular disease and stroke, for instance, are no longer seen as uncommon illnesses. In today's rapidly

urbanising societies, many people in Bangladesh do not consume FV. According to the study by Dey et al. (2025), two-third (67.8%) of adults in Bangladesh had low consumption of FV, and poor knowledge was identified as the main risk factor. This calls for urgent and efficient measures aimed at promoting FV consumption within the Bangladeshi population.

There has been a growing of study focusing on factors affecting FV consumption, yet the proportion of people that consume adequate amount of FV is still low. This implies that more studies are needed to gain a deeper understanding of the factors that can influence decisions of people to consume FV. The present study seeks to fill this research gap by examining demographic and health factors associated with FV consumption. Different from previous studies, analyses of the present study are stratified by urban and rural areas in order to delve deeper into geographical differences in the factors associated demand for FV. The present study expects that the factors that influence FV consumption in urban and rural areas are heterogeneous because of socioeconomic and health awareness disparities. In addition, the present study has the novelty of population as its country of interest, Bangladesh, lacks in-depth empirical studies on FV consumption behaviours because of data limitation.

THEORETICAL BASIS

The health model developed by Grossman (2000), which has been discussed by Cheah et al. (2024), is used as the theoretical underpinning for FV consumption. As discussed by Grossman, utility is determined by health status as well as consumption of goods and services. Given that good health can improve well-being and quality of life, health is treated as a good that can be consumed to reap utility, especially given that being suffered from illnesses can cause disutility. This is the reason why people are making every effort to improve their health.

People are expected to put concerted efforts into maximising their utility throughout their lifetime. However, such utility maximisation is affected by time and income constraints. Health can also be seen as a capital good as it can depreciate over time. Hence, individuals' future health condition is subject to their current health stock. To improve health, making health investments is necessary, including adoption of healthy eating practices like adequate FV consumption. Therefore, health consumption and investment are done simultaneously.

Health production is affected by market and time inputs. This means that people need to spend time and money in using healthcare services in order to treat their illnesses and improve their health. In the present study, it is claimed that people not only use money to purchase FV but also need to allocate their time to food preparation. Therefore, FV possess both direct and indirect effects on utility through health improvement. Some people may not enjoy consuming FV, but FV can improve health, thereby resulting in higher utility. This is similar to medical care. People consume medical care for the sake of health improvement rather than enjoying it.

According to Grossman (2000), health investment, including consumption of FV, can be affected by three main factors, that is, income, education and age. First, having good health condition can improve productivity and reduce absenteeism; thus, it increases income. On the other hand, since higher income earners face higher opportunity costs of illnesses, they are expected to demand more FV as a way to improve their health. Second, education improves health awareness, knowledge and interpreting skills, leading to higher demand for FV. Better educated people tend to know more about the health benefits of FV than their less educated counterparts, and consequently are more likely to incorporate FV in their diets. Third, as people grow older, their health depreciates due to ageing; thus, they have higher preference for health investment though engagement in healthy dietary practices. This helps to explain why older people tend to consume more FV than their younger counterparts.

LITERATURE REVIEW

Satheannoppakao et al. (2009), using data derived from a nationwide survey in Thailand and a logit model, found that the likelihood of consuming FV was higher among well-educated and high-income adults. Furthermore, the authors found gender to be associated with FV consumption, with women consuming more FV than men. The authors also highlighted that older people were less probable to consume FV compared to younger people because they experienced more difficulties in purchasing FV. Findings from the study by Azagba and Sharaf (2011) suggested likewise. In particular, the authors used a linear regression model and found that FV intake was positively associated with income and education. However, male gender and age had negative effects on consumption of FV. Moreover, married adults were found to consume more FV than unmarried adults because of increases in the household size. The findings of Satheannoppakao et al. (2009) and Azagba and Sharaf (2011) were shared by Li et al. (2017), who used Chinese data and found FV consumption to be associated with income, age, gender, education and marital status. Having a better understanding of the benefits of FV was cited as one of the reasons for the findings.

Drawing from data collected in Brazil, Jamie et al. (2009) found that older adults were more likely to consume FV than their younger counterparts because they possessed better health awareness. However, this finding contradicted those of previous studies in Canada, Thailand and China (Li et al., 2017; Azagba & Sharaf, 2011; Satheannoppakao et al., 2009). Additionally, Jamie et al. (2009) found that female gender, education level and being married were associated with FV consumption. In another Canadian study, Dehghan et al. (2011) found that consumption of FV was more likely if the adults were older, female and well-educated. The finding pertaining to gender in South Africa was, however, in contrast to those evidenced in other countries (Peltzer & Phaswana-Mafuya, 2012). Specifically, men consumed more FV than women.

The study by Yaya and Bishwajit (2018) was notable in examining FV consumption in Namibia. Its results showed that adults with higher incomes and better educational backgrounds had higher consumption of FV compared to those with lower incomes and educational attainments, which were consistent with evidence of previous studies (Li et al., 2017; Azagba & Sharaf, 2011; Satheannoppakao et al., 2009). In Bangladesh, Karim et al. (2017), employing mixed-effect logit, identified that income and education were associated with FV consumption. Moreover, the authors found a positive relationship between female gender and demand for FV. This was because women had better health awareness than men. Similar findings were observed by Esteghamati et al. (2012), who found that older adults and men consumed less FV in Iran. The authors also highlighted urban-rural differences in FV consumption, which lent support to the finding of Pengpid et al. (2019).

RESEARCH METHODS

Data

The present study used secondary cross-sectional data from the National STEPS Survey for Non-communicable Diseases Risk Factors in Bangladesh 2018 (World Health Organization, 2018). STEPS Bangladesh was a nationally representative population-based health survey developed by WHO and implemented by the National Institute of Preventive and Social Medicine of Bangladesh. The survey spanned September 2017 through June 2018. The scope was Bangladeshi adults aged between 18 and 69 years, except those who suffered from any serious medical conditions and resided in hospitals, prisons or nursing homes. Although STEPS Bangladesh 2018 was carried out several years ago, it was the most comprehensive health survey available to researchers, especially given that it comprised a wide range of important data.

The sampling approach was based on multistage stratified sampling designed by the Bangladesh Bureau of Statistics for census. A Primary Sampling Unit (PSU) was a geographical area that comprised 100 to 220 households. House locality, PSU location and number of households were included in the sampling frame. Overall, the sampling frame consisted of 65,193 urban PSUs and 228,340 rural PSUs. In the survey, 496 PSUs in both urban and rural areas were selected using

probability proportional to size sampling. Next, simple random sampling was applied to select 20 households from each PSU. Eligible members within the selected households were interviewed. A total of 8,423 respondents were eligible for the survey but only 8,185 took part and completed the questionnaire, producing a response rate of 97.2%.

The questionnaire was designed according to the guidelines of the WHO NCD STEPS. It consisted of multiple questions obtaining respondents' demographic, lifestyle and health data. The questionnaire was written in English and translated into Bengali to facilitate understanding among respondents of different education backgrounds. Its quality was checked using reverse translation. If any of the eligible members of a household was not around during the first visit, a second visit was made. Respondents were asked to provide written consent before the interview, otherwise they were not allowed to participate in the survey. Nevertheless, the questionnaire was pretested before it was distributed to the respondents. The Bangladesh Medical Research Council provided ethics approval for the survey.

Dependent Variable

The dependent variable used in the present study, consumption of FV, was developed based on the following questions asked in the questionnaire: 1) 'In a typical week, on how many days do you eat fruit?'; 2) 'How many servings of fruit do you eat on one of those days?'; 3) 'In a typical week, on how many days do you eat vegetables?'; and 4) 'How many servings of vegetables do you eat on one of those days?' The product of the answers for Questions 1 and 2 was the total servings of fruits consumed by respondents in a week, while the product of the answers for Questions 3 and 4 was the total servings of vegetables. Hence, the sum of these two products, the total servings of FV consumed per week, was the unit of the dependent variable.

Independent Variables

The independent variables used in the present study were identified based on previous findings discussed in the Literature Review section, subject to data availability from the STEPS Bangladesh 2018. The demographic variables comprised age, gender, education, marital status and employment status. Respondents' age was categorised into four groups: 18–29, 30–44, 45–49 and 60–69 years. Gender referred to respondents' biological sex. Respondents' educational backgrounds were segmented into three levels: primary, secondary and tertiary. In terms of marital status, a very small proportion of the respondents were single, divorced or widowed; thus, they were combined to form the 'unmarried' category. Respondents' employment status was classified as employed and not working (including those unemployed, students, homemakers and retirees).

Smoking and health conditions were used as the health variables. A question related to smoking was included in the questionnaire: 'Do you currently smoke any tobacco products, such as cigarettes, cigars or pipes?' The responses to this question were either 'Yes' or 'No'. The respondents' health status was assessed based on the following questions: 1) 'Have you ever been told by a doctor that you have hypertension?'; 2) 'Have you ever been told by a doctor that you have diabetes?'; and 3) 'Have you ever been told by a doctor that you have hypercholesterolemia?'. The responses to these three questions were either 'Yes' or 'No'.

Statistical Analyses

Owing to the incomplete information provided by some respondents, only information from 8,164 respondents were utilised in the statistical analyses. Since only a small proportion of observations were deleted, representativeness of the sample was unlikely to be affected. Prior to estimating regression, descriptive statistics of variables were calculated and presented. For continuous variables, the interpretation was based on means and standard deviations, whereas for categorical variables, percentages and frequencies were interpreted.

In terms of multivariate analysis, linear regression was employed to examine the effects of the independent variables on consumption of FV. Following the notation written by Wooldridge

(2010), the linear regression model with an assumption of a normally distributed residuals can be expressed as follows:

$$y_i = \alpha + \mathbf{X_i}\boldsymbol{\beta} + u_i$$

Where **X** is the vector of independent variables, α is the constant, $\boldsymbol{\beta}$ represents the vector of coefficients, and *u* is the error term. The model was estimated using ordinary least square (OLS).

To ensure that the regression model was not affected by multicollinearity, variance inflation factors (VIFs) of all the independent variables were computed. In addition, the White test was performed to diagnose potential heteroscedasticity. Separate regression models were estimated for the total, urban and rural respondents. Significance for all the tests was set at *p*-values of less than 0.05. The statistical computations were executed using the Stata statistical software

RESULTS

Descriptive statistics of variables are presented in Table 1. On average, respondents consumed about 21.6 servings of FV per week. Similarly, urban and rural dwellers consumed around 21.2 and 22 servings per week, respectively. The age breakdown comprised about 42.8% of those aged 30–44, 26.3% aged 45–59, 23.8% aged 18–29 and 7.2% aged 60–69. Similar age distribution was evidenced in urban and rural settings. Slightly more than half of respondents were females. The majority of respondents only have primary education, whereas only a small proportion had tertiary education. Nearly 90% of respondents in urban and rural areas were married, but only slightly less than half were employed. Approximately two-third of respondents did not smoke. Overall, only a small proportion of respondents, including those residing in urban and rural areas, self-reported being diagnosed with hypertension, diabetes or hypercholesterolemia.

Results of the linear regression models are illustrated in Table 2. Multicollinearity was not an issue in each of the models, as the VIFs fall below the maximum threshold of 10 (Wooldridge, 2010). All of the models were also not affected by heteroscedasticity, except the model of rural dwellers. Nevertheless, this should not be a cause for concern because the sample size is large and robust standard errors were estimated. The constant terms were significant across all models. This is unsurprising, as several unobserved variables that may potentially influence FV intake, such as culture, socioeconomic status and hereditary illnesses, were omitted from the models.

Men consumed 6.4 fewer servings of FV than women. Similar evidence was observed in urban and rural settings, where men consumed 6.8 and 5.9 fewer servings, respectively. Compared to urbanites with primary education, those with tertiary education consumed 3.6 more servings of FV. Rural dwellers with secondary education consumed 3.8 more servings of FV than those with only primary education. Overall, respondents with hypertension consumed 1.9 fewer servings of FV compared to those without. Among urban dwellers, being diagnosed with hypertension was associated with 2.5 fewer servings of FV. Having diabetes was correlated with an increase in FV consumption of 4.4 servings for urbanites and 6.3 servings for rural dwellers. Of all the variables, gender seemed to have the largest effect on FV consumption, whereas age, marital status, employment status and smoking were not significantly associated with FV consumption across urban and rural areas.

DISCUSSION

The present study used a nationwide dataset and linear regression to explore the relationships between FV consumption and demographic, and health factors within the urban and rural adult populations of Bangladesh. Many adults consumed around 21 to 22 servings of FV per week, indicating that FV intake is inadequate among adults in both urban and rural areas. This finding serves as useful information for policymakers and researchers, especially in light of the fact that the prevalence of chronic diseases in Bangladesh follows an increasing trend. Gender, education and being diagnosed with hypertension and diabetes were associated with FV

consumption. However, age, education, marital status, employment status and smoking did not possess significant impacts on FV intake.

In the present study, men were less likely to consume FV than women. This finding is consistent with those of previous studies. For instance, Satheannoppakao et al. (2009) and Dehghan et al. (2011) conducted their studies in Thailand and Canada, respectively, found that male adults consumed less FV than their female counterparts. Furthermore, in Malaysia, Foon et al. (2020), using a rigorous statistical approach, found expenditure on FV to be higher among men than women. Since women tend to favour a healthy diet and play a pivotal role as family caregivers, they are more likely to opt for a healthy diet that comprises an adequate amount of FV (Grunert et al., 2012; Michou et al., 2020). This finding has important implications for policy. There seems to be an urgent need for male-targeted programmes in both urban and rural areas. The government is suggested to make extra effort to reach the male population and provide them with more information about the risk of low FV intake, especially its effects on men's health, as well as the ways to incorporate more FV in daily meals.

Among urban and rural dwellers, those with better educational attainment tended to demand more FV than their less educated counterparts. Similar findings were evidenced by numerous previous studies (Pengpid et al., 2019; Yaya & Bishwajit, 2018; Karim et al., 2017). They consistently found that education was associated with raised consumption of FV. In terms of expenditure, Cheah et al. (2024) found that having better education increased expenditure on FV. This is simply because better educated people have better nutritional knowledge and health literacy; thus, they were more likely to consume FV. The policy implication of this finding is noteworthy. Although health messages have been provided by the government throughout the nation, those with lesser educational attainment may not have a good understanding of the importance of FV intake and therefore are unlikely to consume FV. Hence, public health administrators are urged to undertake to organise more educational campaigns to encourage FV consumption within the segment of urban and rural dwellers with limited formal education. It seems imperative to make compulsory the nutrition subjects for all school students regardless of their grades.

Being diagnosed with hypertension was negatively associated with FV consumption. However, this association was only seen in urban areas, as there were no changes in FV consumption across individuals with or without hypertension in rural areas. Due to cross-sectional data, it is unclear that whether hypertension leads to low FV consumption or otherwise. Therefore, one can point out two possibilities. First, individuals do not consume adequate amount of FV and consequently face a higher risk of developing hypertension. Second, individuals who live with hypertension are usually the adults without good health knowledge or awareness; thus, they are unlikely to make an effort to incorporate FV in their diets. With the availability of longitudinal data, a future study can explore the causality between hypertension and FV intake in order to reach a better conclusion. Nevertheless, the present study's findings have important implication for policies. A multifaceted strategy that can improve the intake of FV among urban dwellers with hypertension is worthy of consideration. More health programmes that focus on advertising the important role of FV in hypertension prevention should be introduced in urban areas. It is crucial to ensure urban dwellers understand that adequate FV intake can lower the risks of hypertension as well as other chronic diseases.

The relationship between diabetes and consumption of FV in both urban and rural areas was alike. In particular, findings showed that individuals living diabetes were more likely to consume FV than those without diabetes, which somewhat lend support to the argument by Tesfa et al. (2022). The authors pointed to the fact that people with chronic diseases tended to have better knowledge about nutrition than those without and this could be a reason explaining why diabetic adults consumed more FV. Because individuals who have diabetes pay more frequent visits to healthcare facilities and receive more health information from medical doctors and health experts (Tesfa et al., 2022; Patel et al., 2017), they are more probable to possess a better understanding of the

benefits of FV. Therefore, public health administrators are suggested not to only devote their attention to people with diabetes but also those without, so that the goal of curbing rising prevalence of low-FV induced diseases can be achieved. Messages pertaining to the beneficial effects of FV on physical and mental health should be delivered to urban and rural dwellers with various health backgrounds via nationwide health campaigns.

Some findings of the present study are not in agreement with the expectations. First, previous studies found that older adults consumed more FV than younger adults (Cheah et al., 2024; Yen & Tan, 2012), but the present study found age to have no significant effect on FV intake. This is somewhat surprising, as older adults should be more concerned about their diet. Second, marital status was not associated with FV consumption, which contradicts the findings from previous studies that married adults were more likely to consume FV than their unmarried counterparts (Li et al., 2017; Yen et al., 2015; Azagba & Sharaf, 2011). Third, employment status was found to be not associated with consumption of FV, which is in contrast to the findings of Cheah et al. (2024). Specifically, the authors found that employed household members tended to spend more on FV when compared to their unemployed counterparts because of better financial capability, but this is not the case in the present study.

Several shortcomings of the present study are acknowledged. While the data had a large sample size, they were collected many years ago. Therefore, findings of the present study may fail to provide the latest scenario in Bangladesh. Furthermore, the causal relationship between FV consumption and chronic diseases could not be established due to cross-sectional data; thus, the possibility of reverse causal effect of health variables cannot be ruled out. Moreover, as in all self-reporting surveys, the data may suffer from social desirability bias and recall bias. This may cause inaccuracy of the estimated results. Lastly, information on income and wealth index was not available. As a result, the effects of economic factors on FV consumption was not well-understood.

CONCLUSION

The present study demonstrated that certain demographic and health factors had an influencing role on FV consumption among urban and rural adults in Bangladesh. In particular, adults were less likely to consume FV if they were male, less educated, diagnosed with hypertension and not living with diabetes. These findings imply the need to prioritise policies that concentrate on improving FV consumption among people of different demographic traits and health profiles, so that the prevalence of chronic diseases can be further reduced. Future studies are suggested to use longitudinal data to examine the causal relationship between FV consumption and risk of chronic disease with a specific focus on urban and rural dwellers.

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Table 1.Summary statistics of variables

Variables	Total	House locality	
		Urban	Rural
	(n = 8,164)	(n =3,995)	(n = 4,169)
Continuous			
FV (servings per week)	21.64	21.22	22.03
	(38.75)	(38.16)	(39.31)
Categorical			
Age (years)			
18–29	1,941	954	987
	(23.78)	(23.88)	(23.67)
30–44	3,495	1,733	1,762
	(42.81)	(43.38)	(42.26)
45–59	2,143	1,032	1,111
	(26.25)	(25.83)	(26.65)
60–69	585	276	309
	(7.17)	(6.91)	(7.41)
Gender			
Male	3,804	1,885	1,919
	(46.59)	(47.18)	(46.03)
Female	4,360	2,110	2,250
	(53.41)	(52.82)	(53.97)
Education			
Primary	6,211	2,679	3,532
	(76.08)	(67.06)	(84.72)
Secondary	1,397	886	511
	(17.11)	(22.18)	(12.26)
Tertiary	556	430	126
	(6.81)	(10.76)	(3.02)
Marital status			
Married	7,237	3,502	3,735
	(88.65)	(87.66)	(89.59)
Unmarried	927	493	434
	(11.35)	(12.34)	(10.41)
Employment status			
Employed	3,901	1,995	1,906
	(47.78)	(49.94)	(45.72)
Not working	4,263	2,000	2,263
	(55.22)	(50.06)	(54.28)
House locality			
Urban	3,995	–	–
	(48.93)		

Rural	4,169		
	(51.07)		
Smoking status			
Smoking	1,922	916	1,006
	(23.54)	(22.93)	(24.13)
Non-smoking	6,242	3,079	3,163
	(76.46)	(77.07)	(75.87)
Hypertension			
Yes	1,398	789	609
	(17.12)	(19.75)	(14.61)
No	6,766	3,206	3,560
	(82.88)	(80.25)	(85.39)
Diabetes			
Yes	537	358	179
	(6.58)	(8.96)	(4.29)
No	7,627	3,637	3,990
	(93.42)	(91.04)	(95.71)
Hypercholesterolemia			
Yes	250	179	71
	(3.06)	(4.48)	(1.70)
No	7,914	3,816	4,098
	(96.64)	(95.52)	(98.30)

Note: For the continuous variable, the entries are the means (standard deviations in parentheses). For the categorical variables, the entries are the frequencies (percentages in parentheses).
Source: Computed from STEPS Bangladesh.

Table 2. Linear regression models of the demographic and health variables associated with FV consumption

Variables	**Total**	**House locality**	
		Urban	**Rural**
	(n = 8,164)	**(n =3,995)**	**(n = 4,169)**
Constant	25.214*	23.932*	25.372*
	(1.717)	(2.200)	(2.178)
Age (years)			
18–29	Ref.	Ref.	Ref.
30–44	-0.728	0.304	-1.648
	(1.717)	(1.875)	(1.652)
45–59	-0.830	-0.923	-0.616
	(1.453)	(2.043)	(1.841)
60–69	0.739	-2.535	3.522
	(2.360)	(2.145)	(2.668)
Gender			

Male	-6.401*	-6.849*	-5.926*
	(1.476)	(1.695)	(2.316)
Female	Ref.	Ref.	Ref.
Education			
Primary	Ref.	Ref.	Ref.
Secondary	1.587	0.143	3.765*
	(1.016)	(1.094)	(1.946)
Tertiary	2.912*	3.640*	-0.243
	(1.276)	(1.598)	(3.630)
Marital status			
Married	-0.493	0.840	-1.815
	(1.769)	(2.083)	(2.088)
Unmarried	Ref.	Ref.	Ref.
Employment status			
Employed	1.019	-0.374	2.245
	(1.554)	(1.918)	(2.175)
Not working	Ref.	Ref.	Ref.
House locality			
Urban	-1.300	–	–
	(0.918)		
Rural	Ref.		
Smoking status			
Smoking	0.003	-0.409	0.121
	(0.895)	(0.974)	(1.779)
Non-smoking	Ref.	Ref.	Ref.
Hypertension			
Yes	-1.920*	-2.462*	-1.222
	(1.019)	(1.370)	(1.793)
No	Ref.	Ref.	Ref.
Diabetes			
Yes	4.859*	4.384*	6.262*
	(2.339)	(2.659)	(3.110)
No	Ref.	Ref.	Ref.
Hypercholesterolemia			

Yes	0.262	0.445	0.916
	(1.590)	(1.713)	(4.825)
No	Ref.	Ref.	Ref.
White test	95.470	57.140	112.460
p-value of White test	0.251	0.927	0.003
Maximum VIF	3.050	2.670	3.610

Note: Ref. refers to the reference group. Robust standard errors are reported in parentheses. *p<0.05.
Source: Computed from STEPS Bangladesh.